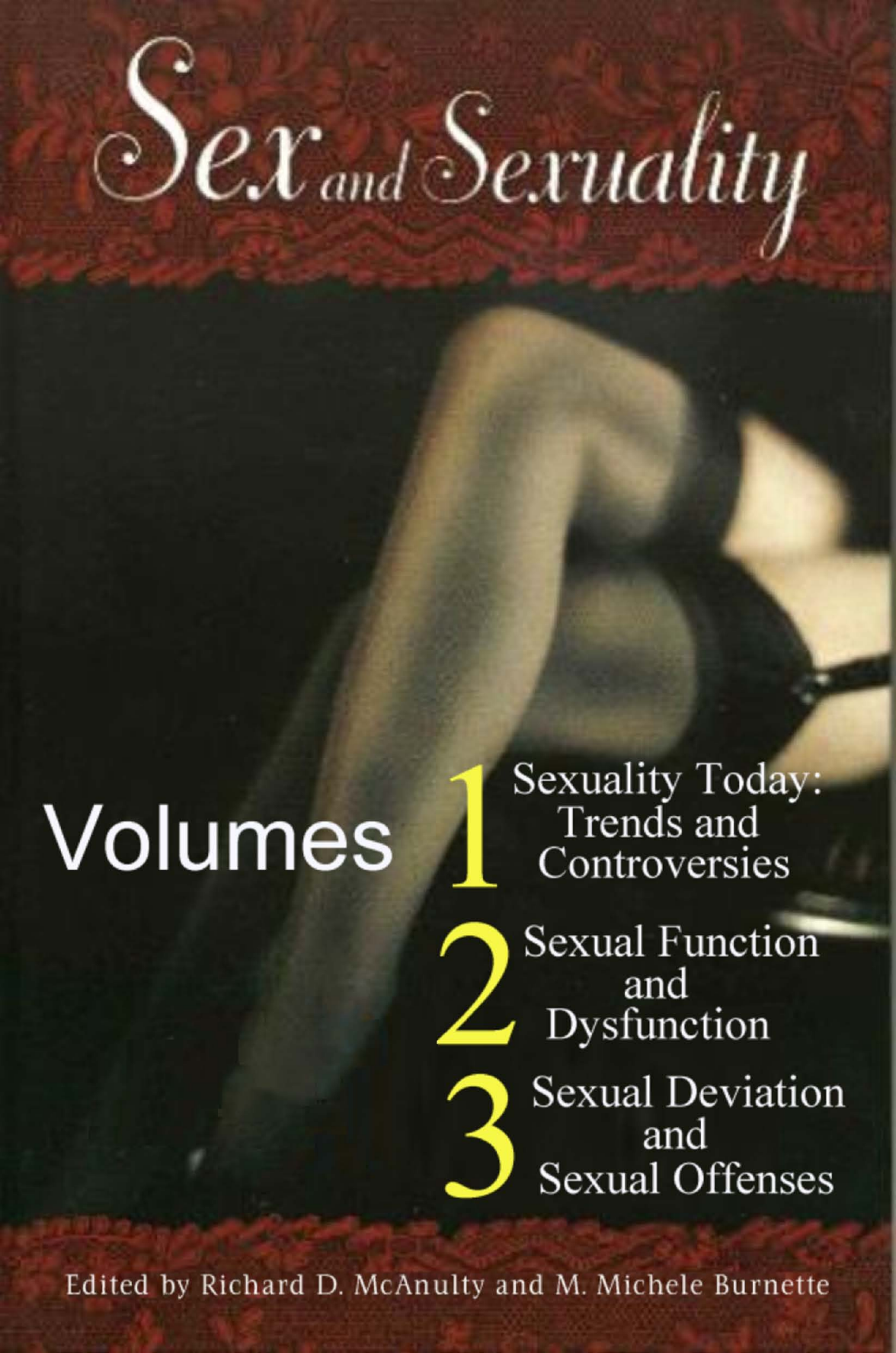
Sex and Sexuality



Volumes

1 Sexuality Today: Trends and Controversies

2 Sexual Function and Dysfunction

3 Sexual Deviation and Sexual Offenses

Edited by Richard D. McAnulty and M. Michele Burnette

How to go to your page

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SEX AND SEXUALITY

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Volume 1
SEXUALITY TODAY: TRENDS AND CONTROVERSIES

Edited by Richard D. McAnulty and M. Michele Burnette

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Preface

We have had many opportunities to teach and interact with both college students and professional audiences about some very important topics and issues in human sexuality in our roles as authors and college professors. When we were approached to write this three-volume set on sex and sexuality, we were intrigued with the idea of having a forum in which to reach a broader audience. That is our goal for this work. With that in mind, we encouraged our contributors to "talk to" a general audience when writing about the topics that were most important to them. The authors we selected to write these chapters represent both established authorities and budding scholars on the various topics in human sexuality. We are confident that they have all helped us accomplish our goal.

To us, few, if any, other topics in the realm of human behavior are more interesting, exciting, or controversial than sex. And we hope that you will agree after reading the chapters from this set. Each chapter stands alone, and you can choose to read as many or as few as you would like—pick the ones that interest you. We hope that you will find this work to be of significant value to you, whether you are in pursuit of a better general understanding of sexuality or are looking for answers to specific questions.

One theme you will find throughout these texts is that human sexual function is affected by a whole host of factors. These factors are biological, sociocultural, and psychological in nature. The scientific study of sexuality is for all practical purposes a "young" field, and we have only touched the

surface in an attempt to fully understand how these factors interact and impact sexuality.

Another theme or concern you will find throughout this work is the question whether "scientific" views of sex are biased by social judgments about normal versus abnormal and/or functional versus dysfunctional sexual behavior. U.S. culture, in particular, holds many strong values and prohibitions about sex. In this context, studying and interpreting research on sexuality in an unbiased manner can be a challenge. Many of our authors caution the reader about this concern.

We wish to thank all the researchers and clinicians, past and present, who have contributed to the science of sex. Many of them have contributed chapters to this set, and for that we are grateful. We also thank our colleagues, families, and friends who supported us during the writing and editing process. Finally, we thank "the team" at Praeger Publishers.

Introduction

In the past few years, we have witnessed major developments in our understanding of sex and sexuality. A landmark survey of sexual practices in the United States offered new insights. The theory of evolutionary psychology inspired countless studies on sexual differences between women and men. Discoveries relating to sexual orientation, including possible brain and genetic factors, have emerged. A medication for the treatment of erection problems became a household term. The scandal of sexual molestation by the clergy captivated the media. Pornography in all of its forms became readily available via the Internet. And sex continued to sell.

The topic of sex is fascinating, intriguing, and even disturbing. We are seemingly surrounded by sexual themes. The media bombard us with sex. Sexuality is a fundamental need and a part of our identity. Yet, this basic human need is often misunderstood, and is often controversial, and sometimes problematic.

Volume 1 in *Sex and Sexuality* offers an overview of recent trends and developments in the field. It provides a summary of the sociocultural determinants of sexual practices and of sexual development through the lifespan. Additionally, some of the more sensitive and controversial topics, including pornography and the sex trade, are reviewed. Each chapter entails an analysis of a topic and related issues, a review of relevant and recent findings, a description of explanations for the issues and trends, and a summary that usually includes suggestions for further study and research.

In Chapter 1, Wiederman explores not only methods but also motives for conducting sex research. Challenges include the stigma attached to sex research, possible volunteer bias, and the potential inaccuracies of sex surveys. In Chapter 2, Baumeister and colleagues offer a concise and informative overview of the leading theories of sexuality. They argue that the two leading theoretical camps—social constructionism and evolutionary psychology—approach the status of cults with their respective dogmatic doctrines and dedicated followers. The historical significance of Freudian theory and, more recently, of social exchange theory is addressed. Kilmer and Shahinfar, in Chapter 3, lament the lack of research on sexuality in childhood, which is truly one of the last frontiers in sex research because of enduring taboos. The limited research has been mostly concerned with abnormal sexual development. The authors favor an ecological systems approach, which considers the contribution of such influences as peer culture, family factors, and community structure to sexual development. Adolescent sexuality has been the subject of much discussion and debate. As Rapsey and Murachver note in Chapter 4, adolescence has invariably been viewed as a problematic phase in human development, including sexual development. This flawed depiction of adolescence has hindered research on normal sexual expression during this phase. Although unwanted pregnancies and sexually transmitted diseases first become evident in this age-group, these problems do not affect most teens, nor should they define adolescent sexuality. Drawing from the General Social Surveys (GSS), Smith, in Chapter 5, offers a succinct summary of important social trends in sexual behavior in the United States. The summary traces changes in sexual activity over the past few decades, including changing rates of cohabitation, extramarital relations, gender of sexual partners, frequency of sexual intercourse and of sexual inactivity, and the impact of HIV. Few topics make people more uncomfortable than sexuality in later life. Sharpe criticizes these prejudiced attitudes and their detrimental impact on mature adults in Chapter 6. The limited research confirms that older adults can, and generally do, enjoy sexual intimacy into late life, even as they redefine the meanings of sex and intimacy.

Sexual orientation remains a fascinating if controversial aspect of human sexuality. In Chapter 7, Kauth reviews the growing amount of research on sexual orientation and identity. His comprehensive and objective review focuses on the relevant findings in America and in other cultures, the current sexuality theories, and recent events involving sexual orientation. In Chapter 8, Burnette examines the relevant research on sex and gender, concluding that men and women are more similar than different. Although popular stereotypes about gender are resistant to change, the findings on transgenderism challenge these simplistic notions. Our views about sexuality are highly influenced by such major sociocultural institutions as the family, medicine, religion, and the media. Bay-Cheng's critical examination in Chapter 9 of these influences dissects or "deconstructs" the various messages, thereby highlighting the comparative and arbitrary nature of these "truths" relating to sex and sexuality.

Her analysis challenges many dominant views of sex in the United States, such as the idea that sexual intercourse alone qualifies as "real" sex. In the same vein, Lewis demonstrates in Chapter 10 that our views of race and ethnicity are determined by culture rather than nature. In other words, categories of race are socially created rather than absolute and biologically determined. Here, too, we find racial stereotypes are oversimplifications. For example, contrary to the stereotype of higher levels of sexual activity among African Americans, Lewis finds this group to be more sexually conservative than others.

The sex trade, in all of its forms, remains a highly visible and controversial aspect of sexuality. Chapter 11 by Brown reviews the extensive and conflicting research on pornography, concluding that it is not as innocuous as some have argued. Brown proposes that even nonviolent pornography promotes callous attitudes toward women. Bullough and McAnulty offer an overview of the research on the "world's oldest profession" in Chapter 12. Despite the stigma, the sex trade thrives in most parts of the world. The authors also discuss a group that has largely been ignored in sex research: exotic dancers. Gil-Rivas and Kooyman discuss sexual risk-taking in Chapter 13. Efforts to understand and prevent sexual risk-taking require an examination of the social context, which in turn is influenced by a variety of individual and contextual factors such as characteristics of the individual, aspects of close interpersonal relationships, attitudes, beliefs, cultural norms, and social and economic conditions. Finally, in a thought-provoking thesis, Baumeister and Stillman offer what will be one of the most controversial chapters in the set. Their discussion of erotic plasticity in Chapter 14 proposes that women's sexual responses and feelings are more affected by social, cultural, and situational factors, whereas male sexuality is relatively more shaped by genetic, hormonal, and other biological factors. For example, the authors point out that women are more likely than men to alter the frequency of sexual activity based on situational factors, and they are also more likely to explore sexual variations, such as same-sex experimentation, than men. Although this chapter is unlikely to resolve this debate, it should inspire lively discussion and productive research.

1

Sex Research

Michael Wiederman

Sex research. Wow! What could be more exciting? People are frequently titillated by the notion of someone conducting research on human sexuality. Because the topic is taboo, and sexual activity is exciting, people often assume that sex research must involve many interesting tasks. Sex research may hardly seem like "work."

The truth is that, although research on human sexuality can be intellectually stimulating, it is rarely arousing sexually or in other ways. Why? Sexuality is deeply private, so most research involves asking people about their sexuality. Researchers typically try to provide a setting in which the respondents are most comfortable—usually by gathering information through anonymous surveys. In the end, sex research often involves handing out and gathering printed survey forms. After analyzing and tabulating the responses, the result is a set of numbers and graphs, but hardly anything that resembles sexually stimulating material (except, perhaps, to some mathematicians).

Although the process of conducting most sex research may not be particularly exciting, people are generally interested in the results of the research. It is implied in Western culture that each individual is supposed to experience a robust sex life, consisting of definite interest in sex (but not too much) and varied sexual experience (but not to include certain behaviors or certain types of partners). So how do we know how we, as individuals, stack up against the rest of society? Even though Western culture often seems saturated with sexual images and references to sex, there is surprisingly little serious discussion or

presentation of facts. This is where sexuality research comes in, and this is probably why most people are interested in its results. Sex research holds the promise of providing objective information about what other people do and think and feel sexually.

As members of Western culture, we most likely encounter with interest reports of sexuality research. So, better understanding the process of sex research, and the various pitfalls along the way, will help us become more savvy consumers of sex research results. We will know the questions to ask, even if only to ourselves, so that we remain appropriately critical in our evaluation of what we hear and read about "the latest research." The process of sex research begins with the people who conduct the research.

WHO ARE SEX RESEARCHERS?

Frequently, media reports of sex research include the proclamation "Scientists have found . . . ." This phrase conjures images of men dressed in white lab coats peering into microscopes, writing down their observations, and engaging in feverish discussions with colleagues. Indeed, some sex research is supported by grant money, so that the researchers can focus most of their attention on the study. Most sex research, however, is conducted by faculty members at colleges and universities. These professors typically teach psychology, sociology, or anthropology, although some are professors of communication, biology, social work, medicine, nursing, or public health. For these faculty members, sex research is a small part of what they do on a day-to-day basis. They teach, advise students, attend committee meetings, and have families and social lives. This helps to explain why any particular study may take several months or years to complete.

Why do professors study sexuality? In most colleges and universities, there is an expectation that faculty members will remain active researchers in their respective professional fields. Of course that does not explain why some professors choose sexuality research whereas their colleagues do not. Because professors are more or less free to choose the broad areas in which they conduct their research, it would not be the case that some sex researcher was pressured into studying sexuality. Being pressured *not* to study sexuality would be much more likely. So why do it? There most likely is an intellectual interest on the part of each sex researcher, but the answer to "why" may be as varied as sex researchers themselves (see the books by Brannigan, Allgeier, & Allgeier, 2000, and Bullough, Bullough, Fithian, Hartman, & Klein, 1997, for individual accounts of how sex researchers got into the business).

People often assume that if someone studies a particular sexuality topic, it must be because the person experiences a personal problem or obsession with that topic. So, if someone studies the effects of childhood sexual abuse, it must be that the researcher was sexually abused as a child (or, worse, is a child abuser). If a researcher investigates pornography, it must be that he or she is personally

drawn to the use of pornography. There are no data on the subject, so it remains speculation as to why researchers choose the research topics they do. Indeed, sometimes it does seem to result from personal experiences, but many times, research topics are simply those that the professional was exposed to in graduate school, or through colleagues, or those that were being funded by grants.

Unfortunately, assumptions about the personal motives of sex researchers often result in sexuality research being stigmatized compared to most other research topics in the social and behavioral sciences. Sex researchers have been known to study nonsexual topics early in their careers, until they have achieved a degree of respectability (and tenure), so that embarking on the study of sexuality does not jeopardize their livelihood. For example, the sex research pioneer William Masters became well respected for his research and clinical work on infertility before deciding he could afford to study sexual behavior. Some sex researchers choose to study nonsexual topics in addition to sexual ones, perhaps as a way to keep from being pigeonholed as "just a sex researcher." Even within sex research, however, some topics (such as childhood sexuality and adult-child sexual contact) are more stigmatized than others. The less socially desirable the topic, the more the research on that topic seems to be stigmatizing for the researcher who seeks to better understand it.

If sex researchers are frequently stigmatized for their choice of research topic, what about people who choose to participate in sex research? Because sexuality is a private topic, who is most likely to volunteer to participate in sex research? What is in it for them?

WHO PARTICIPATES IN SEX RESEARCH?

Since most sex researchers are faculty members in colleges and universities, it is not surprising that many of the results of sex research are based on college student respondents (Dunne, 2002). Perhaps due to stigma, most sex research is not funded by grants, so researchers do not have money to offer as compensation for the time it takes students to participate in the research. Some faculty researchers offer extra credit in their courses for students who participate in research, and some colleges and universities require students in introductory psychology courses to participate in a certain number of research studies as part of the course. Sometimes, research participants are recruited with no obvious incentive or payoff.

Why is it important to consider who participates in sex research? If the research results are used to imply something about people in general, it is important to consider how well the research sample matches the population in general. College students tend to represent a fairly narrow slice of the population: young adults in their late teens and early twenties who are above average in intelligence and motivation. With regard to sexuality, college students have not had very many years to have had sexual and relationship experience, and they may be more open minded compared to people who never attended college. So,

when we learn that a study based on college students revealed certain trends, we should ask whether it is likely that those same results would have occurred among research participants from the general public.

Even though college students represent a fairly unique sample compared to the general public, only certain types of college students are usually studied: those who are taking psychology or sociology courses. How might these students differ from those who choose not to take such courses? Students interested in social and behavioral sciences may be more open-minded and introspective compared to students uninterested in those courses. What about the social science students who then decide to participate in sex research? In what ways might they be different from social science students who choose not to participate, or who choose to fulfill their course requirements through participating in research on nonsexual topics? Research comparing students who participate in sex research to those who choose not to has revealed some consistent differences: sex research participants are more likely to be male, open-minded, and adventurous, and to have more liberal sexual attitudes and greater sexual experience (Dunne, 2002).

Even when sex researchers target the general population, not everyone chosen agrees to participate. Even in the most conscientiously conducted studies, perhaps only 70 percent of those contacted end up participating. How might those 30 percent who do not participate differ from the 70 percent who do? Compared to participants, nonparticipants tend to be older, more conservative in their attitudes and values, and more likely to be female. So, when we hear that a certain percentage of people believe such and such or have had some particular sexual experience, chances are this percentage does not accurately reflect what would be found among the population as a whole.

What we have been discussing in this section is the extent to which any particular sample is *representative* of the population the researcher is trying to understand. The ideal is for the sample to be perfectly representative, meaning, the sample perfectly matches the characteristics of the population. In reality this never occurs, mainly because people cannot be forced to participate in research. So, those who choose to do so will probably always differ in some ways from people who choose not to—and this is especially the case when the topic is sexuality. Some people are simply more open to sharing with researchers details of their sexual attitudes and experiences than are others. These people tend to have more open and liberal attitudes about sex.

Perhaps the least representative of samples occurs when participants themselves have to initiate participation. For example, if a magazine publishes a questionnaire, asking readers to complete it and mail it to the magazine, or asks them to go to a Web site and complete a questionnaire, who is most likely to do so? Participation here requires some effort on the part of respondents, and there is no obvious incentive to participate. So the readers most likely to respond are those who find the topic most interesting or most relevant. If the topic is extramarital sex, we can imagine that those readers who have had some expe-

rience with it will be the ones most likely to respond to the survey. After all, if a reader does not have any experience with extramarital sex, the reader is liable to assume the survey does not even apply. It is not very interesting to check "no" or "does not apply" for most survey items.

In the end, savvy consumers of sexuality research need to ask how research participants were recruited. The ultimate question is the extent to which the sample is representative of the population. The less representative the sample, the less accurate the results, and the less we should let the results influence us in our own decision making or opinions. These issues are separate from another important set of issues having to do with how variables are measured.

HOW IS SEXUALITY MEASURED?

Researchers cannot study various aspects of sexuality directly. Instead, each aspect of interest has to be measured. This may seem like a straightforward matter, but measurements are always less than perfect, and sometimes quite a bit so. Depending on the variable the researcher wants to study, the primary choices are observation (Moore, 2002), physiological measurement (Janssen, 2002), and verbal reports (Wiederman, 2002). Because sexual activity is private, there is little that can be observed directly. Researchers could, and have, observed flirtation, rejection, and behaviors involved in trying to connect with a potential mate or sex partner (Moore, 2002). When it comes to actual sexual activity, however, few researchers have chosen the observational route. One notable exception was the pioneering research performed by Masters and Johnson (1966, 1970).

Masters and Johnson were pioneers for a variety of reasons, including the fact that they observed people actually engaged in sexual activity. These researchers recruited singles and couples to come into the laboratory and be observed, videotaped, and their physiological reactions measured. Masters and Johnson (1966) used their data to construct a model of how the typical person responds physically during sexual activity. We can imagine how the volunteers for such intrusive research might differ from people who would never consent to engaging in sexual activity under laboratory conditions.

Some sex researchers continue to use physiological measures in their research (Janssen, 2002). They may measure general physiological arousal (blood pressure, respiration, heart rate) or degree of genital arousal in response to certain stimuli (such as photos of nude children compared to nude adults). The measure of penile arousal involves a band placed around the base of the penis. As the penis becomes erect the band is stretched, thus registering the degree of erection. The measure of vaginal arousal involves a plastic device that looks similar to a tampon and is inserted the same way. The device measures the degree of blood flow to the vaginal walls by bouncing light off them and reading how much and how quickly the light is reflected (more blood flow to the vaginal walls results in less light reflected back to the sensor).

One important limitation of these measures of genital arousal is that they indicate a relative degree of arousal, but not an absolute level. That is, the measurements are calibrated according to each research participant's resting baseline. So the researcher can determine how sexually aroused each participant is relative to his or her nonaroused state. However, there is no absolute level of arousal, because each person's body starts at its own baseline level. Another limitation is that there are only certain situations in which researchers are interested in the degree to which people become sexually aroused in response to certain stimuli. In most cases, researchers are interested in sexual experiences and attitudes, and those require self-report measures.

Self-report measures are the primary tools of sex researchers, and they include paper-and-pencil surveys, diaries, and interviews. Self-report measures are all based on the assumption that respondents can and will accurately indicate their experiences and attitudes (Tourangeau, Rips, & Rasinski, 2000). Let us start with the issue of insight. With sexual attitudes, researchers typically assume that respondents have good insight into how they feel and what they believe. That may be true, but even if it is, there is probably variation across respondents in terms of how much insight each respondent has into his or her own attitudes. With sexual experience, if the researcher asks respondents to indicate number of sexual partners, or how often they have engaged in certain sexual behaviors, the accuracy of self-report depends on memory (Sudman, Bradburn, & Schwartz, 1996). Who is most likely to accurately remember his or her experience? Probably those individuals with very little experience will be able to remember most clearly, whereas those with the most experience will have to rely on estimation to come up with an answer.

People who engage regularly in a particular activity do not remember each instance of that activity, so when asked how often it occurs, the respondent will most likely make a quick estimate (Thompson, Skowronski, Larsen, & Betz, 1996). The thinking might go something like, "Well, my partner and I typically have sex twice a week, and there's 52 weeks in a year, so I guess we had sex about 100 times last year." Respondents typically do not spend much time making such calculations, and they are probably influenced by such things as how often the respondent has had sex recently. Perhaps, in reality, the respondent typically has sex once per week, but lately the frequency has been higher, leading the respondent to overestimate the frequency for the entire year. Of course the same thing could happen in the other direction, resulting in an underestimate for the year. Interestingly, when the researcher takes everyone's estimates and calculates the average, the result might be something like 63.4 times per year. The average sounds very precise, but it is important to remember that most of the individual self-reports that went into it were estimates or guesses (and hence round numbers).

Given that human memory is imperfect, even when respondents are completely honest and open, self-reports may not be accurate (Tourangeau et al., 2000). In an attempt to overcome the limitations of memory and estimation, some

researchers use diaries to measure sexual behavior (Okami, 2002). Research participants are instructed to complete self-report measures of sexual activity each day, reporting activity experienced since the previous entry twenty-four hours earlier. The idea is that keeping a running report eliminates the need to remember sexual experiences accurately. Of course the diary method has its limitations. For one, it involves more work for research participants, and each participant has to be motivated and conscientious in completing the forms when he or she is supposed to. Many participants may wait until the last minute and complete all of the forms at once, which defeats the purpose of using daily reports. In an attempt to prompt timely reports, researchers typically require respondents to mail one form per day, or to log into a Web site to complete self-report forms, thereby allowing the researcher to track when entries were made.

Another limitation of the diary method is that respondents might feel somewhat self-conscious in reporting their sexual activity. Respondents might have concerns over being embarrassed or appearing a certain way to the researcher. These concerns are lumped together under the concept *social desirability response bias* (Wiederman, 2002). This term refers to the ways self-reports might be biased by people's tendencies to want to appear in a positive light. Intentionally or unintentionally, respondents might distort their responses to appear desirable or typical. An interesting possibility is that social desirability response affects responses differently based on whether the respondent believes less or greater sexual experience is better, or whether conservative versus liberal sexual attitudes are better. So, social desirability response bias may result in males and young respondents reporting greater sexual experience than they have actually had, compared to women and older respondents who may report less sexual experience than they have actually had.

What can researchers do to minimize the effects of social desirability response bias? One major strategy is to ensure that respondents are anonymous, and to make them feel assured that their identity is not connected to their responses. It is hoped that the respondents will then feel free to be completely honest. After all, why not be completely honest when no one will know how you personally responded to the survey questions? The problem is that social desirability response bias may still influence answers in that respondents want to be able to maintain a certain view of themselves in their own eyes as well as in the eyes of others. So, if a respondent has had certain experiences or holds certain attitudes of which he or she is not proud, there may be the tendency to downplay those, even to himself or herself. Reporting certain attitudes or experiences in black and white on a survey may cause some uncomfortable confrontations with the image of oneself the respondent likes to maintain.

As respondents tend to have to estimate certain information about their own experience, and are motivated to appear "normal," even the response choices given to them may influence their answers (Sudman et al., 1996). Suppose a researcher tries to measure how often respondents have engaged in

anal sexual intercourse. After the term is defined, respondents may be asked to choose one of five responses given: (a) never, (b) once, (c) twice, (d) 3–10 times, (e) more than 10 times. These choices imply that the researcher does not expect respondents to have engaged in anal sexual intercourse more than a few times (if ever). Notice that the middle response choice is "twice." Many respondents might assume that the middle choice represents the average or typical respondent. The person who has engaged in anal sex numerous times may feel somewhat embarrassed because the response choices imply that his or her experience is extreme and unusual.

Now let us consider another researcher interested in the same variable. This researcher, however, uses the following response choices: (a) never, (b) 1–10 times, (c) 11–25 times, (d) 26–100 times, (e) more than 100 times. What do these response choices imply about what the researcher, the "expert," expects and considers "normal"? Indeed, research indicates that people will report greater levels of sexual experience with response choices like the second set, compared to the first.

Social desirability response bias might be greatest when data are gathered through face-to-face interviews. Respondents might feel most self-conscious here because they have to report their sexual attitudes and experiences to another person directly. Respondents are no longer completely anonymous. So, why would researchers use interviews rather than paper surveys? One advantage is that the interviewer can make sure all questions are answered (none are skipped or left blank) and can clarify any questions the participant might have. With paper surveys there is no way to clarify the questions or the responses, and there will always be some respondents who interpret the words differently than the researcher intended. One compromise involves using portable computers for "interviews." The respondents wear headphones so that the questions can be read to them privately by the computer. If the respondent has questions about the meanings of particular words, he or she can click on those words to pull up a help window. Of course, this format for gathering data probably works best with respondents who are comfortable using computers (such as college students).

So far we have considered self-report in a general way, or as it applies to reporting one's sexual experience. When researchers are interested in some abstract concept, such as "sexual self-esteem," for example, they typically use scales to measure it. These scales simply comprise several questions, all pertaining to the same concept. Respondents might rate how much they agree or disagree with each statement in the scale, and their total across the items makes up their score on the measure. Constructing valid scales involves many issues, most of which are beyond the scope of our presentation here (see Wiederman, 2002). However, it is important to consider the labels and underlying meanings of such scales.

Suppose a researcher constructed a scale consisting of the following five items. For each item, respondents indicate how much they agree or disagree.

1. It seems that most people put too much emphasis on sex.
2. I have never really been a sexual person.
3. Sex is overrated.
4. Most people are more sexual than I am.
5. Sex is not an important part of my life.

It is debatable whether these five items all measure the same concept. For the sake of argument, let us suppose they do. What might you say this scale measures? What if the researcher called it a measure of "sexual depression"? Do you agree? Now suppose that you encountered a description of the researcher's results and learned that "older adults have greater sexual depression than do younger adults." Apparently, older respondents scored higher on this measure than did younger respondents, but does the conclusion seem accurate given the items constituting the scale? Unfortunately, in mass-media descriptions of research results, we never get to examine the measures used in the research. Despite being left in the dark about this important aspect of research, we need to try to determine what the results of the research really mean.

WHAT DO THE RESULTS OF SEX RESEARCH MEAN?

Many times, researchers are interested in explaining causes and effects: What causes someone's sexual orientation, why do some people have more sexual experience than do others, why does sexual abuse affect some people in certain ways and not others? However, the only time researchers can conclude that one thing causes another is when the results are based on a true experiment. In a true experiment, research participants are randomly assigned to groups. In the simplest case, there are two groups: an experimental group and a control group (Whitley, 2002). The experimental group has something done to them differently than the control group. In sex research that might involve being exposed to sexually explicit material, or undergoing some therapy, or being put under stress to see how sexual functioning is affected.

Because research participants are randomly assigned to the groups, it is assumed that the resulting groups are similar in all respects. So, if after the experiment there is some difference between the groups, the researcher can conclude that what the participants were exposed to must have caused the difference. As a simple example, suppose a researcher was interested in the potential effects of being exposed to typical pornographic films on subsequent attitudes toward women. A group of research volunteers would be randomly split into two groups: one would view a certain amount of sexually explicit film whereas the other group would view a comparable amount of nonsexual film. All research participants would then complete some measure of attitudes toward women. The researcher assumes that the two groups were very similar in their

attitudes toward women prior to exposure to the films, and so any difference between the groups after exposure to the film must be caused by having viewed the sexually explicit films.

Note that even in this example of a very simple experiment, there are several important assumptions: that the two groups were comparable in their attitudes toward women prior to the experiment; that the sexually explicit films shown during the experiment are similar to pornographic films viewed by people in the real world; and that the measure of attitudes toward women indeed measures accurately such attitudes. If any of these assumptions is false, the conclusion that exposure to sexually explicit film affects people's attitudes toward women in certain ways is flawed. Then there are also the issues of who the research participants were, and whether what the researcher found with those participants is what would be found with people in general.

Even with all of these potential concerns, it is only the results of an experiment that can be used to conclude that one thing caused another. In all other kinds of studies, the researcher can only conclude that one variable is related to another. This may seem to be a small difference, but it is an important one. There are many topics that the researcher cannot study with an experiment, so concluding that one thing caused another in those areas is simply wrong. Important things researchers cannot manipulate include gender differences, sexual orientation, upbringing or past experiences, sexual activity and experiences, whether people are involved in a sexual relationship, and prior sexual attitudes. Since it is impossible to manipulate these things in an experiment, researchers cannot determine directly what causes them. The best they can do is investigate whether the variable is related (correlated) to other variables, and then speculate about what might cause what.

As an example, suppose a researcher interested in the possible effects of exposure to pornography on attitudes toward women asks respondents to report how much pornography the respondent views and to complete a self-report measure of attitudes toward women. It is then possible to correlate the amount of porn reported with scores on the scale measuring attitudes toward women. If the researcher finds a correlation between the two, can the researcher conclude that exposure to pornography affects attitudes toward women? If not, why?

The simplest explanation for why the researcher cannot legitimately conclude that one thing causes or affects another is that the research was not an experiment. When researchers examine correlations among variables, as was the case in this example, it is impossible to determine which variable causes or affects another. So perhaps people with certain attitudes toward women are more likely to seek out and view pornography. This would be an instance of the attitudes affecting the behavior, rather than the other way around. It is also very possible that both viewing pornography and attitudes toward women are influenced by some other variable or set of variables. Perhaps viewing pornography and holding certain attitudes toward women are more likely among people of lower

educational background, so it may be that these variables are related to one another simply because both are related to education.

Remember social desirability response bias? It may be that self-reports of pornography use and attitudes toward women are correlated because both are influenced by social desirability response bias. It is probably not socially desirable to admit to viewing pornography and holding certain negative attitudes toward women. So, respondents who more readily admit pornography use probably are not as concerned about appearing in the most favorable light as those respondents who deny it (even though some of these respondents view pornography). Then, when it comes to admitting having negative attitudes toward women, who is most likely to do so? Those respondents who are not concerned about answering in the most socially desirable light are the ones most likely to admit to both pornography use and negative attitudes toward women. If this is the case, there would be a correlation between pornography use and attitudes toward women, perhaps not because one causes the other, but because both are related to social desirability response bias.

Thus far, we have talked about whether there is a difference between the experimental group and the control group, or whether there is a correlation between two variables. Of course there will always be some degree of difference between two groups, or some degree of correlation between two variables. How do researchers determine whether the difference or the correlation is enough to lead to the conclusion that the two groups differ, or that the two variables are related? The answer is that they calculate whether the difference or the correlation is *statistically significant*. This term implies that the difference or the correlation is important, because the word "significant" means important. However, it was an unfortunate choice of words when the term was coined. Statistical significance is unrelated to the importance of a research result.

To understand what is meant by statistical significance, we need to consider the difference between a population and a sample. A researcher is interested in learning about relationships among variables in the population. However, the researcher has access only to samples from the population. When a researcher tests a group difference or a correlation to determine whether it is statistically significant, he or she is testing how likely that result from the sample is if in fact there is absolutely no difference or correlation in the population. So, if a researcher finds a statistically significant group difference or a correlation between two variables, that simply means that it is very unlikely to have occurred in the sample if there was absolutely no such difference or correlation in the population from which the sample was drawn.

Note that statistical significance does not tell us anything about the size of the difference or the correlation, either in the sample or in the population. If a researcher has a relatively large sample (let us say several hundred participants), then even a small group difference or correlation will be statistically significant. In other words, if there is absolutely no group difference or correlation in the population, then it is unlikely that a researcher would find even a small result in a

large sample drawn from that population. So, even small results are statistically significant. These are difficult concepts to understand, especially by just reading about them. The ultimate message is that all research results reported to the public are statistically significant, but the term is misleading because whether a research result is statistically significant depends on both the size of the result and the size of the sample upon which it is based.

Without being told how large a group difference exists or how large a correlation is between two variables, it is impossible to judge the strength of the relationship between two things. Taking our earlier example of the potential effects of watching pornographic films on subsequent attitudes toward women, let us say that the researcher found that the experimental group (exposed to the porn) had statistically significant higher scores on the measure of negative attitudes toward women than did the control group (exposed to nonsexual films). The conclusion is that exposure to porn influenced the self-reported attitudes toward women. But to what degree? The difference between the experimental and control groups was statistically significant, so we know that the difference the researcher found is unlikely if indeed there is no difference between the two groups as they exist in the larger population. Still, there is no guarantee that the difference between the groups accurately reflects what exists in the population. Also, we are not told how large the difference is so that we can judge for ourselves whether to be impressed or dismiss the effect as trivial.

WHAT ARE THE CRITICAL QUESTIONS FOR EVALUATING SEX RESEARCH?

Now that we have covered the basics of conducting research on human sexuality, we are armed with the knowledge to critically evaluate the results of sex research as we encounter them. Being critical does not mean simply trying to find fault. As we have seen here, it is easy to point out flaws because all sex research has them. It would be easy to conclude in despair, "Why should anyone waste time and effort conducting sex research that will be inherently imperfect?" The answer is that some knowledge, even imperfect knowledge, is better than none at all. Science is built on the premise that if enough individual researchers add their imperfect pieces to the puzzle, a clearer picture will eventually emerge. As we will see in the next section, not everyone shares the view that sex research is valuable. Still, it will continue. So when you encounter media reports of sex research, asking yourself the following questions will help put the results in a critical context.

1. Who were the researchers? Were they independent faculty members, or were they employees of a group that has a vested interest in certain findings or conclusions?

2. Who was studied? How were the participants recruited, and who would be most likely to agree to participate? Are these participants likely to be different from the general population?
3. How large were the differences or relationships found? You probably will not have access to this information, but if you know there was a large sample, then it is very possible that the statistically significant finding is actually small.
4. Is the report implying that one thing causes another, when in fact the research was not an experiment? This is very common, probably because people naturally tend to think in terms of causal relationships. However, just because two things are statistically related does not mean that one caused the other—even if such a causal relationship obviously makes sense.

WHAT DOES POLITICS HAVE TO DO WITH SEX RESEARCH?

It has been said that love and politics make strange bedfellows. What about politics and sex research? It may not seem like there should be a connection, but there always has been. Sex is a topic of heated debate as values vary across people. Certain laws exist in an attempt to regulate sexuality and indicate what is right and what is wrong. It is the belief that sex research influences people's sexuality that seems to account for much political and social concern about the research.

In many ways, Alfred Kinsey and his colleagues established the beginning of sexuality research in the United States (Kinsey, Pomeroy, & Martin, 1948; Kinsey, Pomeroy, Martin, & Gebhard, 1953). From that point on, some segments of society have expressed concern that the latest sex research will have a detrimental effect on the sexual values and morals of society's members. Although critics may not articulate it explicitly, their concern seems to be that if sex researchers find certain results, those results will promote undesirable sexual behaviors and attitudes within the public. It is not clear how this might happen, but it could be based on the belief that data indicating that certain percentages of individuals engage in certain sexual behaviors legitimizes those behaviors, and may suggest those behaviors to certain individuals who would not have thought of trying them on their own.

A second concern about sex research is that simply asking certain questions of research participants might negatively affect their sexual values. Again, the assumption seems to be that asking about certain sexual activities makes those activities more acceptable, and may suggest them to otherwise innocent research respondents (this is especially the case when the proposed research respondents are young people). Of course, if the same logic were applied to other research topics, there should be similar protests concerning research on the prevalence of smoking, drinking, drug use, gambling, lying, stealing, unhealthy eating, and so forth.

Ironically, the little research conducted on the potential effects of participating in sexuality research has tended to reveal positive effects. Being asked about your sexual beliefs and attitudes may lead to greater clarification of those beliefs. Some individual participants may later think more about what they believe and why. This has been the case in some research on couples and their feelings about each other (Rubin & Mitchell, 1976; Veroff, Hatchett, & Douvan, 1992). With regard to sexual behavior, it seems plausible that someone might report behaviors or frequencies of experiences that the individual is not proud to report. Doing so might prompt the individual to examine his or her choices in the future. It seems less likely that research participants would conclude from their responses that they have not engaged in sex often enough, or have engaged in enough different sexual behaviors, and then decide to "go wild."

CONCLUSION

All research on sexuality is imperfect. Rather than despair, we should be appropriately critical of any sweeping conclusions we encounter in the media regarding "the latest research." Because of the sensitive nature of the topic, the results of sex research are generally of interest to people. At the same time, the sensitive nature of sexuality leads to special problems when researchers decide to study it. Who will agree to participate? How do you gather information or data? How do you measure sexuality? What do the results mean? All attempts to answer these questions raise just as many questions and potential problems as answers. Still, some research conclusions, even imperfect ones, are better than none at all. When many researchers each contribute their own pieces to the overall puzzle, eventually the picture starts to come into view.

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2

Theories of Human Sexuality

Roy F. Baumeister, Jon K. Maner, and C. Nathan DeWall

The purpose of this chapter is to provide a brief overview of two major and several other theories regarding human sexual behavior. Theorizing is, however, not essential to sexuality research, and indeed the modern research tradition was heavily influenced by the Kinsey approach, which sought to collect information without owing allegiance to any theoretical perspective.

The status of sexuality theory was debated in a special issue of the *Journal of Sex Research* in 1998. The picture that emerged was not pretty. Two main theoretical orientations (constructionist feminism and evolution) dominate the field. Both approach the status of cults, full of loyal and dedicated supporters who self-righteously heap scorn on anyone who disagrees with them (including most members of the other camp). The battle between these major theoretical perspectives leaves little room for the development of smaller, midlevel theories, as prospective younger theorists are pressured to align themselves with one of the two behemoths. Researchers who do not want to sign up for either camp end up reporting their data with little or no theoretical context, and so evidence accumulates in a theoretical vacuum. New ideas are regarded with skepticism, especially by the two main camps, who react mainly by asking whether the ideas fit or conflict with their dogmas. Ideas presented by male researchers are prone to being criticized and discredited by accusations of sexist bias, which presumably invalidates their thinking. As new researchers shy away from hostile reviewers, they suppress their theorizing, and as a result the journals in this field

fill up with articles that simply report patterns of data while giving little or no theoretical elaboration (Weis, 1998).

In the long run, however, we see more grounds for optimism regarding theory development in the study of sexuality. Sex remains one of the most broadly interesting spheres of human activity, and the diversity of interest in it is reflected in a wide range of outlets for new ideas, so that no established elite can dominate all outlets or suppress contrary views. After the taboos against discussing or researching sex have been set aside, the field has begun to discover that a wide range of theoretical approaches to human behavior have something to offer to the study of sex. The coming decades promise to be fertile ones for the development of sex theory.

GENERAL PRINCIPLES AND STYLES OF THINKING

Social Constructionist Theory

Social constructionist theories of sex are one part of the broad theoretical orientation that emphasizes the social construction of reality. This is rooted in the assumption that reality and experience are ultimately subjective, and perhaps truth is relative, too. The social constructionist movement in science and philosophy was in some respects a reaction against positivism, which emphasized gaining knowledge of objective reality. To social constructionists, people cannot really grasp objective reality but must instead devise interpretations of it that are at best only partly driven by external facts and are thus inevitably shaped by subjective preconceptions, biases, and the like.

Hence, social constructionists are deeply skeptical of assertions that sex is subject to universal laws rooted in biology and pancultural human nature. Rather, sexual desire and behavior are a product of upbringing, socialization, religion, the media, political influences, and so forth. Constructionist thinkers emphasize historical, cultural, and personal variations. Constructionist icons such as Margaret Mead (1928, 1961) asserted that what might strike some people as immutable facts of sex are in fact culturally relative arrangements. For example, one of her most famous works asserted that sexual possessiveness and jealousy were products of Western culture and were unknown in other contexts such as Samoa, where people accepted sex easily and naturally without encumbering it with the emotional baggage that Eurocentric societies accumulated. (To be sure, other researchers have bitterly disputed Mead's conclusions, and recent works have concluded that sexual jealousy and possessiveness are universal; e.g., Reiss, 1986.)

Most social constructionists concede some role to biology, just as most biologically oriented researchers acknowledge that culture and socialization have some influence. The difference is one of emphasis. Fervent social constructionists accept that sex is somewhat dependent on hormones, genes, the physiology of sexual arousal, and other biological factors, but they think of these

as the rather boring universal foundation. Social circumstances, meaningful interpretation, cultural influence, and subjective experience are assumed to be paramount and widely variable. Ultimately, who wants to do what to whom, how many times, and in what position, are a reflection of social and cultural influences, not direct biological promptings.

In terms of science, and even of personal experiences of sex, the social constructionists emphasize that people cannot fully escape from the shaping and biasing influences of their past experiences, especially including culture and socialization and their particular roles in society. Ultimately, it is impossible for people to *fully* understand the views or experiences of someone from a different background (partial understanding is possible). The most famous and familiar instance of this principle is the often repeated assertion that men simply cannot understand women's experiences, feelings, needs, and wishes. The phrase "men just don't get it" became for a time a feminist slogan. This brings up the feminist theory, which, in the area of sexuality, has been the most important and influential version of social constructionism.

Feminist Sexology

It is possible to be a social constructionist without being a feminist, and vice versa, but in practice, and particularly in the practice of theorizing about sex, the two overlap heavily and few thinkers embrace one without the other. The two theoretical approaches are quite compatible. Moreover, in our view, the high-water mark of both approaches coincided: the 1970s saw the flowering of social constructionist approaches, in part swept along in the wake of the hugely popular and influential book by Berger and Luckmann (1967). That same decade also witnessed the triumph of feminism in many spheres, not the least of which was in sexual theory, driven in part by the so-called sexual revolution of the late 1960s and the early 1970s, which by all accounts took the form of sweeping and extensive changes in female sexuality. (Male sexuality changed far less than female sexuality; see Ehrenreich, Hess, & Jacobs, 1986; also Arafat & Yorburg, 1973; Bauman & Wilson, 1974; Birenbaum, 1970; Robinson, Ziss, Ganza, Katz, & Robinson, 1991.) The undeniable fact that sexual attitudes and behaviors, and female sexuality in particular, had changed so radically in such a short period of time created the sense that almost anything was possible, and thereby seemed to prove the constructionist point that sex depended on historical and cultural context. In our view, large parts of sexual theory today are still deeply rooted in the feminist thinking from the 1970s, including such landmark theoretical works as Brownmiller (1975).

Summarizing feminist theory is hampered by disagreements among feminists, some stemming from core contradictions. For example, some feminists seek to assert gender equality in all things, whereas others seek to establish the superiority of women in as many spheres as possible. (Admittedly, both views share a rejection of theories that men are properly or naturally superior to

women.) Some feminists embrace the scientific method and seek to use empirical findings to establish gender equality or female superiority, whereas others regard objective science as a sham and assert that the conclusions of research are inevitably biased by the political (and other) views of the researchers, especially in such socially fraught issues as sex. The controversial book *Who Stole Feminism?* (Sommers, 1995) asserted that feminism had changed over time in fundamental ways but was reluctant to admit having changed, particularly because the newer form seeks to benefit from the moral legitimacy of the earlier. In Sommers's account, feminism of the early 1970s promoted gender equality and fairness, advocated questioning of established ideas, and welcomed the support of men. Feminism since the 1980s, in contrast, has promoted female superiority and female gains at the expense of men, opposed questioning of its own entrenched dogmas, and regarded men (with a few exceptions) as irredeemable enemies. Regardless of whether one accepts that particular analysis, the diversity of feminist views is undeniable. We shall summarize several themes as best we can, but it would not be surprising if here or there a self-proclaimed feminist thinker could be found to deviate from each of them.

A major theme of feminism is that sexual attitudes and practices are rooted in the gender roles that each particular culture and historical period have constructed. Feminism is primarily concerned with male and female differences, and, to feminists, sex is just one manifestation of gender. (We use the term "sex" to refer to sexuality and the term "gender" to refer to both the social and biological distinctions between men and women.)

Feminists have then elaborated a variety of implications of that basic assumption. Tiefer (1995) proposed that sexuality is not solely a product of biology, but is socially constructed and frequently negotiated. From the social constructionist perspective, sexuality is not a universal human phenomenon but is instead only a part of social life and identity that can be sexualized or desexualized through its cultural meaning and regulation (Weeks, 1991). Social constructionists believe that sexual authorities create and maintain expectations regarding sexuality only when such expectations will benefit those in power.

Indeed, power is central to feminist thought. Many have asserted that power is a key ingredient to all feminist analyses (e.g., Riger, 1992; Yoder & Kahn, 1992). Feminist thought emphasizes the concept of patriarchy in explaining gender differences and, in particular, women's problems. Patriarchy is the political domination of males over females. Thus, gender relations and women's problems are explained by examining the oppressive and exploitative social structures allegedly set up by men to favor themselves at women's expense.

In the sexual sphere, power and patriarchy remain centrally useful concepts to feminist theory. Rich (1980) asserted that heterosexuality is not a natural state of affairs, but instead is due to the existence of a social structure in which men occupy many of the high-power positions. Brownmiller (1975) helped popularize the view that rape results from a conspiracy by all men to intimidate all women so as to keep men in power. The view that power rather than sex is the

motivating force behind rape has become a central principle of feminist sexology (see later section on rape theory). Dworkin (1981) and others have emphasized that human civilization is built on men's ability to rape and abuse women.

In the 1970s, there was an attempt to deny or minimize gender differences in sexuality and to claim that any observed differences were likely due to patriarchal influences such as the so-called double standard, which prohibits women from enjoying sexual activities that are permitted to men. More recent empirical work by feminist scholars has, however, confirmed the existence of large gender differences in sexuality. Across more than 170 studies testing 128,363 participants, Oliver and Hyde (1993) found large gender differences in the incidence of masturbation and in attitudes about casual sex. Men also expressed more positive attitudes toward sexual intercourse in a marriage or committed relationship than women, and women felt more anxious and guilty about sex than men. Thus, there appear to be substantial differences in how men and women express their sexuality privately and with relationship partners.

Feminists argue that these differences in sexuality perpetuate differences between the genders and create male-female conflicts in close relationships. Regarding the large gender difference in masturbation, women having difficulty reaching orgasm during intercourse—also known as *anorgasmia* (Andersen, 1981; Hyde, 1994)—is sometimes attributed to a lack of experience in masturbation, though other factors such as inept male sexual technique and guilt induced by patriarchal socialization may also contribute. Hyde (1996) recommended sexual education that contains specific instructions for female masturbation as part of the curriculum.

Feminists also argue that the large gender difference in attitudes about casual sex sets the stage for male-female conflict, including sexual harassment and date rape. Gender role socialization, including the sexual double standard (i.e., casual sex is fine for men but not for women), defines social norms and expectations for male and female sexual behavior. These differences are rooted in men having more power than women, both physically and institutionally. According to this line of thought, if the power difference could be eliminated, then the difference in attitudes toward casual sex would vanish also. Clearly, this view is fundamentally opposed to evolutionary and biological approaches such as that of Buss and Schmitt (1993), who propose that the different attitudes toward casual sex are innately different and inextricably linked to the different reproductive strategies and the biological constraints on the sex organs. (That is, having sex with more partners increases the likely number of offspring for men but not for women.) In the field of sex, evolutionary theory arose in part as a reaction against feminist and constructionist thinking. The next section turns to evolutionary theory.

Evolutionary Theory

Some of the earliest thinkers in modern psychology (e.g., James, 1890/1950) thought that an evolutionary perspective was essential for a full theory of human social behavior. This sentiment was largely ignored, however, for the

better part of the twentieth century. Theorists did not start actively importing ideas from evolutionary theory until about the late 1960s. When this theory did start to become integrated into theories of human behavior, it did so to the greatest extent in the domain of sexuality. This should come as no great surprise—classic Darwinian theory (e.g., 1859/1964, 1871) implies that differential reproductive success is the key to biological evolution. Sexuality was therefore a natural focus for evolutionarily minded scientists, because mating is central to reproductive success. Nevertheless, many evolutionary researchers found themselves accused of being obsessed with sex.

When an evolutionary approach to sexuality started becoming popular, many people were uncomfortable with its implications. To some, such theories took people's sexual identities out of their own hands and put them into the hands of their genes. Many were distressed by the idea that their sex lives—including their most intimate feelings and desires—were determined not by their own hearts and minds, but by human ancestors who had been dead for hundreds of thousands of years. In suggesting that much of human behavior is rooted in biology, evolutionary theory was viewed as a cynical and even oppressive standpoint, as this implied that many harmful behaviors could not be changed or avoided. Some even viewed the evolutionary perspective as a strategic tool designed by the patriarchy to maintain the sociopolitical status quo.

Evolutionary approaches to sexuality draw upon unifying principles of biological adaptation and evolution by natural selection. The fundamental premise is this: organisms possessing adaptive physical and psychological design features tend to reproduce at a greater rate than organisms with less adaptive features. As a result, these features—referred to as "adaptations"—can become characteristic of the species over evolutionary time.

Applied to sex, evolutionary theory seeks to understand the desires and behaviors of modern individuals as the result of ancestral (both human and prehuman) patterns that produced more and better offspring. Evolutionary theorists contend that virtually all aspects of human mating and sexuality—from the excitement of initial romantic attraction, to the day-to-day maintenance of a long-term relationship, to the anger and distress experienced at a relationship's break-up—have been shaped, at least in part, by evolutionary processes (Cosmides & Tooby, 1992; Maner et al., 2003). That is, they have been shaped by the mating-related constraints under which ancestral men and women evolved.

Many studies show, for example, that men and women differ in the traits they look for in their romantic partners, as well as in their willingness to engage in casual sex. Whereas men tend to place a premium on the physical attractiveness and youth of their partners, women favor partners with maturity and high social status (Kenrick & Keefe, 1992; Li, Bailey, Kenrick, & Linsenmeier, 2002). Men are generally quite willing to engage in casual sex, without any prospect of a long-term relationship, whereas women are relatively more inclined to require some level of commitment before agreeing to intercourse (Clarke & Hatfield, 1989; Simpson & Gangestad, 1991).

From an evolutionary perspective, these sex differences reflect stable differences between men's and women's mating strategies—strategies that are attributable to the different constraints that influenced the reproductive success of ancestral males and females (Buss & Schmitt, 1993). Evolutionary theorists such as Trivers (1972) pointed out that throughout evolutionary history, women have experienced a higher level of initial obligatory parental investment than have men. When pregnancy occurs, a female is generally obliged to invest herself for the nine months it takes to incubate the child, at the very minimum, and usually a lot more. Ancestral males, in contrast, had no such obligation (at least not in the biological sense), and therefore may have benefited from mating with as many females as they could in order to maximize their reproductive success. As a result, suggest theories of differential parental investment, women tend to be relatively more selective than men, looking for a high-quality mate who exhibits the interest and ability to invest resources in his mate and offspring. Moreover, women are relatively more inclined to refrain from having sex until their mate has given them signs that he is willing to remain in a long-term monogamous relationship. Although men generally have high standards for long-term partners, they tend not to be as selective when it comes to short-term sex, exhibiting greater and more frequent willingness to mate with a wider range of females.

Evolutionary theorists are quick to point out that, despite criticisms to the contrary (e.g., Lickliter & Honeycutt, 2003), an evolutionary perspective does not imply genetic determinism—the idea that people's behavior is entirely determined at birth by their genes. Modern evolutionary theories readily acknowledge the role of learning and culture, and explore ways in which genes, learning, and culture interact dynamically to produce sexual behavior (e.g., Gangestad & Simpson, 2000; Kenrick et al., 2002; Krebs, 2003).

It is also worth noting that evolutionary theorists do not assume that people consciously consider their reproductive success when pursuing particular mating strategies. On the contrary, they believe that human sexuality has been shaped by natural selection such that people carry on their romantic lives without necessarily considering the reproductive ramifications of their actions. Indeed, the widespread use of birth control illustrates that people—even highly promiscuous ones—are not simply out to increase the number of their offspring.

Psychoanalytic Theory

Sexuality theory was heavily influenced by psychoanalytic theorizing during the first part of the twentieth century, though this influence has progressively diminished. Probably few researchers currently emphasize psychoanalytic theory in their work, though occasional findings may seem relevant. Psychoanalytic theory has its roots in the seminal thinking of Sigmund Freud (1905/1975).

The sex drive was regarded by Freud as one of the two main motivations that underlie all human striving (the other being aggression). Freud interpreted the sex drive very broadly, so as to encompass desires for love, affiliation, and

belongingness. He emphasized that the drive could be transformed in many ways, including via symbolic associations. Creative art and philanthropy, for example, were regarded as transformations (sublimations) of the energy from the sex drive, which suggests that symbolically the philanthropist is having sex with the beneficiaries of his largesse.

In Freud's theory of projection, people avoid acknowledging their own socially (or personally) unacceptable desires by perceiving them instead in other people. Applied to homosexuality, this suggests that people who have homosexual desires but are unwilling to accept them tend to overinterpret the behavior of others as indicative of homosexual tendencies, and then they react with strong disapproval, if not vicious aggression, toward those others. In reaction formation, another defense mechanism, the conscious mind transforms a desire into its opposite, so that someone who feels homosexual desires professes to loathe and despise homosexuality. Lab studies have provided some support for these processes (Adams, Wright, & Lohr, 1996).

Freud proposed that people are by nature bisexual and only gradually become socialized into one gender role. The conscious mind resists the socializing pressures that seek to deprive it of half of itself, and the unconscious motivations may retain the opposite gender from that of the conscious self. The much-maligned concept of penis envy has been interpreted as merely a manifestation of this reluctance to lose half of one's bisexual wholeness (Brown, 1966). (Thus, penis envy does not mean that the girl wishes she were a boy, but rather that she is reluctant to lose half her totality.) For anatomical reasons, girls have to realize earlier in life than boys that they are not complete (i.e., limited to being one gender instead of both, and thus shut out from some realms of human experience), and so this transition is more traumatic for them. Later in life, males do envy the female organs and their reproductive powers, but this adjustment is less severe because by the time boys realize they lack these inner organs they will have accepted the social roles of maleness. Little boys equate the vagina with the anus and therefore think they have everything they might need.

If the adjustment to being sexually differentiated is more traumatic for girls, other adjustments are more difficult for boys. Freud proposed that children develop strong sexual and emotional attachments, first to their mothers, and then to the opposite-gender parent. This latter (Oedipal) attachment leads to a desire to marry and possess that parent. The other parent refuses to tolerate this, however, and can use anxiety as a weapon to stifle this blossoming love. With boys, the father's disapproval of the love for the mother takes the form of an implied threat to castrate the boy, and the boy's resulting fear is so strong that the entire pattern of infantile sexuality gets repressed. With girls, the early loves are divided between the two parents and the threat of castration is moot (because the penis is already seemingly gone), so this so-called Oedipal complex is less threatening and its abandonment both less complete and less traumatic.

Freud was among the first to suggest that sexual perversions were natural and acceptable patterns of behavior. He suggested that they had their roots in

childhood experiences, including the repression of Oedipal sexuality. He thought that children were not merely bisexual but open to all forms of physical pleasure, a pattern called polymorphous perversity. Severe Oedipal repression in young men stamped out this all-body sexuality and paved the way for perversions. The less complete repression in women leaves their sexuality more diffused all over the body (hence, for example, women's greater desire for foreplay, defined as stimulating sexual arousal by touching parts of the body other than the sex organs).

Oedipal repression is ostensibly followed by a period of latency, in which there is little direct evidence of sexuality. The sex drive returns in force with the physical and psychological changes of adolescence. The adolescent self finds itself unable to cope with the newly strong desires and hence must detach from loving parents so as to find new mates. Still, the quest for adult mates and relationships is regarded as shaped heavily by the Oedipal love and other experiences from childhood.

Social Exchange Theory

Social exchange theory applies economic concepts to behavior (Blau, 1964; Homans, 1950, 1961; Thibaut & Kelley, 1959). It emphasizes analyzing the costs and benefits of social interaction to the individual participants. It assumes that interactions are most common when they are mutually beneficial, in the sense that each party gains more than it loses. Social exchange theory is a style of analysis and therefore may be compatible with other approaches, including both evolutionary and constructionist/feminist approaches.

Social exchange theory does not restrict its purview to monetary costs and benefits; indeed, other rewards can be paramount, including esteem, love, status, prestige, respect, and attention. Once these are recognized, social exchange theorists may invoke economic principles such as market pricing, scarcity, and competition.

Applied to sexual behavior, social exchange theory examines what sex may bring to the potential lovers, including rewards such as pleasure, love, attention, and prestige, as well as costs such as heartbreak, disease, and disgrace (see Sprecher, 1988, 1992). Pregnancy is of course one possible outcome of sex, but whether it operates as a reward or a cost depends on the motives and preferences of the individual.

A recent formulation of a social exchange theory of sex emphasized that sex itself is often a resource that can be traded—specifically, in heterosexual interactions, sex functions as a female resource, and men will offer women other resources in exchange for it (Baumeister & Vohs, 2004; see also Cott, 1978; Symons, 1979). Thus, female sexuality will be treated by cultural systems as having inherent value, whereas male sexuality has no value. In acts of sex, therefore, women give and men take. In order to make the exchange succeed, the men must usually offer the women something else in return, such as love,

respect, marriage or other commitments, or, in some cases, cash. In the sexual marketplace, women operate as sellers, and men as buyers.

The greater cultural value attached to female sexuality (than male sexuality) is seen as creating a variety of patterns. Female virginity is more precious and important than male virginity, and women may regard their virginity as a valued gift they give to someone, whereas men do not regard their own virginity with the same positive value. (If anything, some males regard it as a stigmatizing sign of sociosexual incompetence; Sprecher & Regan, 1996). Female virgins are regarded in many cultures as more desirable sex partners than nonvirgins, whereas no such distinction exists for males. Female infidelity is prohibited and punished more severely than male infidelity (e.g., Tannahill, 1980). Social exchange theory sees this difference as stemming from the view that the unfaithful wife is giving away something precious that belongs to the couple. In contrast, the unfaithful male is not giving away something of value (unless the sex is accompanied by other resources, such as if he spends the household's money on a mistress). Marriage is regarded as a contract in which the woman contributes sex and the man contributes money and other resources. Hence, when divorce criteria differ by gender, the woman's but not the man's refusal to have sex is grounds for divorce, whereas the man's but not the woman's refusal to provide money is grounds (Betzig, 1989). Laws such as those regarding statutory rape are seen as necessary to protect female sexuality from men, but protecting male sexuality from women is not regarded as worthy of legislation.

Social exchange theory emphasizes the development of a local sexual marketplace with a more or less standard price for sex, as indicated in norms that dictate how much money, time, commitment, or other resources a man should invest in a relationship before the woman owes him sex. One principle of economic theory is that sellers compete more than buyers (e.g., Becker, 1976), and this would be reflected in women not only seeking to "advertise" their wares with makeup and sexually attractive clothing, but also possibly competing to offer sex at a slightly lower price than other women so as to attract more or better quality male attention.

Seller competition may become especially acute when supply exceeds demand, which in sexual terms entails that there are more eligible women than men in a community. Studies of sex ratio have confirmed that when there are more women than men, the price of sex goes down (so to speak), so that premarital and extramarital sex become more common and the need for men to invest extensive resources is reduced (see Guttentag & Secord, 1983). Such things may happen after a major war, for example, in which many eligible young men are killed. In contrast, a surplus of males relative to females corresponds to demand exceeding supply, and such communities typically have restrictive or prudish sexual norms that permit sex only when the man has invested and committed a great deal, corresponding to a high price for sex.

Economic theory holds that sellers not only compete but also collude more than buyers. In sex, this would entail women working together to manipulate

the price of sex. According to social exchange theory, this underlies traditional patterns in many cultures by which girls and women are socialized to restrain their sexual impulses and hold back from sexual activity. Although some feminists and some evolutionary theorists have assumed that cultural constraints on women's sexuality stem from men's attempts to control women, empirical evidence overwhelmingly indicates that women rather than men are the principal sources of pressure on women to restrain their sexuality (for review, see Baumeister & Twenge, 2002). The social exchange theory proposes that a rational strategy for women would be to work together to restrict the supply of sex available to men, in order to drive up the price. "Cheap" women who offer sex without demanding commitment or other resources in return undermine the bargaining position of other women and are therefore punished by the female community with ostracism, bad reputations, and other disincentives.

SPECIFIC SEXUAL PHENOMENA

In this section we touch on some specific sexual phenomena to highlight the differences between the theoretical perspectives noted above and, where relevant, to indicate other directions of theorizing. As mentioned before, the field of sex research has not been hospitable to midlevel theorizing (i.e., developing theories about specific phenomena apart from the grand perspectives of feminism, evolution, and the like), but some theories have been put forward, and in our view theoretical development in this field would benefit from encouraging more of these narrowly focused theories that may be independent of the grand perspectives.

Sexual Desire

Feminist theory saw itself as liberating women from accumulated false stereotypes. Some rebelled against the view that men desire sex more than women do, proposing instead that women's desire for sex is equal to and perhaps greater than men's (e.g., Sherfey, 1966; see also Hyde & DeLamater, 1997). However, a different tradition of feminist thought has emphasized the view of sexual intercourse as inherently coercive. This would seemingly assume that men want sex more than women do (which is why men would use coercion), though it is possible for feminists to propose that men coerce women for political reasons, so equal desire could still result in unequal coercion.

In contrast, evolutionary theory depicts male desire for short-term sex as stronger than that of female (and empirical evidence overwhelmingly supports this; for review, see Buss & Schmitt, 1993; Oliver & Hyde, 1993). In evolutionary perspective, this is because males (unlike females) can reproduce more if they have sex with a greater number of women. Moreover, males must work hard and take risks to get sex (given widespread female reluctance), and so a low sex drive might leave them disinclined to do so. Human females can

normally have only one baby per year, and not much sex is required to accomplish that, so there is no biological payoff for high sex drive.

The social exchange theory is based partly on the assumption of greater male sex drive in general, which research findings also support (Baumeister, Catanese, & Vohs, 2001). According to the theory, this is why men will offer women other resources to induce them to have sex. If women wanted sex as much as or more than men did, the basis for the economy might be undercut.

That gender differences in desire for short-term sex will produce different patterns of sexual decision making has recently been proposed by Haselton and Buss (2000; see also Maner et al., 2005). Their "error management theory" is a midlevel theory though nominally linked to evolutionary theory. It proposes that men and women seek to minimize the more costly type of error. Men seek to minimize the chances of missing out on sexual opportunities, so they pursue all chances and interpret ambiguous behavior by women (such as smiling) as indications of sexual interest. Women, in contrast, seek to minimize the chances of having sex with an unreliable or genetically substandard mate, and so they avoid or refuse sexual opportunities and require suitors to furnish ample signs of suitability before engaging in sex.

Theories about prostitution and pornography are shaped by views of sexual desire. Clearly, prostitution and pornography appeal more to men than to women. To the social exchange theorist, these are low-cost substitutes that cater to the excess male desire that women themselves refuse to satisfy. In contrast, feminist theory assumes equality of desire, and so the greater male interest in prostitution and pornography must be attributed to other, nonsexual motives, such as the wish to degrade and exploit women. (For example, Dworkin, 1981, concluded that "[p]ornography is a celebration of rape and injury to women.") Interpreting male interest in pornography and prostitution as an exploitative political strategy has been a contentious feminist stance that has fueled hostile confrontations between men and women.

Rape

Although recent evidence indicates that women occasionally coerce men into unwanted sexual activity (e.g., Anderson & Struckman-Johnson, 1998) and that homosexual coercion also occurs, the bulk of theorizing has focused on explaining why men rape women. In our view, the major grand perspectives have mostly offered sometimes contentious and mostly unhelpful theorizing, and so the development of midlevel theories to explain rape specifically is needed.

Evolutionary theory has proposed that men rape women because it is one biological strategy for passing one's genes into the next generation (Thornhill & Palmer, 2000). In nature, and presumably in human prehistory, most females mated with a few high-status males, and so the other males were left out. Forcing sex on women was the only way that these lower-status males could reproduce, and so males who were sexually aggressive would have been more

likely to pass on their genes than nonaggressive males (which is why, presumably, some genetic impulse to rape remains today). Though plausible, this theory runs far beyond the available evidence (as Thornhill and Palmer acknowledge) and leaves unanswered many specific questions in predicting rape.

Feminist theory depicts rape as reflecting the general pattern of male violence toward and oppression of women. A landmark feminist analysis by Brownmiller (1975) asserted, first, that rape reflects a conspiracy by all men (implying that even nonrapist men support rape) to intimidate and subjugate all women. She even claimed that men are socialized to rape. Second, the analysis insisted that the driving force behind rape is power rather than sex. Although a large amount of empirical evidence has discredited this view point by point (for reviews, see Felson, 2002; Palmer, 1988; Tedeschi & Felson, 1994), it remains popular with many feminists, especially those who regard quantitative data collection as merely another male tool to undercut subjective experience and oppress women. In fairness, the feminist view that rape is about power rather than sex may be an accurate depiction of the female victim's experience. Moreover, the feminist methodological insistence that people cannot fully understand the subjectivity of others in different roles entails that female theorists could not possibly understand the motives or actions of male rapists anyway.

Various other theories have begun to be put forward to explain rape. One early view emphasized low social skills, proposing that men who could not obtain sex by charm would resort to rape, but it has been contradicted by actual studies of rapists, which show that they do have skills and in fact often manage to have a higher amount of consensual sex than other men (e.g., Kanin, 1985). A newer theory by Malamuth (1996) is derived from observations of sexually coercive men, and proposes that a combination of hostile masculinity (masculine personality traits plus negative attitudes toward women), grievance (sense of having been victimized by women), and a view of heterosexual relations as inherently antagonistic, if not downright exploitative, is what predisposes some men toward rape. Malamuth's approach is admirably cautious in its scope and carefully grounded in systematic observations.

Using a similar, empirically based approach, Baumeister, Catanese, and Wallace (2002) proposed a narcissistic reactance theory of rape. Reactance theory (Brehm, 1966) proposes that people respond to loss of options by trying to reassert those options, and in regard to sex, some men may respond to a female's refusal of sex (especially when the man regards the refusal as unexpected or illegitimate) by using force to obtain sex. Narcissistic men, who overestimate their entitlements and are comfortable exploiting others to satisfy their own needs, may be most prone to make that kind of cognitive distortion.

Homosexuality

Explaining homosexuality is a difficult challenge for most theories. Evolutionary theory explains modern sexual desire as based on what patterns of

ancestral sexual activity produced the most offspring—but homosexual behavior does not produce offspring, so why has evolution not entirely eradicated homosexual activity? Some evolutionary psychologists have speculated that evolution might allow for homosexuality through processes of kin selection (Bobrow & Bailey, 2001). For example, even if a gay man does not reproduce, he might still pass on his genes by helping to support the reproductive success of his close relatives, who carry a large proportion of his genes.

Constructionist theories explain sexual desire as a product of socializing influences of culture and parenting, but most cultures have disapproved of homosexuality. In particular, the Western tradition has condemned homosexuality with religious, social, and legal pressures, as well as informal pressures often extending to severe violence—so again, one might have expected homosexuality to have disappeared from the scene.

The social exchange theory has little to offer regarding homosexuality, beyond the vague speculation that homosexual activity might offer some individuals more rewards than costs. (For example, getting sexual pleasure without the risk of pregnancy might appeal to some individuals, but seemingly such a bargain would be more appealing to women than men, and, in empirical fact, there are more male than female homosexuals.)

The psychoanalytic view suggests that people are born bisexual, and so homosexuality is one possible developmental outcome that should be considered natural, though statistically unusual. More elaborate psychoanalytic approaches, such as emphasizing intrusive mothers and aloof, rejecting fathers, have not been supported by empirical evidence (see Bem, 1996, for critique).

Bem has proposed an intriguing mixture of nature and nurture. He speculates that some children are temperamentally more suited to play with the opposite gender than with their own. He proposes that at adolescence, the "exotic becomes erotic," which is to say that contact with the unfamiliar gender creates arousal that is then labeled as sexual excitement. Boys who grow up playing with boys will find girls different and exciting, but boys who grow up playing with girls will find other boys to be different and exciting. His view is inherently plausible, but evidence for crucial parts of it is not yet available.

The area of homosexuality is one in which midlevel theorizing seems most in need. Undoubtedly, there are correct elements in constructionist, evolutionary, and other approaches, and somehow these must be reconciled with the continued existence of homosexuality.

CONCLUSION

The vagaries of why people enjoy sex, why they enjoy variety, why they make good and bad decisions about sex, and further questions continue to preoccupy the general public as well as a broad realm of thinkers, but most of this thinking remains at the amateur level. The extensive discussion of sexuality

indicates that sex remains an interesting topic, and in the long run, one can expect theorizing about sex to continue and even become better.

Offering an exhaustive account of sexual theories would require a tome written by a team of experts, and even they might not have gotten them all. Our project has been to summarize what we see as the major grand perspectives and provide a smattering of more focused, midlevel theories about sexual behavior. Recent decades have seen progress in both, though perhaps not as much as might have been. Our opinion is that the grand theories should be retained but de-emphasized, and especially the hostility between their adherents should not be permitted to restrict the development of midlevel theorizing. That is, the field of sex research would benefit if young and new researchers were encouraged to develop midlevel theories without having to declare allegiance to a grand perspective or justify themselves to devotees of those great camps.

Freudian theory has been criticized for being notoriously elastic and hence resistant to empirical disconfirmation. We think social constructionist, evolutionary, and probably sexual exchange theories are likewise flexible, and so they may be more useful as explanatory frameworks than as sources of competing, testable, and falsifiable hypotheses. The next decade should concentrate on the cultivation of empirically informed midlevel theories, and once several of those have been refined and honed against the sharp edge of data, only then will it be fruitful to revisit the clash of grand perspectives.

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3

Sexuality in Childhood

Ryan P. Kilmer and Ariana Shahinfar

Sexuality in childhood—the very notion seems an oxymoron. Although many parents and caregivers may prefer to believe that sexuality is something that is not awakened in their child until adolescence, sexuality is no different from other areas of human development in that its roots are planted and take hold in childhood. This does not mean, however, that a young child's capacity to experience and express sexuality is equivalent to that of an adult. Perhaps the most useful approach to understanding child sexuality in this context is to regard it as a "normal" aspect of development, encompassing the set of processes and experiences that provide the groundwork for healthy adult sexual functioning. Despite the obvious evolutionary significance of adult sexual behavior, however, child sexual behavior has been the subject of minimal systematic investigation, and little attention has been paid in the research literature to the normal developmental course through which the foundation is laid for mature adult sexuality.

Ironically, the emphasis in the professional literature is (and has been) on difficulties and problems, such as the impact of sexual abuse, "deviations" in sexual development, and gender role confusion in children. As a result, it appears that we know more about what is viewed as "abnormal" than "normal." Some researchers have recently advocated collecting normative data in order to better understand the behaviors of youngsters who have been sexually abused and to distinguish these behaviors from those of others (e.g., Friedrich, Fisher, Broughton, Houston, & Shafran, 1998; Larsson & Svedin, 2002b). In fact, it was

not until there was a heightened awareness of sexual abuse (and its impact), brought on largely by the institution of mandatory reporting laws over thirty years ago, that the need for data on the normal bounds of childhood sexual behavior was highlighted to the research community (Heiman, Leiblum, Esquilin, & Pallitto, 1998). Thus, it appears that researchers, professionals, and others made decisions about what was "abnormal" without first identifying and understanding what was "normal." Nonetheless, the need for information on normal sexual development has been recognized, and some investigations have begun to shed light on child sexuality.

One problem with the limited research in this field is that much of the work draws on findings from anecdotes or case studies. Because they may not apply to the majority of children, these methodologies are considered weak for the purpose of providing a representative picture of the normal course of sexual development. Furthermore, some researchers relying on vignettes or individual experiences have made claims that are difficult to validate, couching "results" as normative without evidence that the descriptions are indeed typical. Admittedly, there are numerous impediments to conducting well-controlled research in this area. First, parents are often considered the most qualified reporters regarding children's daily behaviors, yet sexuality involves private behaviors, many of which parents may not have observed. Even when children are old enough to offer self-reports, the private nature of sexuality may make them hesitant to report on such behavior. There are also ethical constraints regarding the nature of research that can be done with children, particularly when considering the societal taboo surrounding sexuality in many cultures.

This cultural bias may also contribute to difficulty in gathering sound data in that survey respondents may balk at the use of the term "sexual" to describe behaviors engaged in by infants and children, particularly within societies that are less open regarding sexuality (e.g., the United States). While some researchers and theorists (e.g., Friedrich et al., 1998; Martinson, 1997) have noted that it is possible to describe aspects of children's sexual behavior using categories with a corresponding adult behavior or presentation (including self-stimulation, sexual interest, exhibitionism, sexual knowledge, and voyeuristic behaviors), there are some key points that differentiate the presentation of such behaviors in children versus adults. It is possible that emphasizing these differences may make the larger discussion of normative childhood sexuality more palatable and, thus, more possible within a greater variety of cultures. Toward this end, Heiman et al. (1998) have suggested that discussion and investigation of child sexuality might be freed if researchers modify the description of the behaviors under study from "sexual" to "self-exploratory."

We would further suggest that there is a meaningful difference between behaviors motivated by curiosity or "scientific" interest and those driven by sexual interest and, importantly, between behaviors that are *pleasurable* and those that are *sexual*. Put another way, although some of the behaviors in which young children engage involve their genitalia, they are not necessarily sexual in nature.

A second useful distinction between adult and child sexuality relates to the fact that an individual's intentions and cognitions serve an important function in determining whether a behavior is sexual per se (Gordon & Schroeder, 1995). For instance, while numerous parental and professional reports describe infants, toddlers, and preschoolers touching their own genitals, this self-stimulation is qualitatively different in meaning, intention, and experience than similar behaviors would be later in the developmental span. For this reason, and as mentioned at the opening of this chapter, we believe that childhood sexuality is more usefully described as the foundation for, rather than an early sign of, adult sexuality.

With appreciation for the still evolving state of the field's current knowledge base regarding child sexuality, this chapter seeks to (a) provide an overview of theoretical frameworks that may prove useful in considering the processes and experiences that underlie the development of child sexuality, (b) summarize current knowledge regarding childhood sexuality from birth to 12 years of age, (c) consider briefly cross-cultural findings to clarify cultural differences in youngsters' sexual behavior, (d) describe selected nonnormative child sexual experiences and outcomes, and (e) discuss recommendations for future research in this area.

THEORIES RELATING TO CHILDHOOD SEXUALITY

In considering developmental theories of childhood sexuality, the ideas of Sigmund Freud present a natural starting point. Freud's psychosexual theory is, in fact, the only developmental theory that explicitly names sexuality as a central force in driving human growth and behavior. In brief, Freud argued that children pass through five distinct stages of development (oral, anal, phallic, latency, and genital), each of which centers around a specific area of the body that is most sensitive to excitation and sensual pleasure and thus serves as the primary source of satisfaction and gratification. Successful navigation of each stage involves the child being allowed to experience and explore freely the sources of pleasure attached to each phase while carefully balancing desires/drives ("id"), what the environment will provide or allow, that is, the constraints of reality ("ego"), and the judgments and limitations enforced by social and societal boundaries and mores ("superego"). Failure to navigate one of the phases of psychosexual development (e.g., by obtaining too much or too little gratification) would, according to Freud, result in fixation at a particular stage. In Freud's view, this fixation could very much influence personality traits and even take the form of various psychological problems, but the key element in Freud's thinking is that a child's ability to master sensual pleasure serves as the foundation for growth and development (see Freud & Gay, 1995, for more on Freud's theory and writings).

Several criticisms have been lodged against Freud's psychosexual theory, including that it (a) has no empirical basis, (b) is essentially untestable via current scientific methods and standards, and (c) was primarily developed through retrospective assignment of meaning to childhood experiences among an adult clinical population (as opposed to thorough prospective observation of children's normative development). Another criticism that holds particular relevance to the topic of this chapter is that, as an approach to development, psychosexual theory assumes cultural universality—that is, psychosexual development and the outcomes associated with passage through the various stages are implied to be a universal experience. This issue becomes relevant when addressing the considerable cultural variability in children's sexual behavior and attitudes that has been reported in the literature (see Larsson, Svedin, & Friedrich, 2000). Perhaps the largest problem with relying solely on psychosexual theory in trying to understand the development of childhood sexuality is that it treats sexuality as the force behind development rather than an outgrowth of a complex and comprehensive developmental package. That is, in giving sexual impulses, behaviors, drives, and issues such prominence, this theory does not fully account for the multiple complex processes and systems at play as children grow and develop, nor does it address the interrelationships between sexuality and these other within-child systems as well as the external factors influencing youngsters' development.

Moving beyond Freudian ideas, more modern approaches to developmental theory attempt to account for such factors and underscore the fact that physiological, cognitive, social, and emotional domains of development are intertwined and, in fact, mutually supportive with respect to human growth (see, e.g., Damon & Lerner, 1998). This idea holds true for the development of childhood sexuality as well. As described by Martinson (1997), there is neither a predictable stage sequence nor a universal course of development that is currently thought to independently describe normal sexual development in the child. Rather, normal developmental processes, including various biological and psychological domains, are thought to contribute to the capacities and behaviors that underlie the child's sexual development (Martinson, 1997). Although it is outside the scope of this chapter to review basic theories of normative development, it is important to keep in mind that the development of childhood sexuality reflects overall growth and development. That is, in order to fully understand changes in the sexual behavior and attitudes of children, one must also understand their developing physical, social, emotional, and cognitive capacities. In addition, sexuality is an area of psychological development that is heavily tied to sociological, anthropological, and historical forces and, thus, cannot be entirely understood without reference to such factors (Frayser, 1994; Gordon & Schroeder, 1995; Larsson et al., 2000; Martinson, 1997). In fact, much research suggests that these larger cultural forces contribute to important differences in the development and expression of sexual behavior among children (see Larsson et al.).

Because of the complex interplay of psychological and sociocultural forces in shaping the development of children's sexuality, the most useful theories for explaining such development must necessarily encompass consideration of intraindividual factors (e.g., biological growth, cognitive development) as well as environmental variables (e.g., cultural standards regarding the expression of sexuality). One approach that effectively considers these various levels is ecological systems theory (Bronfenbrenner, 1977, 1979; Bronfenbrenner & Morris, 1998), and the remainder of this section details the application of this approach to the development of children's sexuality. Ecological systems theory builds on transactional models of development, which emphasize that a child's development is impacted in a bidirectional manner, such that influence flows both from parent to child and from child to parent (e.g., Sameroff & Chandler, 1975). This ecological approach goes further, describing development as occurring within the context of various "nested" levels that mutually interact and influence one another, and include not only the individual child and his or her unique social, emotional, physiological, and cognitive developmental trajectory, but also the various environmental influences that transact with him or her.

The ecological systems model is traditionally depicted as a series of concentric circles, with each ring representing a category of influences on the child. In general, more proximal influences (i.e., factors that more directly influence the child himself/herself) make up the inner rings of the model, and more distal influences (i.e., those that influence the child's development through an impact on his or her larger ecology) would constitute the outer rings. At its core, this approach asserts that individual behavior and development are influenced by a variety of factors in both one's proximal (e.g., family milieu, peer group, school personnel) and more distal (e.g., cultural values and beliefs, neighborhood qualities, community characteristics) environments, as well as the interactions and interrelationships between and among the multiple levels of a child's contextual world (for more on ecological theory, see Bronfenbrenner, 1977, 1979; Bronfenbrenner & Morris, 1998).

The ecological systems framework is well suited for considering the development of children's sexuality because, as Friedrich et al. (1998) note, the available findings "affirm the premise that the behavior of children is reflective of the context in which they are raised." Cultures, communities, and the families within these larger contexts exhibit a wide range of variability in their attitudes toward and reactions to children's sexual behaviors, nudity, and other expressions of sexuality, and these differences are thought to affect children's behaviors, thoughts, and outward expressions of their feelings and impulses (Larsson et al., 2000). Utilizing ecological systems theory, the paragraphs that follow provide a brief backdrop for considering childhood sexuality and the multiple influences on the development of the sexual self (see Figure 3.1 for examples of ecological influences).

At the center of the nested levels described by the ecological framework, and arguably most proximal to the child's developing sexuality, is the unique

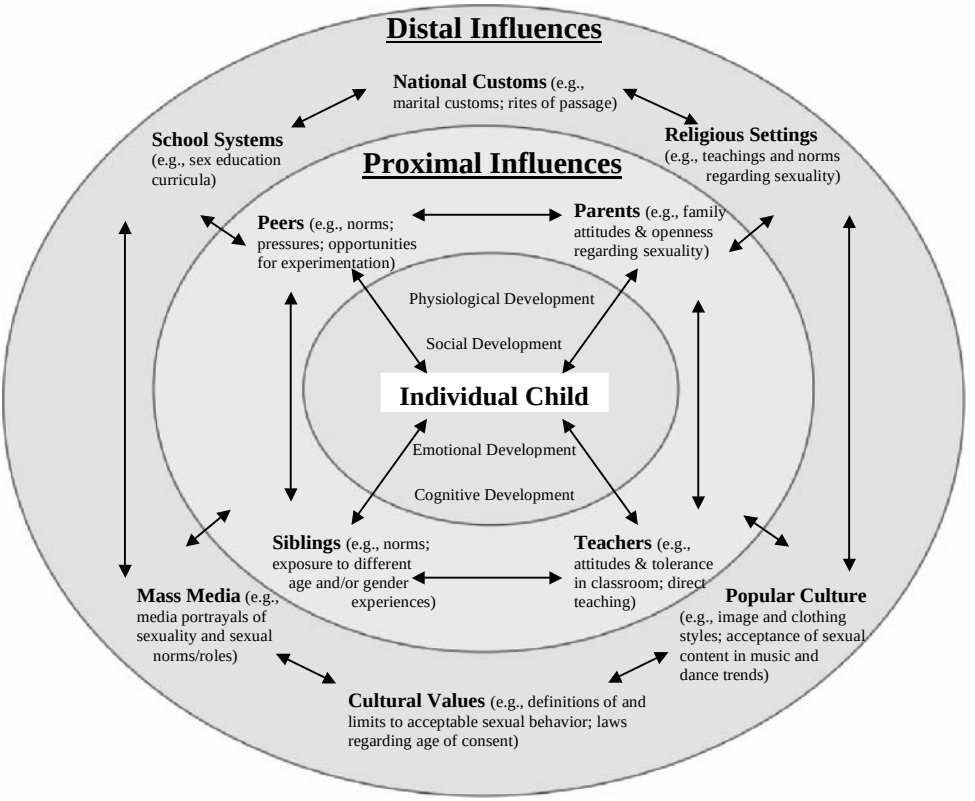

Figure 3.1. Examples of proximal and distal ecological influences on the development of children's sexuality.

social, emotional, physiological, and cognitive developmental trajectory of the individual child. Aspects of intraindividual growth and development, including a child's increasing cognitive capacities and ability to understand thoughts or behaviors as sexual, are relevant to the development of childhood sexuality. Indeed, part of what defines an act as sexual (versus pleasurable) is the understanding of the behavior as such (Gordon & Schroeder, 1995), which develops as a child's cognitive skills develop. Similarly, the child's physiological development provides the necessary backdrop for certain milestones in the development of sexuality, such as the ability to maintain an erection and ejaculate.

Other important proximal influences include those ecological forces that transact directly with the child (e.g., parents, siblings, peers, and teachers). Relevant family factors include how permissive parents are with respect to nudity, sexual television and movie viewing, and opportunities for exposure to adult sexuality—all of which may influence the development of childhood sexual behavior (Friedrich et al., 1992). For example, Friedrich et al. (1998)

found a correlation between openness within the home regarding sexuality and reported child sexual behavior. Other researchers have replicated this finding, identifying an association between an index of family sexuality (including items such as seeing nude adults in the home, bathing with adults, having witnessed intercourse, having nude pictures available in the home, and seeing nudity on television) and sexual behavior scores for youngsters in both U.S. and Swedish samples (Larsson et al., 2000). Although this finding may simply reflect the fact that parents who promote more sexual openness are also more open in reporting their child's sexual behavior, it is also true that a child's behavior is influenced by, and indicative of, the environment in which he or she is raised (Friedrich et al., 1998). Through modeling and the reactions and responses of caregivers and other adults to their acts, statements, and questions, children learn to shape their behaviors, understand which behaviors are viewed as acceptable or not (and which are more appropriate for private settings), and identify the proper language for describing their thoughts, impulses, and behavior (Friedrich & Trane, 2002).

Similarly, the child's peers may play a role in the development and expression of sexual behavior in childhood. Specifically, peers have been found to exert a strong influence on defining norms for each other regarding sexual behavior during preadolescence (Kinsman, Romer, Furstenburg, & Schwarz, 1998), and these influences appear to be stronger than parental social influence in this age-group (Beal, Ausiello, & Perrin, 2001; see also Kinsman, Nyanzi, & Pool, 2000, for an interesting exploration of this idea with an African sample). Additionally, Haugaard and Tilly (1988) found that those undergraduates who made retrospective reports of having experienced a childhood sexual encounter also reported having had more friends as a child, and were more likely to have had a friend in whom they could confide. These findings suggest that the presence of close peers may facilitate childhood sexual exploration by presenting a safe and trusted partner with whom to experiment (Haugaard & Tilly). Peer socialization has also been hypothesized to affect children as young as preschool-age; Friedrich et al. (1998) found that the number of hours spent in day care positively correlated with children's reported sexual behavior. The suggestion is that greater exposure to children from families with other values and experiences may lead to a greater variety of learned sexual behaviors among even very young children.

More distal factors can also have important influences on a child's developing sexuality. For example, ecological systems theory would specifically consider the impact of school programming in the form of sex education on the child's developing sexuality. One theory to explain the cross-cultural differences noted particularly between youngsters growing up in Scandinavian countries and in the United States is that the widespread acceptance and encouragement of sex education in Scandinavia and other Western European countries has a long-standing history, whereas federal standards regarding such education have a more mixed record in the United States (Goldman & Goldman,

1988). For example, the United States has gone from having no federally mandated sex education prior to the 1980s, to the surgeon general calling for sex education as early as the third grade in 1986, at the height of the AIDS crisis (Donovan, 1998). At the time of the writing of this chapter, the debate within the United States regarding sex education centered around whether the current "abstinence-only" approach to sex education favored by the federal government should be changed to an "abstinence plus information on contraception" approach, despite the fact that the United States has a teenage pregnancy rate that is among the highest of any industrialized nation (Singh & Darroch, 2000). As an example of the effect of the educational ecology on children's sexual behavior, the European approach to sexuality education and contraception availability for teenagers has been credited as a central factor in contributing to more rapidly decreasing rates of teenage pregnancy in Western European countries as compared to the United States (Furstenberg, 1998).

Another example of a community influence on the development of children's sexuality that has been noted in the research is the impact of religiosity on sexual behavior and practices. In a retrospective study of childhood sexuality, Haugaard and Tilly (1988) found that in the case of respondents who reported having had a sexual encounter in childhood, the strength of religion in their childhood family was slightly lower than in the case of those respondents who did not report having had a childhood sexual encounter. Of course, this finding could possibly be explained by the emphasis on religion in the childhood family leading to an adult respondent being less likely to report on childhood experiences that involved sexuality, due to shame or guilt. In either case, the point is that religiosity or other cultural frameworks that dictate family attitudes toward sexuality are likely to have an impact on the behaviors a child may engage in or be willing to share through reporting.

Larger sociocultural influences also considered by ecological systems theory include the cultural environment in which the communities and families of developing children reside and function. As described by Frayser (1994, p. 180), "[C]ultural ideas and beliefs can shape the meaning of sexual behavior and define the participants in and limits to that behavior." These cultural messages may exist in the form of laws such as the age at which an individual is able to give consent for participation in intercourse, cultural taboos against incest, and cultural beliefs regarding the age at which children enter adulthood and are ready for sexual initiation and marriage. Cultural messages may also take less organized but equally influential forms, such as how media portrayals treat sexuality and depict gender roles (Ryan, 2000). Ecological theory proposes that these cultural messages are created by communities and influence what messages those communities send to families and children regarding sexuality. Not only are cultural messages regarding sexual behavior available to children through what communities and families teach directly, but they have also become increasingly available through the television, video, and Internet technologies that are ubiquitous in most industrialized nations. It should also be noted that cultural

attitudes are not always directly reflected in media expressions of sexuality. For example, the disconnect between the open display of eroticism in the American media and that same society's reluctance to speak openly about private sexual practices has been noted (e.g., Heiman et al., 1998). The effect this mismatch between purported values and media expression has on children's developing sexuality is unclear; however, there is no doubt that cultural messages regarding sexuality are important in shaping children's attitudes toward their developing sexual selves (Frayser, 1994; Goldman & Goldman, 1988; Gordon & Schroeder, 1995; Martinson, 1997).

The transactional influences specified by the ecological systems model described above were presented as a means of organizing the various factors that contribute to the normal development of sexuality in childhood. This model should be kept in mind as we move forward to outline what is currently known.

NORMAL CHILDHOOD SEXUALITY: WHAT WE *THINK* WE KNOW . . .

In beginning a discussion of the current knowledge available regarding the normal development of childhood sexuality, it is important to first offer a definition of the term "normal" within this context. As mentioned earlier, "normal sexuality" is a socially constructed concept that varies considerably both between and within cultures (Frayser, 1994). Some have further suggested that even within these cultural limits, any sexual idea, fantasy, dream, or wish—that is, one that involves thought, not behavior—is considered to be normal (Gordon & Schroeder, 1995). That said, there are some factors that are generally accepted to distinguish normal from abnormal sexual behavior in childhood. Following the thinking developed in the literature on sexual offending, there is consensus among researchers that normal sexual behavior involves (1) consent, (2) equality of partners (for children, this refers to being within five years of one another's age), and (3) a lack of coercion (National Adolescent Perpetrator Network, 1988, 1993). Although these guidelines are meant to provide objective criteria by which the normalcy of sexual behavior may be determined, it should be noted that the interpretation of consent and coercion may be cloudy even within the participating child's mind (Lamb & Coakley, 1993), and that standards regarding age differences may be culturally and historically bound.

Another consideration is that there exist differences in how child sexual behavior is interpreted and reported. For example, most reports regarding these behaviors are provided by mothers or female caregivers. It has been suggested, however, that female and male reporters may hold different standards regarding their views of sexual behaviors—that is, males have been shown to be more liberal in their interpretation and labeling of behavior as sexual (e.g., Heiman et al., 1998). In a study of 307 health care and mental health care professionals, it was found that females rated various child sexual behaviors as

more abnormal than did males (Heiman et al.). Similarly, Lamb and Coakley (1993) found in a retrospective study of female undergraduates that those who came from a "restrictive" versus an "open" home were more likely to rate their own childhood sexual encounters as "not normal." These interpretations likely impact the reporting of childhood sexual behavior and thus limit the currently available data.

Recognizing the difficulty in defining normal sexual behavior and the various issues associated with reporting bias, it is safe to say that research on normative child sexual development is in its infancy. What follows is a description of some of the prominent behaviors and processes that are currently thought to constitute normative aspects of childhood sexual development across major age-groups. It is important to note that the findings described below are based on two main sources of information: (1) reports by parents or caretakers based on observed sexual behavior among children, and (2) retrospective reports by adults (usually undergraduate students) regarding their own childhood sexual experiences. Although not directly represented in the current section, data from studies of children who have been brought in for treatment due to concerns about age-inappropriate, sexualized behavior have also yielded information on normal childhood sexuality, if only by offering exclusionary criteria and comparisons. These data are touched upon in a separate section of this chapter and more fully considered in a later volume in this set. Rather than providing definitive answers, the information below is meant to provide a starting point for understanding the normative development of sexuality among children across different age-groups—a knowledge base that is not yet well developed.

Infants and Toddlers (Birth–2 Years)

Infants are born with several capacities consistent with developing into sexual beings. For example, Martinson (1997) presents evidence that one of the earliest systems to develop during the embryonic phase is the skin, and he argues that skin sensitivity and touch are more intimately related to erotic arousal than any of the other senses. Evidence has also been presented that male erections and female vaginal lubrication are present in newborns, thus suggesting that the external genitalia are functional at birth (Martinson, 1997). These capacities indicate that the human newborn possesses several physiologic features that prepare him or her to develop sexually.

The most prominent way in which normal development, including sexual development, is expressed during infancy focuses on the sensory and motor activities that take center stage during this developmental period. Such activities allow infants the capacity to explore both their own bodies and the physical world surrounding them, and to learn from these experiences. This bodily self-exploration naturally includes exploration of the genital area. It has been noted that boys begin genital exploration around six or seven months, while girls generally begin between ten and eleven months (Martinson, 1997). This

exploration takes the form of fingering, pleasurable handling, and random exploration and has been noted to disappear in female infants within a few weeks of onset. Male infants, on the other hand, have been noted to continue this behavior as casual play (Martinson, 1997). It should be noted, however, that this self-stimulation is considered to be exploratory and pleasurable rather than masturbatory or sexual in nature (McAnulty & Burnette, 2004). In support of this idea, Martinson (1997, p. 44) notes that "the average infant is not innately motivated and lacks the muscular capacity for the degree of self-stimulation necessary to produce orgasm."

From an anthropologic perspective, Fisher (1989) notes that an important goal of the bodily exploration in which infants engage is to create a map of the body, to which the child will later add significance through transaction with the ecological systems surrounding him or her. This body mapping begins by exploring and then labeling the parts of the body, including genitals. Parents or caretakers have an important role in the child's developing sexuality at this point, as they can either help the child to correctly label or choose to ignore the child's bid for information regarding genitalia. It has been argued that as the infant makes connections between his or her awareness of the body and how adults respond to that awareness, the foundation is being laid for the child's attitude toward his or her body, gender, and sexuality (Frayser, 1994).

As the infant develops further into toddlerhood, genital stimulation takes on a slightly more purposeful note and appears to involve, in addition to manual manipulation of the genitals, the use of objects with which to rub genitals (Levine, 1957). There is also some suggestion that toddlerhood marks the psychological awareness of the genitals and that the sexual behaviors displayed during this period are accompanied by signs of pleasure (Roiphe & Galenson, 1981). In one of the only recent studies of normative child sexual behavior to include toddler-age children, Friedrich et al. (1998) found that 2-year-old children were reported by parents to be relatively sexual (as compared to 10- to 12-year-olds), but that the sexual behaviors displayed by the young children fell within the category of self-stimulation, exhibitionism (i.e., displaying one's genitals), and a lack of personal boundaries rather than behaviors directed toward another individual with sexual intent. Taken together, the available evidence suggests that sexuality in infancy and toddlerhood can best be characterized as prompted by curiosity about one's own and others' bodies.

Preschoolers (3–5 Years)

Although there is a dearth of research on sexuality throughout childhood, the sexual behavior of preschoolers has garnered some attention in the professional literature in recent years. This increase in focus likely reflects two main factors: Parents and guardians often question clinical professionals (pediatricians, psychologists, social workers, etc.) about the appropriateness of their child's observed behaviors at this age, and, perhaps related, the suggestion

that certain behaviors may result from sexual abuse or victimization (e.g., see Lindblad, Gustafsson, Larsson, & Lundin, 1995). Such work underscores the clear need to better understand the range of behaviors that may be characterized as "normal."

Although retrospective self-reports have been utilized, more recent studies of preschoolers' sexual behavior have generally involved reporters representing two major domains of a child's functioning—parents (home) and teachers (preschool or day care)—with parental reports being the most widely used method (Friedrich et al., 1998). Overall, early studies suggested that high frequency behaviors included self-stimulating behaviors, attempting to look at people when nude or undressing, and observing the genitals of other children; other more intrusive behaviors, such as masturbating with an object, inserting an object into one's vagina or rectum, or touching an adult's genitals, were considerably more uncommon (see, e.g., Friedrich, Grambsch, Broughton, Kuiper, & Bielke, 1991; Larsson et al., 2000; Lindblad et al., 1995).

In a study that included 574 2- to 5-year-old American children, parents reported that over 60 percent of boys and nearly 45 percent of girls touched their genitals at home, the most commonly reported behavior in this sample (Friedrich et al., 1998). Other common behaviors for both sexes (reported in over 20 percent of children) included standing too close to people, touching or trying to touch their mother's or other women's breasts, and trying to look at people when they are nude or undressing; touching sex parts in public was also a relatively common behavior among boys, reported for 26.5 percent. Behaviors far more rare in this age-group included putting one's mouth on sex parts, trying to have intercourse, asking others to engage in sexual acts, and pretending toys are having sex, all of which were reported in less than 2 percent of both boys and girls.

A comparative study of sexual behavior in preschoolers in the United States found similar results among the 467 3- to 6-year-olds in the sample (Larsson et al., 2000). Parents reported several common behaviors for both boys and girls, including trying to look at people undressing or nude, being shy about undressing, walking around the house without clothes, touching or trying to touch their mother's or other women's breasts, and touching genitals at home. Over one-fifth of girls pretended to be the opposite sex, and boys tended to more commonly touch their genitals in public, show their genitals to adults, and masturbate with their hands. Rare behaviors for both sexes (reported in 2 percent or less) included asking to watch sexually explicit television, asking others to engage in sexual acts, and masturbating with an object; boys also rarely imitated sexual behavior with dolls and put their tongues in others' mouths when kissing.

As might be expected, preschool-age youngsters appear more inclined to engage in sexual behaviors and/or explore sexuality at home than in more structured settings, such as day care or preschool, which generally involve higher levels of monitoring and more specific behavioral rules (see, e.g., Larsson

& Svedin, 2002b). These studies, conducted in Sweden, have suggested that children of both sexes more often walked around indoors without clothes, talked about sex, showed genitals to adults within the family, masturbated or touched their own genitals, and tried to touch other children's genitalia when at home than when at the center. Girls were also significantly more likely to use sexual vocabulary at home, as well as show their genitals to other children, and pretend to be the opposite sex when playing. Larsson and Svedin note that some data suggest that boys do not change their behavior as much between settings, perhaps reflecting socialization pressures on girls. These same researchers denote multiple behaviors common to both home and day care in their sample, including trying to look at other children's genitals, exposure of body and genitals to peers, trying to look at people undressing, and playing "doctor" and other games (e.g., playing "house," including giving birth). More explicit sexual games were very much unusual in both environments studied (Larsson & Svedin, 2002b). This latter finding is supported by the research of Lindblad et al. (1995), who reported that behaviors such as attempting to make an adult touch the child's genitals, using objects against one's own/other children's genitals/anus, and compulsive masturbation, seemingly without pleasure or to the point that it appeared to cause pain, were very uncommon (reported in 1 percent of youngsters or fewer) in a sample of 251 Swedish preschoolers in day care centers.

Thus, it appears that, as with infants and toddlers, many of the more common behaviors exhibited by preschool-age children fall into two broad categories: (1) self-stimulation and (2) sexual curiosity or exploratory play and behavior. Although the former behavior appears to become less random or accidental as children get older, it is important to keep in mind that it is not necessarily sexual in nature and meaning for preschool-age youngsters. For instance, some authors have reported observations or findings that various means of self-stimulation may serve to release tension or may be associated with other feelings, such as security (see, e.g., Martinson, 1994). Researchers and theorists have also described examples of behavior falling in the second category (i.e., sexual curiosity or exploratory play and behavior), labeling some of them as sexual "rehearsal" play. Among preschoolers, this sexual rehearsal play typically involves exposing themselves to each other and touching one another's genitals, including children of the same and opposite sex (Friedrich et al., 1998; Martinson, 1994), and there is some suggestion that there is more interest in boys' genitals (McAnulty & Burnette, 2004). These often spontaneous behaviors are generally driven by attempts to satisfy curiosity, as opposed to being fueled by sexual interest (e.g., Eisenberg, Murkoff, & Hathaway, 1996), and will manifest in mutual exploration activities such as "playing doctor/nurse" or "I'll show you mine, if you show me yours."

It is difficult to estimate the rates and frequencies of these behaviors, for obvious reasons. However, despite their methodological limitations, some retrospective studies have yielded data regarding sexual rehearsal play and related

behaviors. Although the authors note the difficulty in retrospectively categorizing experiences by age (thus the possible underestimation of the actual rate of behavior in the younger years), one study involving senior high school students (average age 18.6 years) found that fewer than 10 percent of participants recalled a sexual experience with another child before the age of 6 (Larsson & Svedin, 2002a). This proportion is consistent with findings from cross-cultural research, in which 10 percent of children report sexual rehearsal play before age 6 (Goldman & Goldman, 1988). Despite the lack of specificity regarding its frequency and how widely the behavior manifests, sexual rehearsal play has been identified as "universal," at least in the largely Western cultures in which it has been researched (e.g., the United States, England, Canada, Sweden, Australia) (McAnulty & Burnette, 2004, p. 332).

Most children are curious by nature. Both of these major categories of behavior, that is, self-stimulation and sexual rehearsal play, can be viewed as a means by which children learn about sexuality and their bodies, with the learning sometimes happening by accident (via self-exploration), and other times being facilitated by another child telling or showing them. This is consistent with the notion of multiple levels of mutual influence posited by the ecological framework; that is, allowing for individual development and discovery and, as another proximal factor with potential impact, peer influences. Peer influences are self-evident in sex rehearsal play, but, as another case in point, when it comes to self-stimulation, some researchers have noted that boys tend to be more likely than girls to report that a peer explained or showed them how to masturbate (Martinson, 1994). One final common behavior, consistent with this curiosity and desire to make sense of their bodies and their worlds, bears mention as well: children in this age range will also ask questions related to sexual topics, generally focusing on reproduction and childbirth (Larsson & Svedin, 2002b).

Elementary-Age Youngsters (6–10 Years)

Compared to preschoolers, there appears to be less specific attention in the professional literature to the sexual behaviors exhibited by elementary-age children. Nevertheless, one conclusion is clear: in contrast to Freud's theory, in which he argued that youngsters 6 to 12 years old are in a "latency" period during which they essentially lose interest in sexual behavior, children of this age are *not* largely "asexual." They appear to engage in sexual behaviors, though the acts may have different meanings or may take somewhat different forms than in later developmental stages.

As a case in point, one study, described by Ryan (2000), surveyed elementary school teachers about the specific sexual behaviors they had observed in school, as well as which behaviors were most or least frequent. Children rubbing their genitals during class and sexual talk were the most commonly reported behaviors at school, and intrusive behaviors were less frequent. The educators

also noted that secrecy and giggling were regularly observed in restrooms and on the playground.

Another study used parental reports of the sexual behaviors of 362 6- to 9-year-old children and identified two behaviors common among both boys and girls (Friedrich et al., 1998). First, as with preschoolers, touching genitals at home was the most frequent behavior reported in this age-group, endorsed by parents for 40 percent of boys and 21 percent of girls. Trying to look at people when they are undressing or nude was the next most common behavior, reported in 20 percent of boys and 21 percent of girls. Several behaviors were rarely endorsed for either sex in this sample, including putting objects in the vagina/rectum, putting mouth on genitals, trying to have intercourse, asking others to do sex acts, undressing other children, and kissing other children.

The researchers noted that items relating to sexually intrusive acts (e.g., touching their mother's or other women's breasts) or self-stimulating behaviors dropped off in observed frequency relative to the younger, preschool-age children they also studied (Friedrich et al., 1998). In fact, they found that the frequency of parent-reported sexual behavior seemed to peak at age 5 and decrease in the years that followed. Importantly, however, they also noted the likelihood that parents are not as aware of their child's behavior at these ages as they may have been at earlier stages when, for example, the child spent less time with peers (Friedrich et al., 1998). Some children in this age band may also have learned that some behaviors were viewed as private in their households and others were perhaps not accepted. Given such socialization factors, they may have been less overt with their behaviors.

In addition, data from retrospective reports of child sexual behavior indicate fairly common engagement in self-stimulatory behaviors as well as sex rehearsal play among school-age children (e.g., Martinson, 1994). In a study involving those from the United States, Canada, England, Australia, and Sweden, 40 percent recalled sex rehearsal play experiences between ages 6 and 9 (McAnulty & Burnette, 2004). Among their sample of senior high school students, Larsson and Svedin (2002a) found that, of the age ranges they studied, several mutual sexual experiences occurred most frequently between 6 and 10 years, including showing one's genitals (28 percent of boys, 23 percent of girls), touching and exploring genitals of the other child (17 percent of boys, 19 percent of girls), and the other child touching the respondent's genitals (17 percent of boys, 19 percent of girls). Other commonly recalled behaviors included simulating intercourse and teasing that involved using sex words, lifting skirts, or peeking in toilet stalls (Larsson & Svedin, 2002a). In another retrospective study, 85 percent of the 128 American female undergraduates surveyed recalled engaging in a childhood sexual game and that the average age of occurrence of the sexual play was 7.5 years (Lamb & Coakley, 1993). The most common experiences reported (29.6 percent) fell within the category of sex rehearsal play (i.e., imitation of adult sex, love scenes, commercialized sexuality, and coercive scenes), followed by playing "doctor," another sexual rehearsal "game" (16.3 percent), exposure (15.3 percent), and

experiments in stimulation (14.3 percent). Perhaps most salient to the point regarding the private nature of this play and the difficulty in using parents as sole reporters of sexual behavior in this age band is the finding that for 56 percent of the respondents, no one found out about the game (Lamb & Coakley, 1993). Goldman and Goldman (1988) report a similar finding.

Preadolescents (10–12 Years)

Preadolescence can be considered the bridge period between childhood and adolescence. It is a time during which many changes occur in children—physically, socially, and psychologically. Increased hormone levels propel their bodies toward puberty, while awareness of themselves as sexual beings—and of their peers as potential partners—leads them gradually toward more purposeful engagement in sexual activity and experimentation with partners (Martinson, 1997). Despite the obvious significance of this developmental period in understanding how children move from a simple stimulatory approach to sexuality to a more complex and, indeed, adultlike view of sexuality as a relationship-oriented activity, little is known about normative sexual behavior during this stage.

Part of the reason for the lack of information on preadolescent sexuality has to do with the loss of parents as reliable reporters of their child's more private sexual behaviors at this stage. As Gagnon (1985) described, with reference to obtaining parental report on preadolescent children's experiences with masturbation:

> Three problems emerge with reference to the question about [masturbatory activities of] the child. The first is what opportunities for observation did the parents have; the second is what actual conduct did the parent interpret as masturbation . . . ; and the third is the willingness of the parent to report to the interviewer. All of these . . . will affect to what degree the parental report matches the actual rate of conduct among the children. For these reasons, parental reports cannot be taken as estimates of rates of masturbation on the part of [preadolescent] children. (p. 455)

Parental reports of their preadolescent's sexual behavior suggest that the most frequent activity observed in both preadolescent boys and girls was being "very interested in the opposite sex," with 24.1 percent of boys and 28.7 percent of girls reportedly displaying this interest (Friedrich et al., 1998). This observation by parents matches other information regarding the development of crushes on, and attachments to, individuals outside of the family during preadolescence (Martinson, 1997).

With respect to more private sexual behaviors in preadolescence, however, the information that is available is often dependent on statistics gathered decades ago. For example, Ramsey (as cited in Martinson, 1997) found that

masturbation occurred at some point in the sexual histories of most males surveyed, with 29 percent of 10-year-olds, 54 percent of 11-year-olds, and 73 percent of 12-year-olds reporting some engagement in the activity. This finding is notable in that it suggests a pattern of increasing masturbatory behavior as children move from childhood toward adolescence. Ramsey also found that preadolescent boys experienced erections in response to both erotic and nonerotic stimuli, with the nonerotic responses generally tapering off after age 12. Additionally, Kinsey, Pomeroy, and Martin (1948) reported that 20–25 percent of boys had attempted intercourse with a female by age 12. Less information was available then, as it is now, regarding preadolescent female sexuality, possibly due to cultural constraints that discourage girls more than boys from exploring sexuality—a situation that also makes gathering self-reports from girls a more difficult task (Martinson, 1997).

Although fewer data are available regarding normal sexuality among contemporary children, one recent study of children's sexuality found that 20 percent of American boys and girls reported masturbating by age 10, and 50 percent of boys and 25 percent of girls reported masturbating by age 13 (Janus & Janus, 1993). These numbers are supported by another recent Swedish study, in which 6 and 7 percent of boys and girls, respectively, recalled masturbating to orgasm between ages 6 and 10, but nearly 43 percent of boys and more than 20 percent of girls reported such behavior between the ages of 11 and 12 (Larsson & Svedin, 2002a). Taken together with the reports from earlier decades of research, it is safe to say that although the estimates of incidence of masturbation vary by study, culture, and era in which the data were collected, all studies indicate a gradual increase in the behavior throughout preadolescence (McAnulty & Burnette, 2004).

Thus far, we have described self-stimulatory sexual behaviors in preadolescence, but it should be noted that this period of development is also a time during which partnered sexual encounters become more common. In one retrospective study of more than 1,000 American undergraduates, 42 percent of the sample reported having experienced a sexual encounter with another child prior to age 13, with the majority of those experiences involving heterosexual hugging and kissing (Haugaard & Tilly, 1988). In a Swedish study with a similar research design, Larsson and Svedin (2002a) found that 82 percent of those surveyed reported having had a mutual sexual experience before age 13, with hugging, kissing, talking about sex, and viewing pornographic pictures together being the most common behaviors.

It is more difficult to estimate the frequency of experiences involving sexual intercourse during the preadolescent phase. In the Haugaard and Tilly study, 10 percent of the undergraduates surveyed reported having had sexual intercourse before age 13. These data are consistent with the most recent findings from the Youth Risk Behavior Surveillance (YRBS, a large-scale, representative survey of American adolescents), which indicated that slightly more than 10 percent of males and 4 percent of females (7.4 percent overall)

reported initiation of sexual intercourse before age 13 (Centers for Disease Control and Prevention [CDC], 2004). When considering the findings by racial/ethnic category, however, it appears that Hispanic respondents reported nearly double the rates of preadolescent sexual intercourse (8.3 percent) reported by white respondents (4.2 percent), and that black respondents' reports were nearly five times the rate of whites (19 percent). These findings highlight the impact of diverse ecological circumstances on sexual behavior, both with respect to the various ecologies in which different racial/ethnic groups operate, and the different experiences and standards that exist for male versus female children with respect to sexuality and/or the reporting of sexuality. Consistent with this idea, in a large survey of urban, sixth-grade students, Kinsman et al. (1998) found that almost one-third had already initiated sexual intercourse, with those attending a poorer school and living in an area with a high proportion of single-parent families at highest risk for early sexual initiation. It is likely that these relatively high rates may reflect sample-specific issues, as the Kinsman study surveyed only urban children and did not have a sample representative of the broader population.

Overall, the knowledge base regarding preadolescent sexuality suggests that further research on normal sexual practices and behaviors during this phase of development is particularly necessary. Although obvious problems with parental report, ethical constraints regarding self-report, and concern for the validity of reports from both sources of information are issues in this study, its importance toward understanding the transition from childhood to adulthood sexuality is immeasurable.

As we leave behind our summary of the current state of knowledge regarding the normative development of children's sexuality, two points warrant further mention and will be explored briefly in the following sections: First, although we have tried to integrate findings to present a full and balanced picture of the research available regarding children's sexuality, these studies were conducted in several different cultures. Integrating these reports has been useful for the purpose of mapping major trends in the development of children's sexuality, but there are also several cross-cultural findings that are worth noting. A second important point is that normative childhood sexuality has traditionally been understood in the context of nonnormative sexual development, and vice versa. As such, we also offer brief notes to help the reader better distinguish between normative and nonnormative sexual behavior among children.

CROSS-CULTURAL DIFFERENCES: A BRIEF CONSIDERATION

Several authors (see, e.g., Goldman & Goldman, 1982; Martinson, 1994) have discussed differences in sexual knowledge and understanding (e.g., being able to describe intercourse) across cultures. For instance, Goldman and Goldman (1982) interviewed 5- to 15-year-olds from Australia, Sweden,

Canada, England, and the United States, and, in line with other findings in this area, children and youth from the United States were the least well informed. Although some theorists have raised the possibility that such differential knowledge may influence behavior rates as well as what is viewed as normal in a given context, cross-cultural comparisons of sexual behavior have been the focus of little empirical research.

As one key exception, Larsson et al. (2000) used parental reports to examine and compare the sexual behaviors of two samples of 3- to 6-year-old children, one from Sweden and one from the United States (Minnesota). The researchers found that exhibitionistic (e.g., walking around house without clothes), voyeuristic (e.g., trying to look at people undressing), and touching behaviors were most common in both samples. Overall, the preschool-age children from Sweden evidenced higher rates of sexual behavior than those from the United States. Among boys, significant differences were identified for fourteen of the twenty-five behaviors assessed, with Swedish boys exhibiting higher levels for thirteen of the measured behaviors. The differences were somewhat less pronounced among girls; that is, reliable differences were detected on ten behaviors, with Swedish girls displaying higher rates in nine cases. For boys, the behaviors with the largest reported differences (with frequencies varying by 20 percentage points or more) included walking around the house without clothes, talking about sexual acts, using sexual words, touching or trying to touch their mother's or other women's breasts, and touching private parts in public places. Swedish boys exceeded American boys on all but the last behavior. For girls, similar large differences occurred on three items, that is, touching or trying to touch their mother's or other women's breasts, trying to look at others when they are nude or undressing, and talking about sexual acts, all favoring the Swedish youngsters.

In offering interpretations of their findings, Larsson et al. (2000, p. 256) noted that "American children are brought up in a more strict or cautious atmosphere concerning sexual matters, and . . . Swedish children are brought up in a more liberal atmosphere." This possible mechanism of influence, reflecting differences at the familial (e.g., attitudes and values regarding sexuality) as well as sociocultural level (e.g., cultural differences in sexual attitudes, disparate approaches to sexual education), accords well with the tenets of the ecological approach. The researchers also noted that a similar unpublished study comparing Dutch and American preschoolers yielded findings consistent with their own, with higher frequencies of sexual behavior reported in the Dutch sample (Larsson et al.), although cross-cultural findings involving these two groups have been mixed (e.g., Schoentjes, Deboutte, & Friedrich, 1999). Given that Dutch society is among the most open and liberal about sexuality, reported differences in sexual behavior between Dutch and American children may be viewed as providing further support for the notion that larger cultural attitudes about sexuality may influence the behaviors observed. Nevertheless, the literature base is still quite limited in this area, both in number of studies and cultures involved, with the available research largely focusing on Western cultures.

NONNORMATIVE CHILD SEXUAL EXPERIENCES

A full consideration of the impact of nonnormative experiences (e.g., sexual abuse, exposure to inappropriate sexual content) and their emotional and behavioral consequences is beyond the scope of this chapter (for a detailed discussion of the impact of sexual abuse, see Chapter 5, Sexual Assault, in Volume 3 of this set). Although some children who have been sexually abused have no apparent symptoms, studies have consistently identified numerous short- and long-term effects of such abuse (e.g., Browne & Finkelhor, 1986; Finkelhor, 1990; Putnam, 2003). In fact, Kendall-Tackett, Williams, and Finkelhor (1993, p. 173) note that "there is virtually no general domain of symptomatology that has not been associated with a history of sexual abuse," with poor self-esteem, fears, posttraumatic stress disorder, and overly sexualized behaviors among those reported most frequently.

The latter behavioral symptom category is of particular relevance here, since it seemingly reflects behaviors that are atypical, deviating from children's normative developmental trajectories. Indeed, as noted previously, the presence of inappropriate sexual behavior (including content and knowledge not typical for their age) among many abused youngsters (see, e.g., Friedrich, 1993) has led some researchers to emphasize the importance of better understanding what constitutes normal sexual behavior for children across settings (Larsson & Svedin, 2002b). A substantial body of work has assessed the impact of the nonnormative experience of abuse and has attempted to identify the complex processes and pathways that lead to a given outcome.

In their review of forty-five studies, Kendall-Tackett et al. noted that "sexualized" behaviors were the most commonly studied symptom of sexual abuse, and, in his more recent review, Putnam (2003) concluded that sexualized behaviors have been the best-documented outcomes in children who had experienced sexual abuse. This category includes such behaviors as "sexualized play with dolls, putting objects into anuses or vaginas, excessive or public masturbation, seductive behavior, requesting sexual stimulation from adults or other children, and age-inappropriate sexual knowledge" (Kendall-Tackett et al., 1993, p. 165). Findings suggest that developmental level may impact the presentation of such sexualized behavior sequelae; that is, they seem to be more evident among preschoolers and less common in school-age children, perhaps reemerging in different forms (e.g., early pregnancy, promiscuity, sexual aggression) among adolescents (Kendall-Tackett et al.; Putnam). Some researchers (Brilleslijper-Kater, Friedrich, & Corwin, 2004) have noted that age-inappropriate behavior in this domain is more sensitive in differentiating preschool-age victims of sexual abuse than any other age-group.

The actual frequency of such behaviors has varied considerably across studies and has been difficult to determine; however, it is important to note that, across studies, less than half of victims of sexual abuse evidenced sexu-

alized behaviors, and this symptom does not occur only in sexually abused children (Deblinger, McLeer, Atkins, Ralphe, & Foa, 1989; Kendall-Tackett et al., 1993). Friedrich et al. (Brilleslijper-Kater et al., 2004; Friedrich et al., 2001) have noted that age-inappropriate sexual behaviors are also related to a range of factors, including family sexuality, externalizing (i.e., acting out) behavior problems, domestic violence, physical abuse, and life stress. Such findings, particularly when considered in conjunction with the research indicating that a wide range of behaviors occur in normative samples of children (Friedrich et al., 1991; Friedrich et al., 1998), complicate efforts to identify factors that discriminate between sexually abused children and other youngsters. Thus it is critical, as Larsson and Svedin (2002b) emphasize, for professionals working with children and responding to questions about, and reports of, child sexual behavior(s) to be thorough in their information gathering and thoughtful in their interpretation, examining the context in which the sexual behavior occurs, identifying antecedents of the behavior, and noting distress that may be present.

CONCLUSIONS AND FUTURE DIRECTIONS

The literature on normative childhood sexual development is clearly still in its infancy. We are encouraged, however, by the attention that child sexuality has garnered in recent years and note that the continuation of this work is critical, both for professionals working with children and families, and for caregivers, who may have questions and concerns regarding the limits of normal sexual behavior during various stages of children's development. Toward the end of expanding further this important line of study, we offer the following suggestions for future directions for research in this area: First, greater attention needs to be given to the methodologies used to collect data on this important topic. As it stands, much of the information that exists on the topic of normative childhood sexuality has been pieced together from small studies or case reports. When larger-scale studies have been completed (e.g., Kinsey et al., 1948; Kinsey, Pomeroy, Martin, & Gebhard, 1953), the methodologies have been criticized as being less than scientific, and it is likely that the findings are outdated, given the sensitivity of sexual behavior to historical and cultural change. Further, we would encourage the design of prospective, longitudinal studies in order to better understand the pathways that individual children follow toward sexual maturity. Consistent with the early stages of research in any area, the literature on normative sexual development has relied on cross-sectional studies designed to gather initial data on the incidence and prevalence of particular behaviors and experiences. The advantage of moving forward to a longitudinal research design, however, is to allow for better understanding of the antecedents of, and pinpoint the effects of specific ecological influences on, children's developing sexuality. Longitudinal designs also allow for drawing conclusions

regarding the effects of particular sexual behaviors or experiences on children's overall development. We would argue that conducting more large-scale, representative studies and utilizing systematic, longitudinal research designs are necessary next steps in bringing the study of normative child sexuality to a position in which a solid picture may be drawn regarding the developmental process behind this area of human behavior.

A second step toward improving the knowledge base available within this area is to expand the study of sexual behaviors and practices to include examination of the context surrounding these behaviors. For example, most studies ask respondents to report on the presence or frequency of particular sexual behaviors. This information, however, may not capture important aspects of the context in which the behavior occurs—that is, whether it was playful, unintentional, uncomfortable, enjoyable, or coercive, to name a few possibilities. In short, most of the methodologies currently used do not allow for investigation of how children *feel* about sexual behaviors in which they have been involved (Lamb & Coakley, 1993). Because a child's feelings regarding a sexual encounter are part of the way in which an experience is labeled as normal versus abusive, it is critical that this information is gathered systematically to the extent that the respondent or observer can offer it.

In a similar vein, information with respect to the environment in which a child is developing is also important in offering a better understanding of those features that contribute to a child's sexual development. For example, data were presented earlier in this chapter regarding racial/ethnic differences in the rates at which adolescent respondents to the YRBS reported having experienced preadolescent sexual intercourse. This information, however, does not help us understand why these differences exist. In keeping with the ecological systems approach, it is likely that these ethnic differences reported reflect larger cultural differences among groups in the areas of peer culture, family factors, and community structure, and some data have begun to emerge in support of this position (e.g., Beal et al., 2001; Kinsman et al., 1998). Without a systematic examination of these factors, however, it is difficult to discern which ecological factors contribute to the reported variations in age at first sexual intercourse and whether these differences are relevant for understanding more global aspects of children's adjustment and adaptation.

A final point that should be addressed in future research is the inclusion of more cross-cultural comparisons among children, those from more widely varying cultures. Although some cross-cultural work has been completed (e.g., among British, Canadian, Scandinavian, Australian, and American samples), it is important to note that all of the cultures included thus far have been of a "Western" orientation. Inclusion of children from other cultures, such as those from Eastern and Southern hemisphere countries, is critical in distinguishing between those features of children's developing sexuality that appear to be universal and those that are culture specific. These cross-cultural comparisons would also offer a more complete picture of distinctions between normal and

problematic sexual behavior by presenting a broader picture of the range of behaviors and ecological contexts within which children's sexuality develops (Larsson et al., 2000).

Taken together, these suggestions are intended to help bring the study of normative development of children's sexuality to the next stage—one in which basic data on prevalence of normal sexual behaviors among children are solidly based in systematic research, and where meaningful questions regarding the processes, influences, and outcomes of sexual behaviors in childhood may be addressed through longitudinal study.

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4

Adolescent Sexuality

Charlene Rapsey and Tamar Murachver

We begin this chapter with an analysis of the ways in which researchers have conceptualized adolescence. We examine how adolescence, and adolescent sexuality in particular, has been depicted as problematic. We then review contemporary theories of adolescence that focus on social, cognitive, and neurological changes. This is followed by a summary of the physical changes involved with puberty. These more general discussions of adolescence then set the stage for an exploration of current understandings of adolescent sexuality. Within this we explore the types of experiences, social settings, and consequences of adolescent sexual behavior. We end with a discussion of education programs and their conflicting goals of controlling adolescent sexuality, while at the same time supposedly helping adolescents become adults with healthy sexual lives.

CONCEPTUALIZATIONS OF ADOLESCENCE

Adolescence refers to the period of time that marks the transition from childhood to adulthood. This span of a decade or more encompasses a period of rapid physical development, the onset of puberty and consequent maturation to full reproductive capacity, substantial social and cognitive developments, and the attainment of the rights and responsibilities of adulthood.

Few periods of development have been reified as adolescence has. Although adolescence marks the transition from childhood to adulthood, with

characteristics of both, it is often viewed as a separate entity with its own peculiar characteristics (Lesko, 1996; Rosenblum & Lewis, 2003). A person during this period becomes defined by it—an adolescent—and her or his behavior is interpreted or explained as being caused by this period. Thus, when a 13-year-old daughter storms out of the room, it is "because she is an adolescent." However, if a colleague demonstrates similar behavior, it is not because "she is an adult."

Contemporary ideas about adolescence highlight some key dimensions that supposedly distinguish adolescence from childhood on the one hand and adulthood on the other. During adolescence, sexual awareness, interest, and maturity are established. But rarely today is this coupled with the expectation of making commitments to a lifelong partner or to a family. Thus, part of societal concerns is of controlling adolescent sexuality until careers, income, and housing are adequate to support the responsibilities of a family. In this conceptualization, adolescence is like a holding tank where the emerging adult awaits release into adulthood.

Most societies recognize the adolescent's increased abilities compared to those of childhood. And most cultures begin to insist that individuals during adolescence take greater responsibility for their behavior. This is reflected in the laws and punishments within contemporary societies. Nonetheless, many of the more prevalent ideas about adolescence focus less on the abilities and responsibilities of adolescents and more on adolescence as a problem.

There are a number of variations on the "adolescence-as-problem" conceptualization. Adolescence has often been characterized as a time of substantial turmoil and rebellion. Sometimes, this is explained as the effects of "uncontrolled hormones" when adolescents are at the whim of the new levels of hormones invading their bloodstream. Adolescents are also depicted as extreme and unthinking conformists. According to this view, unlike adults, they are more concerned with fitting in with their peers than with making good choices. Other popular depictions of adolescence focus on heightened conflict with parents and extreme risk taking.

These depictions of adolescence have serious flaws. The "storm and stress" perspective on adolescence was promoted in the twentieth century by G. Stanley Hall (1904). Hall placed human development within an evolutionary framework, and viewed adolescence as the link between more primitive beings and civilized ones. Research over the past few decades has not supported this view of adolescence. Although adolescents might experience more frequent minor conflicts with parents as adolescents come to expect greater influence on choices about their day-to-day lives, most families with adolescent children do not suffer from regular major conflicts (Arnett, 1999; Smetana & Gaines, 1999). Estimates are that only 20–25 percent of adolescents are involved in major conflicts with their parents. The frequency of conflicts decreases from early to late adolescence as children and parents negotiate new boundaries and expectations. It is important to note that changes in the parent-child relationship are driven not only

by adolescents, but also by parents, who need to balance protectiveness with the increased granting of autonomy.

Adolescents are often depicted as being unduly influenced by peers—of being conformists. Whereas choices about clothing, hairstyle, and music might be more in line with the choices of peers rather than of parents, most major decisions reflect parental values. Adolescents are not choosing careers, university programs, religious and political values, or ideas about the role of family and society by mainly considering their peers' behavior. In fact, according to Harris (1995), they are likely to choose peers who come from families like their own, and who share similar values to those of their own parents. One of the shortfalls of developmental science is that childhood is extensively studied and then compared to assumed behavior in adulthood. Adolescent conformity to peers is compared to conformity in earlier childhood, with the verdict that adolescents are great conformists. Yet, comparisons with adult populations are rarely provided. It is hard to argue that individuals with only minor responsibilities and very little to lose would conform more to expectations than an older group who have major expectations and responsibilities placed on them by colleagues, employers, and family members. Perhaps adolescents have been viewed as high in conformity, in part, because they have not always conformed to the expectations for adult behavior, which is rarely seen as conformist. In other words, putting on a suit is no less conforming than putting on the right brand of jeans.

Compared to children, adolescents are more likely to take risks. This is partly due to increased opportunity. Adolescents are given permission to drive, to spend time away from adults, and to make some decisions independent from the adults in their lives. They are also relatively free of responsibility for others' well-being. Adolescents also have less experience than older adults. Their decisions might not be guided by the same knowledge or concerns, and they might have fewer social and cognitive skills to deal with awkward situations. Adolescents are more influenced by the perceived benefits of risk-taking behavior than by the perceived risks (Leigh & Stacy, 1993; Parsons, Halkitis, Bimbi, & Borkowski, 2000). This is partly because the benefits are more direct and immediate than are the negative consequences. It means, however, that the adult focus on negative outcomes might not be the best way to motivate and influence adolescents. More importantly, high risk-taking behavior is not necessarily characteristic of the majority of adolescents, even though it is more likely to occur in adolescence than in childhood.

Adolescent sexual behavior is generally perceived of and treated as a problem. Adolescents in Western societies are confronted with a number of conflicting messages. On the one hand, they are immersed in a highly sexualized culture. Sexual images and themes are prevalent in television, movies, music videos and lyrics, and magazines. Sexualized appearances, even for younger children, are promoted through the available clothing choices. On the other hand, especially in North America, adolescents are often told that they

are not ready to, or should not, engage in many sexual behaviors. They are like drivers faced with traffic lights where both the green and the red lights are on. And, of course, their bodies are becoming more and more ready for green.

Adolescent sexual behavior need not be a problem, but sometimes it is. Many studies actually define delinquent behavior as including some sexual behaviors (e.g., those involving intercourse). Responsible sexual behavior that cannot result in pregnancy or sexually transmitted disease, is consensual, and is respectful of one's partner might not be a problem, depending on one's viewpoint. As we will show, much of the research on adolescent sexual behavior not only treats it as a problem, but also focuses on the most problematic aspects of sexuality: unwanted pregnancy, sexually transmitted diseases (STDs), and promiscuity. Because of this focus, we know far more about the antecedents and consequences of unprotected adolescent sexual intercourse, and far less about how adolescents develop into healthy adults capable of enjoying their sexuality.

GENERAL THEORIES OF ADOLESCENCE

Psychosocial Explanations

One of the most influential theories of adolescent development describes adolescence as a period of resolving one's identity. Erik Erikson (1959, 1968) theorized that during healthy adolescent development, individuals must question and resolve who they are in terms of their occupation, their political and religious values, and their sexual identity. According to this view, adolescents must "find themselves," and thereafter, they will be ready to launch their lives in the right direction.

Erikson's ideas about identity development during adolescence were developed further by Marcia (1980). Marcia described four stages of identity development that an adolescent could be placed within. The two least mature stages were foreclosure and diffusion, whereas the more mature stages were moratorium and achievement. In foreclosure, the adolescent unquestioningly follows the identity chosen for him or her by influential adults, such as the parents. Adolescents categorized as identity diffused have avoided making a choice or commitment and have given little thought to who they are and the direction they wish to follow. In moratorium, adolescents are in the process of actively searching for and exploring their identity. Finally, adolescents in identity achievement have worked through the process of establishing their identity and have made a commitment toward that end.

The importance of resolving one's identity during adolescence is not taken for granted in more current understandings of adolescent development. Although the concept is not dismissed, a number of findings have questioned whether finding one's identity is a key achievement during adolescence. One problem is that identity crises do not seem to happen all at once. Rather,

smaller crises seem to occur when important decisions have to be made. Career directions become critical as an adolescent selects a major at university, and then reappear as an issue years later when the individual seeks employment. Sexual identity emerges as intimate relationships are formed. One other main objection to the identity theory as a key element during adolescence is that research has found that identity moratorium and achievement are often not attained until after the end of the adolescent period (see Kroger, 2003, for a review).

Cognitive Explanations

A number of significant cognitive developments occur during adolescence. Relative to their younger counterparts, adolescents are more able to reason abstractly; consider future, potential outcomes; and reflect on themselves and their own behavior. These abilities in turn impact on adolescents' learning from their environment, their social relations, and their understanding of moral behavior. Reasons for these cognitive advances during adolescence generally focus on one or more of the following: changes in thought as a child enters formal operations (promoted by Piaget, 1952, 1972), changes in information processing (see Siegler, 1998), and advances in metacognition (see Kuhn, 1999).

Compared to children, adolescents are able to think more abstractly. They begin to be able to consider "what would happen if..." and to imagine outcomes they have never experienced. They start to understand more subtle forms of humor and behavior, and can reflect on their thoughts and behaviors to a much greater degree. These changes are reflected in the widening interests adolescents show. These might include politics, questions about morality, and balancing one's obligation to others versus taking care of one's own needs. Whereas adolescents are developing the ability to reason and think in the abstract, most of them lack the general knowledge and experience to apply these abilities faultlessly (Byrnes, 2003). Hence, they might show superb reasoning within a familiar domain, but fail when the area is beyond their knowledge base.

Because adolescents more readily engage in reflective thought, they are able to use metacognitive strategies to a greater extent than younger children can. Reflecting on one's own thoughts and behaviors allows for insights into critical thinking and effective planning. This also allows greater self-regulation. Adolescents show greater ability to monitor their performance, to think about their goals and progress toward them, and to make necessary adaptations.

During adolescence, there is an increased awareness of how oneself and others view the world. Adolescents demonstrate the ability to reflect on their own thoughts and how those thoughts came to be. Similarly, they begin to accept more readily that truths might be relative rather than absolute. This extends into domains such as reasoning about moral issues. Whereas a younger

child might believe that a particular behavior is wrong because society accepts it as wrong, an adolescent might consider and appreciate that there could be instances where this might not apply.

Neurological Explanations

There have been a number of exciting advances in the field of neurological development recently. For example, contrary to what was believed only a decade ago, brain development does not stop during adolescence, but continues through to at least the mid- or late-twenties. Most dramatic developments take place in the frontal regions of the cerebral cortex (Giedd et al., 1999). These areas are believed to be critical to abstract thought, the initiation and inhibition of behavior, and other more complex cognitive skills such as advanced planning. The frontal areas are also involved in the regulation of emotion.

Two important neurological developments during adolescence are the decrease in synaptic connections within the prefrontal cortex and the greater connectivity among different brain regions due to increased myelination of nerve fibers (Keating, 2004). Although it might seem counterintuitive, a decrease in synaptic connections between neurons is associated with more efficient neural processing. Brain development after birth is characterized first by a proliferation of synaptic connections, followed by substantial pruning of synapses. The pruning process is guided by experience such that the most used pathways remain and the lesser used ones are removed. During adolescence, the number of synapses in the prefrontal regions in particular declines dramatically, thus increasing the efficiency within this region. In addition, pathways linking different brain regions are made more efficient by the myelination of nerve fibers. Myelin acts as an insulator of neurons and allows faster transmission of nerve impulses.

Recent developments in neuroimaging techniques and their availability are opening up exciting avenues for research. Parallels have been drawn between changes in cognitive abilities during adolescence and neural development. As yet, little research has demonstrated a conclusive link between specific brain changes and consequent cognitive changes or risk-taking behaviors. Nonetheless, interesting patterns of change in both neural processing and behavior across time have been noted. For example, when adults identify the emotional expression in faces, they engage the frontal cortical regions predominantly, as well as a part of the limbic system called the amygdala. Adolescents, on the other hand, respond predominantly within the limbic system—a more primitive region of the brain—and to a lesser degree within the frontal cortex (Baird, Gruber, Cohen, Renshaw, & Yureglun-Todd, 1999). One interpretation of this finding is that adults respond to emotions in a more controlled and rational way compared to adolescents.

PUBERTY

Puberty begins with increased growth and development of secondary characteristics and ends with a fully functional reproductive system. These developments are orchestrated by an elegant cascade of various chemicals produced within the developing child. Even by 8 or 9 years of age, children's bodies are preparing for puberty (Susman & Rogol, 2004). By the end of primary school, many girls will be noticeably in the grips of pubertal change, with the boys soon to follow. Puberty lasts somewhere between two and six years, with a one- to two-year gap in progression on average between girls and boys. Thus, puberty often begins before what is conventionally referred to as adolescence and ends well before adolescence is over.

One of the noticeable features of puberty is the growth spurt. This growth spurt occurs earlier in girls than in boys, and the rate of increase for girls is less than that for boys. For example, the greatest rate of growth for girls is at around 12 years, where they gain approximately 9 cm during the year. Height ceases to increase by around 15 years in girls. Boys, however, reach their highest growth rate at around 14 years, when they gain 10 cm. They begin later, and thus grow for an additional two years on average, and they grow at a greater rate. These two factors account for much of the final height difference between women and men.

Secondary sex features show noticeable changes soon after the increased growth begins. Pubic hair forms, breast buds develop in girls, testicles enlarge in boys, and boys also experience changes to the larynx, which lead to the initial cracking and then lowering of the male voice. Approximately two and a half years after initial breast development, menstruation begins in girls. Spermarche, or first ejaculation, occurs approximately two years after initial testicular enlargement begins in boys. Other changes include increased muscle growth in boys, redistribution of fat in girls and boys, and increases in bone mineral content in both (see Rogol, Roemmich, & Clark, 2002).

A number of psychological factors are associated with puberty. Many of the mechanisms controlling their relationships are not well understood. Pubertal timing is believed to be related to the onset of depressive symptoms in girls (Angold & Worthman, 1993). Antisocial behavior has been linked with puberty, but this might be due to the increased association with older, deviant peers that is likely with early-maturing adolescents (see Susman & Rogol, 2004). Greater moodiness is associated with puberty, but causal links between adolescent moodiness and hormone levels are not particularly strong (Buchanan, Eccles, & Becker, 1992). Greater moodiness might also be influenced by the greater occurrence of negative life events during adolescence (Larson & Ham, 1993).

Timing of puberty is believed to be important, and the effects of timing are different for girls than for boys. Girls who reach puberty earlier than their peers might feel uncomfortable with their changed bodies, particularly the

increased body fat in the hips and thighs. They are also susceptible to the influence of older peers. Early-maturing girls might receive attention from older boys and may be encouraged to engage in more deviant behaviors (Caspi, Lynam, Moffitt, & Silva, 1993). Early-maturing boys, on the other hand, tend to feel self-confident and gain status from their more adult-looking bodies.

Secular trends in pubertal timing suggest that nutrition and weight play a role in the onset of puberty (Parent et al., 2003). There has been a general trend over the past century for an earlier age of menarche over time, with similar estimates of earlier puberty for boys. This trend is believed to be due to better nutrition, health care, and living conditions for children. Although it appeared that this trend toward earlier puberty was leveling off, in countries with significant rises in youth obesity rates, menarche continues to occur at even earlier ages.

Researchers have also noted an apparent link between father absence and the onset of daughter puberty. Girls without fathers in the home show earlier onset of menarche compared to those living with fathers in the home. Belsky, Steinberg, and Draper (1991) suggest that father absence increases stress for daughters, which in turn leads to depression, weight gain, and thus, earlier menarche. An alternative explanation is offered by Comings, Muhleman, Johnson, and MacMurray (2002) who argue that the relationship between father absence and daughter's early menarche is genetic. They investigated a particular allele of the AR gene in 121 males and 164 females. In males, this allele was associated with impulsiveness and aggression, and increased number of sexual partners. In females, the allele was associated with father absence, father divorce, and early onset of menarche. These findings do not yet resolve this issue, but they offer another way of understanding the association between father absence and the timing of daughter menarche.

ADOLESCENT SEXUAL EXPERIENCE

Problem of Knowing and Assessing the Facts

Several methodological pitfalls surround the study of adolescent sexuality. One problem is the inconsistency of adolescent self-reports. Lauritsen and Swicegood (1997) compared adults' retrospective reports of their behavior during adolescence with reports given by the same individuals previously, when they were adolescents. They found that 28–32 percent of the reports of age at sexual initiation were inconsistent with those reports given during adolescence. In another study, assessment of answers given over different time periods showed that many youth revised their estimation of the timing of first coitus (Upchurch, Lillard, Aneshensel, & Li, 2002). Specifically, perhaps reflecting social expectations, girls may be more likely to underreport, but boys may be

more likely to overreport sexual experience (Siegel, Aten, & Roghmann, 1998). In addition, Hollander (1997) found that, in comparison with their medical records, only 46 percent of participants were able to accurately identify how many STDs they had contracted, and only 76 percent of women accurately reported their pregnancies.

Inconsistencies do not occur randomly, but they occur to different degrees according to gender, age, family variables, and ethnicity. This indicates that participants' answers are affected by more-than-random errors and memory lapses (Lauritsen & Swicegood, 1997; Upchurch et al., 2002). Adolescents may give inconsistent reports regarding coitus, STDs, and pregnancy because they have not understood their own medical treatment, they may wish to give socially desirable answers, they may have misunderstood the question, or they may be reluctant to disclose personal information. Illustrating this reluctance to disclose, another study comparing adult retrospective report with prior adolescent report found no inconsistency for age at first reported coitus, but a significant inconsistency for age at first masturbation (Halpern, Udry, Suchindran, & Campbell, 2000). The authors stated that masturbation, even more so than other behaviors, is a sensitive topic. Adolescents may be reluctant to disclose sensitive information even if they are assured that their reporting is confidential. Furthermore, research suggests that individuals least comfortable with questions about sexuality or with the least amount of sexual experience may decline to participate completely, potentially biasing accounts to a greater degree (Strassberg & Lowe, 1995).

Another factor related to inconsistent reporting includes the language used to ask about sexual behavior. Reluctance by researchers to use explicit or colloquial language may result in varying interpretations by participants. For example, "having sex" may be interpreted in various ways, from coitus, oral sex, the presence of orgasm, through to a variety of individual interpretations (Sanders & Reinisch, 1999; Savin-Williams & Diamond, 2004). Capturing homosexuality may be particularly difficult because attraction, behavior, and labeling can be distinct categories that are often discordant (Diamond, 2000; Friedman et al., 2004). Frequently, researchers conceptualize sex as entailing vaginal/penile penetration. Even if this is clearly communicated to participants, failure to ask about a broader range of behaviors leaves large omissions in our understanding of adolescent sexual experience and the meaning attributed to experiences. It is worth noting that some researchers have begun asking about a wider variety of behaviors and defining what they mean by "to have sex." It is wise to remain aware of potential differences in perception between researchers and participants when conducting and interpreting research. Crucially, researchers must extend their investigations beyond behavior, to attend to the meanings attributed to those behaviors and the social and emotional facets that are an integral part of sexual experience.

Sexual Knowledge

Based on the results of a national survey, Terry-Humen and Manlove (2003) reported that only 26 percent of 13-year-olds were able to state the most effective contraceptive from a choice of withdrawal, condoms, and the contraceptive pill. One-third was unable to identify the condom as the most effective STD prevention method. Very few (8 percent) were able to correctly state the most fertile point in the female fertility cycle. Similarly, adolescents' knowledge about normative behavior is not very accurate, with a tendency to overestimate the sexual behavior of their peers. Results from a sample of 958 12- to 14-year-olds showed that 39 percent of boys and 51 percent of girls endorsed the statement "Most teens your age are having sex," whereas, in reality, only 15 percent of boys and 8 percent of girls in that sample reported that they had had sex (Gomez, Coyle, Gregorich, Marin, & Kirby, 2003).

Sexual Behavior

Masturbation

Despite being a safe and common form of sexual expression, masturbation is still a taboo topic. Research conducted from the 1970s through to the 1990s showed, disconcertingly, that self-stimulation is associated with high degrees of guilt for many people (Davidson & Moore, 1994; Lopresto, Sherman, & Sherman, 1985), and more than any other topic, questions about it made respondents feel very uneasy (Bradburn, Sudman, Blair, & Stocking, 1978; Davidson & Moore; Lopresto et al.). Reflecting this uneasiness, and maintaining it, is the absence of masturbation from media representations of sexuality (Ward, 2003). As a result, masturbation, perhaps more than any other sexual behavior, may be underreported (Halpern, Udry et al., 2000). Furthermore, there has been little research attention on it. With this in mind, the research conducted among U.S. college students showed that 81–86 percent of males and 45–51 percent of females reported ever having masturbated (Leitenberg, Detzer, & Srebnik, 1993; Weinberg, Lottes, & Shaver, 1995). In these studies, males were not only more likely to report having masturbated, but they also reported beginning it at a younger age (an average of 13.5 years versus 14.2 years) and doing so around three times as often as females. In addition, only 15 percent of males but 63 percent of females reported that they had never masturbated by the first time they had sex (Schwartz, 1999). While it may be common sense to contend that self-awareness and self-exploration are healthy aspects of sexual development, research has shown that masturbation is not related to sexual satisfaction, sexual difficulties, or intercourse experience. This suggests that masturbation is neither harmful to, nor necessary for, sexual enjoyment in young adulthood (Leitenberg et al., 1993).

Most researchers argue that males' apparently higher engagement in masturbation is a reflection of society's different expectations for men and women. To support this argument, Weinberg et al. (1995) compared Swedish participants with U.S. students. Sweden has a relatively sexually permissive culture and arguably less of a sexual double standard. Both men and women are encouraged to enjoy their sexuality. Interestingly, overall reported rates of masturbation were higher, and the gap in masturbation experience between males and females was smaller; 99 percent of males reported ever having masturbated, compared to 91 percent of women, although men continued to report a reasonably higher frequency. It is likely that a number of factors contribute to the low rates of masturbation reported by U.S. women; however, perceptions of societal disapproval may be a prominent factor.

Precoital Behaviors

The majority of studies devoted to adolescent sexuality present sex as a dichotomous variable (Whitaker, Miller, & Clark, 2000). Sexual experience is defined as having engaged in vaginal/penile sex, or not. Yet, a much broader range of behaviors and feelings constitute sexual experience. Unfortunately, few studies explore these broader behaviors and feelings or the meanings adolescents attribute to them. As a result, it is possible to give descriptive accounts of some precoital behaviors but difficult to provide any substantive analysis of the relationship between them, their developmental course, how they are interpreted, or how behaviors and cognitions relate to later coitus.

Precoital sexual expression, as with coitus, becomes more common with increasing age. A nationally representative study revealed that 12 percent of virgins and 18 percent of all participants aged 12–14 years had been in a relationship in the last eighteen months that had included "touching under clothes," while 6 percent of virgins and 13 percent of all students reported genital touching within at least one romantic relationship (Bruckner & Bearman, 2003). For older students, another nationally representative study of males found that approximately 40 percent of 15-year-olds and 60 percent of 16-year-olds had precoital sexual experience, such as masturbating or engaging in oral sex (Gates & Sonenstein, 2000). In another study, 35 percent of students in ninth through twelfth grade had engaged in noncoital heterosexual activity in the prior year; specifically, masturbation of a partner (29 percent) and by a partner (31 percent), fellatio with ejaculation (9 percent), and cunnilingus (10 percent). Homosexual masturbation and oral sex were less commonly reported (around 1–2 percent) for different behaviors (Schuster, Bell, & Kanouse, 1996). Retrospective reports by college students of their experiences prior to coitus revealed that most had engaged in kissing and fondling of breasts and genitals, 70 percent of males had performed cunnilingus, and 57 percent of females had performed fellatio at least once; moderate to high

engagement in these activities was reported by around one-third of individuals (Schwartz, 1999).

It is difficult to give validated conclusions regarding the relationship of precoital behaviors to coitus, but it appears that they are more likely to be forerunners to coitus than substitution behaviors. Supporting this hypothesis is the finding that teens who postpone coitus also engage in fewer sexual behaviors of any sort (Halpern, Joyner, Udry, & Suchindran, 2000). In addition, there appears to be a reasonably short time frame between engaging in precoital behaviors and engaging in coitus. Specifically, individuals reported activities leading to orgasms with their partners six to eight months before first coitus, and oral sex within one month of first coitus (Weinberg et al., 1995). Yet, there is also evidence to suggest that precoital behaviors may serve to delay sex, at least for a short period. From the limited extant research, it appears that white Americans' sexual behaviors follow a typical progression from extended kissing (necking), through feeling breasts over clothes then without clothes, feeling sex organs over clothes then without clothes, to coitus (Halpern, Joyner, et al., 2000; Smith & Udry, 1985). It seems that black Americans follow a less predictable path, and coitus occurs sooner with fewer preliminary behaviors (Smith & Udry). It is unknown to what degree this finding is a result of ethnicity or social factors and whether it is related to the higher pregnancy rate among black girls. Even if precoital behaviors do not substitute for coitus in the long run, positive aspects of delay may include more time for the relationship to develop and more time to prepare for intercourse. Further research must be undertaken to clarify these issues.

Additional research is needed to investigate the meanings that adolescents attribute to different behaviors. Do adolescents themselves view noncoital sexual behaviors as substitution for, or precursors to, coitus? What are the perceived implications of participating in varying behaviors? Implications to address could include perceived benefits and risks throughout psychological, social, relational, and physiological domains. Researchers are beginning to approach from this angle. For example, it has been reported that adolescents view oral sex as safer, more normative, and more socially acceptable but less pleasurable than coitus (Halpern-Felsher, Cornell, Kropp, & Tschann, 2005). Other issues to address include the varying pressures adolescents feel to engage in different activities, and the extent to which they feel pressured to engage in unwanted sexual activities additional to what they find comfortable. Whereas it is important to ask these questions from the perspectives of pregnancy and disease prevention, the field could benefit from a wider-angle lens that captures the full developmental and experiential aspects of sexuality.

Coitus

In 2003, according to the results of a nation-wide survey (Grunbaum et al., 2004), 46.7 percent of students in grades nine to twelve had had sex. This

percentage was highest among black students (67.3 percent), followed by Hispanics (51.4 percent), and white students (41.8 percent). Males were more likely to report having had sex than were females up until twelfth grade, and prevalence increased as students moved through high school. Data for females and males showed that, respectively, 4.2 percent and 10.4 percent had their sexual debut before age 13, 29.9 percent and 37.3 percent in ninth grade, 43 percent and 45.1 percent in tenth grade, 53.1 percent and 53.4 percent in eleventh grade, and 62.3 percent and 60.7 percent in twelfth grade. Altogether, 14.4 percent had had four or more sexual partners, with males (17.5 percent) more likely to report this than females (11.2 percent). Approximately one-third (34.3 percent) of all participants had had sex in the previous three months, indicating that teenagers who have had sex are not necessarily having sex regularly. Of those who had sex in the past three months, in relation to their most recent sexual encounter, 25.4 percent said that they had consumed alcohol or other drugs before and 63 percent had used a condom.

National data collected by Child Trends (National Campaign to Prevent Teen Pregnancy, 2003b) provided more specific details about the circumstances surrounding teenagers' first coital experience. Teenagers aged 16 to 18 years were asked about the first time they had sex; the most likely location was in one partner's family home (56 percent). The most likely time of day was 10 p.m. to 7 a.m. (42 percent), with the next most reported time being between 6 p.m. and 10 p.m. (28 percent).

Sexual Attitudes

Love, curiosity, and desire were the most popular motives given by young (12- to 14-year-old) adolescents for having sex, whereas wanting to avoid AIDS or other diseases was the most common reason for not having sex, followed by not wanting a baby, parent's anger, and feeling they were too young (Gomez, Coyle, Gregorich, Marin, & Kirby, 2003). Teenagers seem to believe that society should encourage them to delay having sex. For example, 90 percent of adolescent boys stated that teenagers should be given a "strong" abstinence message from society (unpublished data cited by the National Campaign to Prevent Teen Pregnancy, 2003a).

"Too Young" versus "Just Right"

Cotton, Mills, Succop, Biro, and Rosenthal (2004) asked adolescent girls how they felt about their readiness to have sex the first time they did. In their sample of predominately (80 percent) African American girls, 14 years was the mean age of first intercourse. The authors reported that 78 percent of the girls said they were "too young" whereas 22 percent said their age had been "just right." Factors associated with a girl reporting her age as "just right" were being younger at the time of interview, being older at the time of first intercourse,

endorsing the statement "I was in love," more parental supervision, and a higher level of maternal education. A public opinion poll conducted in 2002 by the National Campaign to Prevent Teen Pregnancy found similar results, with 81 percent of 12- to 14-year-olds and 55 percent of 15- to 19-year-olds stating that they wished they had waited until they were older to have sex (Albert, Brown, & Flanigan, 2003).

Mutual Consent/Coercion

A girl's propensity to regret is likely to be related to the degree she desired intercourse in the first place. Although most girls define the first time they have intercourse as being consensual in that the experience was not forced on them, there is variation in how much they desired sex. Flanigan (2003) asked girls about the "wantedness of sex" in consensual intercourse. She reported that among girls younger than 15, 27 percent rated the wantedness as low, 48 percent as medium, and 26 percent as high. Girls older than 15 were less likely to give a low rating (15 percent) and more likely to give a high rating (42 percent); a similar number (43 percent) reported medium wantedness. This substantial number of girls who were ambivalent, if not reluctant, about participating in first coitus suggests that girls are not being sufficiently equipped to have their desires met. Issues of communication, self-esteem, self-efficacy, subjugation, or pressure of perceived social norms may impact a girl's ability to say and get what she wants in a relationship.

Contraceptive Use

A summary of the trends in contraceptive use by Terry and Manlove (2000) showed that from 1988 to 1995 there was an increase in contraceptive use at first intercourse for all teens who had ever had sex, but among those who were currently sexually active, there was a decline in contraceptive use at last sex. The one exception to this trend was that the contraceptive use of sexually active black females remained stable across the periods. To prevent pregnancy, it is important that adolescents use contraception consistently; unfortunately, the data indicated that 30 to 38 percent of females do not do this, with younger adolescents being the least consistent users.

The factors that determine whether adolescents use contraceptives consistently differ from the factors affecting early sexual debut. Unlike early sexual involvement, contraceptive nonuse does not appear to be associated with other risk factors. In a literature review, Manlove, Ryan, and Franzetta (2004) reported factors specific to the couple that reduce the likelihood of condom use. These included an age gap between partners, physical violence, younger age at first intercourse, and a greater number of partners. They also noted that although having sex early in the relationship increased the likelihood of initial condom use, it reduced likelihood at last intercourse. The impact of relationship type,

such as romantic versus casual, has produced contradictory findings. Some studies have found that condoms were more likely to be used in a romantic relationship than in a casual relationship; however, other studies have found the opposite pattern. This discrepancy can be resolved by considering that in longer-term relationships, condoms may be disregarded for other forms of contraception. Discussing contraception with one's partner increases the chances of using it, and females who are more at ease communicating with men in general are more likely to discuss and use contraception.

Individual factors are also associated with condom use, as those who use condoms consistently in one relationship are more likely to do so within other relationships. Characteristics of the individual that decrease the likelihood of condom use included Hispanic ethnicity, low academic achievement, and religiosity. The characteristics that increase the likelihood of condom use included having two biological parents, parents with higher educational attainment, and holding positive attitudes toward contraception. More consistent contraceptive use is associated with hormonal contraceptive methods than with condoms.

CONTEXTS OF SEXUALITY: INTERPERSONAL RELATIONSHIPS

Romantic Relationships

Romantic interests are a defining aspect of adolescence, whether adolescents actually engage in a relationship or participate in fantasy and talk about a person they "like." In one study, 55 percent of all adolescents had been in a romantic relationship in the past eighteen months. The proportion increased with age so that by age 18, 76 percent of adolescents reported having experienced a romantic relationship, and 8 percent reported a "liked" relationship (Carver, Joyner, & Udry, 2003). In another study, with adolescents 14 and younger, 42 percent reported ever having dated. Of those, the majority (40 percent) had only dated 1–3 times (Terry-Humen & Manlove, 2003).

In the Carver et al. (2003) study, approximately half the reported romantic relationships were sexual; again, the proportion increased with the age of the adolescents involved. More relationships involved "touching each other under clothing" (57 percent) than "touching each other's genitals" (52 percent), and 41 percent involved intercourse.

Nonromantic Relationships

Not all sexual involvement occurs within a romantic relationship. A nationally representative sample showed that 14.9 percent of teenagers aged 15 years and older had sex with someone they were not romantically involved with at the time (Manning, Longmore, & Giordano, 2005). The relational context

of adolescent sexual experience is important because it affects sexual health behaviors and provides learning experiences and models for later relationships. Specifically, knowing each other as friends before becoming involved in a romantic relationship is related to a lower likelihood of intercourse for males and females (Kaestle & Halpern, 2005). Females are more likely to use a condom if they knew their partner than if they had just met them (Manning, Longmore, & Giordano, 2000), and teenagers who have participated in nonromantic sex are much more likely to do so again (Manning et al., 2005). The implications of nonromantic sexual involvement for attachment, mental health, and later relationship success need to be expanded upon in future research.

Stability of Relationships

Relationships within which first coitus occurs tend to be short. For adolescents younger than 15, 44 percent of their relationships ended within three months. For those 15 years and older, 39 percent of relationships ended within three months (Flanigan, 2003). On the other hand, relationships that include intercourse tend to be more enduring, lasting almost twice as long as platonic relationships. Analyzed at what stage 25 percent, 50 percent, and 75 percent of relationships ended, sexual relationships endured for 5, 11, and 27 months, respectively, whereas relationships that did not include intercourse endured for only 2, 5, and 13 months, respectively (Bruckner & Bearman, 2003).

Age Disparity

The greater the age disparity between a young girl and her partner, the greater the likelihood that they will be sexually involved, that they will not use contraception, and that she will become pregnant (Darroch, Landry, & Oslak, 1999). In adolescents under 14, 8–13 percent of same-age relationships included sex. This doubled when the partner was two years older, increased to 33 percent when the partner was three years older, and was 47 percent when the partner was four or more years older (Albert et al., 2003). Another study replicated this pattern and found that it applied for boys as well. Thirty percent of girls and 73 percent of boys aged 14 years reported sexual involvement when their partner was at least two years older, compared to 13 percent of girls and 29 percent of boys when their partner was within one year of their own age (Marin, Kirby, Hudes, Gomez, & Coyle, 2003).

Early Sexual Debut

The sexual behavior of younger adolescents deserves special attention. The sexual experiences of those 14 and younger seem to be different from those 15 and older, and the negative consequences experienced are greater

(Albert et al., 2003). Despite sexual involvement having different ramifications according to age-group, there is often no breakdown of ages or data collected from adolescents aged 15 and older. Despite increased risk, the proportion of sexually active individuals aged 14 or younger is not declining like that of those in the older age-group, but is instead increasing.

A number of studies have found that younger age at first intercourse is linked to a greater number of sexual partners over time, decreased contraceptive use, increased risk of STDs, increased risk of pregnancy (one in seven sexually experienced 14-year-olds reported having been pregnant), significantly increased likelihood that the sexual attention was unwanted (13–24 percent described it as nonvoluntary) (Marin et al., 2003). Furthermore, younger girls are much more likely to report regret over first sex. In addition, when girls 14 and under give birth, they are at an even greater risk of childbirth complications and of having a baby with a low birth weight (Martin, Hamilton, Ventura, Menacker, & Park, 2002).

Sexual Orientation

Sexual identity development is difficult to study because sexual orientation labels may not accurately represent the experiences of many adolescents (Friedman et al., 2004). Hence, although attention has been given to adolescents who label themselves as gay, lesbian, or bisexual, a large number of factors may affect teenagers' decision to label themselves, including uncertainty about the meaning of their feelings and behaviors, diversity within their experiences of attraction, and fear of negative evaluation. Furthermore, heterosexual, homosexual, and bisexual appear to present as dimensional continuums rather than as distinct categories to which one either does or does not belong. Therefore, the term "sexual minority" includes those youth who experience same-sex attraction, but recognize that they may also experience other-sex attraction, and that their patterns of experience may change over time (Diamond & Savin-Williams, 2003).

Sexual identity development involves interpreting and integrating attractions, behaviors, intimate relationships, fantasy, and labels into a representation of the self. It should not be assumed that the different aspects of sexual identity are stable and/or concordant with each other (Diamond, 2000; Friedman et al., 2004). For example, adolescents who report same-sex attractions do not necessarily participate in same-sex behavior, and adults who identify as gay do not always recall same-sex attractions during adolescence. Experiencing same-sex attraction does not automatically mean that other-sex attraction either does not or has not occurred, or is unimportant, unsatisfying, or unappealing. Most sexual minority youth have been involved with other-sex peers in a variety of ways. As Diamond and Savin-Williams explained, "[I]ndividuals typically experience a diverse array of attractions and behaviors during their adolescent years some of which reflect curiosity and experimentation, some of which

reflect social pressure, and some of which reflect an underlying sexual orientation" (2003, p. 395).

Fluidity of attractions and behaviors is particularly true of the experiences of women. This is illustrated by a study of eighty sexual minority women aged between 16 and 23 years, where one-third changed their identity label and half changed their identity more than once (Diamond, 2000). Nevertheless, it appears that men's experiences are not static either, according to the findings of a longitudinal study that comprised men born in New Zealand in 1972/1973 and questioned at age 21. The majority (93.2 percent) reported that they had only ever experienced attraction to women, a few (6.5 percent) reported ever being sexually attracted to a man, and a smaller number (4.2 percent) reported current same-sex attraction. Overall, 4.2 percent reported ever having had sex with a man. Of that group, a minority (9.5 percent) reported being only solely attracted to men, and almost half reported that they were now solely attracted to women (Paul, Fitzjohn, Eberhart-Phillips, Herbison, & Dickson, 2000).

A large number of adolescents question aspects of their sexual identity. Much of this uncertainty resolves with time, although a degree of fluidity continues to exist. Unfortunately, wrestling with sexual identity issues is not easy, and sexual minority youth experience a greater number of health risks, including depression, suicide, and substance abuse (Garofalo & Katz, 2001; Savin-Williams, 1994). It is important to remember the "powerful needs for physical affection, emotional security, and simple companionship that underlie *all* adolescents' close relationships," and ensure that adolescents are able to have these needs met safely (Diamond & Savin-Williams, 2003, p. 406).

CONSEQUENCES OF ADOLESCENT SEXUALITY

Pregnancy

Birthrates

Since the 1970s, in industrialized countries worldwide, there has been an overall decline in the childbearing of teenagers aged 15–19 years (Singh & Darroch, 2000). In the United States this decline, particularly in the last decade, has created a degree of optimism—optimism tempered by the fact that the current rate is still one of the highest in the Western world. Decreased adolescent childbearing has occurred in a context of declining fertility for women of all ages, but this trend has generally been more marked among adolescents (Darroch, Singh, & Frost, 2001).

In the United States and several other countries, the decline in birthrates is accompanied by a declining abortion rate. Although abortion trends are less consistent across countries, generally, from 1980 to 2000, there has been a stable or decreasing rate among 15- to 19-year-olds. In the United States, there

has been a 31 percent decrease in abortions since the mid-1980s (Darroch & Singh, 1999). Younger adolescents are more likely to seek an abortion. For example, in the United Kingdom in 1997, approximately 50 percent of births were aborted in those under 16, but this figure fell to around 30 percent for those aged between 16 and 19 (Macleod & Weaver, 2003).

Effects for Mother and Child

Bringing a baby into the world is ideally a positive and happily anticipated event. In fact, teenage mothers often share the same positive emotions as adult mothers do around the birth of an infant (Macleod & Weaver, 2003; Milan et al., 2004). Unfortunately, teenage motherhood often occurs in a context that leads to negative consequences for the mother and her child (Felice et al., 1999; LeTourneau, Stewart, & Barnfather, 2004; National Campaign to Prevent Teen Pregnancy, 2002). Whereas, historically, young married women have borne children without attracting societal concern, contemporary society differs significantly from that of even fifty years ago. For young women today, adolescence is more a time to prepare for the future and less a time of marrying and beginning a family. Adolescent parenting can mean a path of narrowed opportunities without the expected acquisition of education and job skills. In addition, adolescent parenting often means single parenting, and while this should not carry stigma, it can carry hardships, including a lack of social and economic support.

Hobcraft and Kiernan (2001) conducted a study in Britain using longitudinal data for over 5,500 women. They described the situations of women at age 33. Controlling for a large number of background variables, they found that the younger a woman was at giving first birth, up until the age of 23, the more likely she was to have experienced a variety of negative outcomes. The experience of an early first birth was a more powerful risk factor than was childhood poverty, although childhood poverty and early first birth together created the worst outcome. Women who gave birth before the age of 20 were most likely to experience single parenting, to be in government-provided housing and receiving financial aid, have no qualifications, smoke cigarettes, have no telephone, be of low income, experience malaise, say life is unsatisfactory, and report moderate or poor health. The authors noted that negative outcomes are unlikely to be the result of the birth of a baby per se, but that early parenting has the potential to limit other opportunities and choices.

While teenage motherhood may be associated with an array of negative outcomes, the relationship is complex. The factors that are said to result from teenage pregnancy are the same factors that put adolescents at increased risk of becoming parents (Bingham & Crockett, 1996; Coley & Chase-Lansdale, 1998). Nevertheless, as discussed by Hoffman (1998), although adolescent parenthood does not, in and of itself, cause disadvantage, nor guarantee that disadvantage will ensue, this does not then mean that efforts to discourage

it should be abandoned. As he stated, "Reduction of early parenthood will not eliminate the powerful effects of growing up in poverty and disadvantage. But it represents a potentially productive strategy for widening the pathways out of poverty or, at the very least, not compounding the handicaps imposed by social disadvantage" (p. 243).

Moreover, the results of research investigating the effect of teenage parenthood on the child suggest that children born to adolescent women are at greater risk of being disadvantaged. They are more likely to experience low birth weight, more hospital admissions, neglect, poverty, becoming teenage parents themselves, being disadvantaged on tests of cognitive performance, and doing less well emotionally and socially than children of older mothers (Osofsky, Hann, & Peebles, 1993; Terry-Humen, Manlove, & Moore, 2005).

Effects for Fathers

Substantially more research is directed toward teenage mothers than teenage fathers (Thornberry, Smith, & Howard, 1997). As is the case for adolescent mothers, adolescent fathers are more likely to have encountered greater social disadvantage, including poverty, low educational achievement, and involvement with alcohol and other drugs, petty crime, and violent behavior (Nelson, 2004; Stouthamer-Loeber & Wei, 1998; Thornberry et al.). Unfortunately, it is those factors that may place a man at greater risk of becoming a young father that may also decrease his likelihood of remaining involved with the child (Thornberry et al.). It is unfortunate because there are tremendously beneficial long-term outcomes for children when fathers remain involved and provide quality parenting. Father involvement results in a reduction in family poverty and improved outcomes for children cognitively, behaviorally, and socially (Marsiglio, Amato, Day, & Lamb, 2000; Reid, 2000), and improved psychosocial outcomes for the mother (Gee & Rhodes, 2003; Kalil, Ziol-Guest, & Coley, 2005). More research is needed to investigate the factors that lead to fatherhood and affect continued involvement, and the social and emotional impact of fatherhood on the adolescent boy (Fagan, Barnett, Bernd, & Whiteman, 2003; Marsiglio et al.).

Sexually Transmitted Diseases

Sexually transmitted diseases (STDs) incur high costs. In addition to the immediate negative physical and psychological effects of contracting disease, long-term sequelae can include pelvic inflammatory disease, tubal scarring, ectopic pregnancy, infertility, cancer, and increased mortality (Chesson, Blandford, Gift, Tao, & Irwin, 2004). Adolescents have the highest chance out of all age-groups of contracting an STD (Upchurch, Mason, Kusunoki, Johnson, & Kriechbaum, 2004). For example, 46 percent of all reported cases of *Chlamydia trachomatis* are for girls in the 15- to 19-year age-group (Cothran & White, 2002).

Overall, 25 percent of reported STDs are for adolescents (Weinstock, Berman, & Cates, 2004). This number is particularly alarming when considering that it only applies to the proportion of adolescents who are sexually active and those who seek medical care.

Upchurch et al. (2004) reported that age at first intercourse was the primary predictor of adolescent sexual health. Adolescents who postpone sex tend to have fewer sexual partners, have longer-lasting relationships, and use condoms more consistently (Albert et al., 2003; Flisher & Chalton, 2001). In addition to being at increased risk of disease due to risky behaviors, young women are more physically susceptible to infection. The cervix does not mature fully until late adolescence and until then is less able to resist infection (Joffe, 1997). Furthermore, postponing sexual involvement until late adolescence is particularly important for reducing transmission of those STDs that are not affected by condom use, specifically, those caused by herpes simplex virus, pubic lice, and human papillomavirus (HPV), which leads to cervical cancer (Cothran & White, 2002; Warner et al., 2004; Winer et al., 2003). Although consistently wearing condoms leads to reductions in transmission of most STDs, the aforementioned diseases are contracted through any skin-to-skin contact. Therefore, interventions that lower disease rates need to focus on methods (other than condom use) of reducing risk behaviors, such as delayed sexual debut, STD screening and treatment, and fewer sexual partners.

In addition to interventions that reduce STD transmission, it is crucial to provide, and educate about the necessity of, screening and treatment of STDs. Research to date suggests that adolescents are not being adequately assessed and that professionals and adolescents need to be aware of the importance of regular screening (Fiscus, Ford, & Miller, 2004). It is also important that health practitioners are aware of the possible need to screen for STDs contracted through behaviors other than coitus, such as oral sex (Remez, 2000). Generally, education and media campaigns have focused on vaginal/penile intercourse as being synonymous with sexual behavior (Halpern-Felsher et al., 2005). However, a variety of sexual behaviors outside of this definition still place the young person at risk.

Sexually Transmitted Disease in Developing Countries

The consequence of sexually transmitted disease is particularly devastating in developing countries where HIV/AIDS has become an epidemic. Young women specifically are at a high risk of contracting HIV. The UNAIDS/WHO *AIDS Epidemic Update* reported that in sub-Saharan Africa, 76 percent of infected young people (15–24 years) are female. This report highlights the effect of the social and economic context in determining the sexual health of individuals. An adolescent girl in a developing country commonly has little control over the factors that lead to her becoming infected. She will often marry an older man who has had and may continue to have multiple partners. Cultural expectations

that women be sexually naïve result in her holding limited knowledge about the importance of protected sex. In addition, even if she did know about the importance of using a condom, she may have limited power to assert that one be used (UNAIDS/WHO, 2004). As well as the increased incidents of HIV/AIDS, STDs, and unintended pregnancy, adolescents in developing countries also have reduced access to health care. Consequently, there is less opportunity for treatment and there are increased incidents of pregnancy complications, which lead to increased mortality for mother and child.

FACTORS INFLUENCING SEXUAL RISK BEHAVIORS

There are a multitude of cultural, community, family, and individual factors that increase the likelihood of early sexual debut, poor contraceptive use, and adolescent pregnancy. Kirby (2001a) reported more than 100 antecedents from an analysis of over 250 studies. He explained that it is important for educators, policy makers, and parents to be aware of these risk factors so that they can design and implement appropriately targeted interventions and can identify those youth who are most at risk. It is necessary to remember, though, that such a large number of antecedents entails that the contribution of each factor is relatively small. It is also necessary to remember to focus on protective factors, which build resiliency and may attenuate the likelihood of negative outcomes.

Culture

Cultural atmosphere is the broadest and the most inescapable influence on sexual behavior. The media, schools, families, extracurricular clubs, and communities of faith all give messages about appropriate sexual behavior. Out of this melting pot of sources, youth are given contradictory messages. On the one hand, sexuality is glamorized, and on the other, it is prohibited. The media, from movies to magazines, generally depict sexuality in a way that is discordant with reality (Ward, 2003). Equally discordant with reality is the information that depicts only the biophysical aspects and risks of sexual involvement. Adolescents do not merely hear these messages, but they interpret them and choose to accept or disregard them. These choices and interpretations affect adolescent beliefs about what is acceptable and what is normative. These beliefs may be one of the most powerful underlying influences on their sexual behavior (Kirby, 2001b).

Media

Adolescents with unsupervised access to television were more likely to engage in sexual activities (Gruber, Wang, Christensen, Grube, & Fisher,

2005), and adolescents who watched television with more sexual content were more likely to initiate intercourse within the following year (Collins et al., 2004). However, as with most predictors of sexual behavior, the link between media and behavior is not necessarily unilateral. Chapin's (2000) developmental approach to mass media suggests that teenagers actively use the media to find information relevant to their interests and developmental stage. Their interpretation of the media will then also differ accordingly. This theory is consistent with the findings of Brown, Halpern, and L'Engle (2005). They found that pubertal timing influenced girls' likelihood of engaging with media containing sexual content. Early-maturing girls showed more interest in music, magazines, and movies with sexual content and were also more likely to interpret sexual messages as being permissive. Interestingly, late-maturing girls were also more likely to report that they viewed STD- and birth control–related messages. As the authors noted, the rarity of this information in the media suggests that these girls may have been particularly attuned to such information.

Family

Despite the powerful influence of wider community and societal influence, research unequivocally supports the impact of the family (Miller, 1998; Miller, Benson, & Galbraith, 2001; Upchurch, Aneshensel, Sucoff, & Levy-Storms, 1999). This large body of research supports the finding that the most effective way to protect adolescents from disadvantage, including early sexual debut and pregnancy, is a functional and supportive family. Such families have been found to include qualities such as parent-child connectedness, good communication, strong values with expectations for abstinence, parental involvement, awareness and supervision of adolescent activities, high level of maternal education, hereditary influences, and presence of both biological parents in the home (Borawski, Ievers-Landis, Lovegreen, & Trapl, 2003; DiLorio, Dudley, Soet, & McCarty, 2004; Ellis et al., 2003; Hutchinson, Jemmott, Jemmott, Braverman, & Fong, 2003; Miller, 1998; Miller et al., 2001; Rose et al., 2005; Sieverding, Adler, Witt, & Ellen, 2005).

Peers

An adolescent's peer group also impacts his or her behavior (Whitaker & Miller, 2000). Adolescents who perceive that their peers are having sex, who have older friends, or who have friends who participate in delinquent activities are more likely to have sex (Bearman & Bruckner, 1999). The importance of social context was exemplified in a study conducted by Bearman and Bruckner (2001).They found that the effectiveness of virginity pledging relied on there being at least some other pledgers within the pledger's school, and differed according to whether the school environment was relatively socially closed or

open. Schools whose students primarily formed social groups with peers inside their school were more likely to be affected by the pledge, whereas schools where students formed social groups from diverse contexts were less likely to be affected.

The Individual

There are many studies investigating individual attributes associated with sexual risk behaviors. These include physical maturation; depression and low self-esteem (Longmore, Manning, Giordano, & Rudolph, 2004); low academic aspirations; low community attachment; alcohol and other drug use (Rashad & Kaestner, 2004; Stueve & O'Donnell, 2005); history of abuse; previous pregnancy; and having an older romantic partner, which is associated with greater likelihood of sex, reduced contraceptive use, and higher reports of coercion (Young & d'Arcy, 2005). Individual factors that have been identified as protective include being involved in sports or youth groups, having strong religious beliefs (Whitehead, Wilcox, & Rostosky, 2001), self-efficacy for abstinence (DiLorio et al., 2004), sexual attitudes and knowledge (O'Donnell, Myint, O'Donnell, & Stueve, 2003; Rosengard et al., 2001), and good cognitive ability. The whole picture is complex, however, because these factors interact and are more or less appropriate according to the age, gender, and ethnicity of the individual.

Looking Further

The literature addressing adolescent sexuality has almost exclusively focused on pregnancy and disease. Very little attention has been given to the social and emotional aspects that are integral to sexuality. In one study (Widdice, Cornell, Liang, & Halpern-Felsher, 2005), teenagers were asked their opinions about the risks and benefits of having sex. Along with noting pregnancy and STDs, teenagers noted several social consequences, including negative effect on the relationship, negative emotions such as regret and loss of self-esteem, and parental or peer disapproval. Positive consequences of sexual involvement were predominately social, such as improving the relationship, having fun, and lifting social status. Although pregnancy and STDs are clearly high costs and have therefore been the focus of most interventions, the social and emotional aspects of sexuality should nevertheless be considered in future research.

SEX EDUCATION/PREVENTION

Virtually every North American student in public school will receive some form of sexuality education. Darroch, Landry, and Singh (2000) found that while the content and timing differs, the focus of the curriculum is likely

to be on HIV transmission, STDs, and abstinence. Across the United States, 94–95 percent of teachers covered these topics with the majority of teachers reporting that abstinence was the most important message to communicate. This information was most likely to be discussed in the ninth grade. The content of sex education is heavily influenced by the goals of reducing pregnancy and STD transmission, and therefore is directed toward delaying sex debut and declining sexual involvement, as well as encouraging consistent use of condoms (Albert et al., 2003; Flisher & Chalton, 2001).

Franklin and Corcoran (2000) discussed that there has been an evolution in the content of sex education. The first programs developed were knowledge centered, emphasizing the risks and consequences of sexuality. As a reaction to this biological approach, later programs emphasized values, with abstinence promotion and limited discussion of contraception. The impact of HIV/AIDS led to the development of programs independent of previous approaches. Each of these three educational aspects can be seen in the most recently developed sex education programs.

While parents, educators, and policy directors each undoubtedly have adolescent welfare as their goal, there is strong disagreement and controversy surrounding how to best meet this goal (Moran, 2000). Essentially, the argument is centered on values. Traditionally, sexuality was contained within the context of marriage. The sexual revolution questioned this value and instead placed sex within the context of individual fulfillment. Each view offers a different solution to teen pregnancy and STDs; one group advocates abstinence until marriage, the other, contraception. Fear of AIDS further polarized these positions. Although these views are fundamentally dichotomous, there may be more potential for consensus, when determining what messages to convey to young people, than has been attempted so far. We do our young people a disservice by avoiding contentious issues and presenting sexuality in a reductionist manner. This is conveyed by the answer given by one 15-year-old girl who, in answer to the question "What is the main reason some teenagers don't have sex?" wrote, "My choice is to remain abstinent for reasons beyond religion and morals. I know that I am nowhere close to being ready for the consequences that come along with sex. . . . Sex is an act of love, not only an act of pleasure, and, in my opinion, this subject shouldn't be taken so lightly" (cited in Whitehead et al., 2001, pp. 27–28). She included faith, morality, responsibility, pleasure, and relationship and asked for awareness of the magnitude of these issues. This emphasizes that a simple "safe sex" or "true love waits" approach to sexuality is insufficient.

In practice, although sex education is often discussed as being abstinence-only or not, in the United States, sex education exists on a continuum (Kirby, 2001a). Furthermore, the evidence suggests that it is not inconsistent to advocate abstinence and contraception. Kirby (2001b) stated that virtually no study has found that sex education, even when it includes discussion of contraception or condom availability programs, increases rates of sexual activity.

In fact, some studies found that discussion of contraception actually delayed sexual debut and frequency of coitus. Likewise, when contraception is discussed alongside the promotion of abstinence as preferable, contraceptive use does not decrease.

Comprehensive Sex Education

Comprehensive sex education covers contraception, health, and abstinence and has been found in at least seventy studies (Kirby, 2001a; see also Kirby et al., 2004; Speizer, Magnani, & Colvin, 2003) to have some impact on teenage behavior. Nevertheless, as Kirby (2001b) discussed, more research needs to be undertaken before firm conclusions can be drawn. He states that it is clear that there are no "magic bullets." No one approach is single-handedly superior; programs need to target a wide range of antecedents and be open to combining techniques. He outlined the common components of those comprehensive sex education programs that were effective. First, he stated that each component is vital, but one of the most crucial aspects of an effective program is the consistent stressing of abstinence and contraceptive use. Second, he recommended the use of theoretical approaches that have been employed effectively in other health intervention programs. Such programs target specific sexual antecedents and focus on one or more specific sexual behaviors that lead to pregnancy or disease and focus on reducing that behavior. Third, he recommended the presentation of facts about the consequences of sexual involvement, ways to avoid involvement, and ways to protect oneself when one is involved. Fourth, he advocated teaching skills, for instance, hearing examples of and practicing communication, negotiation, and declining unwanted sexual advances. In addition, he suggested addressing the social pressures toward sexual involvement. Fifth, he recommended that program presenters believe in the value of the program, be trained, and use appropriate teaching methods so that participants feel involved and have the ability to personally relate to the material. The material needs to take into account the age, experience, and cultural background of the participants. Finally, he advised against programs of short duration; regardless of the content, they have little measurable effect.

Abstinence-Only Programs

Abstinence-only programs have not been sufficiently studied to justify drawing conclusions about their effectiveness at this stage (Besharov & Gardiner, 1997; Kirby, 2002). In his review of pregnancy prevention programs, Kirby (2001a) stated that only three studies (Kirby, Korpi, Barth, & Cagampang, 1997; Olsen, Weed, Nielsen, & Jensen, 1992; St. Pierre, Mark, Kaltreider, & Aikin, 1995) have evaluated abstinence-only programs in a sufficiently rigorous manner. The findings from those studies suggested that the programs did not impact the sexual behavior or contraceptive use of participants. Yet, as Kirby

discussed, there are huge variations in the type of programs that come under abstinence-only education. The above three studies do not reflect the wide range of abstinence programs, some of which may be more effective than others. A program adjunctive to that offered by schools, which is abstinence based, is the virginity pledge. This, perhaps surprisingly, has been found in specific circumstances to effectively delay sexual debut. Bearman and Bruckner (2001) reported that sexually inexperienced young adolescents, in a context where there are enough other pledgers but not too many, are likely to delay intercourse for a substantial period of time. This is consistent with an intention not to have intercourse. However, when they do have intercourse, they are less likely to use contraception but pledge-breakers report no negative effects on self-esteem for breaking the pledge.

Noncurriculum-based Interventions

In addition to curriculum-based sex education, other initiatives have been developed to improve adolescent outcomes. Kirby (2001a) divided interventions into three broad categories based upon whether they target primarily sexual antecedents, nonsexual antecedents, or both. Within each of these broad categories, additional groupings can be made according to the structure of the programs. Programs that target sexual antecedents include curriculum-based programs, community-wide initiatives, sex education for parents and families, and clinic-based programs. Programs that target nonsexual antecedents are broad adolescent development programs that typically include structured preparation time leading to voluntary community service followed by reflection time. The third category of programs includes components of comprehensive health education and adolescent development.

Clinic-based services that provide contraception have been set up in the community and sometimes in schools. Kirby (2001a) explained that clinic-based interventions have not been studied in a comprehensive manner; however, common sense would suggest that contraceptive availability is an important factor dictating contraceptive usage. It does appear that clinic protocols are important. Specifically, providing information about reproductive health, the merits of abstinence, and opportunities for one-to-one discussions were components that facilitated effective service provision. He stated that school-based clinics do not appear to increase contraceptive use overall. Rather, teenagers substituted use of the school-based clinics over the community based clinics. As already stated, studies show that condom availability does not increase sexual activity (e.g. Kirby, 1991; Kisker & Brown, 1996).

Community-wide Interventions

Recognition of the multiple influences on teenage behavior has led to the development of community-wide interventions, including media campaigns

through radio, television, posters, and billboards; presentations at large community events; workshops in schools, youth groups, community organizations, health centers, and personal homes; handing out pamphlets and condoms on streets and from door to door; setting up condom vending machines; and so on. The more intensive these initiatives are, the more likely they are to be successful. However, effects have not been found to last beyond the length of the intervention.

Service Learning Programs

Interventions that focus on the nonsexual antecedents of sexual risk taking include adolescent development or service learning programs. Service learning typically involves the adolescent being involved in voluntary community service while receiving input from positive role models during weekly debriefing sessions. In fact, Kirby (2001b) noted that at this stage, the best evidence for effective intervention is current involvement in a service learning program. Positive effects are hypothesized to result from quality time with caring adult role models, self-efficacy resulting from positive social interactions and a belief that they are making a valuable contribution to their communities, and provision of an activity, which means less opportunity to engage in risky activities.

One example of a service learning program is the Reach for Health intervention (O'Donnell et al., 2002). This program involved service in a community setting for three hours each week for thirty weeks. Participants were placed in one or two field placements over each year. At the commencement of the program, participants were given an orientation to the responsibilities and codes of conduct that were required in their placements. Each week, debriefing sessions were held and used to develop critical skills such as communication. The importance of the participants' contribution to the community was emphasized. The youth were required to learn about their organization as well as set personal goals, and they received a jacket and badge to wear. A total of seventy-four health lessons over a two-year period were also included.

Evaluation of the program four years after its commencement found that participants were less likely to report sexual initiation or recent sex compared to the control group that received the health education component only. Those who remained in the program for two years had the best results, but those who remained for one year also had positive results compared to a control group. Among those who had not had sex at the beginning of the project, by the end of the project 80 percent of males in the control group had initiated sex versus 61.5 percent who had been in the program for one year and 50 percent who had completed the full two-year program; among females, the respective figures were 65.2, 48.3, and 39.6 percent.

The most intensive, and therefore expensive, programs focus on sexual and nonsexual antecedents. One example of this type of program is the

Children's Aid Society-Carrera Program. It has been used with at-risk youth and includes the following components:

1. Family life and sex education
2. Academic assessment for specific needs, help with homework, and help with preparation for exams and course entry requirements
3. Work-related activities
4. Self-expression through arts
5. Sports
6. Comprehensive health care

Significant effects were found for girls and included postponement of sexual debut, increased condom use, and reduced pregnancy and birthrates.

Complicating the evaluation of program effectiveness is the fact that different programs may have different success with different groups. For example, different interventions may be more or less appropriate to individuals depending on their gender, ethnicity, sexual experience, at-risk status (e.g., those affected by sexual abuse or substance abusers), and so on (Kirby et al., 2004). The ability to target interventions to specific groups may improve the success of the program.

A consideration that has been missing from intervention research is that sex involves more than the decisions and desires of one individual. The vast majority of intervention research has considered individuals rather than couples. Little attention has been given to the interpersonal aspects of sexuality. Likewise, the physical consequences of sexuality have been emphasized, with the emotional consequences less emphasized. Researchers have only recently attempted to address this imbalance.

Programs in Developing Countries

Education and interventions are vital in developing countries where the life and death consequences of sex are even more pronounced. In the past decade, programs have been developed to address this need. More research needs to be conducted as few programs have been evaluated and most do not measure actual rates of disease. There is unlikely to be one magic answer, but evaluations are important so that the most effective programs can be implemented with long-term success.

Speizer et al. (2003) reviewed forty-one studies of adolescent reproductive health interventions operating in developing countries. Several different types of interventions were included in the review under the categories of school-based programs; mass media; community programs incorporating youth development, peer educators, and education; workplace programs; and health facilities. Interventions generally had a positive impact on knowledge and

attitudes, but were less likely to impact on behavior. For each of the various approaches, at least one study found an impact on a behavior. Interventions that aimed to alter multiple behaviors generally did not achieve this goal although they may have succeeded with one behavior or one group of participants, for example, women.

Uganda is one country that, through a consistent countrywide effort, has seen a reduction in the AIDS epidemic (Blum, 2004). The effort, referred to as ABC, includes several tactics: **A**bstinence, **B**e faithful, and **C**ondoms; voluntary counseling and testing; and a focus on reducing mother-to-child transmission. Dramatic reductions in AIDS are accompanied by equally dramatic increases in condom use and abstinence.

Programs in European Countries

The United Kingdom and the Netherlands have large differences in pregnancy rates; moreover, the already low rate in the Netherlands has halved within the last twenty-five years and is one of the lowest among industrialized countries. Lewis and Knijn (2003) compared these countries' approaches in an attempt to understand what processes produce different outcomes in these countries. The reasons given for the higher pregnancy rate in the United Kingdom were social disparity, with women unable to see a life beyond welfare; limited understanding of contraception, sexually transmitted disease, relationships, and parenting; and contradictory messages about sex.

The impact of limited life choices due to social disparity is an issue in the United Kingdom and the United States to a degree that is generally not evident in Western European countries. However, Lewis and Knijn (2003) noted that black women in Amsterdam have a similar pregnancy rate to women in the United Kingdom. This may be because they have more limited life opportunities.

Ignorance of sex and relationship issues was also identified as a contributor to high pregnancy rates. Interestingly, a similar amount of time is devoted to sex education in British and Dutch schools. However, the approaches taken are dissimilar. Lewis and Knijn described the Dutch curriculum as "more explicit, more comprehensive and more coherent" (2003, p. 126). Sexuality education is presented as an integral and normal part of life. This contrasts with the British curriculum, where "[t]he irony is that the greater emphasis . . . on the negative aspects of teenage sex and on prevention continues to feed the often confused and sometimes crude perception of teenagers and the apparent lack of regard, especially on the part of boys, for relationships and for other people" (p. 127). Sexuality in the Netherlands, similar to that of Sweden, emphasizes empathy and responsibility toward one's sexual partner, attitudes that promote responsible sexual behavior.

In addition, continuity in the treatment of sexuality throughout different spheres of society in the Netherlands aids in the presentation of a consistent message about sex. Sexuality is discussed with greater openness, not just in

school, but at home and in the media. However, contrary to what has sometimes been assumed, there are strong social expectations regarding acceptable behavior.

Lastly, the different approaches taken by these countries in determining the content of sex education may also contribute to the portrayal of mixed messages and less effective messages. An adversarial approach is used in Britain, but in the Netherlands, there is an attempt to find points of similarity within opposing viewpoints and to reach consensus.

FUTURE DIRECTIONS

In this chapter, we have tried to provide a snapshot of the key issues in and contemporary research on adolescent sexuality. The field of adolescent development is itself going through a period of rapid change. Whereas past research was heavily focused on children under 5 years of age, this focus has shifted, and a greater proportion of research now addresses older children and adolescents. Other changes include new theoretical approaches and methods that view development as integrated systems, combining neurological, biological, cognitive, and social factors, explanations, and applications (see Lerner & Steinberg, 2004).

The study of adolescent sexuality presents some striking contradictions and dilemmas within our society. On the one hand, the period between sexual maturity and the establishment of a family is extending, with the average age of first childbirth reaching into the late twenties and early thirties in many Western countries. In addition, the external, public world we live in has become highly sexualized. And yet, the attitudes reflected within many societies remain ambivalent toward sexual expression, especially by adolescents. Although the lyrics to a popular song might say, "Let's talk about sex," real talk is less forthcoming.

Perhaps it is not sexuality in the media per se that is problematic, but rather it is the way in which sexuality is portrayed and conceptualized in the media. Sex is often presented as something that girls give and boys take, something naughty, something based on physical acts leading to orgasm rather than the shared physical and psychological intimacy created. This might be part of sexual expression, but it is a very limited picture presented. Limited also are the types of people presented as sexual. And this might have serious implications for how adolescents feel about their own bodies and their own sexuality.

We know more about the frequency, contexts, and consequences of adolescent intercourse than we know about how adolescents feel about their sexuality (see Savin-Williams & Diamond, 2004). What factors, for example, predict healthy attitudes toward sexuality during adolescence and into adulthood? What do adolescents think, feel, and know about sexuality, and how does this influence the decisions they make? More importantly, how can

educators and health professionals help adolescents develop positive conceptualizations of sexuality and healthy behavior? In most other areas of development, society prepares its young to face the challenges ahead. Perhaps it is time for our research and practice to reflect this in our approach to sexuality.

Sex and romance can be dangerous. Certain types of relationships and sexual involvement can lead to a greater likelihood of experiencing lower academic achievement, serious psychological problems, violence, pregnancy, and STDs. We cannot forget this. Yet, neither can we forget the beauty of sexual intimacy. Sexuality has the potential for such impact because it is an integral and powerful aspect of our humanity, for bad and for good. Yet, it is not often recognized that the reason sexuality has so much potency for harm is because it has so much potency for pleasure and fulfillment. It is precisely because of the powerful and integral nature of sexuality that it is "dangerous." We should not want to make sexuality "safe" for the same reasons we do not want to make mountains smaller; however, we must ensure that our young people are equipped for the journey.

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5

Sexual Behavior in the United States

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INTRODUCTION

Sexual behavior is not only of basic biological importance but also of central social importance. Not only does it perpetuate the human species, but it is also the central behavior around which families are formed and defined, a vital aspect of the psychological well-being of individuals, and a component of a variety of social problems. Among current concerns tied in part to sexual behavior are (1) the familial problems of marital harmony and divorce; (2) criminal problems of rape, incest, child molestation, and prostitution; (3) reproductive problems of infertility, sterility, unwanted and mistimed pregnancies, and abortion; and (4) health problems related to sexually transmitted diseases (STDs).

Moreover, with the coming of human immunodeficiency virus (HIV), the problem of STDs has taken on increasing urgency (Centers for Disease Control and Prevention [CDC], 2004a; Yankauer, 1994). Deaths from acquired immunodeficiency syndrome (AIDS) rose at a rapid pace in the 1980s and early 1990s (CDC, 1995a). By 1992, AIDS had become the number one cause of death among men aged 25 to 44. Cases diagnosed as AIDS peaked in 1993, and rates of AIDS-related deaths peaked in 1995. Both have since declined substantially; cases of AIDS have fallen by more than two-thirds and AIDS-related deaths by over 80 percent since 2001 (CDC, 1998a, 2001; Ventura, Anderson, Martin, & Smith, 1998). Most HIV infections have

resulted from sexual behavior, and heterosexual intercourse is an increasingly common mode of transmission (CDC, 1994, 1998a, 2004a).

Because of the importance of sexual behavior in general and of problems related to unsafe sexual activities, we need to arm ourselves with a thorough, scientifically reliable understanding of sexual behavior and to study high-risk behavior (Hewitt & Beverley, 1996). This chapter outlines what is currently known about American sexual behavior. The emphasis will be on general trends and on sociodemographic differences within the following areas:

1. Premarital and adolescent sexual activity, including cohabitation and nonmarital births.
2. Adult and general sexual behavior, including extramarital relations, gender of sexual partners, frequency of sexual intercourse, and sexual inactivity.
3. The impact of HIV on sexual behavior, including reported changes in sexual behavior, number of sexual partners, and relationships between sexual partners.

PREMARITAL AND ADOLESCENT SEXUAL ACTIVITY

Premarital sexual intercourse became increasingly common over the last century (Smith, 2003, table 1A; see also Hopkins, 1998; Joyner & Laumann, 2001; Whitbeck, Simons, & Goldberg, 1996). This increase was not merely the result of the so-called sexual revolution of the 1960s. The change was under way for decades prior to the 1960s and has continued since that time. Rates of sex before marriage among men were moderately high even from the beginning (61 percent of men born before 1910 report having had sexual intercourse before marriage) and climbed steadily. Women had relatively low rates of premarital intercourse before that era (only 12 percent of those born before 1910 had premarital sexual intercourse), but their rates grew more rapidly than those of men, and the gap between men and women narrowed significantly over time. By the 1980s (roughly the 1965–1970 birth cohort), women had almost as much sexual experience as men prior to marriage (in 1988, 60 percent of men and 51.5 percent of women aged 15 to 19 had engaged in premarital sex). This increase in premarital sexual experience is confirmed by community studies (Trocki, 1992; Wyatt, Peters, & Guthrie, 1988) and longitudinal panels (Udry, Bauman, & Morris, 1975).

In the early 1990s, the century-long increase in the level of premarital and adolescent sexual activity reached a peak and then declined for the first time in decades (see Abma & Sonenstein, 2000; Bachrach, 1998; Besharov & Gardiner, 1997; Peipert et al., 1997; Singh & Darroch, 1999; Smith, 1998, table 1A; Stossel, 1997). This decrease was greater for males than for females, but both genders showed a leveling off and then some reversal or decline.

With the increase in levels of premarital sexual intercourse came a decrease in the age at first intercourse (see Smith, 2003, table 1B). In 1970, 5 percent of women aged 15 and 32 percent aged 17 were sexually experienced; by 1988, this had grown to 26 percent of 15-year-olds and 51 percent of 17-year-olds (see also Hofferth, Kahn, & Baldwin, 1987; Kahn, Kalsbeek, & Hofferth, 1988). This trend may also have leveled off and possibly reversed to some extent although the evidence is still inconclusive (see Smith, 1998, table 1B).

When the increase in rates of premarital sexual intercourse is coupled with the delayed age at first marriage, the result is an expanded period of sexual activity prior to marriage for the majority of young men and women (Bachrach & Horn, 1987; Ehrhardt & Wasserheit, 1991; Laumann, Gagnon, Michael, & Michaels, 1994). Between 1960 and 2000, the median age at first marriage rose from 22.8 to 26.8 years for men and from 20.3 to 25.1 for women. For women, the average age at first premarital intercourse in 1960 was about 19 (Bachrach & Horn, 1987; Turner, Miller, & Moses, 1989), which meant a short period of premarital sexual activity. In 1990, the average age at first intercourse was 16.9 for women (CDC, 1992a, 1992b, 1995b), meaning an average premarital sexual activity period of 8.2 years. For men, the period of premarital sexual activity now averages 10.7 years (age at first intercourse is 16.1 and first marriage is at 26.8 years).

Along with this wider window of opportunity for sex before marriage, the number of lifetime sexual partners has increased for both men and women (see Smith, 2003, table 1C). Between the pre-1910 birth cohort and the 1940–1949 birth cohort, the percentage of men with two or more premarital sexual partners rose from 49 percent to 73 percent, while for women the increase was from 3 percent to 26 percent. This trend continued until recent years. For example, among sexually experienced women aged 15 to 19 living in metropolitan areas, 38 percent had two or more sexual partners in 1971 compared to 61 percent in 1988. More recently, there is evidence of a slight reversal of this trend. The Youth Risk Behavior Surveillance (YRBS) (CDC, 2004b) reveals that the percentage of male high school students with four or more sexual partners declined from 1989 to 2001, but the trend among females was less clear.

Cohabitation

The rise in premarital and adolescent sexual activity, coupled with delays in marriage, has led to more unmarried people living together. Since 1970, the rate of living together outside of marriage has increased more than sixfold, from 1.1 percent to 7.4 percent of couples (see Bramlett & Mosher, 2002; Smith, 1998, table 2). Similarly, the proportion of single mothers who were cohabiting grew from 2 percent in 1970 to 12 percent in 1995 (London, 1998). While the proportion of cohabiting couples at any one point in time

remains relatively small, a large and growing percentage of couples live together at some point in their relationships. Currently, over one-third of adults in their midtwenties to midthirties cohabited before their first marriage, and half of this age-group has cohabited at some point in their lives (see Smith, 1998, table 3A). Cohabitation after a failed first marriage and between subsequent marriages is even more common. According to the General Social Survey (GSS), among those 25 to 44 years old who are in a second marriage, 61 percent cohabited with their new spouse before marriage (Davis, Smith, & Marsden, 2003).

Rates of cohabitation are fairly consistent for both sexes and for most ethnic and racial groups. Higher rates occur among younger adults, the divorced, separated, never married, those living in urban areas, and those who attend church less frequently (see Smith, 1998, table 3B). Cohabitation is usually a short-term arrangement, leading to either marriage or a breakup after about a year (median duration is 1.3 years) (Bumpass & Sweet, 1989; Thomson & Colella, 1992; Thornton, 1988).

Cohabitation has often been characterized as a trial marriage, which is fairly accurate: in 40 percent of cases it leads to marriage within two years, and 60 percent of cohabiting couples eventually marry (Bumpass & Sweet, 1989). However, marriages formed after cohabitation are usually less stable and more likely to end in divorce than marriages not preceded by living together (Axinn & Thornton, 1992; Brown & Booth, 1996; Clarkberg, Stolzenberg, & Waite, 1995; DeMaris & MacDonald, 1993; DeMaris & Rao, 1992; Lillard, Brien, & Waite, n.d.; Popenoe, 1993; Thomson & Colella, 1992). Cohabitation thus does not seem to serve very well the function of a trial marriage (Popenoe).

Unmarried persons who are cohabiting have fewer sexual partners than unmarried individuals who are not, but more sexual partners than married couples (Waite & Joyner, 1996). For example, according to the GSS (Davis et al., 2003), married persons averaged 1.01 partners over the preceding year, the never married who were cohabiting had 1.39 partners, and the noncohabiting never married had 1.67 partners. That fact, along with the temporary nature of most cohabiting relationships, makes living together riskier than marriage when it comes to STDs (Kost & Forrest, 1992; Turner et al., 1989).

Nonmarital Births

With the growing acceptance of sexual activity prior to marriage, the connection between marriage and procreation has also lessened. In the 1960s (and presumably before), when premarital sexual intercourse resulted in conception, it usually resulted in marriage before the child was born (see Driscoll et al., 1999; Smith, 1998, table 4; South, 1999). Since that time, the likelihood of unmarried parents getting married before the birth of their child has steadily fallen. By the 1990s, fewer than 25 percent of women who conceived before marriage got married before the child's birth.

As a result of the higher level of premarital sexual activity and the decline in marriages after a conception but prior to birth, there has been a large increase in out-of-marriage births (Miller & Heaton, 1991; see Smith, 2003, table 5). In 1960, only 5 percent of all births were to unmarried women. This climbed to 14 percent by 1975 and 33 percent by 1994. Then, after over thirty years of increase, the rate leveled off between 1994 and 2000 at approximately 33 percent of all births being to unmarried women.

The trend in the United States has been parallel to that in similar Western and industrialized cultures. While the percent of births to unmarried mothers climbed from 5 percent in 1960 to 33 percent in 1998 in the United States, it rose from 5 percent to 38 percent in Great Britain, from 4 percent to 28 percent in Canada, and from 6 percent to 40 percent in France (Teitler, 2002; U.S. Census Bureau, 2001).

The rate of increase in births to unmarried women has been much greater for whites than for African Americans. For whites, the percent of unmarried births has increased over elevenfold from 2.3 percent of all births in 1960 to 27.1 percent in 2000, while the number for African Americans grew from 21.6 percent in 1960 to 70.4 percent in 1994 (and then down to 68.5 percent by 2000). While the black-to-white ratio has fallen from a little over 9:1 in 1960 to under to 3:1 in 1990s, the gap between African Americans and whites rose from 19 percentage points in 1960 to 44 to 46 percentage points from 1980 to 1996 (with a peak in 1993). The cumulative difference between whites and African Americans is further shown by the fact that by ages 30 to 34, only 23 percent of never-married white women have given birth, while 69 percent of never-married African American women have had a child (Bachu, 1991, 1995; Loomis & Landale, 1994).

While both whites and African Americans have a greater number of births occurring outside of marriage, these increases reflect distinct patterns for these groups (see Smith, 1998, table 5). For whites, the unmarried birth rate (number of births to unmarried women per 1,000 unmarried women aged 15–44) rose throughout the period. It increased more than four times, from 9 in 1960 to 37–39 in 1994–2000. For African Americans, the rate was quite variable over time. It fell from 98 in 1960 to 79 in 1985 before climbing again to 91–93 in 1989–1990. In the early 1990s, this rate declined again, falling to 71.5 in 1999.

In addition, there are many unplanned births in the United States (Abma, Chandra, Mosher, Peterson, & Piccinino, 1997; Williams, 1991). Of women aged 15 to 44 who had a child in 1995, 28 percent reported that they had an unintended birth, and this was 36 percent for women aged 40 to 44. Of those with an unintended birth, 80 percent described the birth as mistimed and 20 percent as unwanted.

In brief, over the last century, premarital sexual activity became more widespread, sexual initiation started at younger ages, the period of premarital sexual activity lengthened, and the number of premarital sexual partners

increased. This expansion in premarital sexual activity in turn led to major increases in cohabitation and childbearing among unmarried persons.

During the 1990s, however, a small but historic reversal of some of these trends occurred. The level of premarital and adolescent sexual activity leveled off and, in some aspects, declined, and the proportion of births outside of marriage reached a plateau. These changes are partial rather than across the board (e.g., levels of cohabitation continue to rise) and even those behaviors that have leveled off or reversed are near record-high rates. But even limited changes to a century-long trend are highly notable and potentially important from a public-health perspective.

ADULT AND GENERAL SEXUAL BEHAVIOR

Compared to the amount of information available on premarital and adolescent sexual behavior, there has been little scientifically reliable data on the sexual behavior of adults or of the population in general until recently (Aral, 1994; di Mauro, 1995; Seidman & Rieder, 1994). Moreover, the dearth of representative and credible studies has created a vacuum that has been filled by unrepresentative and sensational misinformation from popular magazines, sex gurus, and others. In this section we review what is known about extramarital relations, sexual orientation, frequency of sexual intercourse, and sexual inactivity.

Extramarital Relations

There are probably more scientifically worthless "facts" on extramarital relations than on any other facet of human behavior. Popular magazines (e.g., *Redbook*, *Psychology Today*, *Cosmopolitan*), advice columnists (Dear Abby and Joyce Brothers), pop sexologists (e.g., Morton Hunt and Shere Hite) have all conducted or reported on "studies" of extramarital relations. These studies typically report extremely high levels of extramarital activity (Gibbs, Hamil, & Magruder-Habib, 1991; Reinisch, Sanders, & Ziemba-Davis, 1988; Smith, 1989, 1991b). Hite, for example, reported that 70 percent of women who have been married five or more years "are having sex outside of their marriage" (Smith, 1988). These questionable sources also often claim that extramarital relations have become much more common over time. Joyce Brothers (1990), for example, claimed that 50 percent of married women were having sex outside of marriage, twice the number of the previous generation.

However, representative scientific surveys (Choi, Catania, & Dolcini, 1994; Forste & Tanfer, 1996; Greeley, 1994; Greeley, Michael, & Smith, 1990; Laumann et al., 1994; Leigh, Temple, & Trocki, 1993; Tanfer, 1994; Treas & Giesen, 1996, 2000) indicate that extramarital relations are in fact much less prevalent than claimed (see Smith, 2003, table 6). The best estimates suggest that in a given year, approximately 3 to 4 percent of currently married people have a

sexual partner other than their spouse. Over 90 percent of women and over 75 percent of men report being faithful to their spouses throughout their marriage (Laumann et al.).

There is little reliable information on the prevalence of extramarital relations before 1988. Some indirect evidence suggests that extramarital relations may have increased across recent generations. The reported rates in 2002 were 13 percent among those 18 to 29 years old, and 20 percent among those 40 to 49 (see Smith, 2003, table 7). It then falls to 9.5 percent among those 70 and older. Since these are lifetime rates, one would normally expect them either to increase across age-groups or to increase until a plateau is reached (this would be the case if few first-time extramarital relations were started among older adults). The leveling off and then the drop among those 50 and older suggests that members of birth cohorts before about 1940 were less likely to engage in extramarital relations than are spouses from more recent generations (Greeley, 1994; Laumann et al., 1994).

Extramarital relations are apparently more common among younger adults. This is probably a function of younger adults having been married a shorter period of time and the difficulty shifting from a premarital pattern of multiple sexual partners to an exclusive monogamous partnership; related to that trend, recent marriages are more likely to end in divorce than be long-term relationships. The rates of extramarital relations are about twice as high among husbands as among wives (see Smith, 2003, table 7). Extramarital relations are also more common among African Americans, those with lower incomes, those who attend church less frequently, those who have been separated or divorced (including those who have remarried), and those who are unhappy with their marriage. It also may be more frequent among residents of large cities, but the overall relationship with community type is fairly small and somewhat inconsistent. Finally, extramarital relations do not vary significantly by education level.

Same-Sex Sexual Interactions

Few debates have been as contentious as the controversy over the sexual orientation of Americans (Billy, Tanfer, Grady, & Klepinger, 1993; Michaels, 1998; Stokes & McKiran, 1993; Swann, 1993). The gay and lesbian communities have long adopted 10 percent as the proportion of the population that is homosexual. However, a series of recent national studies (see Smith, 1998, table 8A) indicate that only about 2 to 3 percent of sexually active men and 1 to 2 percent of sexually active women identify as gay and lesbian, respectively (see also Anderson & Stall, 2002; Black, Gates, Sanders, & Taylor, 2000; Butler, 2000; Horowitz, Weis, & Laflin, 2001; Sell & Becker, 2001). These national estimates are consistent with figures from local communities in the United States (Blair, 1999; Guterbock, 1993; McQuillan, Ezzati-Rice, Siller, Visscher, & Hurley, 1994; Rogers & Turner, 1991; Trocki, 1992),

indirect measurements (Aguilar & Hardy, 1991), and statistics from other comparable countries such as Great Britain, France, Norway, and Denmark (Biggar & Melbye, 1992; Diamond, 1993; Johnson, Wadsworth, Wellings, Bradshaw, & Field, 1992; Melbye & Biggar, 1992; Sandfort, Hubert, Bajos, & Bos, 1998; Spira, Bajos, Bejin, & Beltzer, 1992; Sundet, Magnus, Kvalem, Groennesby, & Bakketeig, 1989; see also Smith, 2003, table 8B).

Rates of same-sex sexual activity increase as the reference period is extended. Recent figures (see Smith, 2003, table 9B) indicate that 3.4 percent of sexually active males have had a male sexual partner in the preceding twelve months, 4.1 percent during the previous five years, and 4.9 percent since age 18 (see also Michael, Laumann, & Gagnon, 1993; Smith, 1991a).[1] As the time frame is lengthened, the percentage of men with exclusively male partners declines. Over the preceding twelve months, 2.8 percent of men identify as gay and 0.6 percent as bisexual; over the last five years, 2.7 percent are gay and 1.4 percent are bisexual; and since age 18, fewer than 1 percent of men identify as gay and 4 percent as bisexual. Most of those who report having both male and female sexual partners since age 18 report only opposite sex partners during the preceding year (Smith, 1991a). Lesbians follow these same patterns.

There is little reliable evidence on whether sexual orientation has changed before the late 1980s. In terms of attitudes, levels of approval of homosexuality declined slightly from 1973 to 1991, but then rose notably during 1992–2000 (Davis et al., 2003; Laumann et al., 1994; Smith, 1994). Studies of male and female homosexuality both in the United States and in Europe regularly find a higher proportion of gay men than lesbians (see Hubert, Bajos, & Sandfort, 1998; Johnson, Wadsworth, Wellings, & Field, 1994; Sandfort et al., 1998; Smith, 1998, tables 8A and 8B; Spira, Bajos, & Ducot, 1994; Wells & Sell, 1990).[2]

Sexual orientation does not vary much across sociodemographic groups (see Smith, 2003, table 9). The most distinctive pattern for both gays and lesbians is that they are less likely to have been married. About 60 percent of those with same-sex partners during the previous twelve months have never been married, compared to the 16 percent of female heterosexuals and 21 percent of male heterosexuals. Second, gays, but not lesbians, are distinctive in congregating in the largest central cities. About 8.8 percent of men in large central cities have had a same-sex partner in the last year, as have 9.6 percent over the last five years and 11.7 percent since age 18. Rates are lowest outside of metropolitan areas. The relative concentration of gay men in large urban centers also occurs in Europe (Johnson et al., 1992; Spira et al., 1992). Lesbians, like gays, are underrepresented in rural areas. Third, more gays and lesbians are found in the lower-income categories, but the relationship is stronger for men than for women. Fourth, race is only weakly related to sexual orientation. Fifth, being gay is unrelated to education, but lifetime lesbian activity appears higher among those with graduate degrees. Sixth, lesbians are more common among younger age-groups. This could indicate an increase in

homosexual activity among women across cohorts (see Rogers & Turner, 1991) or it could be a life-cycle effect. Gays show a similar but less pronounced pattern. Finally, lesbians, but not gays, attend church less frequently than heterosexuals. About 4.2 percent of women who rarely attend church have had a female sexual partner in the last year compared to only 1.7 percent of those who attend regularly.

Frequency of Sexual Intercourse

There is some evidence that the frequency of heterosexual intercourse rose from the 1960s to the 1970s (Trussell & Westoff, 1980) and may have declined in the 1980s. Among teenage males aged 17 to 19 living in metropolitan areas, the rate fell from 59.8 times per year in 1979 to 39.0 in 1988 (Sonenstein, Pleck, & Ku, 1991), but among all males aged 17.5 to 19, it rose from 30 to 49 times per year between 1988 and 1991 (Ku et al., 1993). Among unmarried women aged 20 to 29, the rate showed a more modest decline from 59.8 in 1983 to 56.0 in 1988–1993 (Davis et al. 2003; Tanfer & Cubbins, 1992). However, no meaningful change has been occurring among all adults since 1988. On average, adults engage in sexual intercourse about 62 times per year, a little over once a week (see James, 1998; Smith, 2003, table 10A).

The overall adult average is relatively uninformative, however, since the frequency of sexual intercourse varies significantly across sociodemographic groups (see Smith, 2003, table 10B). The factor accounting for most differences in frequency of intercourse is age. Among those aged 18 to 29, the average frequency of intercourse is near 85 times per year. This declines steadily to 63 for those in their forties and to 10.5 for those 70 and older. Among the married, the decline is even more striking, dropping from 110 times per year for those under 30 to 18 for those 70 and older. This pattern applies to both husbands and wives. This age-related pattern is nearly identical to the one reported in the 1988 National Survey of Families and Households (Hughes & Gove, 1992) and is consistent with a large number of other studies (Call, Sprecher, & Schwartz, 1996; Feldman, Goldstein, Hatzichristou, Krane, & McKinlay, 1994; Hawton, Gath, & Day, 1994; Jasso, 1985, 1986; Kahn & Udry, 1986; Laumann et al., 1994; Leigh et al., 1993; National Council on the Aging, 1998; Rao & VandenHeuvel, 1995; Tanfer & Cubbins, 1992; Udry, 1980; Udry, Deven, & Coleman, 1982; Udry & Morris, 1978).

This decline in frequency of sexual intercourse within marriages is explained by several factors. First, the so-called honeymoon effect leads to the highest rates of intercourse among the recently married, and those recently married tend to be younger (Greenblat, 1983; James, 1981, 1998). Second, biological aging increases the likelihood of health problems, including sexual difficulties (Feldman et al., 1994; Leiblum, 1990; Levy, 1992; McKinlay & Feldman, 1992; Morokoff, 1988; Schiavi, 1990, 1992). As a result, even among couples who rate their marriages as very happy (Davis, Smith, &

Marsden, 2003) and those who say they are still "in love" (Greeley, 1991), frequency of intercourse declines with age. Third, some research indicates that the quality of sexual activity declines with marital duration which might reduce the frequency (Liu, 2003).

Marital status also influences sexual activity (see Smith, 2003, table 10B; Wade & DeLamater, 2002). Frequency of sexual intercourse is greatest among married couples (with those remarried slightly exceeding those in their first marriage probably because of the honeymoon effect). The never married and divorced have lower rates, probably because of less continuous and convenient availability of a partner. The widowed have by far the lowest rates, a function of their age as well as lack of a partner. The higher rates of intercourse among married persons compared to unmarried persons are even more apparent when age is taken into consideration. Sexual activity is 25 to 30 percent higher among the married compared to the nonmarried at various ages. Among the married, intercourse is more frequent among those who have happier marriages (Smith, 1991a; Waite & Joyner, 1996). Interestingly, one national survey reported that the highest frequency of intercourse occurred among cohabiting couples (Laumann et al., 1994), perhaps due to the fact that most of those relationships are relatively new.

Husbands and wives generally closely agree on the frequency of intercourse, whether reporting jointly or separately (Bachrach, Evans, Ellison, & Stolley, 1992; Smith, 1992a, 1992b). However, unmarried men and women differ considerably, with men reporting more sexual activity than women do (Bachrach et al.); this statistical anomaly holds up even after accounting for the greater number of widowed women in the population.

A multivariate analysis indicates that higher rates of sexual intercourse are separately and independently related to (a) being younger, (b) having been married less than three years, and (c) rating one's marriage as happy. It is unrelated to gender when controlling for these other factors (Davis et al., 2003).

Frequency of sexual activity also decreases as church attendance increases. While this is somewhat related to the fact that church attendance increases with age, there is still a decline controlling for age. There are few differences in intercourse frequency across racial/ethnic groups, community type, education level, or income. When these factors do seem to affect frequency of intercourse, it can usually be explained by age and/or marital status. Likewise, frequency does not vary if one or both partners are employed (Hyde, DeLamater, & Durik, 2001).

Sexual Inactivity

Sexual inactivity can take three distinct forms: (1) the period prior to first sexual intercourse, (2) periods of extended inactivity after first intercourse and prior to last intercourse, and (3) a period of inactivity after last intercourse. The

first has been dealt with above in the discussion of premarital sexual relations. The latter two are discussed here, although it is difficult to distinguish between them.

Sexual inactivity appears to have modestly declined since the early 1980s (see Smith, 2003, table 11). For women of childbearing age and all adults, the proportion not engaging in sex over extended periods (three to twelve months) has decreased in the late 1980s and early 1990s. However, sexual inactivity has increased since 1996.

For adults, there is a U-shaped curve with sexual inactivity most frequent among the youngest and the oldest. Sexual inactivity among the elderly is fairly common and is a function of aging, poor health, and unavailability of a partner. As we saw in the section on frequency of sexual intercourse, sexual activity decreases markedly with age even when a partner is available, perhaps due to habituation or health problems. Higher rates of sexual inactivity are due to a decline in frequency of sexual intercourse among those remaining sexually active and also an increase in the percentage of sexually inactive persons. Among those over 70 years old, 61 percent are not currently sexually active. In this age-group, sexual abstinence occurs in 33 percent of married persons; for unmarried adults, it is closer to 90 percent (see Smith, 1998, table 11).

Sexual inactivity is much less common among younger adults. Among married young adults aged 18 to 49, only 1.0 to 2.4 percent are completely sexually inactive. Virtually every case of sexual inactivity in this age-group is associated with health problems and relationship dissatisfaction (Smith, 1992a; see also Donnelly, 1993; Edwards & Booth, 1976). While 6 percent of married couples of all ages were sexually inactive over the preceding year (Davis et al., 2003), as many as 16 percent of married couples have not engaged in sexual intercourse in the previous four weeks (Donnelly; see also Dolcini et al., 1993). Sexual abstinence is much higher among the nonmarried, ranging between 15 percent and 28 percent for those under 50.

Most other sociodemographic differences are small and merely reflect underlying differences in age and/or marital status, but sexual inactivity is lower in households with higher incomes. While there have been significant increases in all aspects of premarital and adolescent sexual activity, there is little evidence of similar trends in adult sexual behavior. Moreover, adult sexual behavior appears to be more restrained and traditional than it has commonly been portrayed.

THE IMPACT OF HIV ON SEXUAL BEHAVIOR

AIDS is a potentially deadly and infectious disease that is mainly transmitted through tainted blood products, sexual intercourse, and the sharing of needles by users of illicit injection drugs. With the safeguarding of the blood supply, current transmission usually occurs through sexual activity or the sharing of needles with an HIV-positive individual. The only means of re-

stricting the spread of the virus is to adopt safer sexual practices and injection drug use behaviors.

On the one hand, the long latency period of HIV greatly complicates matters since infected people are often not aware of the fact and can transmit the virus to others. On the other hand, since the mid-1980s over 90 percent of the public have known that HIV is spread by sexual intercourse, and knowledge about HIV in general has grown over time (CDC, 1998b, 2000; Herek, Capitanio, & Widaman, 2002; Rogers, Singer, & Imperio, 1993; Singer, Rogers, & Corcoran, 1987).[3] Given the existence of widespread, if imperfect, knowledge about the role of sexual intercourse in spreading HIV, the question arises whether sexual behavior has been modified in light of the known risk.

Overall Changes in Sexual Behavior

A number of studies have asked people whether they have changed their sexual behavior because of HIV (see Smith, 2003, table 12) or have taken steps to avoid exposure to HIV (see Smith, 2003, table 13). Early surveys in 1986–1987 showed that only about 7 to 11 percent of adults reported any precautionary behavior change. At that time, these rates of behavior change were commonly seen as indicating that people were either not informed about the risk of HIV or were not reacting responsibly to these risks. But recent studies on sexual orientation, extramarital relations, and sexual abstinence (see Smith, 2003, tables 6, 9, and 11) indicate that the number of people at risk was in fact smaller than initially feared. And if relatively fewer people were engaged in risky sexual behavior, it would be understandable that few reported altering their behavior. This was directly supported by a 1987 Gallup question in which 68 percent reported they had not changed their behavior because they were not at risk. Likewise, the low level of behavior change among the married (3 to 12 percent) compared to the nonmarried (17.5 to 51 percent) reflects the lower level of risky behavior among married people (see Smith, 2003, table 12). Similarly, more change has been reported by higher-risk groups such as younger adults and some persons from minority groups.[4]

Of the individuals reporting a change in sexual behavior because of the concern about HIV, about 45 to 50 percent report reducing their number of sexual partners—including having only one partner and getting married—20 to 35 percent cite the use of condoms, 17 to 30 percent indicate they have sex less frequently or abstain completely, 10 to 30 percent say they are restricting their partners to people they know well, and fewer than 10 percent of women report they have stopped having sex with bisexual men or injection drug users. Overall, adults report having made behavior changes to reduce their exposure to HIV. Monogamy and/or limiting the number of sexual partners is

mentioned by about 20 percent, 10 to 12 percent report using condoms, and 5 to 7 percent practice abstinence (see Smith, 1998, table 13).

Reports of HIV-related behavior change have risen somewhat over time, apparently indicating that risky sexual behaviors are increasingly being modified (see Smith, 2003, table 12) and that more people are taking precautions to avoid exposure to HIV (see Smith, 2003, table 13; see also Feinleib & Michael, 1998). However, since these questions have not often been asked after 1993, it is unknown if this trend continues. Moreover, because of the nature of retrospective questions on behavior change, the accuracy of these trends may be questionable at times. Time series monitoring of the relevant risk behaviors is needed to accurately track behavior changes. We therefore consider what changes have occurred in sexual behaviors that relate to risk of HIV infection—sexual activity among men who have sex with men, number of partners, and familiarity between partners.[5]

Behavior Change among Men Who Have Sex with Men

By the time HIV was identified, its mode of transmission via sexual intercourse documented, and tests for HIV infection developed, the disease was already widespread among the population of men who have sex with men (MSM), especially in San Francisco and New York City. Combined efforts by gay community organizations and public health officials led to the rapid dissemination of knowledge about HIV and the adoption of safer sex practices by MSM. The result was "a dramatic decline in risk practices for HIV transmission. . . . gay men have reduced the number of sex partners, have fewer anonymous sexual encounters, have switched from shorter to longer term relationships, and engaged in less anal intercourse or consistently used condoms" (Ehrhardt, Yingling, & Warne, 1991). More recently, however, there has been little further increase in safer sex practices among MSM and even some backsliding among those who have tired of the diligence and restrictions required by safer sexual practices—among some minority groups, and among younger MSM who did not experience firsthand the toll of the epidemic (Carballo-Dieguez & Dolezal, 1996; Catania, Stone, Binson, & Dolcini, 1995; CDC, 2005a; Ehrhardt, 1992; Ehrhardt et al., 1991; Goldbaum, Yu, & Wood, 1996; Kalichman, 1996; Osmond et al., 1994; Ostrow, Beltran, & Joseph, 1994). As a result, sexual intercourse among MSM remains the most frequent mode for the transmission of HIV in the United States (CDC, 2005a; 2005b).

Changes in Number of Partners

While the overall number of sexual partners among all adults has not diminished in recent years (Smith, 2003, table 14), some change has been occurring among teenagers and young adults (Smith, 2003, table 1C). Among

young males, the number of partners was probably rising for most of the century until the early 1990s. However, the evidence is somewhat mixed for the 1980s. The mean number of lifetime partners among sexually active males aged 17–19 in metropolitan areas fell from 7.3 to 6.0 between 1979 and 1988, while among sexually active males aged 17.5 to 19, the mean number of sexual partners in the last twelve months rose from 2.0 in 1988 to 2.8 in 1991 (Ku et al., 1993). During the 1990s, there appeared to be a decline in number of sexual partners. The percentage of male high school students with a lifetime total of four or more partners declined from 31 percent in 1989 to 14 percent in 2001 (see Smith, 1998, table 1C). For young females, there was less clear evidence of a decline in number of partners from the 1990s. The YRBS data (CDC, 2004b) indicate year-to-year fluctuation rather than any definite trend. The GSS shows a decline from the late 1980s to early 1990s to the mid-1990s in the number of sexual partners among those aged 18 to 24, but no further decrease and even possibly a partial increase in the late 1990s and into the twenty-first century.

Despite reductions in number of partners among teenagers and young adults, many youths are still at risk of HIV and other STDs because of having multiple partners and other risky sexual behaviors (Anderson & Dahlberg, 1992; Beckman, Harvey, & Tiersky, 1996; Ku, Sonenstein, & Pleck, 1994; Leigh et al., 1993; Luster & Small, 1994; Smith, 1991a; Trocki, 1992; Tubman, Windle, & Windle, 1996).

Whether the reported decline in number of partners among teenagers and young adults will translate into a lower number of lifetime sexual partners is unknown. If it does, it will reverse a trend that began several generations ago. We can see evidence of that increase in the number of sexual partners since age 18 (see Smith, 2003, table 14). The increase in the number of sexual partners from ages 18 to 29 to ages 40 to 59 mostly represents the accumulation of partners over a person's lifetime. The sharp drop in cumulative partners for those 60 and older occurs because this age-group represents a generation that came to age before the peak in premarital sexual activity. That is, they had fewer premarital partners, married relatively early in life, and, as a result, accumulated fewer lifetime sexual partners than subsequent generations.

Among adults, having multiple sexual partners during the previous year and during the last five years is most strongly associated with being young, unmarried, and male. It is also higher among African Americans (Bakken & Winter, 2002), residents of large central cities, those with low incomes and less education, and infrequent church attenders. The adult lifetime figures show a similar pattern except that there is no relationship between income or race and number of sexual partners, and the less educated have fewer partners than the better educated. The reversal of the education relationship results from earlier cohorts with less education having fewer partners than more recent and better educated cohorts.

Multiple partners are thus found in two main social niches: young unmarried adults and adolescents who have not yet "settled down," and among disadvantaged segments of society in general, including inner-city minorities, who also tend to lead less stable and less conventional lifestyles (Ford & Norris, 1995; Wagstaff et al., 1995).

Changes in Relationship to Sexual Partners

STDs and other risks increase not only with one's number of sexual partners, but also with the nature of the relationship between partners. When it comes to STDs, one "sleeps not only with a partner, but with all of that partner's partners." Intimate committed relationships are associated with (but do not guarantee) mutual monogamy, while casual relationships come with little expectation of exclusivity.

The trends in relationships are mixed and depend on the measure and data set being examined. For example, according to GSS findings, there has been no change in the nature of the relationship between sexual partners for most adults and persons under 40 between 1988 and 2002 (see Smith, 2003, table 15A). Most people are engaged in close and presumably mutually monogamous relationships with their spouses or cohabiting partners; however, each year, 3 to 4 percent of sexual partners involve casual relationships, which can range from one-night stands to prostitutes. Another 4 to 5 percent involve sexual partners with whom the person has a superficial relationship (neighbors, coworkers, and long-term acquaintances). Between 1996 and 2002, there was statistically significant variation in whether one was in an ongoing relationship with one's most recent sexual partner, but no clear trend (see Smith, 2003, table 15A). Finally, across birth cohorts of women, the relationship with one's first sexual partner has become more casual over time (see Smith, 2003, table 15C). Among women born between 1951 and 1955, 32 percent were engaged or married to their first sexual partner, 51 percent were "going steady," 16 percent were less closely involved, and 1 percent were no longer with that person. For those born between 1976 and 1980, 4 percent were engaged or married to their first sexual partner, 73 percent were "going steady" with that person, and 23 percent were less connected.

Casual relationships are most prevalent among young unmarried males. They are also more common among African Americans, residents of large central cities, and those with lower incomes. Similarly, having the last sexual encounter with someone with whom one did not have an "ongoing relationship" is more common among men, African Americans, the young, the never married, city residents, those with lower incomes, the less educated, and infrequent church attenders (see Smith, 2003, table 15). One-night stands are equally common for African American and white males, but less frequent for African American females than for white females (Tanfer, 1994). In general, we

see that those sociodemographic groups with a high number of lifetime partners also tend to have casual sexual relationships.

SUMMARY

Over the past century, the bonds between marriage and sexual activity have been unraveling. A majority of young men and women have engaged in premarital sexual intercourse, they have become sexually active at earlier ages, and they have accumulated more lifetime sexual partners. While premarital and adolescent sexual activity has increased for both men and women, the most significant changes have been in the sexual behavior of women. The higher rates of sexual behavior parallel a rise in cohabitation and a surge in nonmarital births, and they have contributed to a variety of public health and social welfare problems (Besharov & Gardiner, 1997).

Rather than being an isolated phenomenon, these changes in sexual behavior, living together, and childbearing have been part of broader social changes toward an individualistic rather than a family-centered society (Glenn, 1987; Popenoe, 1993; Smith, 1999). These sexual and relationship trends also mirror the changing roles in society for women (Firebaugh, 1990; Simon & Landis, 1989). Moreover, there are signs of similar shifts in other postindustrial societies. As such, the changes in American premarital and adolescent sexual behavior may result from the development of advanced economies, welfare states, and liberal governments in general rather than from any special situation peculiar to North America.

These trends have recently slowed and, in a few aspects, have shown signs of reversing. First, the increase in premarital and adolescent sexual activity has slowed and waned to some extent. Second, the number of nonmarital births has leveled off (albeit at near record levels). Third, condom use has more than doubled over the last twenty years and apparently continues to increase. Although there have not been decreases in every form of risky sexual behavior in all segments of the population, these changing trends are notable and may reflect an underlying shift in social values.

While marriage is no longer the entry point into sexual activity for most Americans, it remains an important regulator of sexual behavior, and thus may serve as a barrier to STDs. Since most married people tend to be monogamous, marriage limits one's total number of sexual partners and reduces the spread of HIV and other STDs. However, marriage may be less of a barrier than it used to be. Extramarital relations seem to be more prevalent among younger married adults relative to older generations. Yet, there has been no change in disapproval of extramarital relations over the years (Davis et al., 2003; Smith, 1990, 1994). Overall, though, extramarital relations have not increased since 1988, and marital infidelity is less common than suggested by popular culture.

Of course, marriages themselves are also not as enduring as they were in the past. The two-and-a-half-fold increase in divorce rates from the 1960s to

the early 1980s and its continuation at historically high levels to this day suggest that approximately half of all recent marriages will end in divorce (Smith, 1999). For most divorced people this means accumulating new sexual partners, especially for those under 50 (Stack & Gundlach, 1992).

Sexual behavior is strongly influenced by age. In general, sexual activity diminishes with age as evidenced by a declining number of sexual partners, less extramarital sex, a reduced frequency of sexual intercourse, and higher rates of sexual abstinence. Cohabitation rates and nonmarital births also decline with age.

There are also significant differences in sexual behavior between whites and African Americans (Bowser, 1992; Brewster, 1994; Brunswick et al., 1993; Kilmarx et al., 1997; Peterson, Catania, Dolcini, & Faigeles, 1993; Quadagno, Sly, Harrison, Eberstein, & Soler, 1998; Reitman et al., 1996; Smith, 1999; Sterk-Elifson, 1992; but see Wyatt, 1989). On average, African Americans become sexually active at an earlier age, accumulate more lifetime sexual partners, have more casual partners, are less likely to marry, have shorter-term marriages, and have many more children born outside of marriage.

Sexual behavior also varies by community type. Residents of large central cities have more sexual partners, casual partners (including prostitutes), and extramarital relations than those living in rural areas. In addition, probably due to selective migration, gay men congregate in large cities. Since sexual and injection-drug risk behaviors are more common in large cities as is the prevalence of HIV, the chances of becoming infected are especially high in these areas (Catania et al., 1992).

Finally, religion exercises a restraint on sexual behavior for some persons (Brewster, Cooksey, Guilkey, & Rindfuss, 1998; Goldscheider & Mosher, 1991; Hogan, Sun, & Cornwell, 1998; Seidman, Mosher, & Aral, 1992; Stack & Gundlach, 1992; Tanfer & Schoorl, 1992; Thornton & Camburn, 1989). Those who attend church regularly are less likely to become sexually active, to have multiple and casual partners, and to have extramarital relations. Church attendance, like rural residence, imposes a restrictive influence on sexual behavior.

Despite the potentially deadly nature of HIV and the widespread knowledge of risk factors, its impact on sexual behavior has been relatively limited. The largest changes occurred among men who have sex with men in large metropolitan centers who adopted considerably safer sexual practices. But the resurgence in new cases of HIV infection suggests some complacency and underestimation of risk in recent years (CDC, 2005a).

Among the heterosexual population, the largest change has been the increased use of condoms. However, condom use is still inconsistent and haphazard. The small reductions in the number of partners among adolescents and youths may represent improved safer sex practices in response to the HIV epidemic. However, those changes have not been universal: most people still have numerous sexual partners, many of which involve casual relationships. It

also remains to be seen if reductions in numbers of sexual partners will be temporary or long term; only long-term changes would result in reductions in numbers of lifetime sexual partners. Continuing patterns of multiple sexual partnerships combined with inconsistent condom use mean that many adolescents and adults remain vulnerable to HIV and other STDs (Anderson & Dahlberg, 1992; Dolcini et al., 1993; Smith, 1991b). In addition, the level of nonmarried births is still at record levels and the percent of unplanned births remains high.

In sum, contemporary patterns of sexual behavior remain a source of considerable public policy concern relating to HIV and other STDs, unintended childbearing, and many other public health and social problems.

NOTES

1. It is generally believed that including adolescent behavior would further increase these rates, but firm numerical estimates are not available. For some indication of this, see Billy et al., 1993, and Faulkner and Cranston, 1998. However, other surveys of young adult and teenage sexual orientation do not confirm this trend (Ku, Sonenstein, & Pleck, 1993). Spanning the lower and higher estimates, Turner et al. (1998) found that among males aged 15–19 in 1995, 1.5 percent reported homosexual relations on a paper self-completion questionnaire, but 5.5 percent did so on an audio-computer-assisted self-completion questionnaire.

2. A notable exception is a 1991 U.S. sample of men aged 20–39 and women aged 20–37, which found that 2.3 percent of men and 4.1 percent of women had a same-sex partner in the last ten years (Tanfer, 1994). This anomalous finding may have resulted from the question format, which used a five-point scale ranging from exclusively heterosexual to exclusively homosexual.

3. On knowledge among adolescents, see Kann et al., 1998.

4. On the relation of HIV-related risk behaviors and perceptions of risks, see Holtzman, Bland, Lansky, and Mack, 2001, and on the positive relationship between risky behavior and testing for HIV, see Anderson, Carey, and Taveras, 2000.

5. One sexual risk factor not discussed is type of sexual activity (e.g., vaginal, anal, and oral intercourse). On the comparative risk of these behaviors, see Susser, Desvarieux, and Wittkowski, 1998.

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6

Later Life Sexuality

Thomasina H. Sharpe

SEXUALITY IN LATER LIFE

The subject of sexuality triggers awkwardness and discomfort in many people. The topic of older adults' sexuality evokes even more discomfort, if not disgust. Although sexuality is a fundamental need across the life span, society typically ignores the sexual needs and concerns of older adults. The older population of the United States is growing at an unprecedented rate. In 2003, persons 65 and older accounted for 12.4 percent of the population. By 2030, that number will rise to 20 percent or higher (U.S. Census Bureau, 2001). The so-called baby boomer generation (the cohort of people born between 1946 and 1964) will increasingly present many challenges to views of sexuality in late life.

There are signs that the growing population of older persons will force society to reconsider its views of aging. Being able to live in one's own home is important to most adults, and older adults are no exception (Novelli, 2002). "Aging in place," as it is called, is especially important to baby boomers, who are challenging many existing views of aging. Not only do they intend to stay in their own homes, they also intend to maintain their current lifestyles into advancing age. They expect to remain healthy well into their seventies and eighties (Lenahan, 2004). This generation, which came of age during the sexual revolution of the 1960s, seems determined to retain its sexual life as well.

Today, adults are living longer, healthier, and wealthier lives than their parents. And they expect to have healthy sexual lives too (American Association of Retired Persons [AARP], 1999, 2005). Most older adults view sex as essential to a successful relationship, and for many it is important to overall quality of life. Marketing executives certainly have realized that sex sells not only to young adults: aging baby boomers are interested in sex (see Katz & Marshall, 2003). Magazines put steamy pictures of graying models on their covers and announce, "Sixty Is the New Thirty!" Beer ads feature elders drinking and necking on the sofa only to be caught by their shocked and much older parents. *A Round-Heeled Woman*, a memoir, follows the sexual exploits of a 66-year-old woman on a quest to have "a lot of sex with a man I like," becoming a best seller (Juska, 2003). Television news shows and newspapers lead with headlines that tout the results of the latest surveys such as those by the Association of Reproductive Health Professionals, the National Council on the Aging, and the Kaiser Family Foundation, which show that people are maintaining satisfying sex lives well into their eighties and even nineties (Sexuality Education and Information Council of the United States [SIECUS], 2002). Yet, despite this budding awareness that older adults are sexual beings, there is little information on sexuality in late life.

Late life is a stage of development like any other across the life span. Aging brings with it many challenges similar to those faced in childhood or adolescence. Sexuality, sexual behavior, intimacy, and relationships are fundamental human needs, whether we are 14 or 84. This chapter will address some of the unique tasks that we face as we age and how they affect our sexuality.

First, it is important to define some of the terms related to sexuality and aging. *Sexual behavior* is any form of physical intimacy that may be motivated by the desire to reproduce or to enjoy sexual gratification. *Sexual desire* is the need for sexual intimacy. *Sexuality* is often used as the general term for the feelings and behaviors of a human being concerning sex (Carroll & Wolpe, 1996). Sexuality encompasses both sexual behaviors and sexual desire. Sexual development occurs through distinct stages, each with its own tasks, challenges, and outcomes. To understand what this means in later life, it is helpful to examine sexual development at the earlier stages, beginning with childhood.

Sexuality and sexual behavior in very young children are mainly based on curiosity. Preadolescents have little physical or mental investment in sexuality. Most of their energy is devoted to forming a sense of identity as part of a community, collecting information and myths about sexuality from friends, school, and family, as well as forming a sense of morality they will use later in their sexual lives. Along with the striking changes of puberty, adolescents begin to revise their individual identities to include sexuality and sexual development. In Western cultures, adolescence provides opportunities to experiment with intimacy, the freedom to explore one's own maturing body, and the chance to master skills useful in the transition to adulthood. During

this passage, the young adult moves from dependence to independence. Unlike the curious explorations of childhood, adolescent sexual behavior becomes more expressive and more goal directed. Adolescents and young adults begin to form emotional bonds in their quest for intimacy. Most young adults plan to find a committed relationship, usually with the intention of having children. This focus may change at midlife as couples rediscover the importance of intimacy. Sexual activity in older individuals is primarily motivated by the desire for intimacy, sharing, and pleasure (Hillman, 2000; Stone, Wyman, & Salisbury, 1999).

Interest in the study of aging (gerontology) is growing. Unfortunately, little is actually known about healthy sexual development in late life. There are many reasons for this lack of knowledge. First, statistics about what is "normal" and what is "average" can be misleading. For example, the Association of Reproductive Health Professionals (ARHP) study (2002) reported that 52 percent of men 50 to 59 years of age, 26 percent of those 60 to 69, and 27 percent 70 years and older engaged in some form of sexual activity more than once a week. These statistics may provide a benchmark, but they only offer a glimpse at normal sexual development in these age-groups.

Second, a review of the literature will quickly reveal that most textbooks and articles ignore the subject of sexuality in the elderly population. If it is discussed, the emphasis is on dysfunction or disease rather than on healthy sexual development. In addition, most of what is written on sexuality in older adults is based on the Classic Triad. The Classic Triad consists of the seminal work of Alfred Kinsey, Masters and Johnson, and Eric Pfeiffer (Fogel & Lauver, 1990). Kinsey's investigations into sexual behavior shattered many common myths about sexual activities practiced by older men and women (Kinsey, Pomeroy, & Martin, 1948; Kinsey, Pomeroy, Martin, & Gebhard, 1953). The pioneering research of Masters and Johnson (1966) has formed the basis of most teaching on the normal age-related changes in sexual functioning. Likewise, the Duke Longitudinal Studies reported by Pfeiffer (Pfeiffer, Verwoerdt, & Wang, 1968; Pfeiffer & Davis, 1972) represented a significant piece of research on aging since it allowed for observations of individual changes over time.

Although the Classic Triad opened discussion of sexuality and aging, there are significant limitations to these projects. In most cases, the samples of older adults were very small and not representative of the older population as a whole. For example, older people were administered only a portion of the total survey instrument in the classic Kinsey studies and were excluded completely toward the end of the fieldwork (Rossi, 1994). The studies of both Kinsey and Masters and Johnson were hindered by the small sample size. Kinsey surveyed only 126 men and 56 women over the age of 60, and they were completely excluded from the follow-up surveys. Masters and Johnson (1966) observed only thirty-one men and women over age 60 and only nine of their participants were over 70 years of age. Consequently, caution must be used when applying the

findings from these small samples to the general older population (Rossi, 1994).

Similarly, the cultural and social changes that have occurred over the last thirty to sixty years since these studies were conducted are too significant to ignore. Improvements in health and advanced longevity each challenge the relevance of these studies to today's older adults. For example, the average woman now lives to be 82 and, thus, she can be expected to live one-third of her life post-menopausal (Kingsberg, 2002). Simply stated, one-fourth of a woman's sexual life will be experienced in her later years. Given that fact, it is remarkable that there has been so little research on sexual development in older adults.

Finally, the elderly are a more varied group than most people believe. In fact, the definition of "aged" continues to change as medical advances improve the quality of life and longevity. The definition of "late life" tends to be reserved for persons over the age of 65, historically, the age of retirement. Yet, the growing numbers of 70-, 80-, and even 90-year-olds in our population means that late life is a period that can span thirty years or more. We must remember that the differences between people in their sixties and those in their eighties are often greater than those between 20- and 60-year-olds. The differences between a healthy 65-year-old and his 90-year-old parent who suffers from dementia can be more extreme than the differences between a teenager and her 43-year-old mother. In fact, our definition of late life means that two living generations of the same family could be included in the same category, and hence they could be facing some of the very same challenges, including those relating to sexual development.

WHAT IS ''OLD''?

When discussing late life, it is important to determine what is "old." Obviously, like beauty, "old" is in the eyes of the beholder. In other words, "old" is highly subjective. People in their eighties may not consider themselves old. In fact, many adults in later life do not consider themselves old because they feel healthy and maintain active lives. They have fallen prey to stereotypes of the elderly as decrepit or infirm and, therefore, believe that as long as they "feel" young and remain active they are not old.

We must consider that how we define old has very real ramifications for policy formation, public perceptions, and for individuals' self-concept (Calasanti & Slevin, 2001). For our purposes, we will use *chronological age* as our criterion and define *later life* as the period after age 65 until death. But this too can be a biased and flawed definition because age identification is made up of more than chronological age or the number of years since a person's birth. It also is made up of how old one feels as compared to one's peers, known as *subjective age,* and one's assessment of one's own status in relation to the ideal for one's age-group, or *functional age* (Calasanti & Slevin). It is important to

note that as life expectancy is extended and our knowledge of what is "normal development" for this stage grows, it may become necessary to divide later life into further stages.

THEORIES OF DEVELOPMENT AND AGING

Sexuality in later life is a culmination of all of the developmental processes an individual has experienced up to that point. This stage is generally marked by a stable sense of self-identity. Most changes that do occur tend to take place subtly and gradually, even those that follow momentous life events, such as the loss of a spouse. Most individuals continue to see themselves as basically the same person they have always been (Schuster & Ashburn, 1992). This is also true of a person's sexuality. Yet, theorists have viewed normal development in the elderly in different ways.

Cummings and Henry first described the disengagement theory in 1961. They maintained that in old age, the individual and the society mutually withdraw from one another in four steps. The first begins in late middle age, when traditional roles, such as worker and parent, become less relevant or less important and as one's social circle begins to shrink as friends die or move away. In the second step, people anticipate, adjust to, and participate in this narrowing of the social sphere by giving up many of the roles they have played and by accepting this disengagement. Third, as people become less role centered, their style of interaction changes from an active to a passive one. Finally, because of this more passive style of interaction, older people are less likely to be chosen for new roles, and, therefore, they are likely to disengage further. This theory proposes that the elderly voluntarily participate in the disengagement process and that by old-old age, people prefer to be withdrawn from most social interactions, avoiding the noisy bustle and insistent demands of the younger person's world (Berger & Thompson, 1998; Cummings & Henry, 1961).

Disengagement theory has been highly controversial due to its assumption that this withdrawal is not only universal but also voluntary. But the most unfortunate aspect of the theory is that it reinforces many ageist stereotypes. Palmore (1999) argued that it perpetuated discrimination in everything from forced retirement to socially sterile nursing homes based on the premise that the elderly, after all, want to withdraw.

An opposing theory is the activity theory, which proposes that people age most successfully when they participate fully in daily activities, that is, by keeping busy (Lemon, Bengtson, & Peterson, 1972). According to this theory, remaining active and adopting numerous roles in life promote satisfaction and longevity. But this theory too has fallen out of favor. Yet, many of the elderly continue to believe that activity is the key to successful aging, so much so that gerontologists have dubbed this philosophy "the busy ethic" (Ekerdt, 1986).

The argument against activity theory is that it is not the absolute number of roles or activities an elder engages in that predicts satisfaction but how close

the level of activity is to one's individual preference (Lomranz, Bergman, Eyal, & Shmotkin, 1988). This is the general basis of the continuity theory, which states that each person deals with late adulthood in much the same way that he or she coped with earlier periods of life (Atchley, 1989). The continuity theory is a primarily sociologically oriented theory that uses the concept of continuity of socialization and the idea of stages of life. Each stage builds upon the next, and to understand a person's response to aging you must examine the complex interrelationships among the biological, psychological, and social changes in his or her life and previous behavior patterns (Cox, 2005).

Controversy surrounding the disengagement and activity theories has also led many gerontologists to turn to developmental psychology theories to explain the adjustments of advancing age (Cox, 2005). Sigmund Freud (1949) emphasized sexual function in the overall development of humans. Freud believed that early sexual development had important and lasting effects. He emphasized the earliest developmental stages as the most important and believed that development culminates in adulthood with the final or genital phase. On the other hand, Erikson (1984) proposed eight stages that continued throughout the life span. He stated that late life was a time for reflecting on one's own life and its significance. He described the developmental task of old age as *integrity versus despair.* Ego integrity involves an acceptance of the way one has lived and continues to live one's life. It is also the assessment that one remains in control of one's own life. Erikson defines the failure to master this stage as ego despair. Ego despair is a state of conflict about the way one has lived and continues to live one's life. It is the subjective experience of dissatisfaction, disappointment, or disgust about the course of one's life, together with the conviction that if given another chance one would have chosen a different course. The individual struggles with despair and, therefore, fears death and the loss of meaning (Schuster & Ashburn, 1992).

Continuity theory and Erikson's psychosocial theory of development seem most useful in understanding sexuality in late life. Older persons believe sexuality is a vital part of their lives, much like it was in their early adulthood. If they have successfully mastered a sense of ego integrity, they are more likely to accept their sexuality and continue to feel in control. A sense of satisfaction with one's past sexual experience seems to be an important predictor of a person's satisfaction with sexuality in late life. The frequency of sexual activity decreases with age, but sexual satisfaction does not (AARP, 2005; ARHP, 2002; Avis, 2000; Kingsberg, 2002; Laumann, Paik, & Rosen, 1999; Schuster & Ashburn, 1992; SIECUS, 2002).

In fact, older adults often find that some aspects of their sexual lives improve with age. There are, of course, inevitable physical changes with advanced age. Older individuals also find that they are not immune to the effects of societal and peer attitudes on what is acceptable sexual behavior. Ageism affects many people, including older persons themselves.

SEXUAL PHYSIOLOGY IN LATER LIFE

> There seems to be no physiologic reason why the frequency of sexual expression found satisfactory for the younger women should not be carried over into the postmenopausal years. (Masters & Johnson, 1966, p. 246)

> There is every reason to believe that maintained regularity of sexual expression coupled with adequate physical well-being and healthy mental orientation to the aging process will combine to provide a sexually stimulative climate within a marriage. This climate will, in turn, improve sexual tension and provide a capacity for sexual performance that frequently may extend to and beyond the 80-year age level. (Masters & Johnson, 1966, p. 270)

When discussing aging and sexual physiology in late life, most articles and texts adhere closely to the observations of Masters and Johnson (1966). They concentrated on senescence or the weakening and decline in the body, as well as the sexual response cycle and the changes in individuals over the age of 40. The sexual response cycle consists of four phases: drive or desire, arousal, release or orgasm, and resolution, which includes the refractory period in men. In the presence of desire, a person experiences the drive to engage in sexual behavior. Effective sexual stimulation, whether psychological or physical, triggers erotic arousal or excitement. The plateau phase, a period of sustained arousal, follows. Continued effective sexual stimulation leads to orgasm, followed by resolution, during which organs and tissues return to their resting state. The pattern of changes throughout the sexual response cycle applies to both sexes with the exception of the resolution phase. Following orgasm, men experience a refractory period during which they are unable to respond to further stimulation until an obligatory period of rest has occurred (for a review, see Trudel, Turgeon, & Piché, 2000).

Drive or desire remains fairly stable in both men and women throughout life. Multiple studies, including those by Avis (2000), Laumann et al. (1999), as well as surveys by the National Council on the Aging, AARP (1999, 2005), and ARHP (2002), have shown that frequency of sexual activity may decrease but satisfaction and desire do not (Kingsberg, 2002; Schuster & Ashburn, 1992).

Arousal is the phase most affected by aging. In women, the decline and eventual cessation of estrogen production during menopause may lead to atrophy of urogenital tissues and an overall decrease in genital vasocongestion and lubrication during arousal. Both sexes may experience a prolonged arousal phase, which may require more direct genital stimulation (Demeter, 1998; Masters & Johnson, 1966; Miller, Versi, & Resnik, 1999).

Orgasm tends to be the phase least affected by aging, especially in women. Men may need sustained direct stimulation and additional time to reach orgasm.

They also tend to have decreased volume of ejaculate and less forceful ejaculation. Women retain their ability to achieve orgasm. Some women may experience pain during orgasm that is associated with the orgasmic contractions of the uterus and vagina becoming less rhythmic and coordinated (Demeter, 1998; Masters & Johnson, 1966; Miller et al., 1999). Yet, despite this change, older persons report that their orgasms are as satisfying as ever. For those who have problems achieving orgasm, it is likely to be related to medications, illness, or previous problems with orgasm. In other words, aging alone does not interfere with the ability to have an orgasm.

The refractory period is the phase most affected in older men. The resolution phase right after orgasm becomes shorter with advanced age: in other words, men return to the non-aroused state more quickly with advanced age. But the time that it takes a man to regroup, the refractory period, is prolonged as it can take anywhere from twelve to twenty-four hours or longer before he can achieve another orgasm (Milsten & Slowinski, 1999). Women tend not to have a refractory period and, therefore, are less affected by aging during this phase. A woman who is multiorgasmic will remain so in late life (Beers & Berkow, 2000; Demeter, 1998; Masters & Johnson, 1966; Miller et al., 1999).

In women, other changes that occur with aging include shortening and narrowing of the vagina, as well as changes in the chemistry of the vagina; decreased acidic secretions increase the risk of vaginal infections (Trudel et al., 2000). Cystitis, or bladder infection, is more common in older women. Decreased estrogen levels may also lead to a decrease in clitoral size, incontinence, and a graying and thinning of pubic hair. Estrogen replacement therapy prevents or reduces many of these problems. However, estrogen replacement may also increase the risk of some cancers and heart attacks in women with heart disease and therefore must be used with caution. Women who remain sexually active have fewer problems maintaining their sexual activity and genital health. Some of the declines in sexual functioning that are more common in older persons are related to illness, medication side-effects, or even sexual inactivity rather than to aging per se (Beers & Berkow, 2000; Demeter, 1998; Miller et al., 1999).

Normal physical changes in older men include decreased production of testosterone, which levels off around age 60. Likewise, the testicles decrease in size and firmness, sperm production is reduced, and the prostate increases in size. In addition, men may notice that preejaculatory fluid is reduced. Erections may be less durable and less firm. Men do not experience an equivalent of menopause, and they often remain fertile throughout life. Although sexual dysfunction is not a part of aging, erectile dysfunction is a common concern for many older men. The incidence of erectile dysfunction does increase with age, but aging per se is not the cause. Medical conditions and medications are usually responsible for the increased rate of erectile dysfunction in older men (Laumann et al., 1999). Stress and emotional problems also can affect erectile

functioning. For example, the widower's syndrome refers to temporary erectile dysfunction experienced by some men who remarry following the death of their first wives. This is more likely to occur if the former wife's prolonged illness demanded sexual abstinence (Rossi, 1994).

In the book *Fifty—Midlife in Perspective*, Katchadourian (1987) points out that these age-related physical changes are not abnormalities and do not preclude an enjoyment of sex at midlife and beyond. Some individuals, however, do have difficulty accepting these normal age-related changes in sexual functioning. Sexual dysfunction specifically refers to recurring and persistent problems with sexual desire, performance, or satisfaction. One of the most common forms of sexual dysfunction is the inhibition of sexual desire, evident by a continuous and overall lack of sexual interest. Disorders of sexual excitement may result in problems with erection in men and vaginal lubrication in women. Difficulties with orgasm in the male typically take the form of premature ejaculation and sometimes of failure to ejaculate. Women may experience undue delay or inability to reach orgasm despite normal sexual arousal and adequate erotic stimulation. Painful intercourse, which is rare in men, is common among women. It is typically caused by spasm of the musculature surrounding the vaginal opening, which may be due to psychological factors or various forms of pelvic pathology (Katchadourian).

Sexual dysfunction usually arises from multiple causes, including psychological, physiological, physical, and interpersonal components. In late life, sexual dysfunction can be viewed from three different perspectives (Katchadourian, 1987). First, the normal physiological changes that occur may be misperceived as evidence of sexual failure. For example, a softer penis or a drier vagina is seen as a sign of impotence or loss of sexual desire. Second, sexual dysfunction can result from physical illness. And third, since sexual intercourse entails an interaction between two individuals, sexual dysfunction often reflects disturbances in a couple's relationship, which may or may not be related to sexual issues.

These documented age-related changes in sexual functioning are based on studies of a small number of men and women. What is becoming increasingly clear is that aging alone does not usually cause sexual problems. For example, menopause has a small effect on women's sexual functioning (Avis, 2000). Conditions such as heart disease, stroke, diabetes, depression, and alcohol abuse have a much greater impact on sexual functioning than does aging (Tallis, Fillit, & Brocklehurst, 1998).

It is also important to realize that sexual intercourse is not the only sexual outlet for people of any age. Older adults enjoy sexual fantasy and masturbation. Abstinence is also a legitimate choice for some individuals. Increasingly, the Internet is increasingly being used as a resource for older adults for finding information, meeting other people, or even as a safe outlet for sexual needs (Adams, Oye, & Parker, 2003).

SOCIETY AND LATER LIFE SEXUALITY

Societal expectations often have more of an impact on sexuality in late life than actual physiological changes do. Many of the common views and stereotypes of aging profoundly influence older adults and their sexual attitudes. According to the sociological view of the normative timetables of the life course, sexual interest should begin in midadolescence and reach full expression during midadulthood, coinciding with the height of fertility and physical attractiveness. Therefore, sex is believed to be the prerogative of youth (Booth, 1990). This view partly arises from traditional values that equate sexuality with procreation. Because pregnancy and childbirth are not part of the older person's experience, it is assumed that they should not need or want sex (Rossi, 1994). This attitude is a reflection of the larger problem of ageism.

Robert Butler, the first director of the National Institute on Aging, coined the term *ageism* to describe the process of systematic stereotyping and discrimination of older adults (Butler, 1969; Robinson, 1994). He equated ageism with racism and sexism and defined it as simply "not wanting to have all those ugly old people around" (Butler, 1975). By the nineteenth century, there is clear evidence of contempt for the aged along with the development of a cult of youth in literature, the emergence of derogatory terms such as "fogey" and "geezer," and the introduction of mandatory retirement policies. By this time, people increasingly associated advanced age with helplessness, illness, and "senility" (Calasanti & Slevin, 2001; Haber, 1983). Fischer (1977) attributes the decline in the status of older people to two important factors: the growth of the population due to increased life expectancies and birth rates, and the radical expansion of the ideas of equality and liberty that were seen as the "new world order." Older persons had the misfortune of belonging to the old world order, and they were seen as reminders of what the new order hoped to avoid: dependence, disease, failure, and death (Calasanti & Slevin, 2001; Cole, 1992).

Ageism is a cultural phenomenon whose acceptance is widespread as it cuts across all social classes, age-groups, and regions (Kart, 1989). Many of the stereotypes of aging are particularly negative with respect to sexuality. Depictions of older adults as sickly, senile, unattractive, impotent, and asexual have a powerful influence on all people, including older persons. Myths and stereotypes of older persons are pervasive; they are perpetuated in the mass media as well as in literature. But ageist attitudes toward sexuality were not born out of a vacuum as they have a long history.

In reviewing perceptions and attitudes from the Middle Ages, Covey (1989) found that although little had been written about elderly sexuality, what did exist was overwhelmingly negative. A double standard was also revealed that painted older men's participation in sexual activity as comical or pathetic, whereas older women's participation in sex was viewed as unnatural and evil. For example, older men were thought to have no capacity for sexual

relations, and those who were able to maintain active sex lives were believed to have exceptional qualities that helped them gain social status and even increase their life span. In contrast, older women were thought to be able to have sex in later years only if they were able to trick a man into going to bed with them, a feat so abhorrent that it required the aid of witchcraft. Bullough (1976) revealed that medieval religious prohibitions mirrored popular beliefs about sexuality in the elderly. At the core is the belief that sexual intercourse was intended for procreation only. This doctrine promoted the belief that older adults who had sex were engaged in a "sin against nature." Thus, we can trace clichés of "wicked witches" and "dirty old men" to distant history (Covey, 1989; Hillman, 2000).

In contemporary Western cultures, we equate aging with dying, and we view older adults as defective or decrepit. This view is fortunately not universal. Many cultures prize and admire the characteristics of old age. In a groundbreaking study of more than 106 cultures, Winn and Newton (1982) described many of the beliefs about sexuality in late life as stereotypes. In fact, most cultures they studied had favorable views of sexuality and aging: fewer than 3 percent have prohibitions against sex for older adults. The vast majority of older adults, 70 percent of men and 84 percent of women, enjoyed active sexual lives. In many Eastern and Middle Eastern cultures, men who were as old as 100 continued to engage in sexual relations. Many cultures did not view a loss of sexual functioning as an inevitable part of aging. For example, some African cultures attribute erectile problems to such unnatural phenomena as illness or witchcraft (Winn & Newton).

In the majority of these traditional cultures, menopause is not associated with changes in older women's level of sexual activity: it is simply a phase in a woman's life. In certain African and Asian cultures, an older woman's physical attractiveness is unrelated to her sexual status: older women are considered as sexually desirable as younger women. In addition, although a double standard operates with regard to elderly sexuality, it is in the opposite direction: older women are more likely to engage in sexual relations and are often described as becoming less sexually inhibited and more sexually adventuresome with age. In certain South American and Eastern cultures, older women even serve as sex educators for sexually inexperienced young men (Winn & Newton, 1982). An ancient Turkish proverb illustrates the positive sexual attitudes espoused by many traditional and preindustrial cultures: "Young love is from earth, while late love is from heaven" (Hillman, 2000).

Health care providers, unfortunately, are not exempt from ageist attitudes. Even physicians often assume that sexuality is unimportant in late life (Butler, 1975). The American health care system also perpetuates ageism by focusing on acute care and cure rather than on chronic care, which some older adults need. It is also done covertly by denying or limiting services, by not including aging issues in training materials or educational offerings for providers, and by not requiring training in geriatrics in medical schools even though older adults

constitute a significant proportion of their future patients. But ageism is not the only obstacle to a healthy expression of sexuality for older adults. Some of the other barriers include lack of a partner, sexual dysfunction, attitudes of adult children, altered body image, previous attitudes toward sex, attitudes of peers, religious prohibitions against sex outside of marriage, depression, lack of autonomy of choice, lack of privacy, marital conflict, and libido mismatch. As Judith Levy (1994) noted in *Sexuality Across the Life Course*:

> [A]lthough negative influences of ageism are an important variable that potentially can dampen sexual interest, meeting the rigors and demands of daily life also shapes older people's sexual drives. Engaging in sex at any age requires an investment of time, psychosocial involvement and energy. Like individuals of other age groups, older people's sexual drives may decline or die under the pressures of mental or physical fatigue, preoccupation with business interests, overindulgence in food or drink, physical illness and fear of sexual failure. (p. 291)

In the Duke Longitudinal Studies, Verwoerdt et al. (Pfeiffer et al., 1968; Verwoerdt, Pfeiffer, & Wang, 1969) found that sexual interest did not decline with age in their sample of men and women aged 64 to 94. In fact, sexual interest can persist indefinitely. They also found that patterns of sexual behavior in the later years correlate with those of younger years. Individuals who enjoyed an active sexual life in their younger years usually retained their sexual interest in the later years. Unfortunately, older persons are not immune to ageism, which they may internalize. Older adults may feel shame and embarrassment about having sexual interests (Brogan, 1996; Trudel et al., 2000).

Nontraditional Relationships among Older Adults

Due in part to the sexual revolution and the gay rights movement, older adults are becoming more open about their involvement in nontraditional romantic relationships including gay, lesbian, and cohabiting heterosexual relationships (Hillman, 2000). Alternative sexual lifestyles can present new and unique challenges at all stages of life, and this can be especially difficult for older adults. Many of the obstacles faced by all aging adults, such as institutionalization, lack of or loss of a partner, ageist attitudes from the community or adult children, and loneliness apply to those in unconventional relationships too. Research by Kelly (1977) shows that although many of these individuals do enjoy stable relationships in later life, they still have to face the fears of losing a partner or of having to live in an assisted-living arrangement (Burnside, 1988). These challenges are magnified by the prejudice and bias against alternative sexual lifestyles. Older same-sex or unmarried couples may be required to live in separate rooms in nursing homes, or one partner may be denied the visits usually reserved for family members. They may lack the

family or social support offered to traditional heterosexual couples upon the loss or death of a spouse. In a culture that values youth and beauty, many gay men struggle to accept their changing physical appearance. Controversy also persists among clinicians and researchers regarding various issues such as the adoption of gay or bisexual identities later in life, particularly among women, and the impact of affairs within the context of long-term marriage (Hillman, 2000).

Many of these fears or myths are simply extensions of ageist attitudes. Sex, which supposedly only concerns young people, is just as important for aging gay and lesbian couples as it is for their heterosexual counterparts. Biases against same-sex relationships, premarital sex, or extramarital sex are shaped by cultural norms and values. Interestingly, several researchers have theorized that older adults who have experienced societal prejudice when they were younger may actually be more resistant to internalization of ageism later in life. It seems the experience of "coming out" may teach individuals skills useful in dealing with ageism or perhaps inoculate them against myths about aging (Berger, 1995; Francher & Henkin, 1973; Friend, 1990; Kimmel, 1978).

McDougall (1993) found that developmental and demographic changes associated with aging may actually work to the advantage of older gay men and lesbians. It is much more socially acceptable for two older men or women to live together as roommates than it is for younger same-sex couples. In fact, society seems to recognize that people, including older adults, want and need companionship. This belief, coupled with the ageist assumptions that older adults do not engage in sex and the invisibility of older gays and lesbians as a group, allows older same-sex couples to live together without causing any undue distress or homophobic anxiety among their heterosexual neighbors. Likewise, society is less likely to label physical contact among older adults of the same sex as inappropriate since it is not viewed as sexual in nature (Hillman, 2000; McDougall, 1993).

Older Institutionalized Adults

In the eyes of society, there is perhaps no place that is more asexual than a nursing home or assisted-living facility. Abbink (1983) noted that intimacy is a need "which is manifest from conception to death and it does not decrease in intensity or significance through adulthood." It is maintained not only by sexual intercourse, but also by touching, stroking, patting, hugging, and kissing, as well as emotionally by the sharing of joy, sorrow, affection, ideas, and values (Abbink). Yet, society seems to believe that institutionalized adults somehow lose the need for intimacy. Therefore, intimacy needs among the institutionalized aged require special attention.

Older institutionalized adults suffer from isolation and sensory deprivation, which probably intensify their need for physical contact. Stiffl (1984) suggests that these individuals require sexuality as part of their spiritual and emotional

well-being rather than separating it out. She points out the importance of understanding that all meaningful sexual relationships are not heterosexual; accepting masturbation as an expression of sexuality; providing touch along with "feeling" objects to handle, fondle, and hold; using live pets to provide sensory stimulation; encouraging the use of music (romantic, sentimental, sensuous, and erotic) in nursing homes; and encouraging the opportunity for sexes to meet, mingle, and spend time together without structuring the trysting time or place too rigidly (Stiffl; Burnside, 1988).

Staff attitudes and institutional barriers against sexual expression are not the only factors affecting sexual expression in nursing-home residents. Illness, dementia, lack of privacy, and medications continue to be negative factors. Elderly people in nursing homes are also limited in their sexual opportunities by their own attitudes. Although sexual activity outside of marriage is widely accepted now, this was not the case during 1920–1940, when these elderly were developing a sense of morals. Also, the inequality in the ratio of men to women in these institutions effectively deprives lone elderly women of an opportunity to maintain an active sex life.

THE OLDEST OF THE OLD AND SEXUALITY

In their book, *The Oldest of the Old in Everyday Life,* Ruth Dunkle, Beverly Roberts, and Marie Haug (2001) discuss how the oldest adults perceive themselves and how they cope with change and stress. The authors studied "very old" adults, those 85 years of age and older. There is very little research on what is the fastest growing segment of the U.S. population. Most of these oldest adults are women, who often have health problems, and are more apt to be institutionalized, all of which can significantly impact their sexuality. Lack of partners, illness, medication, isolation, and lack of privacy all are obstacles to sexuality in older persons. The oldest adults are more likely to have lost their spouses and to have a shrinking network of friends, which limits opportunities for sexual expression and intimacy (Dunkle et al., 2001).

Satisfactory marital and sexual relationships are important to quality of life from early adulthood throughout life. Whereas young adults often form social friendships in the workplace, the oldest of the old turn to social clubs, church groups, political organizations, and senior centers for social support. However, the oldest women have fewer opportunities for sexual relationships because of the gender imbalance in this age-group. There are two women for every man among adults 80 years of age and older (U.S. Census Bureau, 2001). The gap increases in older age-groups.

Contrary to popular stereotypes, unmarried and widowed older women miss having a sexual relationship. They report that the gender imbalance detracts from their quality of life. The need for a healthy sexual partner remains important for most adults in all age-groups. It is especially challenging for many of the oldest of the old (Dunkle et al., 2001).

SEXUALITY AND DEMENTIA

Dementia involves more than declining mental abilities. The cost of dementia, especially Alzheimer's disease, on the individual, the partner, the family, and society is quite high. Sexual functioning during the early to moderate stages of Alzheimer's disease is often not spared; the individual may experience problems with orgasm, erectile dysfunction, and impaired sex drive. As dementia progresses, inhibitions may be compromised, which can introduce many problems for patients and their partners. In the later stages of dementia, patients may fail to recognize their lifelong partners.

Partners of patients with dementia struggle with the progressive changes in their relationships, including the loss of intimacy and sexual fulfillment. Caregiving is often stressful and demanding, which can add to the loss of intimacy. For many couples, dementia may cause reversals in roles and affect every aspect of their relationship (Lenahan, 2004).

There are basic guidelines that caregivers and providers can use to determine if a patient with dementia is able to consent to sexual activity. Several factors to consider include degree of mental impairment, lifelong sex values and practices, the ability to initiate and decline sexual overtures, and overall physical health (Galindo, 1995). Without a doubt, the sexual needs of adults with dementia and their partners pose significant challenges (see Ehrenfeld, Bronner, Tabak, Alpert, & Bergman, 1999).

SEXUALITY AND END OF LIFE

Later life sexuality has received little attention. Sexuality at the end of life, however, has been virtually ignored. Recent studies suggest that sexual expression can serve as a form of communication and intimacy that should be considered in the overall care plans of individuals receiving hospice (Hordern, 2003; Stausmire, 2004). Health care providers should encourage an open discussion of sexual needs of adults who may be near the end of their lives. Couples who previously enjoyed active sexual lives should be reassured that they can participate in various forms of intimacy to the extent that their health permits (Lenahan, 2004).

CONCLUSIONS

Sexuality is a fundamental need for adults of all ages. Older adults usually retain an interest in sexual intimacy, and they view it as an important part of rewarding relationships (AARP, 2005). Unfortunately, negative views of aging and common stereotypes are detrimental to sexual enjoyment later in life. A growing body of research reveals that older adults are able to enjoy sexual fulfillment if they are physically and psychologically healthy and if they have a partner (Trudel et al., 2000). The sexual problems that are more prevalent in

older populations are not products of aging per se: they are due to factors such as medications or illnesses. There are predictable changes in sexual functioning with advancing age, but none of these preclude sexual activity although they may require some adjustments.

The sexual needs of the growing segment of the population have been largely neglected. Similarly, the needs of the oldest adults, those living in institutions, and those suffering from health problems, including dementia, are only beginning to be understood. More research is needed to address these needs and to combat the negative stereotypes and myths about sexuality and aging.

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7

Sexual Orientation and Identity

Michael R. Kauth

For two centuries, Western culture has devoted enormous attention to sexual orientation, particularly, homosexuality (Bullough, 1994). Shifting social beliefs about homosexuality have influenced psychiatric concepts and practices, law and civil rights such as marriage, as well as military service. This chapter describes the concept of sexual orientation, sexual identities in America and in other cultures, current sexuality theories, and recent events involving sexual orientation.

DEFINITIONS AND IDENTITIES

Sexual orientation is the experience of or capacity for erotic or sexual attraction to one or both sexes (Kauth, 2000). *Sexual attraction* is a desire for emotional or physical intimacy and physiological arousal associated with an individual or class of persons. Sexual attraction sometimes leads to sexual behavior with a partner, for example, passionate kissing, oral sex, vaginal intercourse, and so on. In the absence of a partner, sexual desire may lead to sexual fantasies or masturbation. *Sexual (orientation) identity* is the personal identification with a category of sexual attraction: *heterosexual* or *straight* (male-female or other-sex attraction), *homosexual* or *gay/lesbian* (same-sex attraction), and *bisexual* (attraction to both sexes). These labels are thought to reflect particular personality traits and social behaviors but are actually poor indicators of both, as discussed below.

Stigma related to homosexuality, the desire to be perceived as heterosexual and accepted by one's community, as well as the awareness of and comfort with one's own sexual feelings all influence an individual's choice of sexual identity. For many people, sexual identity is about how one wants to be perceived, rather than an indicator of sexual feelings. Prior to identifying as gay or lesbian, many men and women identify as heterosexual, or at least bisexual. African American men and other men of color on the *down low* identify as heterosexual and maintain heterosexual relationships, but engage in clandestine sexual behavior with men (King, 2004). So-called ex-gays, who have undergone treatment to change their same-sex attraction, identify as heterosexual, although their same-sex feelings have not changed (Besen, 2003). For some people, same-sex attraction is not "discovered" until after many years of heterosexual marriage (Rust, 2000a). Are these two latter groups actually bisexual? Further, in the 1970s and 1980s, many feminists identified as lesbians as a political statement, although they did not have sexual relationships with women (Faderman, 1981/1998). Recently, some men and women have reclaimed the epithet *queer* as a provocative challenge to conventional sexual identities (Norton, 1997). A queer sexual identity comes from academic queer theory, which holds that identities are not fixed and do not determine who we are. The label includes gays and lesbians, bisexuals, and *transgendered* persons—people who believe they are actually the other biological sex. However, "queer" has historically referred to people with same-sex attraction, primarily gay men, as illustrated by the popular Bravo television program *Queer Eye for the Straight Guy*. In short, sexual identity labels better reflect social identity than sexual feelings.

PREVALENCE OF SEXUAL IDENTITIES AND CROSS-CULTURAL PERSPECTIVES

The prevalence of sexual orientations depends on how sexual attraction is measured (e.g., erotic desire, romantic feelings, sexual identity, or sexual behavior), what period of time is assessed, and how the culture defines the term "sexual." People in rural India and urban Montreal, Canada, experience different sexualities. However, several Western studies using different methodologies have found that between 2 percent and 6 percent of men and 1–4 percent of women are exclusively same-sex oriented (Fay, Turner, Klassen, & Gagnon, 1989; Kinsey, Pomeroy, & Martin, 1948; Kinsey, Pomeroy, Martin, & Gebhard, 1953; Kontula, 1993; Laumann, Gagnon, Michael, & Michaels, 1994; Wellings, Field, Johnson, & Wadsworth, 1994). About 4 percent of men and women have experienced attraction to both sexes, and between 6 percent and 20 percent of men and 4 percent of women report having one or more same-sex orgasms in their lifetime (Fay et al., 1989; Wellings et al., 1994). In most Western studies, the vast majority of people identify as heterosexual or report exclusive other-sex attraction, although social stigma may inhibit disclosure about same-sex attraction.

In many non-Western and Native American cultures, social roles have greater significance than sexual identities. Among traditional East Asian (Japan, China, and Thailand) and Asian American cultures, as well as Latin and Arab cultures, individuals are referenced by their role in the family social system, not by their sexual feelings, which are private and do not entail a personal identity (Almaguer, 1993; Chan, 1995; Helie-Lucas, 1994). Yet, where Western culture predominates, some individuals adopt labels of sexual identity in conflict with native social values (e.g., Blackwood, 1999; Mogrovejo, 1999; Williams, 1986).

Many non-Western societies have recognized that people experience a variety of sexual feelings. Ford and Beach (1951) found that 64 percent of seventy-six societies around the world viewed same-sex behavior as normal and appropriate for some members of the community at some times. Some societies have even institutionalized same-sex erotic relationships (Greenberg, 1988). Until recently, several Melanesian societies and related cultures in the Pacific supported ritualized same-sex activity for males (Herdt, 1984/1993). Boys were thought to lack the substance to become masculine and fertile, and they engaged in regular oral or anal sexual behavior with older males in order to receive this vital substance. After puberty, these young men in turn provided semen to boys. Most men eventually developed exclusive heterosexual relationships. Women in these cultures were seen as inherently fertile and did not engage in ritualized same-sex relationships.

Among the Basotho of southern Africa, intimate same-sex relationships have played an important role in providing sexual and social information to young women (Gay, 1985). An adolescent girl and an older married woman form a long-term relationship, called *Mummy-Baby*, which includes casual sexual play and sometimes intense genital contact. These intimate relationships bear no stigma as long as the young woman fulfilled her social obligation to marry and produce children. The !Kung (Shostak, 1981) and Mombasa of South Africa (Shepherd, 1987) and aboriginal Australians (Roheim, 1933) also have formed same-sex relationships between younger and older women. Among Mombasans, both boys and girls develop intimate same-sex relationships, and these relationships provide many social and economic advantages (Shepherd, 1987). Mombasan boys, who have little social status, develop relationships with older married men who can provide for them. The boy (*shoga*) takes a passive sexual role with his patron (*basha*). After acquiring personal resources, most, but not all, shoga males end their same-sex relationships and marry. For Mombasan girls, however, the relationship sometimes continues after marriage.

In many cultures, *gender role*—the social performance of masculinity or femininity—determines sexual expression, and gender roles are quite distinct. Among Central and South American, North African, and Mediterranean societies, males are masculine, socially dominant, and active sexual partners (i.e., penetrate their partner), while females are expected to be feminine, submissive,

and passive sexual partners (i.e., penetrated by partner) (Carrier, 1980; Espin, 1993). Cross-gender behavior in these cultures violates gender role norms and is stigmatized. Men who are sexually penetrated are considered effeminate, and vice versa, while men who penetrate a male partner bear no stigma and are considered masculine. In some Latin and Mediterranean cultures, anal intercourse with a receptive male may demonstrate *hyper*masculinity and may be witnessed by one's peers (Carrier). In fact, male-dominant societies with rigid gender roles report a high incidence of male-male sexual behavior (Reiss, 1986). For women, however, same-sex encounters in gender-role-rigid societies are often seen as antifamily and are taboo (Espin).

Some cultures have classified individuals who behave or dress as the other sex as a *third gender*, both male and female. Same-sex activity is often associated with third-gendered individuals (Greenberg, 1988). The *waria* of Indonesia (including Java, Sumatra, most of Borneo, West Irian, and other small islands), *hijra* of India, *mahu* of Tahiti, *xanith* of Middle Eastern Oman (Mihalik, 1988), and *washoga* of Muslim Mombasa in Kenya represent third genders (Carrier, 1980). Several Native American Indian societies have reported third and even fourth genders, including the Iroquois, California, Eskimo, Comanche, Cherokee, Illinois, Nadowessi, Chippewas, Koniag, Oglala, Quinault, Crow, Cheyenne, Creek, Yokot, Sioux, Fox, Sac, Zuni, Pima, Mohave, Navajo, Cree, Dakota, Siksika, Arikara, Mandan, Florida, and Yucatan, although the practice has largely ended with increased Westernization (Greenberg; Williams, 1986). Third- or fourth-gendered individuals are sometimes referred to as *berdache* (those with male physiology) or *amazons* (those with female physiology), but the more neutral collective term, *two-spirited* people, is preferred today (Roscoe, 1998). Social roles and statuses for two-spirited people varied across cultures. The Navajo *nádleehi* were farmers, sheepherders, and weavers who often achieved wealth, while Lakota *winkte* were typically powerful spiritual leaders and warriors.

Exclusive same-sex erotic relationships are rare in human history and more typical of contemporary Western culture. While male-female relationships are typical in most societies, same-sex relationships, at least for males, are not uncommon and may have been the norm in some cultures (Bleys, 1995; Cantarella, 1992; Greenberg, 1988). The frequency of same-sex behavior among diverse societies suggests that many people have the capacity for same-sex eroticism or a bisexual orientation (Kauth, 2000).

DESCRIPTIVE MODELS OF SEXUAL ORIENTATION

Despite the attention given to sexual orientation, the concept is poorly defined in the scientific literature and, yet, is a basic construct of sex research (Kauth, 2005). Researchers often omit conceptual or operational definitions of sexual orientation and cite support from studies that employ conflicting models of attraction (Byne & Parsons, 1993; Stein, 1999). Researchers' own implicit

assumptions about sexual orientation may serve to maintain conceptual contradictions and dismiss alternative perspectives (Kauth, 2002). Understanding the assumptions behind models of sexual orientation is critical for disentangling a complex literature (Kauth, 2005).

The concept of sexual orientation is related to sex and gender, the structure and nature of sexual orientation, and the role of biology and environment (Kauth, 2005). The foundation of conventional models of sexual orientation is sex and gender. *Sex* refers to biological and physiological characteristics that distinguish males from females (e.g., sex chromosomes, hormone levels, testes, ovaries). *Gender* refers to social characteristics and roles that typify men and women (e.g., masculinity or femininity, husband or wife, clothing, occupations). A writer's choice of terminology suggests specific relationships among sex, gender, and sexual orientation. For example, "same-*sex* orientation" stresses the physiological characteristics of actors and partners, but "same-*gender* orientation" stresses the social characteristics of participants. Some writers (Stein, 1999) employ the hyphenated term *sex-gender* to illustrate the contribution of both constructs and to avoid difficult distinctions, although this practice retains ambiguity.

Structurally, sexual orientation may be *binary*, *bipolar*, or *multidimensional* (Stein, 1999). A binary sexual orientation involving two mutually exclusive kinds of attraction—same-sex (homosexual) or other-sex (heterosexual)—is a common but false model among both laypeople and researchers. This model views bisexuality as situational (e.g., due to absence of the other sex) or circumstantial (e.g., adolescent experimentation), or as a form of homosexuality (e.g., married men who have sex with men). When a binary sex-gender overlays binary sexual desire, attraction to males becomes a *female* trait, and attraction to females becomes a *male* trait. Same-sex attraction is then a kind of sex-gender inversion, reminiscent of nineteenth-century ideas about homosexuality (Coleman, Gooren, & Ross, 1989). Homosexuality-as-gender-inversion is a popular notion that recurs frequently in the literature.

Bipolar sexual orientation involves a continuum of attractions between exclusive same-sex attraction at one end and exclusive other-sex attraction at the other. This model views attraction to males as inversely related to attraction to females, and some people are expected to experience attraction to both sexes. The Kinsey scale (Kinsey et al., 1948, 1953), a common method for assessing sexual attraction, represents a bipolar model. Surveys of sexual behavior often report a bimodal distribution that is skewed toward the other-sex-attraction pole (Bailey, Dunne, & Martin, 2000; Fay et al., 1989; Laumann et al., 1994). That is, most people report heterosexual behavior, some report same-sex behavior, and few report behavior with both sexes.

Multidimensional models of sexual orientation view same-sex and other-sex attraction as separate dimensions. Shively and DeCecco (1977) have depicted attraction to males and attraction to females as parallel dimensions, each spanning low to strong attraction. Storms (1981) has proposed that these

attractions are orthogonal dimensions, forming a grid. This model allows for strong attraction to both sexes, and no attraction to either sex. Klein, Sepekoff, and Wolf (1985) have proposed seven dimensions of sexual orientation, each assessed for three time periods, producing twenty-one scores. Coleman (1987) developed a nine-dimensional model in which current and ideal self-identities are scored, along with physical, gender, sex-role, and sexual orientation. Although these models are conceptually more sophisticated, they are also more complicated and rarely employed in research (Chung & Katayama, 1996).

The models of sexual orientation just discussed tie attraction to sex-gender. However, Ross (1987) has argued that social characteristics—age, physical build, race, personality traits, mentoring, and dominance—and pleasure play a greater role in partner choice than sex or gender. Anthropologists claim that social context and cultural gender roles largely determine partner choice (Blackwood, 1999; Herdt, 1997). Gagnon and Simon (1973) have purported that sexuality exists only in a social context and that *social scripts* determined which relationships are sexual. Diamond (2003) proposed that sexual desire and affectional bonding are functionally independent. Especially for women, affectional bonding may be less oriented toward one or the other sex. Rather, people can be characterized by their capacity to form affectional bonds, regardless of sex of partner.

The nature of sexual orientation refers to whether the concept is viewed as a *natural kind*—universal and invariant—or a *social construction* in which sexual identities and social roles are specific to a sociohistorical period (Stein, 1999). If a natural kind, then sexual attraction is presumed to be experienced today as it was in the past, and similar forms of attraction should be evident across cultures. If so, particular attractions represent kinds of people. Researchers who hold this view use *homosexual* and *heterosexual* as nouns, rather than adjectives, and believe that these sexual kinds of people are represented in non-Western cultures that hold very different ideas about sexuality. However, if sexual orientation is a social construction, then *gay* and *straight* represent specific ideas about personhood, politics, gender, psychology, and sexuality, whose meaning has evolved with changing social beliefs (Foucault, 1978/1990; Katz, 1995). Researchers who hold this view recognize that sexual identities are specific to a particular culture and time and do not describe a universal kind of person. Other writers have claimed that while sexual attractions are universal, their meaning is influenced by individual, social, and cultural factors (Baumeister, 2000; Kauth, 2000).

Finally, the concept of sexual orientation is influenced by presumed biological and environmental effects on attraction (Stein, 1999). Researchers who allege direct environmental effects on sexual orientation tend to view attraction as flexible, while investigators who propose direct biological effects view attraction as relatively stable but perhaps not fixed. The conventional hormonal theory that atypical exposure to fetal androgens results in same-sex attraction is often presented as a direct biological effect (Hershberger, 2001).

Scientists who acknowledge that sexual orientation is a product of indirect, interactive processes involving both biological and environmental factors tend to discuss sexual (orientation) *phenotypes*—the observable and varied features of an organism. Biological and environmental factors such as gender, health, nutrition, age, injury, social class, religion, education, culture, and social experiences all influence the expression of attraction.

Most theories of sexual orientation are simplistic, conceptually flawed, and specific to Western culture, although recent work is notable for greater theoretical sophistication.

THEORIES OF SEXUAL ORIENTATION

Most theories of sexual orientation have attempted to explain homosexuality, which investigators considered aberrant behavior. Heterosexuality was viewed as natural, and received little attention. Below is a brief survey of major theories of sexual orientation. For general surveys, see Katz (1995), Kauth (2000), McKnight (1997), and Rust (2000b).

Evolutionary Psychology

Evolutionary theories attempt to explain *ultimate* causation—*why* a trait developed among ancestral humans to promote reproductive success. Traits that over many generations advantaged reproductive success are called *adaptations* and were dispersed throughout the population (Buss, 1998). Evolutionists have long puzzled over the persistence of same-sex attraction, a trait that presumably leads to few offspring and less reproductive success. Traits can persist without reproductive benefit, as by-products of an adaptation (e.g., poetry) or random effects of a genetic variation, but these are conclusions of last resort.

Wilson (1978) suggested that same-sex-oriented individuals may benefit their siblings' reproductive success if they directed their energies and resources to raising their siblings' children (who share some of their genes). Trivers (1974) has also proposed that altruistic same-sex-oriented individuals advantage their parents by maximizing reproductive success for some offspring and minimizing competition for mates and scarce resources. Both theories rest on shaky assumptions that same-sex-oriented individuals are altruistic and parents can manipulate their children's sexuality. Little evidence supports either assumption (Bobrow & Bailey, 2001; Kirkpatrick, 2000).

Separately, Kauth (2000), Kirkpatrick (2000), and Muscarella (2000) have proposed that same-sex attraction developed as a survival strategy to manage conflict and competition within same-sex groups among ancestral hunters and gatherers. That is, same-sex eroticism facilitated long-term intimate alliances with equal- or higher-status peers and served to manage within-group hostilities and ensure mutual cooperation, loyalty, access to high-quality resources,

and social status. An alliance with a high-ranking male may have helped young males achieve social status and ultimately gain access to high-status females, and females may have preferred mates with loyal friends and high social status (Muscarella, 2000). For young females, an alliance with a high-ranking, older female may have been critical for gaining within-group acceptance, quality nutritional and material resources, and assistance during pregnancy and child rearing (Kauth, 2000). In many preagricultural societies, and perhaps in early human societies, very young females leave their natal group to live with their husband's female kin (Campbell, 1985). Sexual behavior may have strengthened same-sex alliances by reducing conflict and providing pleasure. Thus, reproductive success is hypothesized to have been enhanced by erotic relationships with both sexes. Several cultures have favored same-sex alliances (Kirkpatrick, 2000; Muscarella, 2000) and, in the ancient world, sexual relationships with both sexes were not uncommon (Cantarella, 1992; Greenberg, 1988).

Muscarella, Cevallos, Siler-Knogl, and Peterson (2005) found support for perceived advantages of contemporary same-sex erotic alliances. Despite stigma associated with homosexuality, university students viewed same-sex relationships as providing increased social and reproductive opportunities if the individual benefited by greater social status, economic advantages, or career opportunities.

Ultimate causation is contrasted with *proximate* causation or *how* a trait occurs. Proximate causal theories describe immediate events that produce a trait. The following are proximate causal theories.

Psychoanalytic Theory

Freud produced four different theories of male homosexuality and one weak theory of female homosexuality. The theory most repeated by Freud to explain male homosexuality involved a young boy who overvalued his penis and avoided castration anxiety and disgust that mother lacked a penis by choosing sexual partners who resembled himself (Freud, 1905/1953; Lewes, 1988). Later, he speculated that unconscious same-sex erotic identifications represented the most common form of homosexuality (Freud, 1918/1953). In this case, males struggle with their desire to be loved by a father figure (in the way that father loves mother) and yet maintain their (heterosexual) masculinity. Freud suggested that men who admired other men struggled with unconscious homosexual feelings. He explained female homosexuality as a girl's disappointment that her father would not give her a child, leading to her rejection of him and all other men (Freud, 1920/1953).

Although ambivalent about whether homosexuality was a mental illness, Freud saw it as a disruption of normal psychosexual development. Freud is one of the few theorists who proposed theories of heterosexual development. These are described in a later section in this chapter, "Sexual Identity Formation."

Later analytical theorists rejected Freud's view of pansexuality and asserted that heterosexuality was normal and natural (Bergler, 1947). Analysts attempted to explain and cure homosexuality. Based on clinical histories, they purported that men who love men failed to separate from their mothers in early childhood (Socarides, 1968), grew up in dysfunctional families, and had dominant and overprotective mothers and passive and distant fathers (Bieber, 1976). Even so, some analysts warned parents that homosexuality was spread by gay men who seduced children (Lewes, 1988). Women who love women were reported to have had rejecting or indifferent mothers and distant or absent fathers, although less than one-third of lesbians actually described such family dynamics (Wolff, 1971). Other studies have found that gay men and lesbians are no more likely than heterosexuals to come from dysfunctional families (Bell & Weinberg, 1978), and gay men are only slightly more likely than heterosexual men to report a poor father-son relationship (Saghir & Robins, 1973).

Psychoanalytic theories of homosexuality lost favor because analysts failed to substantiate their claims or provide reliable evidence of a cure for homosexuality. Counter findings and pressure from gay rights activists persuaded the American Psychiatric Association to drop homosexuality as a psychiatric disorder in 1973 (Bayer, 1987).

Conversion/Reparative Therapy

Psychoanalytic ideas resurfaced in sexual-orientation conversion therapies, frequently blended with Christian fundamentalism (Besen, 2003). Conversion therapies purport to change homosexual orientation to heterosexual. These therapies explain same-sex attraction as sin, inferiority and social inadequacy, confusion of gender roles, poor masculine identity, weak attachment to the same-sex parent, depression, fetal trauma, and/or poor heterosocial skills. Treatment involves a combination of self-labeling as heterosexual, prayer, Bible study, rejection of gay friends and the gay "lifestyle," suppression of same-sex feelings, sports, heterosexual activity, and, ultimately, marriage. Recipients of conversion therapies are often called "ex-gays." Nicolosi (1991), a leading proponent of conversion, coined the term *reparative therapy* to emphasize that the treatment corrects a problem that prevents full psychological maturity. Nicolosi leads the National Association for Research and Therapy of Homosexuality (NARTH), an organization of conversion therapists whose goals are to make homosexuality a mental illness again and promote a cure for it (Besen). Love in Action, Exodus, Homosexuals Anonymous, Evergreen International, Desert Stream, and Living Waters represent religious-based conversion organizations.

Nicolosi (1991) has claimed to cure one-third of his gay patients and improve heterosexual functioning in another one-third, but has refused to provide verifiable data for examination. However, Beckstead (2001) has described twenty individuals who claimed benefit from conversion therapies.

None had experienced substantial or general heterosexual arousal or decreased attraction to the same-sex, yet all identified as "exclusively heterosexual." Spitzer (2003) has reported a telephone survey of 200 individuals who benefited from conversion therapies, all referred by ex-gay ministries or conversion therapists. Participants were highly religious, and 78 percent had spoken publicly in favor of changing sexual orientation. Most respondents reported change to a predominant or exclusive heterosexual orientation, which Spitzer viewed as credible but probably rare. Critics have strongly challenged Spitzer's methodology, conclusions, and objectivity. The publication of Spitzer's article in the *Archives of Sexual Behavior* was accompanied by twenty-six commentaries from fellow researchers.

Learning and Conditioning Theories

Prominent in the 1960s and the early 1970s, learning theories presumed that people are largely blank slates and that all behavior is learned by being paired with reflexive responses (classical conditioning, e.g., Pavlov's dog salivating to a bell), by being rewarded (operant conditioning, e.g., working for a paycheck), or by punishment (e.g., avoiding a hot burner). Theorists speculated that same-sex attraction resulted from accidental or inadvertent conditioning, such as stimulation of an infant's genitals by the same-sex caregiver, punishment following genital stimulation by the other-sex parent, negative social messages about heterosexual relations, attention from a same-sex person, lack of an other-sex partner when aroused, or inadequate heterosocial skills (Barlow & Agras, 1973; Money, 1988). Indeed, one study found that individuals who learned to masturbate by being manually stimulated by someone of the same sex and who experienced their first orgasm during same-sex contact were more likely to identify as gay as an adult (Van Wyck & Geist, 1984), although sexual attraction may well have preceded behavior. Contrary to prediction, gay men and lesbians often have a great deal of heterosexual experience (Bell, Weinberg, & Hammersmith, 1981), and bisexuals, unaccounted for by learning theorists, presumably have no deficiency in heterosocial skills or lack of arousal to the other sex (Weinberg, Williams, & Pryor, 1994).

To demonstrate that same-sex attraction is learned, researchers have attempted to condition sexual responses to unusual stimuli such as geometric shapes or women's boots, with only limited success (Alford, Plaud, & McNair, 1995). It seems improbable that accidental and infrequent conditioning of same-sex stimuli could produce permanent same-sex attraction in individuals living in a heterosexist society that stigmatizes homosexuality. However, the absence of supportive evidence did not prevent behavior therapists from employing aversive treatments (e.g., electric shock, emetics) to reduce same-sex attraction, but with no greater success. Contemporary conversion therapists continue to employ aversive behavioral therapies (Besen, 2003).

Personality Theories

In a classic study, Green (1987) followed a group of extremely feminine boys who had been referred for treatment and an age-matched group of masculine boys for fifteen years. As young adults, thirty-two (73 percent) formerly feminine boys identified as gay or bisexual, while only one (4 percent) masculine boy was bisexual. Green attributed same-sex attraction among some boys to parenting that permitted feminine behavior and failed to encourage traditional masculine behavior, but cautioned against concluding that childhood femininity leads to male homosexuality. However, in a set of identical twins in the study, the 23-year-old feminine twin was married but acknowledged a strong attraction to males and identified as gay. His masculine twin had a male lover and a pregnant girlfriend and reported a strong attraction to females. Another study of identical male triplets where one brother was gay (HM) and two were heterosexual (HT1 and HT2) further weakens the relationship between male femininity and adult sexual orientation (Hershberger & Segal, 2004). While both HT1 and HM scored similarly on measures of femininity, HT1 endorsed the "desirability" of having male sexual partners, although he had never had sex with men and was currently married.

Nevertheless, Byne and Parsons (1993) have hypothesized that cross-gender traits promote same-sex attraction, citing the prevalence of childhood gender nonconformity among gay men and lesbians. They described male-typical traits as novelty seeking, low harm-avoiding, and reward independent and female-typical traits as low novelty-seeking, harm avoiding, and reward dependent. Presumably, boys who lack one or more male traits feel different from their male peers and are more open to female-typical experiences. Byne and Parsons did not explain how feeling different and spending time with girls leads to male homosexuality.

Bem (1996) has hypothesized that children with cross-gender traits socialize with other-sex children because they fear and feel anxious around same-sex peers. During puberty, this fear and anxiety gets interpreted as sexual arousal, a process Bem called *exotic-to-erotic*. Although the idea of eroticized differences is consistent with heterosexual development, the theory has strange implications for nonheterosexuals. For example, feminine (pregay) boys should be sexualized to masculine (heterosexual) boys, not men and not other gay males. The theory does not account for masculine gay men or feminine heterosexual men. Bem appears to confuse sexual orientation with complementary gender roles and has dismissed bisexuality as irrelevant, when in actuality his model is likely to produce *pan*sexuals (Kauth, 2000). If children eroticized traits or classes of people who differ from their peer group, then sexual attraction may not be limited to one sex, and sex of partner may not be the sole characteristic that influences attraction.

Biomedical Theories

Biomedical theorists generally presume that sexual orientation is a product of genes, exposure to hormones, or some other internal event. Theorists rarely discuss other-sex attraction and often imply a gender inversion model of homosexuality. Typical development is assumed to produce heterosexual, masculine males who play a sexually active role (i.e., the inserter) and heterosexual, feminine females who are sexually receptive. Being natural, heterosexual orientation is given no further explanation. Gay men and lesbians are thought to experience atypical development and possess cross-gender traits. Bisexuals are virtually ignored by biomedical theorists.

Genetic Studies

Linking genes to homosexuality suggests a biological effect. Indeed, Hamer, Hu, Magnuson, Hu, and Pattatucci (1993) found an 82 percent correlation among five consecutive markers on the X chromosome (Xp28) for forty pairs of gay brothers. In addition, the men's maternal uncles were more likely to be gay than were their paternal uncles (7.3 percent versus. 1.7 percent). A follow-up study found a 67 percent correlation among the five markers for thirty-three pairs of gay brothers (Hu et al., 1995). Hamer concluded that at least one form of male-male attraction is transmitted maternally. Lesbian sisters, however, did not share these markers with their gay brothers, suggesting a different mechanism for female homosexuality. Other investigators have reported less convincing data (Rice, Anderson, Risch, & Ebers, 1999), but failed to replicate Hamer's methods.

Traits highly correlated among twins who share identical genetic material also support a biological basis for sexual orientation. Bailey and Pillard (1991) found a 52 percent correlation for homosexuality among fifty-six gay men with an identical twin. Only 22 percent of fifty-four gay men with a nonidentical twin were gay, and 11 percent of adopted brothers were gay. A second study found a 48 percent correlation for homosexuality among seventy-one lesbians with an identical twin compared to 16 percent of thirty-seven lesbians with a nonidentical lesbian twin (Bailey, Pillard, Neale, & Agyei, 1993). Only 14 percent of adopted sisters identified as lesbian. Other researchers have reported a 65 percent correlation for homosexuality among identical male twins and a 30 percent correlation among nonidentical male twins (Whitam, Diamond, & Martin, 1993). This study also included three sets of triplets. In one set, the identical twin brothers were gay, but their nonidentical sister was heterosexual. In the second set, the identical twin sisters were lesbian and their nonidentical sister was not. And, in the third set, all three identical brothers were gay. However, a large sample of Australian twins found only a 20 percent correlation for homosexuality among identical twin males and 24 percent

among identical twin females (Bailey et al., 2000). The investigators concluded that subject recruitment procedures inadvertently inflated earlier correlations.

These studies suggest two important points: (a) male homosexuality is more strongly biological (heritable) than female homosexuality, and (b) heritable biological factors alone fail to account for same-sex attraction. Genes only influence neurochemical processes such as hormone production. These processes in turn are influenced by prenatal and postnatal environments. Even identical twins do not share identical prenatal environments.

Hormonal and Neuroanatomic Studies

Most hormonal studies are premised on the notion that same-sex attraction results from atypical prenatal androgen exposure or production. However, extensive literature reviews have found few physiological or postnatal hormonal differences between heterosexuals and gay men and lesbians (Byne & Parsons, 1993; Meyer-Bahlburg, 1984). There is also little evidence that hormonal abnormalities influence same-sex attraction. Women with genetic recessive condition that masculinizes development—congenital virilizing adrenal hyperplasia—have reported increased same-sex attraction (Dittman, Kappes, & Kappes, 1992; Money, Schwartz, & Lewis, 1984), but investigators did not evaluate how knowledge about the condition or its physiological effects (e.g., an enlarged clitoris, shallow vagina, tomboyishness, masculine appearance) may have influenced sexuality. Genetic males with androgen insensitivity are partially or completely unresponsive to androgen, and usually develop a female gender identity and attraction to males and marry men as adults (Collaer & Hines, 1995). However, ultralow prenatal androgen without androgen insensitivity does not appear to increase same-sex attraction (Sandberg et al., 1995). Other genetic conditions that impair androgen synthesis and lower androgen exposure—5-alpha reductase deficiency and 17-beta hydroxysteriod dehydrogenase deficiency—also fail to influence same-sex attraction (Collaer & Hines, 1995), although notable exceptions have been reported (Johnson et al., 1986).

Because direct measurement of prenatal hormones is difficult, most researchers have relied on indicators of fetal hormone exposure to gauge the effects on sexual orientation. These indicators include digit length, fingerprint asymmetries, handedness, birth order, auditory responses, and neuroanatomic structures and functioning. Prenatal androgen exposure in the male fetus typically produces a low second-to-fourth-digit ratio (2D:4D) while low androgen and high estrogen exposure in the female fetus typically produces a high 2D:4D ratio. That is, the second and fourth digits are often similar in length for males but differ in length for females. This effect may be fixed by week fourteen of gestation. Robinson and Manning (2000) have found that

gay men had a lower 2D:4D ratio than age-matched heterosexual men, and bisexual men had a lower ratio than gay men. However, Williams et al. (2000) have found a lower ratio only for gay men with older brothers, although Robinson and Manning had reported no birth order effect. Williams et al. (2000) also found a lower 2D:4D ratio among lesbians compared with heterosexual women. Contrary to the conventional androgen theory, these studies suggest that same-sex attraction is associated with high prenatal androgen levels, particularly among males with older brothers. Attraction to both sexes may be associated with very high fetal androgen exposure.

Leftward asymmetry in fingerprint pattern is a female-typical effect that is present as early as seven weeks postconception, and gay men are more likely than heterosexual men to evidence this leftward asymmetry (Hall, 2000). Finger-ridge counts on the left and right hands also differ by sex and sexual orientation. However, among a set of identical male triplets, the predicted pattern held for one heterosexual (HT1) and one gay brother (HM), but the most masculine heterosexual triplet (HT2) had a ridge count similar to his gay brother (Hershberger & Segal, 2004).

Handedness may be determined before birth and shows sex differences. Most adults (89 percent) are right-handed, and men are more likely to be left-handed than women (Gilbert & Wysocki, 1992). Left-handedness is associated with a number of developmental problems that are more typical in males and, thus, linked to androgen exposure. Left-handedness has sometimes been associated with male homosexuality (Lindesay, 1987). A meta-analysis of twenty studies found a higher frequency of non–right-handedness among gay men and lesbians compared to heterosexuals (Lalumière, Blanchard, & Zucker, 2000). However, these studies obscure the point that most gay men and lesbians are right-handed and most left-handers are heterosexual. Among one set of identical male triplets, the heterosexual brothers differed on handedness, and the gay brother was right-handed (Hershberger & Segal, 2004).

A small but consistent birth-order effect has been found among gay men (Blanchard, Zucker, Siegelman, Dickey, & Klassen, 1998). That is, gay men have more older brothers than heterosexual men. Lesbians, however, do not differ from heterosexual women in number of any category of siblings. Blanchard and Klassen (1997) have hypothesized that this birth-order effect among gay men might be explained by a maternal immune response to male-specific fetal hormones, inhibiting heterosexual orientation. The idea that maternal stress blocks male fetal hormones comes from studies of laboratory rats (Dörner, 1979). Male rats exposed to maternal stress hormones more frequently present themselves to males and show little interest in females. Dörner et al. (1980) speculated that pregnant human mothers living during periods of extreme social stress (e.g., the war years in Germany) would have more gay male children and, indeed, they found such an effect although greater social acceptance of homosexuality over time may explain this finding. When mothers of adult gay and heterosexual men were questioned about

stressors during pregnancy, they reported similar levels of stress across stages of pregnancy (Bailey, Willerman, & Parks, 1991). Mothers of lesbians reported greater stress during the first and second trimesters, although the theory did not predict female homosexuality. However, other researchers have found that mothers of gay men reported higher levels of stress during the first and second months of pregnancy than mothers of heterosexual men, consistent with the maternal stress theory (Ellis & Cole-Harding, 2001). No differences were found between mothers of lesbian and heterosexual women.

The auditory system differs by sex. Males have an advantage in auditory discrimination tasks, and females hear high frequencies better than males (McFadden & Pasanen, 1998). The inner ear also typically emits sounds—otoacoustic emissions (OAEs)—that differ by sex and are, thus, related to prenatal androgen exposure. Yet, contrary to the conventional androgen theory, McFadden and Pasanen (1998, 1999) found no differences in OAEs among gay, bisexual, and heterosexual men. They hypothesized that variation in timing and concentration of androgen at different brain sites accounts for variation in sexual orientation among men. McFadden and Pasanen (1998, 1999) also found that lesbian and bisexual women demonstrated OAEs that were more male-typical. This is the strongest evidence to date that links female-female attraction to prenatal androgen exposure.

Sex differences in neuroanatomic size and functioning are well documented. Some structural differences in a number of sites have been linked to male homosexuality, but the relevance of these findings is unclear. In most cases, these sites are not known to influence sexual attraction. However, the anterior hypothalamus in humans is thought to be functionally similar to the preoptic area in male rats, which regulates sexual behavior, specifically, mounting behavior. LeVay (1991) found that for presumed gay men and heterosexual women a section of the anterior hypothalamus (third interstitial nuclei) was similar in size but was two to three times larger for heterosexual men. Of course, human sexual behavior is more complex than mounting behavior in rats, and what role the anterior hypothalamus plays in sexual orientation is uncertain.

As for cognitive differences, generally gay men have performed less well on mental rotations (spatial ability) but better on verbal fluency tasks than heterosexual men (Gladue, Beatty, Larson, & Staton, 1990; McCormick & Witelson, 1991). Most functional differences have been attributed to non–right-handed gay men, although right-handed and non–right-handed heterosexual men are more variable than gay men on fluency tasks (McCormick & Witelson, 1991). Gay men and heterosexual women have performed similarly on tests of spatial abilities, which differed significantly from heterosexual men (Rahman & Wilson, 2003; Rahman, Wilson, & Abrahams, 2003). By contrast, lesbians have performed similarly to heterosexual women on many cognitive tasks (Gladue et al., 1990) or better than heterosexual women on visuomotor targeting, and similarly to heterosexual men (Hall & Kimura, 1995). Among a set of identical male triplets discordant for sexual orientation,

cognitive functioning was in the predicted direction (Hershberger & Segal, 2004). One important caveat: cognitive studies often describe gay men as making female-typical responses, although gay men's responses are usually intermediate to heterosexual men and women, and not female-typical responses. Such language implies a gender inversion assumption. In sum, the general pattern of cognitive functioning for gay men is consistent with the androgen underexposure theory, but the pattern for lesbians is similar to that for heterosexual women and counter to the androgen theory. The largest differences in functioning between homosexuals and heterosexuals may be due to non–right-handed gay men and butch lesbians.

Synthesis and Conclusions

Overall, the conventional fetal androgen theory poorly explains sexual orientation development. While the theory is consistent with several features of exclusive same-sex attraction in males, it better accounts for non–right-handed, later-born gay men. Bisexual men remain unexplained. The theory also fails to account for female homosexuality, perhaps because female and male sexual orientations have different causes (Baumeister, 2000).

One interactionist theory of sexual orientation presents sexual attraction as an information processing system involving a coordinated network of brain structures (e.g., amygdala, hippocampus, prefrontal cortex, and association cortex) variably sensitized by fetal hormones (Kauth, 2000). Fetal hormone exposure is projected to be a product of timing and duration of exposure to a ratio of sex hormones that results in a complex pattern of effect across brain sites. Thus, masculinization and feminization are expected to vary by brain structure and by degree of effect (Woodson & Gorski, 2000). Byne and Parsons (1993) and Diamond (2003) have hypothesized that genes and fetal hormones influence neural growth and sensitivity, brain structures, cognitive and behavioral traits, and postnatal social experiences in ways that bias toward particular sexual attractions. Kauth (2000) has proposed that site-specific exposure to fetal hormones biases information processing toward attaching emotional significance to particular sex-related stimuli, establishing a range of reactivity to sex stimuli, not a sexual orientation. As children become self-aware, personality traits, social experiences, cultural conditions, and health also influence information processing and the erotic significance of sex-related stimuli—for example, breasts, genitals, body shape, body hair, eye contact, clothes, gestures, and movement. First awareness of sexual attraction may occur around age 10, although this may vary with a number of factors (Herdt & McClintock, 2000). By early adolescence, pubertal hormones may give erotic associations—or lovemaps (Money, 1988)—greater (sexual) significance (Kauth, 2000). Personality, social experiences, cultural beliefs, and sexual behaviors further shape and reinforce sexual attributions. An interactionist model like this one is consistent with human development but difficult to

investigate because of its complexity. A major appeal of the linear androgen theory is its simplicity.

Technological advances and methodological sophistication of biomedical research will propel new studies on sexual orientation. Biomedical researchers studying sexuality have traditionally emphasized differences between heterosexuals and gay men and lesbians, although sex differences are far larger. Researchers need to explain how normal variation in fetal hormone exposure among males and females does not affect sexual orientation, since within-sex variation among males is considerable. Indeed, gay men and heterosexual men are more similar than different. In addition, researchers need to explain the development of bisexuality, which has far greater implications for human sexuality than understanding homosexuality.

SEXUAL IDENTITY FORMATION

Heterosexual Identity

Freud (1905/1953) proposed one of the few theories of heterosexual development. He supposed that all children are born capable of erotic attraction to anyone or anything. According to Freud, from an early age, male children know that they have a penis and believe that everyone else does too. Upon learning that females do not have a penis, boys fear that theirs will be taken from them. Gradually, young boys identify with their penis-bearing father and view him as a rival for their mother's affection, a psychic conflict that Freud called the *Oedipal complex*. The fear that father (or other males) will cut off a boy's penis prohibits him from forming erotic attachments to males. Young girls allegedly go through a parallel process. Girls, upon realizing that they do not have a penis but boys do, become jealous. They identify with their mother but blame her for their lack of a penis. The young girl believes that she and her mother are competing for her father's affection, a psychic conflict called the *Electra complex*. In directing their erotic attachments to the other-sex and engaging in heterosexual activity, boys and girls reach Freud's final stage of psychosexual development.

A study of fourteen heterosexual men and twelve women who wrote about their own identity development provides some support for Freud's ideas about male psychosexual development (Eliason, 1995). Most men described arriving at their heterosexual identity by first rejecting a gay identity. However, women often considered a lesbian or bisexual identity before choosing a heterosexual one.

Bisexual Identity

Female bisexuals have reported experiencing other-sex attraction and behavior before same-sex feelings, while male bisexuals have reported experiencing

same-sex eroticism before or at the same time as other-sex behavior (Fox, 1995). Despite these differences in timing of attractions, Weinberg et al. (1994) have proposed four stages of collective bisexual identity formation: (a) *initial confusion*—erotic feelings for both sexes are recognized, producing confusion and discomfort; (b) *applying a label*—acknowledgment that sex with both men and women is pleasurable; (c) *settling into an identity*—greater self-acceptance is often associated with meaningful relationships; and (d) *continued uncertainty*—confusion regarding identity stems from exclusive relationships and difficulty managing multiple partners. Although most participants in this study thought that bisexuality was not a phase for them, 40 percent acknowledged that their identity might change in the future (Weinberg et al., 1994). Rust (2000) has noted that bisexuals experience multiple shifts in identity depending on their current partner and argued that a stable identity is not the endpoint for bisexuals. Ault (1996) has noted that some bisexual women adopt "fractured" identities—e.g., lesbian-identified bisexual—in an attempt to maintain identification with lesbian communities and politics. For bisexuals in this culture, sexual identity appears to be a fluid characteristic.

Gay/Lesbian Identity

Cass (1979) proposed an early model of gay/lesbian development, involving six stages: (1) *identity confusion*—uncertainty generated by awareness of same-sex feelings; (2) *identity comparison*—awareness of being different produces a great deal of internal conflict; (3) *identity tolerance*—self-acceptance of same-sex desires and sense of belonging to a stigmatized minority; (4) *identity acceptance*—openly disclosing one's same-sex feelings and identity; (5) *identity pride*—newly out gay men and lesbians relish their supportive gay family of friends and reject the heterosexual community as intolerant and hostile; and (6) *identity synthesis*—public and private identities meld into a single self-concept. Collective stage models like this one have been criticized for their simplistic view of development; for ignoring gender, ethnic, class, and geographical differences; and for stressing identification with the gay community (Reynolds & Hanjorgiris, 2000).

Recent models have emphasized that sexual identity development is a diverse and continuous life process. McCarn and Fassinger (1996) have proposed separate but parallel processes for individual and group identity for lesbians, with each process having four phases: *awareness, exploration, deepening/commitment,* and *internalization/synthesis*. Fassinger and Miller (1996) have proposed similar parallel processes for gay men. Both evidence-based models de-emphasize public disclosure and attempt to account for the many influences on identity development.

Gays, lesbians, and bisexuals manage multiple identities, depending on their openness about their sexuality. However, the problem is especially complex for people of color who must balance a sexual minority identity with

a racial or ethnic identity that may be more central to their sense of self (Fukuyama & Ferguson, 2000).

CURRENT SOCIAL ISSUES

The U.S. Supreme Court's recent decision to reject sodomy laws and the Massachusetts Supreme Court decision to legalize gay marriage have made homosexuality a frequent topic of public conversation. Gays in the military also remains topical.

Sodomy Laws

In 2003, the U.S. Supreme Court (*Lawrence and Garner v. Texas*, 2003) struck down a Texas state law banning private consensual sex between adults of the same sex. The case stemmed from the 1998 arrest of two Houston men after police entered their home on a false report of a man with gun, filed by a disgruntled former lover. Delivering the majority opinion, Justice Anthony Kennedy stated:

> It suffices for us to acknowledge that adults may choose to enter upon this relationship in the confines of their homes and their own private lives and still retain their dignity as free persons. When sexuality finds overt expression in intimate conduct with another person, the conduct can be but one element in a personal bond that is more enduring. The liberty protected by the Constitution allows homosexual persons the right to make this choice. (p. 6)

The Court also reversed its 1986 *Bowers v. Hardwick* decision that upheld state criminalization of private homosexual conduct. In his dissenting opinion, Justice Antonin Scalia accused the Court of granting a "fundamental right" to homosexual sodomy and buying into the "homosexual agenda" (*Lawrence and Garner v. Texas*, 2003).

In 2003, fourteen states had sodomy laws. Four states—Texas, Kansas, Oklahoma, and Missouri—prohibited oral and anal sex between members of the same sex only; the other ten states—Alabama, Florida, Idaho, Louisiana, Michigan, Mississippi, North Carolina, South Carolina, Utah, and Virginia—and the territory of Puerto Rico banned sodomy for everyone (Summersgill, 2005). Although rarely enforced, sodomy laws created a permanent criminal class of citizens and were routinely cited by courts and legislatures to deny parental rights to gay people. One infamous example is the 1995 Virginia case, *Bottoms v. Bottoms*, in which Sharon Bottoms lost custody of her son to her mother who invoked state sodomy laws to demonstrate Sharon's criminal status and unfitness to raise her child. The child's father had no objections to

Sharon having custody. Sodomy laws have also been used to prohibit gays and lesbians from becoming foster parents or adopting, to deny individuals employment, and to harass student organizations (Summersgill). Justice Kennedy acknowledged the overreaching impact of sodomy laws: "When homosexual conduct is made criminal by the law of the State, that declaration in and of itself is an invitation to subject homosexual persons to discrimination both in the public and private spheres" (*Lawrence and Garner v. Texas*, 2003, p. 18). Justice Scalia, however, lamented the loss of criminal status for gay men and lesbians: "Many Americans do not want persons who openly engage in homosexual conduct as partners in their businesses, as scoutmasters for their children, as teachers in their children's schools, or as boarders in their home" (p. 18).

About eighty-five countries currently criminalize same-sex sodomy (International Gay and Lesbian Human Rights Commission [IGLHRC], 2003). Penalties vary widely, from two to twenty-five years in prison (Mali and Saint Lucia), a life sentence (e.g., India, Singapore, Uganda), or death (e.g., Iran, Pakistan, Saudi Arabia). Same-sex relations still occur in these countries, but are hidden. Sodomy is legal in another 125 countries, including Albania, Argentina, Austria, Cambodia, Canada, Central African Republic, Colombia, Denmark, Eritrea, France, Germany, Israel, Italy, Japan, Jordan, Mexico, New Zealand, Netherlands, Poland, Rwanda, Spain, Sweden, and the United Kingdom (Summersgill, 2005). In addition, a number of countries (e.g., Ecuador, Finland, Israel, South Africa) and ten U.S. states also have policies prohibiting discrimination in the workplace based on sexual orientation (IGLHRC, 1999).

Gay Marriage

The current controversy over gay marriage in the United States began in 1993 when the Hawaii Supreme Court ruled that the state's disallowance of same-sex marriage amounted to gender discrimination ("Trial challenging," 1996). Three gay couples promptly sued for the right to marry. As the court case opened, members of Congress passed the Defense of Marriage Act, allowing states the right to deny recognition of gay marriages licensed in other states, which President Clinton signed into law in 1996 ("Anti gay marriage act," 1996). Critics argued that the law violated the constitutional requirement that states recognize legal contracts in other states. Meanwhile, the Hawaii Legislature amended the state constitution to define marriage as only between a man and a woman.

Three years later, the Vermont Supreme Court ruled that the state constitution allowed gays and lesbians the benefits of marriage ("Vermont's top court," 1999). After contentious debate, the state enacted same-sex civil unions that carried all the benefits of marriage. Then, in 2003, the Massachusetts

Supreme Court ruled that the state had no constitutionally valid reason to deny gays and lesbians the right to marry (Arce, 2004). The Court later clarified that only full marriage rights, not civil unions, would conform to the state constitution.

The Massachusetts Court decision came on the heels of the U.S. Supreme Court ruling on sodomy laws. In his dissent, Justice Scalia had noted, "This reasoning leaves on pretty shaky grounds state laws limiting marriage to opposite-sex couples" (*Lawrence and Garner v. Texas*, p. 17). Events in Canada also fueled the issue. In 2001, a favorable court ruling in Ontario allowed the first gay male couple to marry in a church (Struck, 2004). Soon, six Canadian provinces had begun issuing marriage licenses to gay couples. The Ontario premier Dalton McGuinty proclaimed: "The fact that a gay couple might happen to marry does not threaten me or my marriage or my children's future in any way, shape or form" (Cotter, 2004). In 2003, Canadian prime minister Paul Martin, with approval from the Supreme Court, asked the government to draft a federal law to standardize gay marriage rights.

In the United States, however, President Bush called for a constitutional amendment defining marriage as a union between a man and woman, making gay marriage a presidential campaign issue ("Our government," 2004). Bush accused "activist judges" of making "arbitrary" court decisions and redefining marriage. He openly worried that the Defense of Marriage Act would not "protect" traditional marriage, meaning that states and cities might have to recognize gay marriages.

Despite attempts by the state governor and legislature to halt the process, in May 2004, Massachusetts became the first state to allow same-sex couples to marry ("Same-sex couples," 2004). By November, Congress had failed to pass a federal constitutional amendment, but eleven states approved constitutional amendments to ban same-sex marriage, with eight states also prohibiting same-sex civil unions ("Voters in 11 states," 2004). These eleven states included Arkansas, Georgia, Kentucky, Michigan, Mississippi, Montana, North Dakota, Oklahoma, Ohio, Oregon, and Utah. Missouri and Louisiana had already passed gay-marriage ban amendments. Another fifteen states are prepared to introduce same-sex marriage bans over the next two years. In early 2005, a district court upheld the Defense of Marriage Act, dismissing a lawsuit by two women seeking to have their Massachusetts marriage recognized in Florida (Chachere, 2005). No doubt the U.S. Supreme Court will ultimately decide the legality of gay marriage.

In countries like the Netherlands, where same-sex marriage has been legal for years, the issue is rarely a topic of discussion ("Global view," 2004). Currently, Denmark, the Netherlands, and Belgium grant same-sex couples full civil marriage, while Brazil, Croatia, Finland, France, Germany, Hungary, Iceland, Israel, New Zealand, Norway, Portugal, and Sweden recognize same-sex "domestic partnerships" or civil unions with limited rights ("Global view,"

2004; IGLHRC, 2003b). A number of provinces and cities around the world also recognize civil unions.

Relationships

The 2000 Census has reported 54.5 million married couples and another 4.9 million unmarried heterosexual couples living in the United States (Simmons & O'Connell, 2003). Almost 600,000 unmarried couples were of the same sex. Most same-sex couples (51 percent) were male. One study has estimated that 40–60 percent of gay men and 45–80 percent of lesbians are currently in relationships (Kurdek, 1995). On average, married men were 2.4 years older (49) than their wives, and unmarried men (36.8) were 2.1 years older than their partners (Simmons & O'Connell, 2003). Same-sex couples were in their early forties on average. Male partners differed in age by an average of two years, while female partners differed by only one year.

Nearly nine in ten people marry sometime in their lives, but about half of first marriages end in divorce (U.S. Census Bureau, 2002). The median length of first marriages was eight years. In 2000, 120.2 million Americans were married, and 41 million were widowed, separated, or divorced (Kreider & Simmons, 2003). Just over one-quarter of the population had never married.

Nationally, almost half (46 percent) of married couples and 43 percent of unmarried heterosexual couples had at least one child under age 18 living in the household. One-third of female couples and almost one-quarter of male couples also had children living with them. Perhaps 2–8 million gay men and lesbians are parents of between 4 million and 14 million children (Patterson, 1995). Most same-sex couples bring children from heterosexual relationships. Some couples adopt or foster children where laws permit, and a number of lesbians conceive via artificial insemination.

Gays in the Military

The 1993 "Don't Ask, Don't Tell, Don't Pursue, Don't Harass" policy prohibited openly gay and lesbian personnel from serving in the U.S. military. Gay and lesbian personnel cannot identify as gay or engage in same-sex sexual acts and, since the policy was enacted, about 10,000 service personnel have been discharged for being gay (Servicemembers Legal Defense Network [SLDN], 2004). Even so, an estimated 65,000 gay men and lesbians currently serve in the armed forces, including active duty, National Guard, and reservists (Gates, 2004). While lesbians may comprise about 5 percent of all female military personnel, gay men may account for only 2 percent of personnel. The prohibition of openly gay men and lesbians in the military rests in part on the criminalization of sodomy. Given the Supreme Court's rejection of state sodomy laws, the military's policy on sodomy is likely to be revisited.

The oft-forgotten "Don't Harass" part of the policy was intended to reduce antigay harassment and violence toward gay service members, but has instead institutionalized negative social beliefs about gay men and lesbians (SLDN, 2004). Harassment and witch hunts soared in the first years of the policy. Some personnel have experienced daily antigay remarks from subordinates and superiors. Some were charged for being gay just prior to their retirement, jeopardizing their pension and benefits. The failure of "Don't Ask, Don't Tell" to stop antigay harassment became public in 1999 when Private First Class Barry Winchell was beaten to death with a baseball bat in his sleep by a fellow soldier who believed Winchell was gay. Winchell had endured four months of daily antigay taunts from the two killers prior to his death. Some of Winchell's commanding officers even participated in the harassment.

"Don't Ask, Don't Tell" was enacted over concerns about morale, unit cohesion, recruitment, and heterosexual discomfort serving with gay and lesbian personnel, although support for these claims is anecdotal (Kauth & Landis, 1996). Several countries, including key allies in the current war on terrorism, allow openly gay men and lesbian personnel to serve in the military, including Australia, the Bahamas, Belgium, Canada, Czech Republic, Denmark, Estonia, Finland, France, Germany, Ireland, Israel, Italy, Netherlands, New Zealand, Norway, Portugal, Slovenia, South Africa, Spain, Sweden, Switzerland, and the United Kingdom (International Lesbian and Gay Association [ILGA], 2000). Until recently, the United Kingdom's military policy was similar to that of the United States. The British policy was rescinded in 2000 after the European Court of Human Rights ruled that the ban was unlawful.

SUMMARY

Sexual orientation is largely unexplored territory, and its origins have yet to be discovered. The study of male homosexuality has dominated research on sexual orientation in an attempt to explain less common, socially stigmatized sexual behaviors. However, many cultures have noted considerable diversity in sexual attractions. Understanding attraction to both sexes may be the key to explaining human sexuality.

Conventional theories of sexual orientation have found little support. Interactionist theories are relatively new and have yet to be tested. Some theorists suggest that same-sex attraction developed to facilitate intra-sex relationships and reduce conflict. If so, many people would be capable of attraction to both sexes.

While many other countries have enacted antidiscrimination laws and granted same-sex couples the benefits of marriage, it seems likely that in the current political climate, homosexuality will continue to be a pressing issue in the United States.

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8

Gender, Gender Identity, and Sexuality

M. Michele Burnette

Do men have stronger sex drives than women? Are women more emotionally expressive than men? These are common assumptions in today's world that often guide our thoughts and behaviors toward others. The assumption that women and men are characteristically very different is a highly popularized notion and a major topic of discussion in the media (e.g., talk shows, magazines) and popular self-help books. However, scientific research on men and women suggests that they are far more similar than different. Thus, while categorizing and generalizing about what males and females are like may simplify our lives (and provide interesting and lucrative fodder for book writers and the media), these assumptions do not often hold true.

Before moving forward in this discussion, it is important to understand a few general concepts that will be discussed throughout this chapter. *Sex* refers to the biological differences in the sex chromosomes and sex organs of males and females. *Gender* refers to the psychosocial condition of being feminine or masculine, or those traits, interests, and behaviors assumed to be appropriate for a given sex. For example, the sex of a person born with an XY chromosomal makeup, with a penis and testicles, is assumed to be male, but his behavior, personality, and general lifestyle will determine whether or not his gender is masculine or feminine. *Gender roles* are those social behaviors, lifestyles, and personality characteristics that women and men are expected to exhibit. People who adhere closely to these roles are *gender-typed*. A gender-typed female, for example, might dress in feminine clothing, become

emotional easily, not show interest in or participate in sports, and dedicate her life to rearing children rather than having a career outside the home. A gender-typed male might work in road construction, watch or participate in sports, and show very little emotion in the face of an upsetting event. But when we assume that all members of a sex possess characteristics and behave in ways that are consistent with gender role expectations, we are *gender stereotyping*—we expect females to be feminine and males to be masculine. Though many men and women do exhibit several characteristics and behaviors in common with other members of their identified sex, this is not universally true. Consider the stay-at-home dad or the woman fighter pilot. When we stereotype, we might fall prey to *gender bias*, that is, we treat men and women differently based on assumptions about members of their sex. Gender bias often leads to unfair treatment. For example, we often rob men of the opportunity to play a primary role in rearing their children because we assume women are by nature more nurturing than men. Or we restrict women from jobs assumed to be suitable only for men. The truth is, many people are *androgynous*, meaning that they exhibit a balance of masculine and feminine characteristics. One final concept is *gender identity* or one's personal view of oneself as male or female, which also may be inconsistent with the individual's biological sex. In general, the dichotomy of maleness and femaleness is an arbitrary notion that can be challenged on both social and biological levels.

PRENATAL SEX DIFFERENTIATION

Prenatal sex differentiation is dependent on two biological factors—chromosomal makeup and hormones. The egg produced by the female always carries an X chromosome; sperm contribute either an X or a Y chromosome. When the sperm and egg unite to form a prenatal organism, if the chromosomal configuration is XX, the fetus is considered female. If the configuration is XY, the fetus is considered male. Ordinarily, the prenatal organism will begin to develop ovaries in the presence of XX, or testes in the presence of XY. However, this process can be interrupted—if the testes do not secrete testosterone between the sixth and twelfth weeks of prenatal development, the organism will automatically develop female sex characteristics—ovaries, uterus, fallopian tubes, and vagina as well as clitoris, labia, and vaginal opening—even with an XY makeup (Money, 1980). As in this example, the expected chromosomal and hormonal processes of sex differentiation occasionally do not occur, and sexual ambiguities result.

The most common chromosomal abnormalities are Klinefelter's syndrome, Turner's syndrome, and intersexuality (also called hermaphroditism). Klinefelter's syndrome occurs when a male has an extra X chromosome (XXY). The result is incomplete masculinization, such as underdeveloped penis and testes, low testosterone levels, and incomplete pubertal maturation, as well as some female physical characteristics, such as partial breast development.

These individuals are infertile and many are mentally handicapped. Turner's syndrome results from a female having only one X chromosome (XO). Individuals with this condition appear female but have no ovaries (or underdeveloped ovaries) and, therefore, do not produce egg cells or sex hormones. In the absence of sex hormones, these women do not develop at puberty without hormone replacement therapy. They also tend to be short and have various physical defects. Unlike these two conditions, the cause of intersexuality is unknown. Hermaphrodites usually have female chromosomes (XX) but genital development is abnormal, resulting in ambiguous genitalia and internal reproductive structures (e.g., one ovary and one testicle, or uterus with male external genitals).

Over- or underexposure to hormones during prenatal development can also cause abnormal sexual development. The embryo may produce abnormal amounts of hormones, or the mother may produce or ingest hormones that affect prenatal development. The most common hormonal abnormalities are congenital adrenal hyperplasia (CAH) and androgen insensitivity syndrome (AIS). In CAH, the adrenal glands of the fetus produce too much testosterone. The result is premature puberty in boys and malelike external genitals in girls. For example, the clitoris may be enlarged and have the appearance of a penis. In AIS, the male fetus has a genetic disorder, which causes the person to be insensitive to testosterone. As a result, the newborn male will not have an internal reproductive system and will have a clitoris and a shallow vagina. At puberty, he is likely to develop breasts. Because they appear female at birth, these chromosomal males are ordinarily reared as females—in fact, by surgically lengthening the vagina and taking estrogen supplements, these individuals usually have satisfactory lives as women (Hines, Ahmed, & Hughes, 2003; Wisniewski et al., 2000). AIS is a condition that highlights the difference between biological sex and gender as well as the difficulty of dichotomizing male and female. According to their chromosomal makeup, these individuals are male; however, their visible physical traits would suggest they are female. In addition, they are generally socialized and identify themselves as female.

GENDER IDENTITY

It is common to assume that one's biological sex will always match one's perception of self as male or female. However, as we just discussed in the case of AIS, this assumption is simply false. Even in the absence of any genetic or hormonal abnormalities, some individuals' gender identity does not correspond to their biological sex. In our society, we find a highly diverse group of individuals who do not conform to traditional notions of a one-to-one correspondence between biological sex and gender in the way they look, behave, or self-identify. We collectively refer to them as *transgendered*. This term is often used to refer to a broad range of individuals, including the intersexed individuals we just discussed, as well as cross-dressers, gay men in drag,

"butch" lesbians, and transsexuals (Bullough, 2000). Most relevant to our discussion of gender identity are transsexuals. Cross-dressers, gays, and lesbians are discussed elsewhere in this series. *Transsexuals* are those individuals who think of themselves as the opposite of their biological sex. Many refer to this as feeling "trapped inside the body of the opposite sex." Some transsexuals are content to live as the opposite sex without altering their genitals or physical appearance, but many of them wish to have surgery and take hormones in order to make their bodies appear more like their self-identified sex.

Those who persistently feel "trapped inside the body of the opposite sex" may be diagnosed with gender identity disorder (GID). Signs of GID usually become apparent early in childhood, but it may also develop in puberty. GID is far more common in boys than in girls (4:1). Children with GID are generally very clear about wanting to be the opposite sex and will verbalize this desire openly. However, some may simply take on behavior patterns of the opposite sex and insist on dressing in clothing of the opposite sex. It is important to note that not all children who exhibit these behaviors grow up to live as the opposite sex—many children grow out of it. Those who truly experience GID will become more persistent in their efforts to cross-dress and act like the opposite sex as they grow older (Doorn, Poortinga, & Verschoor, 1994; Money & Lehne, 1999; Zucker, 1995).

How GID exists in the face of a culture that does not accept significant diversions from gender role norms is difficult to understand. Some experts have suggested a biological basis for GID, but the research has not yielded any consistent conclusions (Zucker, 1995). Several environmental factors have also been identified as possible correlates of GID. Boys with GID tend to have more brothers and to be born late in the birth order than non-GID boys (Green, 2000). In addition, children with GID tend to have difficulty identifying with the same-sex parent and have parents who permit and support identification with the opposite-sex parent (Zucker & Bradley, 1995).

Generally, psychotherapy is ineffective in helping an individual feel less distress about her or his cross-gender identity (Zucker, 1995). Some individuals are content to live and dress as the opposite sex, but many seek "sex reassignment," which is having surgery to restructure the genitalia to appear as the opposite sex and taking hormones to change voice quality, muscle mass, hair growth, breast size, and body fat distribution to appear like the opposite sex. Research suggests that in the overall pool of individuals with GID, most suffer from emotional issues throughout life (Hepp, Kraemer, Schnyder, Miller, & Delsignore, 2005). Those individuals who seek and receive sex reassignment are satisfied with the results and generally adjust well psychologically, socially, and sexually (Smith, Van Goozen, Kuiper, & Cohen-Kettenis, 2005). However, they are generally heavily screened in advance to insure that they are psychologically well adjusted before surgery. Postoperative psychotherapy has been recommended in aiding adjustment as well (Rehman,

Lazer, Benet, Schaefer, & Melman, 1999). Transsexualism is indeed an extreme and relatively rare example of how humans transcend common notions of sex and gender. The next section addresses common and more culturally tolerated challenges to traditional notions of gender.

GENDER ROLES AND STEREOTYPES

Recently, a man was discussing his upcoming nuptials and remarked that although his fiancée made more money, she would be quitting her job and moving to the town where he lived. When asked why they would sacrifice the higher income, he remarked that "of course" men should have the higher income and be the primary wage earners. This is a common traditional gender role expectation that persists even in our modern age. Gender role expectations impact our personal relationships in many ways. Traditional gender roles dictate, for example, that women not approach men for dates but that they play the most active role in nurturing a relationship once formed. Men are expected to act "cool" and emotionally distant but be the initiators in sexual interactions. These are all examples of gender-typed behaviors.

Obviously, these roles are not as strictly adhered to today as they were some years ago. Women are more assertive in initiating relationships (and this is often welcomed by men), and men are more comfortable with expressing emotions (also appreciated by women). Despite the fact that so many men and women display flexibility in their gender roles, gender stereotyping is still relatively common. Recall that gender stereotyping occurs when an individual is assumed to engage in certain behaviors or display certain characteristics based on her or his apparent sex, regardless of the extent to which the individual actually exhibits gender-typed behaviors and characteristics. For example, we are stereotyping when we say that all men are primarily motivated to form relationships in order to have sex or that all women are primarily motivated to form relationships to get married and have children. Although some individuals are gender-typed—adhering closely to common notions of male and female—the vast majority of men and women behave similarly most of the time, perhaps more than 98 percent of the time (Canary & Hause, 1993). Thus, stereotypes persist in the face of disconfirming information. Why do they persist? Research suggests that they are sustained because stereotypes bring stability and predictability to a person's life and simplify one's ability to process information about the social environment (Hughes & Seta, 2003). In addition, when men and women do exhibit clear differences, it is in the stereotyped direction, confirming and supporting stereotypic notions (Vogel, Wester, Heesacker, & Madon, 2003).

Life is simplified if we can predict how people will behave based on first appearances rather than having to discover a person's unique qualities. However, problems are likely to arise if one is inflexible about stereotypes and does

not accept a person's individuality. Because so many stereotypes are not only inaccurate but also negative, strict adherence to such stereotypes can harm or oppress stereotyped groups. Such gender bias, for example, has often prevented women from pursuing and succeeding in their chosen careers. A contemporary example is the debate over whether or not women should be placed in or near combat (Stone, 2005). Many of the arguments against women in the military, in general, are based on stereotypes and are not supported by research (RAND Research Brief, 1997), and the cost to women is not having equal access to a tremendous number of jobs and advanced positions in the armed services.

ANDROGYNY

So far, this chapter has illuminated the fact that neither sex nor gender is a dichotomous characteristic, and that we cannot easily assume that a person will think, behave, or possess a particular set of characteristics based on our perception of the individual's sex. In fact, people fall on a continuum of masculine and feminine—most men and women are best described as androgynous, having both masculine and feminine characteristics. Only a small number of individuals possess very few either feminine or masculine characteristics—they are referred to as *undifferentiated*. In neither case are these people gender-typed. Where once individuals who were not gender-typed were viewed as deviant, much evidence today suggests that androgyny is the picture of well-being. No longer under pressure to prove one's masculinity or femininity, the androgynous person has a broader repertoire of possible responses to draw from and can choose the most appropriate response for a particular situation. With such a broad repertoire, an individual can function effectively in a variety of situations. To take the case of women in war again, one advantage to having women in the Iraq war is their ability to deal sensitively and effectively with other women and children whom they approach during door-to-door searches (Stone, 2005). Thus, these women are true warriors who also make use of more traditionally "feminine" qualities in a unique and challenging environment.

Researchers have addressed the question of whether or not androgynous individuals enjoy greater psychological well-being than their more gender-typed counterparts owing to their broader repertoires and, therefore, greater ability to act and respond to a variety of demands. Because adolescence is the time when young people begin to take on more adult roles, this question has been studied most extensively in adolescents. Research does suggest that androgynous children and adolescents enjoy greater psychological well-being but so do more masculine children and adolescents (Allgood-Merten & Stockard, 1991; Markstrom-Adams, 1989). This latter finding may be because masculine traits have traditionally been more highly valued by society than feminine traits, giving the more masculine adolescent greater status and acceptance in her or his environment.

THEORIES OF GENDER ROLE DEVELOPMENT

Why are some people gender-typed while others are androgynous? The prominent theories on gender development tend to focus more on the contribution of either nature (heredity) or nurture (learning environment) and less on the relative contributions of both influences. The reader may find that many of these theories complement as well as contradict one another. In addition, most of them focus on how people come to conform to expected gender roles as opposed to why so many people do not.

There are five dominant theories of gender development—three are predominantly based on the notion that gender roles are learned through experience; the other two rely more heavily on the notion that biology determines gender role adherence. The biological theories include behavioral genetics and evolutionary viewpoints, and the environmental theories include Freudian theory, social learning theory, and cognitive developmental theory.

Behavioral Genetics

The behavioral genetics viewpoint posits that gender-typed behaviors are determined through genetic inheritance. In other words, our adoption of these behaviors as well as others is determined by our genetic makeup passed down to us through our biological parents. This position is tested by two primary means. One is by demonstrating that adopted children demonstrate more similar behavior patterns to their biological parents (inheritance) than to their adoptive parents (environment). It is also tested by looking at similarities between monozygotic twins, who are genetically identical, and comparing the extent of those similarities to similarities between dizygotic twins, who are no more genetically similar than any other pair of siblings—they share only about 50 percent of their genes. If a behavioral trait is totally determined by genetics, you would expect identical twins to behave exactly the same 100 percent of the time. This is called a *concordance rate*. You would also expect dizygotic twins to have about a 50 percent concordance on that trait. Few genetic studies have been conducted to assess the relative influence of genetics on gender role development. One study did show some evidence that genetics accounted for the variance in masculine and feminine characteristics in children (20 to 48 percent of the variance). However, they concluded that experiences outside the home, such as peers, have a greater impact than genetics or even parental influence (Mitchell, Baker, & Jacklin, 1989). A recent twin study addressed the contribution of genetics to *atypical* gender development (e.g., boys playing with jewelry and girls playing with swords). This study found that environment contributed more to gender role development than genetic factors, except perhaps in the case of girls who were high in masculinity and low in feminine characteristics. In this case, genetic factors appeared to be the primary determinant (Knafo, Iervolino, & Plomin, 2005).

Evolutionary Theory

The evolutionary position is that gender-typed behaviors that present themselves across all cultures have been selected throughout the centuries in order to insure survival of the species and that these behaviors cannot be explained by environmental factors alone. One would expect to see more variability in these behaviors if they were environmentally determined. Examples of cross-cultural invariability are that in all cultures men are more likely than women to be polygamous (have multiple partners), and women are less likely to commit murder than men. Evolutionary psychologists claim that they can predict similarities between the sexes in those areas where both have been challenged by similar adaptive problems, and differences between the sexes in those areas where they have faced different adaptive problems, throughout time.

For example, David Buss (1995), a prominent evolutionary psychologist, suggested that women are less likely to engage in casual sex than men because the costs of sex are much greater for women. Women are likely to get pregnant and then bear the burden of caring and providing for the child. Men tend to engage in more casual sexual interactions because their evolutionary "goal" is to propagate the species. In addition, they suffer few, if any, lifelong negative consequences. Because of the additional burden women bear, they are more likely to be discriminating and seek out only those sexual partners who appear oriented toward commitment and assuming responsibility for their offspring. While these tendencies may be true in a general sense, in reality there is tremendous variability in the behaviors of men and women. Certainly, we all know men who are very focused on finding the right lifelong mate and women who engage in casual sex without fear of the potential consequences. Perhaps it is best to think of the evolution of behaviors as predispositions that are either exaggerated or diminished by environmental factors (Buss & Schmitt, 1993; Kenrick & Trost, 1993). For example, the invention of effective contraception has given women much greater sexual freedom (Buss, 1994); therefore, women do not have to worry as much about pregnancy and can be less discriminating in their sexual choices.

Overall, it appears that these biological theories of gender role development provide incomplete explanations of how common behaviors are established. It is most likely that environmental factors play as much of, if not a greater, role in gender role development.

Freudian Theory

Sigmund Freud (1856–1939) lived primarily in Vienna, Austria, during what was known as the Victorian era. The Victorian era was marked by extreme sexual oppression. Women, in particular, were denied sexual expression, and, in fact, were considered potential prostitutes if they expressed any sexual

feelings at all. This is the context in which Freud's view of gender identification evolved. By today's standards, aspects of this view are sexist. Freud's overall idea of development was that children proceed through a relatively predictable set of stages, including the phallic stage, from about age 3 to 6. He believed that boys and girls learn about what it is to be "male" or "female" by observation and imitation of the same-sex parent's behavior. During the phallic stage, children develop their gender roles through this process. According to him, a boy experiences what Freud called the *Oedipal complex,* during which the boy desires his mother and comes to envy his father, the primary rival for his mother's affection. He then becomes fearful that his father, upon discovering the boy's feelings, will castrate him. Thus, he develops *castration anxiety*. To relieve his anxiety, he suppresses his carnal desires for his mother and identifies with his father by imitating his behaviors, attitudes, and appearance. The girl is also attached to the mother, her primary caregiver. However, during the phallic phase, when genitalia become the object of attention, she discovers that she lacks a penis, and blames her mother and becomes hostile toward her. She then attaches to her father and imagines that she will become pregnant by him and that this will cause her to develop a penis and gain equal status with her father. This is due mostly to the idea that the girl is "envious" of her father's penis and wants to possess it so strongly that she dreams of bearing his children, thus the term *penis envy*. Eventually, recognizing that she cannot possess her father, she identifies and imitates her mother, the woman who does possess him. Freud argued, however, that because the girl is ambivalent about being female (i.e., has penis envy), she adopts an inferiority complex as the "inferior sex." She does not fully adopt her mother's characteristics and her identification is incomplete, causing her to have a poorly developed superego, or conscience. As a result, her values and morals are seen as weaker than men's. Clearly, these are antiquated and sexist notions about the sexes. Freudian theory has little relevance to our current understanding of gender role development except that it opened the door for theorizing about how the social world impacts on the developing child.

Social Learning Theory

The basic tenet of social learning theory is that the roles we assume in life are shaped by events and other people in our lives. In other words, we learn our gender roles through being reinforced or punished and by imitating others. Reinforcement is a stimulus or event that follows a behavior and increases the likelihood that that behavior will occur in the future. Generally, if performance of a behavior results in a pleasant outcome, that behavior will be reinforced. However, the removal of an unpleasant stimulus can also reinforce behavior. Punishment occurs when the onset of an unpleasant stimulus or the termination of a pleasant stimulus following a behavior decreases the likelihood of that behavior occurring in the future. For example, a little boy

plays with a doll, but his little male friends make fun of him, so he no longer plays with dolls. In this case, the teasing from his friends punishes playing with dolls. If he picks up a truck and his friends come over to play with him, then playing with trucks is likely to be rewarded by their approval. Reinforcement of gender-typed behavior and punishment of deviations from them establish gender-typed patterns early in life, and these may even take place before birth. Take, for example, parents' preparation for a new baby. If they know the sex, they generally decorate a nursery differently for a boy or a girl—a boy's room might be decorated with sports-related themes, while a girl's might be decorated with cute bunnies. As children grow up, they are influenced by more than their parents' behavior. We are inundated in our society with messages that tell us that boys and girls should behave differently. Take, for example, the highly gender-typed toy commercials that children see while watching cartoons, or the ads on radio and television and in the written media that stress beauty for women and achievement for men.

Beyond the more direct forces of reinforcement and punishment is *role modeling*. Role modeling is the imitation of behaviors of someone admired or liked. Children are most likely to imitate the behavior of someone of the same sex when several members of that sex exhibit that behavior (Bussey & Bandura, 1984; Bussey & Perry, 1982). When, for example, boys see only one or two men (if any) staying home to care for their children while most men are working, they are not likely to aspire to be stay-at-home dads. They are much more likely to model "climbing the corporate ladder" as they see numerous examples of men doing just that.

Social influences on gender role development in our culture cannot be ignored. There is a plethora of research on the influence of parents, peers, teachers, and the media on the development of gender roles, and there is little doubt that all these influence children to develop gender-typed behavior. One of the criticisms of social learning theory is that it focuses almost exclusively on the external environment and ignores the role of other factors, such as thought processes, in gender socialization.

Cognitive-Developmental Theory

There are several cognitive theories of gender development. All are consistent with the social learning perspective in that they assert that children learn gender roles through interactions with their environment. But while social learning theory paints a picture of children as somewhat passive with respect to the influence of their learning environments, most, if not all, cognitive theories emphasize the active role that children play in their own gender socialization. One prominent cognitive theory is cognitive-developmental theory. A major tenet of this theory is that a child's ability to develop gender roles relies on her or his ability to develop *gender constancy*, which occurs when the child accomplishes three things: (1) gender identity—identifies self as male or

female: (2) gender stability—recognizes that one's gender does not change over time: and (3) gender consistency—recognizes that one's identity is not altered by changes in gender-typed activities, traits, or appearance. Once the child identifies as male or female, the child will seek out same-sex role models to imitate "appropriate" behaviors. A final tenet of cognitive developmental theory is that a child is motivated internally to bring her or his behavior and thinking in line with one's gender category (Martin, Ruble, & Szkrybalo, 2002).

All of the theories of development that we have reviewed have value. Today's gender role theorists, for the most part, maintain that in order to completely understand gender role development, we need a comprehensive model of development that takes into account biological, social, and cognitive influences (Martin et al., 2002; Martin, Ruble, Szkrybalo, 2004). In fact, some theories, such as social cognitive theory, attempt to integrate cognition into a social learning theory of development and also make note of the contribution of biology and other sociocultural factors (Bussey & Bandura, 1999). Ultimately, all of these factors probably contribute to gender role development, but a truly comprehensive model of these contributions has not yet emerged.

FEMALE AND MALE: INTERACTIONS BETWEEN THE SEXES

In our adult lives, one area where gender-typed behavior and stereotypes impact us most is in interactions between the sexes. With respect to interpersonal interactions, research shows that initial attraction for males and females tends to be toward more gender-typed individuals. However, these relationships tend to become unhappy pairings in the long run (Brehm, 1992; Ickes, 1993; Kenrick & Trost, 1989). In fact, an older but very large survey of men and women revealed that feminine women in relationships with masculine men reported that they were highly dissatisfied with all aspects of their relationships, including their sexual interactions (Ickes). Furthermore, the best interactions between females and males seem to be within couples in which one or both are androgynous. These relationships are more interactive and rewarding than those shared between traditional males and traditional females (Ickes & Barnes, 1978). In addition, other research has shown that both males and females prefer androgynous partners for dates, "one-night stands," and marriage (Green & Kenrick, 1994). In general, it seems that androgynous individuals are more successful at fostering and maintaining healthy heterosocial relationships.

How do gender-typed roles and stereotypes affect sexual interactions? Unfortunately, dissimilarities between the sexes also may create negative outcomes in sexual interactions. Some areas in which gender identification and stereotyping affect sexuality are in expression of sexual intent (i.e., whether or not there is interest in a sexual interaction), initiation of or pressure to engage in sexual interactions, and safer sex practices.

Numerous studies have shown that while women and men are both able to accurately identify flirting behaviors, men have a much greater tendency than women to identify flirting as imparting sexual interest (Henningsen, 2004). Even in casual and brief interactions, men are more likely than women to see members of the opposite sex as being seductive, sexy, and even promiscuous (Harnish, Abbey, & DeBono, 1990; Haworth-Hoeppner, 1998; Johnson, Stockdale, & Saal, 1991). There are several possible reasons why men might overinterpret flirtatious or even neutral interactions as sexual in nature. One may be that men are unduly influenced by the media's tendency to place greater emphasis on women's physical attractiveness and sexual availability as opposed to other attributes such as character and personality. Second, men may be on the lookout for signs of interest from women because men have traditionally been expected to play the role of initiating dates and sexual interactions (Muehlenhard & Rodgers, 1998). Finally, men have traditionally been taught that women play "hard to get" and avoid giving off signs of interest even when they are interested.

The discrepancy in male and female interpretations of sexual interest may, in part, be at the core of the most common form of rape—acquaintance ("date") rape. When males believe that females are interested in a sexual encounter when they are not, and/or that females are more likely to act as if they are not interested, males may continue to pursue sexual interactions even when the female is not interested. In fact, research has shown that males are less likely than females to identify scenarios depicting nonconsensual sex as unacceptable (Freetly & Kane, 1995) perhaps because they do not perceive it as nonconsensual at all, but rather they see it as part of a "mating game."

The traditional view of sexual interactions between men and women has been that men are the initiators, and, as we discussed above, women are the resistors. However, a fairly sizable number of studies now suggest that many women do initiate sexual activity (Clements-Schreiber, Rempel, & Desmarais, 1998). Up to 93 percent of females report that they have initiated sex at some time (Anderson & Aymami, 1993). More surprisingly, research has also documented that women use pressure tactics to get men to engage in sexual interactions with them. Results from a study of coercive sexual strategies used by women suggest that there is at least a modest relationship between a woman's willingness to use coercive strategies and adherence to the gender stereotype that men are always ready and willing to engage in sexual activity (Clements-Schreiber et al., 1998). Thus, stereotypes about men may contribute to inappropriate and potentially harmful behavior in women directed at men. While much attention has been given to how stereotypes about women put them at risk for sexual victimization, little attention has been given to how men might likewise be victimized. The role of harmful gender stereotypes of men in coercive sexuality needs to be explored further.

With the spread of HIV over the last few decades, more attention has been given to how gender stereotypes might have an impact on safer sex practices.

The only way to practice safer sex, besides complete abstinence, is to use a condom each and every time one has oral-genital or genital-genital contact with another person. Until the female condom gains greater popularity, the primary means of protecting against sexually transmitted infections, including HIV/AIDS, is to use a male condom. Obviously, use of a male condom requires significant male cooperation. Women who adhere to traditional notions of male as the aggressor and woman as the passive, less sexual one in heterosexual interactions are not likely to take the initiative to purchase, and, much less, require that their male partners use condoms. In fact, in a study of African American women, those women who never used condoms and were hence characterized as sexually nonassertive expressed that they did not use condoms out of concern for how their male partners would react to their requests to wear a condom (Wingood & DiClemente, 1998). Furthermore, a more traditional woman is more likely to prefer sex in the context of an ongoing relationship as opposed to casual sex. When a woman waits until she gets to know a man well before having intercourse, she is more likely to assume that he is "safe" (i.e., does not carry any sexually transmittable infections). In fact, one study supported this idea that women preferring "relational" sex were less likely to use a condom than women who did not place an emphasis on relational sex (Hynie, Lydon, Cote, & Weiner, 1998).

ARE MEN AND WOMEN SEXUALLY DIFFERENT?

The previous discussion might raise the question of whether or not true sexual differences between men and women actually exist. For example, are men always primed for sex, and women less interested or less sexually arousable than men? In general, objective data using direct physiological measures of genital responses and self-report data regarding arousability to sexual stimuli suggest that both men and women are aroused most by explicit sexual material (as opposed to romantic content) and that women are just as physiologically arousable as men (Heiman, 1977; Schmidt & Sigusch, 1970; Schmidt, Sigusch, & Schafer, 1973; Sigusch, Schmidt, Reinfeld, & Wiedemann-Sutor, 1970). Research further shows that men and women are also most highly aroused to *female-initiated* sexual interactions. How are men and women different in sexual arousal? When shown several different types of sexual interactions (male to male, female to male, female to female, group versus individual), heterosexual women and men are similar in that they show greatest arousal to group sex and least arousal to male homosexual sex. However, men found lesbian sex (between two women) most arousing, followed by heterosexual sex. Women showed the opposite pattern (Steinman, Wincze, Sakheim, Barlow, & Mavissakalian, 1981); heterosexual sex was more arousing than lesbian sex.

What can be learned from this brief review of gender and sexuality? In general, neither gender nor sexuality is clearly a dichotomous category. Not only is there a great deal of variability in expression of masculinity and femininity

in men and women, but there is also not always a clear distinction between male and female sex. Some individuals have genetic or hormonal conditions that make their biological sex ambiguous as well. If people do not fit into clear categories of male and female, masculine and feminine, what about similarities and differences between men and women? Overall, men and women have more similarities than differences in how they behave, especially with respect to interpersonal and sexual relationships.

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9

The Social Construction of Sexuality: Religion, Medicine, Media, Schools, and Families

Laina Y. Bay-Cheng

- It is important to remember that helping your child stay healthy is an ongoing job. Parents need to know that sexually active adolescents face greater physical and emotional health risks than any other segment of the population. . . . With so much at stake, it is more important than ever for parents to encourage their adolescents to delay sexual involvement, preferably until marriage. Abstinence is, without question, the healthiest choice for adolescents, both physically and emotionally.
- In most dating relationships there is a natural progression of physical intimacy. If no barriers are put into place, this progression generally leads to sexual intercourse. Most experts agree that once couples move beyond hugging and light kissing, hormones encourage further physical contact.

  Progression of physical intimacy:

  - Holding hands
  - Holding each other around the waist or shoulder (hugs)
  - Kissing on the lips
  - "French" (open mouth) kissing
  - Touching breasts
  - Touching sexual organs
  - Sexual intercourse.[1]

These excerpts from www.4parents.gov, a Web site launched in early 2005 by the U.S. Department of Health and Human Services, are readily recognizable as tips to help parents understand and communicate with their adolescent children about sexuality. However, a closer reading reveals a deeper level of information and education. Specifically, adolescent sexuality is implicitly defined as an inherently, universally risky venture that is virtually unstoppable once activated. What is more, by referring to "marriage" (a social institution that only heterosexual couples have access to, except in Massachusetts), "breasts," and "sexual intercourse" in its discussion of sexuality, this site favors heterosexuality over other forms of sexual identities, relationships, and behaviors. This position is made clear elsewhere on the Web page where reference is made to nonheterosexual "lifestyles," a word typically used by conservatives to imply that lesbian, gay, bisexual, or transgendered identities, relationships, and behaviors are a matter of choice and therefore can—and should—be changed. This deeper level of analysis and process of reading between lines is referred to as *deconstruction*: a dissection of the obvious message in order to reveal its parts and underlying assumptions, which may be hidden by the whole. By studying the message within the message, the passages above become significant not just as a helpful guide to parents seeking information and tips on how to talk about sex with their teenagers, but also as a conveyer of a particular set of social norms and values.

The term "deconstruction" is drawn from the theoretical framework of *social constructionism*. The basic tenet of social constructionism was most popularly and succinctly defined by Berger and Luckmann (1966) as the position that "reality is socially constructed." In other words, there is no single, objectively true world or reality that we just live in; we are not passive residents of a prefabricated setting, just soaking up and responding to the view. Instead, our realities, which consist of our relationships and identities, are constantly being produced or constructed through our actions, reactions, and interactions. We do not just inhabit the social world; we are simultaneously building it, too.

From this perspective, nothing is stable or universal; race, gender, "right" and "wrong"—none are fixed or foregone conclusions. In this way, social constructionism is not just a strategy for answering the same old questions; it allows us to ask entirely new questions. For instance, suppose you are concerned about gender issues such as the disproportionate number of men working in the sciences or male violence against women, but you also buy into the idea that gender is innate (e.g., women are naturally less adept at logic and spatial relations; men are inherently more aggressive), then there is only so much you can do to rectify the inequality. After all, the difference is natural and, at some point, we revert back to a "boys will be boys" conclusion. However, if approached from a social constructionist perspective, a new level of analysis and intervention is opened up; anatomy no longer must be destiny. Rather than a reflection of inalterable biological difference, gender itself is seen as a social construct, a deeply ingrained but nonetheless changeable one. By

questioning and deconstructing the very "reality" of gender, new solutions to sexism and misogyny are revealed.

Using the analytical tool of deconstruction, this chapter will examine questions about sexuality that only social constructionism allows us to ask: How is sexuality constructed in contemporary American culture? What social institutions authorize this construction as correct and real? How are the social norms associated with our construct of sexuality delivered and disseminated among us? Optimally, each of these questions warrants a chapter (or a book, or even several books) unto itself. Clearly, one chapter to cover all of these questions cannot possibly do them justice. However, I hope to be able to provide at least a thumbnail sketch of the meanings and mechanisms of the social construction of sexuality.

INTRODUCING SOCIAL CONSTRUCTIONISM

Social constructionism emerged out of a critique of the principles and priorities that have dominated American and European schools of thought since the Enlightenment. The post-Enlightenment period, commonly referred to as modernity, is typified by a reliance on the scientific pillars of objectivity and logic. Facilitated by the advances in technology, modernist science focused on the primacy of nature and the pursuit of singular, finite, and knowable facts. Postmodernism, which is used to describe a wide-ranging critique of modernist principles and values, rejects the suggestion that there is a single, true reality, or that humans, for instance, possess a single, uniform "nature" or way of being. To the contrary, postmodernism endorses the existence and validity of multiple realities, multiple truths, and multiple ways of being—one no more "true," "real," or "better" than another.

The challenge raised by postmodernist scholarship has commonly been conceived as a debate between social constructionism and *essentialism*. "Essentialism" is used by social constructionists to refer, typically negatively, to the modernist belief that an entity or phenomenon contains a central, natural essence—a core truth that is immutable, universal, and innate (DeLamater & Hyde, 1998). For instance, in his theory of the life and death instincts (Eros and Thanatos, respectively), Sigmund Freud (1940) proposed an essentialist view of human nature as always—across both time and culture—being motivated by the selfish needs for pleasure and domination. However, rather than accept the notion that *all* humans are aggressive and that this is an unchangeable, inborn trait, social constructionism looks for exceptions and alternatives: Can human behavior across time and around the world really be simply reduced to the need for either pleasure or aggression? Do pleasure and aggression themselves look the same and mean the same across time and around the world? Finally, if we *do* see evidence of humans being motivated by pleasure and aggression across time and around the world, is this because these drives really, truly exist or because this is what our own skills of perception

have been trained to see? An essentialist answers this final question with the former: we are observing actual reality, which exists regardless of whether we are there to observe it or not. A social constructionist, on the other hand, endorses the latter: what we see is a reality that we are simultaneously constructing to be "true"; motives for pleasure and aggression exist precisely because we look for—and decide that we find—them.

SOCIALLY CONSTRUCTING SEXUALITY

Although individuals have particular sexual interests, styles, and peccadilloes, most people believe in the general common denominator of an instinctual, deeply seated, and utterly natural human sex drive. Americans tend to endorse a *drive reduction model* (Gagnon & Simon, 1973) of sexuality; that is, our innate, constantly surging sex drive must be actively restrained or it will threaten to overrun all good and common sense. This position is exemplified by one of the statements that opened this chapter: "If no barriers are put into place, this progression generally leads to sexual intercourse. Most experts agree that once couples move beyond hugging and light kissing, hormones encourage further physical contact." What is more, it is believed that this drive is predominantly focused on coitus—penile-vaginal intercourse—and is satisfied by orgasm (at the very least for the man; possibly, but not necessarily, for the woman). Indeed, the urge to have sex (i.e., coitus) is linked to evolution and the survival of the species—what could be more natural than that?

However, closer inspection of our cultural discourse (everything said, printed, performed, or expressed—verbally or otherwise) about sexuality reveals that it is not that simple. Our expectations and norms of sexuality extend beyond this seeming lowest common denominator of a generic, unformed sex drive. To the contrary, we expect that it (1) be aimed at members of the "opposite" sex who are within a certain age range;[2] (2) involve a certain kind of sexual behavior (penile-vaginal intercourse culminating in male orgasm) in a particular relational context (ideally a monogamous, legally sanctioned marriage); and (3) be robust enough to compel people to have (or at least want) sex at a particular rate of frequency. If we over- or undershoot any of these targets, or aim for entirely different targets, we are labeled as being impotent, oversexed, frigid, a tease, a pervert, a slut, a fag, and so on. There are a seemingly limitless number of ways in which we criticize ourselves and each other for our deviations—in size, stamina, style, etc.—from the perceived sexual norm. In addition, many of our notions of sexual deviance are thoroughly enmeshed with racism and other forms of prejudice: animalistic, predatory black men; loose working-class women; emasculated, geeky Asian men; hot, insatiable Latina women (Reid & Bing, 2000). Indeed, far from being a simple, naturally occurring drive within us, sexuality is a carefully scripted social construct with very narrow boundaries.

The social constructionist take on sexuality does not deny that most humans have an innate capacity for the physiological states of arousal (e.g.,

vaginal lubrication, penile erection) and orgasm. Everything beyond that most basic physiological potential (e.g., what cues provoke arousal, how an individual responds after arousal, etc.), however, is socially constructed (Tiefer, 2004; White, Bondurant, & Travis, 2000). What is more, social constructionists also argue that it is precisely these other, socially dependent aspects of sexuality that are meaningful, not the base potential for arousal. For instance, Paul Abramson and Steven Pinkerton (2002) explain that until it is processed by the brain according to cultural scripts, a kiss or a caress has no sexual significance: "The sensory signals arriving at the brain following stimulation of an erogenous zone are not inherently pleasurable, or even inherently sexual. Instead, interpretation of these signals by the brain is required for the impinging sensations to be recognized as sexually pleasurable. It is this interpretive stage that admits the profound influences of culture and context in the experience of sexual pleasure" (pp. 8–9).

In this sense, sexuality is thoroughly social and context dependent. The act of coitus, for instance, might be construed as an expression of intimacy ("making love"), a casual act of physical gratification ("hooking up"), a violation of bodily and personal integrity (rape), a form of labor performed in exchange for resources (prostitution), or even a military strategy (as in the case of systematic wartime rape). These varied interpretations of coitus depend not just on the time, place, and situation but also on which participant you ask. These examples show how an identical physical act, penile-vaginal intercourse, may have radically divergent meanings and consequences. On a similar note, Hope Landrine (1998) argues for the need for contextualized understandings of behavior by comparing the distinct meanings of anal intercourse among young Latina women and gay men:

> When contextually defined, when understood as an act-in-context, the behavior here is not unprotected anal intercourse except in the most superficial way of thinking about complex human beings. For these particular Latinas, the behavior was "trying to maintain virginity for, but still have intercourse with, men who are demanding both," and that surely is not the behavior gay men engage in when they exhibit similar, superficial, mechanical movements. Comparisons across groups on superficially similar movements cannot be made because the acts-in-context are different behaviors and have different meanings. (p. 86)

As suggested by the number and variety of sex-related slurs and taunts, there are many ways in which one might stray (advertently or not) from *normal* sexuality. As Tiefer (2004) explains, there are several definitions for the term "normal": it can refer to a *statistical* average (as in "most people do it"); it can refer to a seemingly objective *clinical* standard of healthfulness (as in "physically and mentally fit people do it"); and it can also refer to an *ideal* (as in "all people should at least strive to do it"). Although social construction is a dynamic

process that varies significantly according to time and place, it is possible to point to five critical pillars of the dominant construction of normal sexuality in the contemporary United States:

1. Our instinctual sex drive is constantly surging and must be actively restrained by laws, morals, and individual willpower (i.e., the drive reduction model).
2. "Real" sex is coitus (i.e., penile-vaginal intercourse)—everything else is foreplay (e.g., hand-genital contact, oral sex) or perverted (e.g., anal sex; bondage).
3. Heterosexuality is normal (statistically, clinically, and ideally).
4. In sexual relationships and encounters, men and women occupy distinct gender roles.
5. Sexuality is for adults only.

What is most important to note about each of these components is that they all claim to be innate, constant, and universal. In other words, this is a thoroughly essentialist view of sexuality. By disguising the construct of sexuality as natural, essentialist positions make it indisputable, a given that we seldom even notice, never mind question (that is just the way it is). For example, Gagnon and Simon (1973) argue that sexuality is no more biologically driven than any other behavior, but because the drive reduction model so thoroughly saturates how we think, feel, and experience sexuality, its influence on and direction of our sexual and relational behaviors are virtually invisible. The deconstruction of sexuality, however, makes it—and its alternatives—visible.

Similarly, this presumably universal, innate, and constant sex drive does not have a generically sexual goal; it is specifically aimed toward coitus. This is not surprising given that the "naturalness" of our sex drive is based on the presumed evolutionary imperative of procreation: we are driven not just to seek sexual gratification in any old way, but we are specifically driven to coitus in order to reproduce. While some sexuality theorists clearly delineate the difference between the pleasure and procreative functions of sexuality (White et al., 2000), popular opinion does not typically make this distinction. Indeed, there is little doubt that "real sex" is equated to coitus. This was famously articulated by President Clinton with regard to his relationship with Monica Lewinsky and his denial that fellatio qualified as "sexual relations." The status of oral sex and whether it should "count" as real sex or not has also been called into question after numerous reports in the popular media regarding the prevalence and incidence of fellatio among adolescents (Jarrell, 2000). Professionals and parents have expressed concern that teens are engaging in casual oral sex, seeing it as more of a dalliance than an intimate relational behavior.

Given that, by definition, coitus involves male and female genitalia, it logically follows that our drive-reduction, coitus-centered construction of sexuality is also thoroughly *heteronormative*, meaning that only heterosexuality is explicitly and implicitly deemed normal; homosexual behaviors and rela-

tionships are marginalized. Of course, the extent and consequences of this marginalization can vary: some people view homosexuality as a hateful sin or an unfortunate pathology; seemingly more tolerant people may see it as comprising a minority, but as no less worthy than heterosexuality. Although this final position may not seem particularly prejudicial or untrue (after all, homosexual relationships and activities are in the statistical minority), this liberal position among some individuals does not change the fact that virtually every American social institution privileges heterosexuality and penalizes homosexuality. Straight couples can get married; they can share health insurance; they can express affection for one another in public without fear of negative attention (or outright hostility or danger); and their relationships and sexual behaviors are represented—favorably—in research, the media, and politics. All of these serve to normalize heterosexuality and marginalize homosexuality, whether as a sin, a pathology, or, at best, a statistical aberration.

The heteronormativity of our construction of sexuality does not give all heterosexually behaving people an automatic pass on sexual stigmatization, though. Indeed, as will be demonstrated throughout this chapter, it is not enough to just be "straight" and have intercourse; carefully scripted roles must be adhered to. Although social dimensions such as class, race, and religion influence the specific sexual script one must follow, gender is arguably the central determinant of sexual behavior (Fausto-Sterling, 2000). Even the very first building block of our construction of sexuality, the drive reduction model, is gendered: men are believed to have an almost irrepressible sex drive, whereas women are less sexually compelled (and have historically been cast as wholly asexual) (Holland, Ramazanoglu, Sharpe, & Thomson, 1999). This treatment of sexual gender difference as fundamental truths is evident not only in popular rhetoric (e.g., the book, game, and TV show *Men Are from Mars, Women Are from Venus*), but also in academic scholarship in the field of evolutionary psychology (Buss, 1995). It is also used to further justify the more elaborate sexual scripts that have been developed around sexual relationships and behaviors (Morokoff, 2000): Girls and women are passive recipients, whereas boys and men are active initiators; girls and women must be responsible sexual "gatekeepers" (i.e., they must learn how to say "no") since boys and men are physically unable to control their sexual impulses; girls and women have sex out of love, whereas boys and men agree to love in order to have sex; boys and men are studs if they have frequent sex or numerous partners, whereas girls and women are sluts if they do. Despite thoughtful and impassioned critiques of these problematic assumptions regarding gender difference, they are alive and well in the sexuality discourse produced through the media, in schools, and in families, as we will explore later in this chapter.

Finally, as will be discussed at length in relation to school sexuality education and sexual socialization within families, sexuality is also largely considered to be an adults-only terrain in the United States. This belief grows out of both our essentialist, drive reduction notions of sexuality, and our social

construction of adolescence. Indeed, just as gender, sexuality, and race are socially constructed, so too are developmental stages (Holland, 2001; Lapsley, Enright, & Serlin, 1985). In her critique of popular views of adolescence, Nancy Lesko (1996) argues that adolescence as a developmental stage is constructed such that youth are trapped in a sort of developmental no-man's-land: they no longer possess the presumed virtues and appealing vulnerability of childhood; but they are also denied access to the credibility and legitimacy granted to adults. The notion of "coming of age," for instance, asserts the superiority of adults and reduces youth to a secondary position as not-quite-adults.

Essentialist concerns regarding humans' innate, surging sex drives are therefore compounded by our dominant construction of adolescence as a time of recklessness, rebellion, and "raging hormones." Indeed, one of the least challenged presumptions about adolescence is that it is a tumultuous period in which teens' moods and motives are overrun by hormones (Steinberg & Scott, 2003). From this perspective, the "natural" sex drive that compels all of us is not only particularly robust in adolescents, but it is also less likely to be reined in by one's sense of responsibility and good judgment, which many believe—reflecting yet another component of our construction of adolescence—youth are cognitively incapable of possessing. All of this leaves adults with a challenging mandate: since teens are too young to have sex, we must do everything in our power to obstruct them from doing so. However, teens are more sex-crazed and less responsible than adults, leaving us with an uphill battle, to say the least.

In addition, discussions of teen sex or adolescent sexuality tend to imply that teens are simply having sex with each other and that we, as responsible adults, must stop them and save them from themselves (i.e., their hormones and their recklessness). It becomes evident that "teen sex" is a misnomer, however, when one looks at the statistics of who is having sex with whom. One national study found that 37 percent of adolescent women between 15 and 19 years of age have male partners who are at least three years their senior (i.e., adult men) (Darroch, Landry, & Oslak, 1999). What is more, several studies indicate that the primary problem associated with teen sex—teen pregnancy—is more likely to occur when adolescent women have sex with adult men (Males, 1998). These statistics certainly put a different spin on what, or who, is the problem with teen sex.

AUTHORIZING SEXUALITY: RELIGION AND MEDICINE

Religion

Prior to the Enlightenment and the premium placed on science in the modern world, the Christian church (which I use to refer to Catholic and Protestant denominations) served as the ultimate authority governing sexuality. Relying on and generating doctrines that associated certain (most) sexual rela-

tionships and behaviors with varying levels of sin, the church established and disseminated norms, including strict prohibitions regarding masturbation and premarital or extramarital sexual relations (especially for women). The concept of "sin," which characterized all violations of the religious boundaries placed on sexuality, played a central role in pre-Enlightenment constructions of sexuality. With the rise of modernism, however, the scientific concepts of disease and disorder replaced sin as the marker of deviations from sexual norms. Kim Phillips and Barry Reay (2002) articulate this by quoting Donzelot: "The priest preceded the doctor as the manager of sexuality" (p. 10).

Although religion is no longer the sole authority regarding sexuality, it would be misguided to minimize its continued role in the construction of sexuality. This is especially true in the United States, which is widely regarded as the most religious among industrialized nations (Whitehead, Wilcox, Rostosky, Randall, & Wright, 2001). For instance, despite the racial and ethnic diversity of the country, the majority of Americans claim theistic beliefs and specifically identify with Christian denominations. According to the results of a recent Gallup poll reported in the *New York Times*, 46 percent of all Americans identify as evangelical or born-again Christians (Kristof, 2003). Indeed, through its significant influence on American politics and therefore federal funding, the Christian church exerts substantial control over sexuality-related research, policies, and programs such as sexuality education (Irvine, 2002).

In addition to this indirect influence, religion also plays a direct role in the construction of sexuality at local and personal levels. Research regarding the association between religion and sexuality has been primarily focused on whether religion serves as a protective factor against the perceived risks of sexuality by reducing nonmarital sexual activity itself. If we take a moment to deconstruct this basic research question, it becomes clear that it operates on the drive reductionist assumption that *something* is needed to help people withstand the urge to have sex; that without religious, legal, or social deterrents of some sort, people will engage in sex willy-nilly and put themselves, and others, at all kinds of risk. Nevertheless, the preponderance of evidence does indicate that religiosity, both in terms of personal beliefs and public practices such as attending services, is associated with less frequent sexual activity among adults (Poulson, Eppler, Satterwhite, Wuensch, & Bass, 1998; Wyatt, 1997) and adolescents (Holder et al., 2000).

Although this appears to suggest that religiosity is "good" for one's sexual health (presuming one strives for lower rates of sexual activity), another set of research findings complicates this picture: religion is also associated with lower levels of *safe* sexual activity (i.e., condom and contraceptive use) (Holder et al., 2000; Wilcox, Rostosky, Randall, & Wright, 2001). Another study by Marlena Studer and Arland Thornton (1987) indicated that religious teen women were less likely to use "medical" contraceptives (e.g., methods such as the pill, which require a medical examination and prescription) than other methods, including condoms, spermicides, withdrawal, and the rhythm method. They explain this

finding by suggesting that it is difficult for highly religious individuals to plan in advance for safer sex (e.g., get a prescription for the pill), since premarital sex and sometimes contraception are at odds with the values of most Christian denominations. In a similar vein, teens who take virginity pledges, an exercise commonly promoted by popular faith-based sexuality education programs, have been found to initiate intercourse approximately eighteen months later than their peers who have not taken such pledges. However, when they did have sex, teens who had taken virginity pledges were one-third less likely to use contraception at first sex than their nonpledging peers (Bearman & Brückner, 2000). Thus, it appears that the construction of sexuality by religious institutions as sinful and shameful is a bit of a double-edged sword: although there is evidence that it enables adolescents and unmarried adults to delay or reduce rates of sexual activity, it also appears to *dis*able them from taking necessary health precautions when they do engage in sexual behaviors.

As cited earlier, religion no longer is the leading authority on sexual health and well-being; indeed, this is a position it has ceded, in large part, to medicine. Reflecting this shifting social position, religious institutions now frequently draw on scientific knowledge, which they help direct and fund, of course, to bolster their doctrinal principles opposing premarital sex (e.g., by promoting information regarding the risks of sexually transmitted infections [STIs]) as well as the rationale for changing their approaches to other sexual issues (e.g., citing the declassification of homosexuality as a mental illness as grounds for accepting same-sex relationships that are based on principles of monogamous love and commitment). Indeed, medicine, to which we now turn, has assumed the top, most visible, role in dictating the boundaries of normal sexuality.

Medicine

One of the hallmark features of modernism is its conviction in the supremacy of objectivity and logic. Medicine, as the scientific study and treatment of the human body, is revered as the ultimate authority on the conditions and potential of human life. Through its predominant focus on physiological, as opposed to social, grounds and remedies for sexual "dysfunctions" and abnormalities, the interdisciplinary study of sexuality reveals its reliance on *medicalized* notions of human experiences and relationships. Tiefer (2004) defines medicalization as "a major social and intellectual trend whereby the concepts and practices of medicine come to exercise authority over particular areas of life" (p. 181). She continues to describe American culture as in a state of "biomania," in which our attention is exclusively trained on the body (hormones, brain chemistry, brain structure, DNA, and so on), and we are fixated on medical explanations and techniques to reveal the reasons and cures for all conditions and complaints. Although advances in medical knowledge and technology have certainly enriched many aspects of life, Tiefer warns that the total dominance of the medical model in sexuality, both as a field of research and as an aspect of

life and relationships, has eliminated alternative understandings and knowledge about sexual experiences, development, and relationships.

The appeal of a medical model for assessing human behavior is that it identifies, using presumably objective criteria, what is "normal." However, this is not a simple or innocuous act. As Tiefer (2004) explains, "The normative basis of the health model is absolutely inescapable—the only way we can talk about 'signs and symptoms' or 'treatments and cures' or 'diagnosis and classification' is with regard to norms and deviations from norms" (p. 189). This might not be objectionable if science and medicine were somehow truly unbiased endeavors. However, as cited by numerous postmodernist and feminist critical theorists, there is no value-free objective science (Riger, 1992). From the selection of research questions to pursue, to the funding of particular projects and how widely their results may be disseminated, scientific study is implicitly and explicitly driven by subjective biases and values. White et al. (2000) make the point that as a result of religious and social norms that continue to regard procreation as the best (i.e., most acceptable) reason for sexual behavior, sexuality research is largely focused on procreation. However, this focus on procreation initiates a sort of domino effect: (1) if procreation is at the center, then the majority of research is about coitus (therefore excluding a wide range of noncoital sexual behaviors that individuals might engage in); (2) given that, by definition, coitus involves male and female genitalia, research about coitus is largely heteronormative; and (3) this study of heterosexuality, especially with its narrow focus on a single sexual act, tends to "naturalize" gender, treating gender roles and differences as biologically based and therefore inevitable and immutable.

For these reasons, critics charge that medicalized approaches are about much more than the unbiased scientific study of sexuality. In contrast, they construct healthy, normal sexuality as coitus-centered, heterosexual, and attached to traditional gender roles. In their dissections of the history and effect of Viagra, both Tiefer (2004) and Loe (2004) explore how the gendered and heteronormative idea of male virility is a central component of our construction of sexuality. In addition, the hype around erectile dysfunction, including the production of several Viagra-type drugs, their accompanying aggressive advertising campaigns, and the emergence of an analogous focus on female sexual performance reflect science's preference for studying measurable, physiological phenomenon (e.g., signs of arousal, occurrence of orgasm) as opposed to the far more complicated and intangible aspects of sexuality, such as pleasure and intimacy.

As discussed earlier in this chapter, before the "personnel of science and medicine replaced the churches' ministers and priests as the custodians, confessors, and controllers of sex" (Phillips & Reay, 2002, p. 15), faith-based constructions of sexuality also identified normal sexuality and stigmatized other sexualities (behaviors, relationships, feelings). In this sense, the consequences of a medicalized social construction of sexuality are no different than those of a faith-based one; the mark of "sin" is simply replaced by the diagnosis

of "sick." However, as Tiefer (2004) points out, the health model does not quite work with sexuality:

> Who's to say, for example, that absence of interest in sex is abnormal according to the clinical definition? What sickness befalls the person who avoids sex? What disability? Clearly, such a person misses a life experience that some people value very highly and most value at least somewhat, but is avoiding sex "unhealthy" in the same way that avoiding protein is? Avoiding sex seems more akin to avoiding travel or avoiding swimming or avoiding investments in anything riskier than saving accounts—it's not trendy, but it's not sick, is it? (p. 10)

Tiefer's position, not a unique one, is that what is damaging to an individual is *thinking* that one is somehow damaged, inferior, or inadequate—if one is not having enough sex, not having good enough sex, not having the right kind of sex with the right kind of partner, or perhaps not wanting to have sex enough. In this sense, the medicalized construction of sexuality, with its judgments of health and promise of more frequent, more satisfying, more normal sex, may ironically be bad for our sexual health.

DISSEMINATING SEXUALITY: THE MEDIA, SCHOOLS, AND FAMILIES

Social constructionism does not view power or authority as a fixed entity or object that an individual or institution possesses or not. Instead, power and authority, just as meaning and significance, are produced through social interactions; they do not independently exist. According to these tenets, for instance, religious doctrine is meaningless without believers, and a church is insignificant as a structure if no one attends its services. Similarly, science and medicine must be regarded as expert in order to hold sway in individuals' lives. Without the status and prestige of expertise, science and medicine would be (and have been) dismissed as heresy or quackery. The following section reviews the ways in which the media legitimates the authority and expertise of medicine. What is more, the norms authorized by medical experts must be conveyed to the masses; although doctor-patient consultation represents one means of disseminating information and norms, it is hardly the most efficient. Through the media, school-based sexuality education, and the institution of the family, however, individuals are continually exposed to and directed to internalize the five components of our construction of sexuality.

The Media

Magazines, television, movies, and the Internet all serve as the mouthpiece of medicine and play a critical role in the medicalized construction of sexu-

ality. A glance at the headlines of current women's and men's magazines will offer clear evidence of the media's role in the construction of sexuality as well as the dissemination of sexual "expert" advice: "Secrets of your sex drive: Why you want it when you want it . . . and how to want it more" (*Cosmopolitan*, 2005, June); and "Sex by sundown: Cheap tricks that pay off big" (*Maxim*, 2005, May). In addition, the news media play an important role in relaying scientific and medical discoveries and knowledge to the general public. Most recently, a Swedish study regarding differences between the reactions of homosexual and heterosexual men to particular scents made the headlines of major print, television, and online media. The study's design does not allow for conclusions about which came first: the difference in scent receptivity or the identity as gay. That is, it is possible that men who frequently or exclusively have sex with men develop a different smell response as a result of their sexual behaviors, rather than having homosexual relationships as a result of an inborn biological difference. However, as Anne Fausto-Sterling (2000) warns, popular media reports of scientific studies frequently distort research findings by overlooking or misrepresenting more nuanced aspects of the work or by only choosing to report studies that confirm particular positions or viewpoints (thereby increasing their audience and subsequent profit). Indeed, with regard to the study about scent reception, some media outlets, such as the *New York Times* (Wade, 2005), mentioned (albeit at the end of the article) that causality cannot be deduced from this study, while others blatantly distorted the findings with headlines such as "Hormone sniff test indicates biological base for sexual orientation, researchers report" (Schmid, 2005). Rather than present a more complex, ambiguous, and accurate story of the research findings, the media packaged a simpler, more popular version, one that bolsters an essentialist construction of sexual orientation.

In addition to its role in perpetuating a medicalized construction of sexuality, the popular media also socialize viewers and readers into other aspects of "normal" sexuality. Specifically, through their explicit and implicit messages, media such as magazines and television contribute to the coitus-centered, heteronormative, and traditionally gendered norms of sexuality. Studies by Laura Carpenter (1998) and Meenakshi Durham (1998) deconstructed the gendered messages contained in girls' magazines such as *Seventeen*, noting the ways in which they teach girls to adhere to gendered sexual norms of feminine appearance and the role of girls and women to please others (especially boys and men). At the same time, such magazines send messages of the importance of sexual virtue, warning girls not to give in to sexual temptation. In this way, they direct girls to be sexual looking but not sexual acting. Men's magazines such as *Maxim* and *Stuff* contain similarly gendered content, though it is aimed at encouraging a male target audience to objectify women and view themselves as entitled to sexual fulfillment (Krassas, Blauwkamp, & Wesselink, 2003; Ward, 2003). In her extensive review of the media's role in sexual socialization, Ward (1995) found that although television programming tends

to be less sexually graphic than magazines, and primarily relies on innuendos and discussions about sexuality rather than depictions of it, shows and commercials participate in the sexual objectification of women while also treating dating and sexuality as a sort of competition or game.

In her analysis of the content of magazines, Melissa Tyler (2004) observed that their messages were not just reflective of medicalization or sexist norms of sexuality. She argued that headlines such as "10 seconds to a 10 minute orgasm" and "7 easy steps to orgasm heaven" were signs of how corporate culture was becoming part of our construction of sexuality. She likened articles about how to increase the efficiency and effectiveness of one's sexual performance and how to get maximum pleasure with minimum effort to the priorities of the business world of maximizing profit while minimizing cost. In her estimation, this sort of content is not helpful to readers; rather, it provides more yardsticks for readers to measure themselves and others against.

Although the research in this field is more limited than one would expect, most of it pertaining to television and magazines, there is evidence that exposure to sexual content in the media influences sexual attitudes and behavior. Over the course of Ward's (1995) review, and in her own subsequent research (Ward, Hansbrough, & Walker, 2005), she found evidence that increased exposure to sexual content in the media, particularly through soap operas and music videos, was related to more liberal sexual attitudes (e.g., acceptance of nonmarital sex) as well as more sexist gender attitudes (e.g., acceptance of sexual harassment). In her review, she also found that youth who either consumed a lot of media or were at least very involved in the media they did consume (i.e., they did not watch a lot of TV but were very invested when they did) overestimated how much sex others were having. However, she warns against oversimplifying these findings. Many of the studies in this field are correlational, meaning that it is impossible to determine if individuals with liberal sexual attitudes seek out shows and magazines with a lot of sexual content, or if the content itself fosters liberal sexual attitudes (in other words, which came first: the attitudes or the media content?).

In addition, a fairly consistent finding among the studies she reviewed was that girls and women appeared to be more affected by media content than boys and men. This relates to a critical factor when thinking about how the media's sexual content is related to its audiences' sexual behavior: every viewer and every reader approaches each television show or magazine from a unique position and therefore takes away different messages. This consideration of one's social location (e.g., race, class, gender) and personal history when assessing the impact of the media is at the core of the Media Practice Model (Steele, 2002). As an example, the effect of race was demonstrated in a study of adolescent women's perceptions of magazines aimed at teen girls (Kaplan & Cole, 2003). In contrast to focus groups of young white women whose conversations revolved around the gender and sexuality content in *Seventeen*, a group of young black women were more concerned with the representation of race, specifically

their impressions that there were not enough images of black girls and women and that those that were included made them seem less attractive and feminine than their white counterparts. Indeed, viewers and readers are not passive or blank slates that mindlessly consume whatever media is in front of them; instead, not only do we choose what we watch or what we read, we also interpret them differently based on our particular histories and backgrounds.

When comparing the sexual content of the news media (e.g., newspapers) with that of the entertainment media (e.g., television sitcoms), a somewhat divided picture emerges. While both these media construct sexuality according to the drive reduction, coitus-centered, heteronormative, gendered, and adults-only principles, they also diverge from one another. On the one hand, entertainment media such as movies, music videos, and fictional television programs tend to glamorize and simplify sex and sexuality: the people are beautiful and successful and the sex tends to be exciting and consequence-free (Cope-Farrar & Kunkel, 2002). The news media, on the other hand, tend to report on the darker sides of sexuality: rates of STIs in the United States and around the world, sexual predators seeking victims over the Internet, and the incidence of date rape, especially among youth. As we will see in the next section, school-based sexuality education delivers a far less mixed message, focusing almost exclusively on the dangers of sex.

Schools

Without a doubt, sexuality education is an ongoing process that involves familial, peer, romantic, and sexual relationships; it certainly is not confined to classroom lessons in middle and high school. Indeed, much of the point of this chapter is that we are constantly learning about sexuality and soaking up norms of sexuality from all different social institutions and relationships. However, formal school-based sexuality education (SBSE) warrants distinct attention as it serves as a public, official face of our culture's sexual norms and ideals. Recently, SBSE has been at the center of a cultural debate between a conservative, largely Christian sexual agenda—in favor of abstinence until marriage and in opposition to abortion and equal rights for lesbian, gay, bisexual, and transgendered-identified individuals—and a liberal agenda that advocates for safer sex (including, but not limited to, abstinence) and respect for a range of reproductive and sexual choices. Beginning with federal legislation in 1996 as part of welfare reform (Personal Responsibility and Work Opportunity Reconciliation [PRWOR] Act), states have received significant federal funding for abstinence-only SBSE. This funding has been regularly increased since 1996, including an 18.5 percent funding increase for abstinence-only programs in President Bush's proposed budget for 2006 (SIECUS, 2005). In order for a program to qualify for this support, it should satisfy a list of criteria—the program "teaches that sexual activity outside of the context of marriage is likely to have harmful psychological and physical effects" and

"teaches that bearing children out-of-wedlock is likely to have harmful consequences for the child, the child's parents, and society" (Hauser, 2004). Comprehensive sexuality education, on the other hand, which characterized most school-based curricula from the 1960s until the mid-1990s (Moran, 2000), includes information on a range of sexual health options (e.g., abstinence, condoms, and contraception) and adopts a "values clarification" stance whereby youth are encouraged to reflect on and develop an individual set of moral values to guide their sexual decision-making (Morris, 1994).

Many researchers and practitioners in the field of sexuality education are sharply critical of the reliance of SBSE, particularly of abstinence-only programs, on scare tactics as a means of discouraging adolescent sexual behaviors. SBSE curricula are frequently dominated by images of diseased genitals, misleading statistics regarding the failure rates of condoms, and narratives of guilt and regret from sexually active youth (see Kantor, 1992/1993). In 1973, Gagnon and Simon remarked that "learning about sex in our society is learning about guilt; conversely, learning how to manage sexuality constitutes learning how to manage guilt" (p. 42). Some argue that through this exclusively sex-negative depiction, sexuality educators are not only failing to equip youth with the information they require to make careful decisions regarding their sexual relationships and behaviors, but are also failing to instill in them a positive, healthy sense of their sexualities (Welsh, Rostosky, & Kawaguchi, 2000). In thinking about the particular position of adolescent women, Raymond (1994) warned: "Ironically, in our indiscriminate portrayals of teenage girls as sexual victims, we may be failing to teach them about genuine sexual autonomy and consequently ensuring that they *will be* victims" (p. 132).

It is in the context of SBSE that the drive reduction model and the adults-only perspective feed into tremendous anxiety at the prospect of adolescents being sexual. What makes this especially tricky is that we not only fear what will become of adolescents if they are sexual with one another (though, as mentioned earlier, teens are not only being sexual with other teens), but we also simultaneously believe that adolescents are essentially hypersexual (Steinberg & Scott, 2003). It is precisely this intersection of our social constructs of sexuality and of adolescence that is used to justify the scare tactics and absolutist (i.e., just say no) approach so common among SBSE curricula. Michel Foucault (1976/1990), one of the most prominent figures in social constructionism, described the "pedagogization of children's sex" as a strategy designed to produce or construct knowledge and power vis-à-vis sexuality. This process construes youth sexuality as both natural (in the sense that there is an innate sex drive in all functional humans) and unnatural (children are and should be asexual), and hinged on a drive reduction model of sexuality, thus providing the rationale for the formal regulation of children and youth sexuality (e.g., through SBSE).

From the vantage point of social constructionism and through the process of deconstruction, it becomes apparent that SBSE is not just delivering a single lesson regarding sexuality. In addition to information and statistics about STIs

and reproductive anatomy, sexuality education also transmits a particular set of norms and standards regarding sexuality: not only is it a biological drive, but it is—ideally—also focused on heterosexual penile-vaginal intercourse (i.e., real sex) within a monogamous adult relationship that generally conforms to conventional gender roles (Haywood, 1996; Raymond, 1994; Redman, 1994). In this sense, SBSE is not simply instructing students about the birds and the bees, nor is it only telling them to "just say no." It is participating in a more complicated process of construction by treating some sexual behaviors and relationships as "normal" and others, by default, as less healthy, less desirable, and less moral. This represents the hidden curriculum of SBSE: the socialization of youth into a particular set of sexual and relational behaviors.

That SBSE is motivated by more than a desire to protect youth from negative sexual outcomes (e.g., unwanted pregnancy and STIs) is evidenced by the fact that abstinence-only programs receive political and economic support from the federal government even though research does not show that they are the most effective means of promoting sexual health among youth (Kirby, 2001), and the majority of American parents want their teens to learn about safer sex options other than abstinence (Henry J. Kaiser Family Foundation, 2000). Indeed, support for abstinence-only SBSE does not come from empirical research or popular opinion; rather, it is driven by religious and political ideology that uses threats of sickness and immorality to enforce a heteronormative and gendered construction of sexuality.

Interestingly, much of the debate regarding SBSE involves families, specifically parents. When first proposed at the beginning of the twentieth century, it was argued that SBSE was necessary because the lower classes—for example, immigrants, North-migrating black laborers, non-Protestants, and nonwhites—were not capable of providing their children with sufficient moral instruction (as per white, Protestant, middle-class norms) (Morris, 1994). In this (racist and classist) sense, SBSE was seen as a way to redress what was lacking in familial environments. This stands in sharp contrast to current discourse regarding SBSE, in which conservative white, Protestant leaders argue that sexuality education exclusively belongs in the home.

Families

The social construction of sexuality in the context of familial relationships has received surprisingly little and fairly superficial attention. I refer to this as "superficial" given that research in the field has been limited to a focus on adult-adolescent communication, even though sexual socialization is a process that occurs over the entire course of a parent-child relationship, and because it is typically only concerned with explicit, verbal communication rather than the multitude of nonverbal forms of teaching and learning that parents and their children engage in. What is more, this section of the chapter should probably be called "Parents" as opposed to "Families" since there has been

very little research on the role of siblings in sexual socialization. The research that has been conducted has yielded mixed findings: some studies suggest that younger siblings become sexually active at a younger age than their older siblings (Rodgers, Rowe, & Harris, 1992) or are more likely to become pregnant if an older sister is a teenaged mother (East & Shi, 1997), whereas others find that younger siblings are more conservative in their sexual attitudes and behaviors, perhaps out of disapproval of their older siblings' sexual activity (Kornreich, Hearn, Rodriguez, & O'Sullivan, 2003).

Much of the research on parent-child communication regarding sexuality has been focused on whether parents are having "sex talks" with their children and what specific topics they include (DiLorio, Pluhar, & Belcher, 2003). Surveys have shown that both youth and their parents want parents to be a main source of sexuality education (Wyatt & Riederle, 1994). However, despite this mutual interest, research about *what* is being communicated, along with other studies of exactly *who* is communicating with whom and *how*, reveals a pretty substantial disconnect between parents and their children.

First of all, the confluence of three factors—the drive reduction model of sexuality, the position that only adults should be sexual, and the belief that teens are hypersexual—leaves parents fearful that talking about sex will somehow encourage youth to have sex (Fine, 1988). This worry lingers despite the fact that there is no evidence that talking to youth about sex compels them to have more of it (Kirby & Coyle, 1997). In her interviews with American and Dutch parents regarding the rules and limits they set for their teenaged children's sexuality, Amy Schalet (2000) found that the American parents frequently described their teens as not only too young to have sex, but also too young to know that they were too young to have sex (again, reflecting the essentialist presumptions regarding the developmental capabilities and limitations of adolescents described earlier in this chapter). Therefore, the American parents felt that setting limits on potentially sexual interactions (e.g, coed parties) was part of being a good, responsible caregiver. The Dutch parents, tapping into a different construction of both sexuality and adolescence, felt that their role was to adjust to and accommodate their adolescents' emerging sexual interests, relationships, and behaviors. Schalet describes Dutch parents' efforts to negotiate with their adolescent children and employ an ethic of mutual consideration that involves compromise and communication among all family members, children and, adults alike. She uses the following quote from a Dutch father to illustrate such negotiation and reconciliation:

> You [live] here with each other, [so] you have to take each other into account. That means that it can be necessary to consult with one another about what television program to watch, or what time to eat dinner. From time to time, someone will have to compromise. We [the parents] too. [This applies also] to whether boyfriends can sleep here, or whether they cannot because we have other guests. (p. 92)

Aside from this fear that talk about sex will incite the act itself, parents frequently report feeling like they do not know how or what to say to their adolescents. In fact, this is regarded to be such a common obstacle that there are public service announcements on television encouraging parents to talk with their teenagers, and community programs designed to educate parents about sexuality so that they will be able to educate their children at home. Indeed, in their review of related research, DiLorio et al. (2003) cite studies indicating that the more knowledgeable and confident in their knowledge parents are, the more likely they are to discuss sexuality with their children.

However, while increasing a parent's knowledge about sexuality may increase the likelihood that they will talk with their children about sexuality, this does not remedy another major problem: many parents report that they and their children have conversations about sex, but unfortunately, their children do not agree. Across studies that asked parents and their children if they had talked with one another about sex, 72–98 percent of the parents reported that they had; however, only 13–83 percent of the children recalled such conversations taking place (DiLioro et al., 2003). In another study, Jaccard, Dittus, and Gordon (1998) found that 73 percent of the mothers in their sample claimed to have discussed sex with their teenagers, but only 46 percent of the teenagers corroborated this.

Researchers who are curious about the reasons for this apparent disconnect between what parents say and what youth hear have suggested that parents may be talking as they claim, but that they are communicating in ineffective ways. Studies have shown that when discussing sexual matters, mothers become more authoritative and didactic in their style and are more inclined to lecture than to engage in a conversation of mutual turn-taking (Kahlbaugh, Lefkowitz, Valdez, & Sigman, 1997; Lefkowitz, Kahlbaugh, & Sigman, 1996). This may be due to a few factors: a lack of modeling about how to talk about these issues (because parents' own parents did not have such conversations with them), the concern mentioned earlier that talking about sex will somehow encourage sex, and the discomfort and embarrassment that parents frequently report when talking to their children about sexuality (which, of course, may be due to the first two factors) (Wyatt & Riederle, 1994).

Research in this area also demonstrates that parents are communicating in selective ways. That is, who says what to whom varies significantly and largely according to gender. In their review, DiLorio et al. (2003) cite evidence that when it comes to sex talks, mothers are doing more of the talking than fathers. What is more, mothers are more likely to talk with daughters than with sons; and when fathers do talk about sexuality, they are more likely to do so with sons than with daughters. Of greatest importance to the subject of this chapter, however, is the difference in what parents (typically mothers) tell their daughters compared to their sons. In keeping with the gender norms that dominate mainstream sexual scripts, daughters are more frequently instructed in ways to be successful sexual gatekeepers (Downie & Coates, 1999; O'Sullivan,

Meyer-Bahlburg, & Watkins, 2000). This finding reveals important underlying gender assumptions: (1) boys and men have a naturally stronger (insatiable and irrepressible) sex drive and therefore are unreliable as gatekeepers, and (2) girls are asexual or at least sexually passive, making them suitable gatekeepers. These combine to justify the well-known sexual double standard: if a boy is sexual he is a stud, but if a girl is sexual she is a slut. The tendency to talk to girls but not boys about sexual responsibility implies that the burden of gatekeeping—and the blame for failure to do so—is exclusively that of girls.

CONCLUSION

The focus of this chapter has been on the social institutions that authorize and disseminate norms of sexuality in the contemporary United States, norms that essentialize sexuality as driven by a deep-seated, instinctual urge to have penile-vaginal intercourse, within traditionally gendered adult relationships. In the past, religion served as the primary authority regarding sexuality. Although it retains significant influence, this role has largely been usurped by science, which presents a seemingly objective, medicalized view of sexuality. Heteronormative, coitus-centered, and gendered norms are further transmitted through the social institutions of the media, schools, and families, reproducing a narrow, essentialist construction of sexuality.

However, as discussed at the beginning of this chapter, social constructionism allows us to revisit and reevaluate what seem to be foregone conclusions about what is natural—what must be, or has always been. In doing so, social constructionism shows us how to read between lines and recognize the implicit meanings and norms that shape our behavior, which in turn further shapes our reality. Thus, social constructionism creates new ways of viewing social issues.

What is more, it also allows us to see ourselves and the potential for change in new and exciting ways. In contrast to the inevitability and stability proposed by essentialist perspectives, social constructs are dynamic and must be constantly produced and reproduced in order to exist. If, for example, we all stopped using race in our identification and categorization of ourselves and others, if no one called anyone "white," "black," or "Asian" anymore, then these labels would cease to have meaning or even exist. Race is not an independent entity; it is fueled by our thoughts and interactions. Of course, one point here is absolutely critical: this example is not meant to suggest that the repercussions of race, specifically, the damage done by oppression and the benefits afforded by privilege, are somehow imagined; or that these do not affect the lived experiences of individuals, families, communities, and nations; or that the legacy and injustices of racism can be easily undone. The point and perspective offered by social constructionism is not that race and racism do not exist in our world; it is that *they do not have to*. Race exists as it does only because we think and say so (see Chapter 10 by Lewis in this volume).

Indeed, social constructs are not stable, and social construction is not a one-way, top-down process. Individuals are not passive recipients of institutions' teachings; they also exert influence and play an active role in the existence not only of social constructs but also of institutions themselves. Without sufficient membership, for instance, churches must close their doors. In a recent study, Ellingson, Tebbe, van Haitsma, and Laumann (2001) described the challenge faced by churches that must negotiate between denominational doctrine (the source of their institutional authority and legitimacy) and the needs and norms of their local communities (the source of their institutional viability). They cite several examples of congregations diverging from larger denominational conventions (e.g., bans on performing same-sex unions) in response to the more accepting and open norms of the local culture. In doing so, these individual churches influence the "normative frameworks" for sexuality in the local community, but also may have an impact on the larger denomination's policies and stances toward particular sexual issues. This is an example of how social construction is an ongoing, dynamic process that occurs through the relations and transactions between social systems of all sizes: individuals, local churches, and the upper levels of denominational leadership and doctrine.

Similarly, dominant sexual norms and constructs are also altered and influenced through alternative channels and communities. The Internet has emerged as an alternative site of sexuality expression, interaction, and education. To use sexuality education as an example, in sharp contrast to school settings (where the curricular content is closely regulated by federal, state, and local funders and administrators), anyone can say anything on the Web—a double-edged sword, to be sure. However, despite the numerous risks (e.g., spreading misinformation), the opportunities for sexuality education offered by the Internet are exciting. While conservative positions regarding sexuality are well represented online (see Irvine, 2005), they are counterbalanced by alternative, sex-positive Web-based sources of information and interaction (Bay-Cheng, 2005). Furthermore, the Internet offers unique opportunities for building communities among sexually stigmatized and marginalized individuals (Stern & Handel, 2001) and for challenging the narrow construction of sexuality that is being produced and reproduced through religion, medicine, the media, schools, and families.

Much of the content here has criticized biomania and the medicalization of sexuality for disguising variable, alterable cultural biases as universal, fixed biological truths and for stigmatizing our deviations from those constructed norms as signs of inherent inadequacy or dysfunction. If we did not have science to draw boundaries of normal and abnormal; healthy and sick; big, good, or frequent enough, what would sexuality look like? Would we see it as a relationship that we engage in rather than an individual capacity? Tiefer (2004) draws a humorous analogy to friendship:

> People use the phrase "my sexuality" as though they are only sexual in one way. They say that really comfortably, but I'm not so comfortable with that, because the sexuality that I have with one person is very different than I have with another person. My experience—I think everybody's experience as they get older—is one of enormous fluctuation in my sexual life. Sexuality is more situational, like friendship. You have the potential for friendship, but it's not like you walk around saying, "Gee, my friendship is really going strong today." (p. 93)

This is one suggestion for how our conceptions of sexuality might be changed through the deconstruction of dominant norms. However, social constructionism does not offer or recommend specific endpoints or goals; indeed, this would be wholly antithetical to the social constructionist, postmodern framework, which endorses the existence and validity of multiple truths and realities. What it can do for us in our study of sexualities (ours and others') is free us from artificial starting points (e.g., an innate drive toward coitus), externally imposed standards of performance, and the limited and limiting pursuit of so-called real, normal sex.

NOTES

1. *Abstinence* (n.d.). Retrieved May 15, 2005, from www.4parents.gov/topics/abstinence.htm.

2. This conception of gender as a polarized categorical variable is itself a social construct that has been rigorously critiqued and deconstructed. For example, see Fausto-Sterling (2000).

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10

Sexuality, Race, and Ethnicity

Linwood J. Lewis

How can we understand the relationship between race/ethnicity and sexuality? Do persons of different ethnic groups have different ways of being sexual? There are many correlates of sexual behavior, orientation, and identities—social class, education, neighborhood organization, and gender, as well as race and ethnicity. We cannot reduce the diversity of human sexual experiences to differences between persons based on ethnic or racial characteristics. The sexual experiences of persons in the world clearly occur at the intersection of multiple social identities. Yet, race and sexuality (as well as gender) seem to be important, basic aspects of the Western sense of "self." Michel Foucault (1978) suggests that sexuality captures a sense of "truth" about ourselves; Jeffrey Weeks (1986) suggests that there is an assumption in Western culture that our sexuality is "the most spontaneously natural thing about us" and that it gives us our identities and a sense of self as man or woman, "normal" or "abnormal" or "natural" or "unnatural" (p. 13). I would suggest that race also gives us a basic sense of identity and our place within society, which is more apparent for ethnic and racial minorities, but in fact exists for all of us.

For many audiences, both academic and nonacademic, ethnicity and race may seem to be natural categories, which emerge from a biological or physiological base and do not change over historical time (Morning, 2004). Sexuality also shares this sense of the natural, meaning that it is *presocial*, or falling outside of human societies to alter or control; highlights essential or intrinsic and fixed defining aspects of a person, particularly in reference to their gender;

and is *universal*, thus extending across national boundaries (Tiefer, 2004). However, as I will make clear later in this chapter, race and sexuality are profoundly social constructs, which change quite often over time and place. The central thesis of this chapter is that sexual behavior and beliefs are used in a racially organized social context to define what it means to be a member of an ethnic or racial group. Sexuality is also used to police the boundaries between ethnic and racial groups and serves to highlight racial and ethnic hierarchies (Nagel, 2003). In order to support this thesis, I will (1) highlight the differences between race and ethnicity, (2) briefly describe the history of the concept of race, (3) describe and contrast the history, sexual practices, and attitudes of U.S. white, Latino, and black populations, and (4) describe some theories from the sexual scientific literature that can inform the relationship between race and sexuality. I have chosen to examine white, Latino, and black populations because these are the largest racial/ethnic groups in the United States, together accounting for 93 percent of all Americans in the 2000 U.S. Census.

WHAT IS RACE?

Race is most often defined as the placement of individuals and groups into categories based on physical characteristics such as skin color, hair texture, and facial structure (Braun, 2002; Goldberg, 1993). It is commonly assumed that members of a race also share a host of nonphysical characteristics including behaviors, customs, and belief systems. Race differs from ethnicity, which we will define here as a category of persons who share language, culture, history, religion, and/or geographic origin (Haney-Lopez, 1997). All members of an ethnic group need not share all of the characteristics of the group, but there is a sense of shared origins and familial roots (e.g., blood). Race may be seen today as primarily physical (with a subtext of culture added), while ethnicity is more cultural (with a subtext of biology added) (Haney-Lopez; Omi & Winant, 1994). There is enormous confusion about the differences between race and ethnicity: each is often defined in terms of the other, and this confusion has existed since the beginning of the use of the term "race" in its modern sense in the seventeenth century. The differentiation of these concepts is important in understanding the relationship among race, ethnicity, and sexuality.

One example of this is the confusion between the racial term "black" and the ethnic term "African American." In this chapter, I use the former to refer to the broadest grouping of persons whose ancestors were of African descent, and the latter to refer to those specific Americans whose ancestors were brought to the United States as African slaves. Thus, the racial term black contains various ethnicities, including African American, a number of Afro-Caribbean ethnic groups (e.g., Jamaican, Haitian, Trinidadian), as well as recent immigrants from various countries in Africa (e.g., Nigerian Americans, South African Americans). The distinction between race and ethnicity is important because very different ethnic groups are often collapsed into the

same racial demographic category; yet, they may have very different histories, cultures, and conflicting relations with other members of their racial category. This is especially important when looking at issues of sexuality. For example, some Afro-Caribbeans hold themselves in contradistinction to African Americans, whom they may perceive as morally suspect, lazy, and sexually undisciplined (Kasinitz, Battle, & Miyares, 2001; Waters, 1999). The use of broad racial/ethnic categories in the sexuality literature masks ethnic, generational, and cultural diversities.

Given the indeterminacy of race as a category, it may not seem that it is a useful construct in understanding sexuality. In fact, there are calls from various disciplines to remove race as a scientific construct, because it does not appear to have biological meaning. There is no biological evidence that humans can be reliably organized into racial categories that mirror common categories of race (Lewontin, 1972; Montagu, 1942/1997). It has been demonstrated that 85.4 percent of genetic variation occurs within racial groups and 8.3 percent between population groups within a race; only 6.3 percent of genetic variance occurs between racial groups (Braun, 2002; Lewontin). However, to do away with the concept of race would be a mistake because although race may not appear to have biological currency, it does have enormous social significance.

At the microsocial level of individual interactions, we notice the physical characteristics of a person that are associated with different races, and this informs our expectations of that person. Omi and Winant (1994), in their classic work *Racial Formation in the United States*, note the discomfort that arises when we meet someone who is racially ambiguous, and our comments when someone violates our perception of what that person's race should be—"Funny, you don't look [b]lack" (p. 59). Racial expectations and stereotypes (e.g., whites' inability to jump higher than blacks, the exaggerated sexuality and criminality of blacks and Latinos) are testimony to a racially organized social structure. These beliefs are used to justify broader, macrolevel social "policies" such as housing and job discrimination as well as to explain why differences in the life circumstances of different racial groups, such as poverty and high rates of incarceration, exist in the first place. Beliefs and expectations about sexuality are organized racially, and so, ignoring race would deprive us of a tool in understanding human sexual experience, particularly in twenty-first-century America.

A Brief History of Race

It is important to understand the history of the use of race in order to understand how race and sexuality are connected at present, and why they are so inextricably linked. The focus of much of this section is on Africans; I am suggesting that the earliest conceptions of race by Europeans were in response to their experiences and treatment of Africans among other indigenous peoples.

The organization of persons into races is a relatively new phenomenon. The modern conception of race was first articulated in the seventeenth century during the Enlightenment. The first published use of race in the modern sense was by François Bernier (1684/2000), a French traveler who described his journeys in a text entitled "A New Division of the Earth." Bernier described four races (curiously, he described the regions that members of these races lived in but did not give the names of three of the races). The first group comprised persons from northern Europe, southern Europe, North Africa, and parts of southeastern and western Asia (e.g., Siam [Thailand], Borneo, Persia [Iran]); the second, persons from all of sub-Saharan Africa; the third, persons from China, Japan, Tartary, and the Philippines; and the fourth, persons from northern Finland, who were called the Lapps. Bernier noted physical characteristics that were associated with each group. The skin color, hair texture, and sparseness of hair of the African group was compared to that of the European group, as was the different body structure of the East Asian group. The Lapps were described as "little stunted creatures with thick legs, large shoulders, short neck and a face elongated immensely; very ugly and partaking much of the bear" (Bernier, p. 6).

In describing the skin of the European group, Bernier noted the wide variation in skin colors and asserted that the darkness of the skin of some members was due to exposure to sun, as opposed to the Africans, whose skin remained the same if transported to a cold country. Of course, other European travelers had noted physical differences between themselves and the indigenous peoples they met, but Bernier was the first to group humans based on these characteristics. Interestingly, aspects of sexuality were discussed by Bernier in this first publication of racial ideas. He spent considerable space describing the beauty of women found in each of the locations (except for the Lapps) and the physical characteristics that signified beauty in Bernier's eyes. There were some subtle ideas of racial hierarchy in Bernier's text, as he spoke of seeing "handsome [women] among the blacks of Africa, who had not those thick lips and squat nose" (Bernier, 1684/2000, p. 3). Travelogues that included discussion of the sexual nature of other peoples were a common part of European cultures in general; sailors were a particularly avid audience, reading both for knowledge and for sexual titillation (Bergreen, 2004). Bernier's text highlights some of the features of later discussions of race in its conflation of ethnic, racial, and national origins. However, there is little of the increasing stigmatization of non-European ethnic/racial groups that followed racial thinking in later years.

Enlightenment philosophers such as Immanuel Kant, John Locke, and David Hume extensively explored the idea of race. Their organization of humans into races increasingly betrayed a European ethnocentrism, which placed Europeans at the top of a racial hierarchy. This hierarchy later helped to justify the colonization, enslavement, and exploitation of the indigenous peoples of Africa and the New World. For example, Kant (1775/1997) writes

of four races—whites, Negros, the Hunnic (Mongolian), and the Hindustanic—the original rootstock of human races being the white race. Kant believed that differences in climate were responsible for the physical and behavioral differences between whites and the other races: "Besides all this, damp heat promotes strong growth in animals in general; in short, the Negro is produced, well-suited to his environment; that is strong, fleshy, supple, but in the midst of the bountiful provision of his motherland lazy, soft and dawdling" (Kant, 1764/1997, p. 46).

These differences were seen as hereditary and permanent. Kant also established European national differences in the ability to perceive beauty and the sublime, which signified a refined intellectual and moral cultivation. He stated that Germans are the Europeans best able to perceive both qualities, whereas the Africans have, "by nature, no feeling that rises above the trifling" (Kant, 1764/1997, p. 54). He briefly explored gender and sexual relations among non-Europeans and Europeans. Europeans, according to Kant, were the first (and only) race to raise sex to the sublime by interlacing it with morality and, by doing so, raise the status of women. In contrast, non-European men placed women in virtual slavery because of the insecurity of their dominance as men. Kant cited a report of a "Negro" carpenter, who mocked whites as fools for making concessions to their wives and then complaining when they drove men mad. Kant commented that the carpenter may have had a point, but, "in short, this fellow was quite black from head to toe, a clear proof that what he said was stupid" (Kant, 1764/1997, p. 57). It is clear from this passage that it is skin color that drives Kant's hierarchy of races, a common theme of Enlightenment racial thought. Furthermore, these groupings are seen as absolute, such that all members of a racial category share the characteristics cited for the group.

Stigmatization of Racial Differences and Justification for Slavery

Examination of Enlightenment ideas about race, and particularly about Africans, shows generally increasing stigma about certain races as one moves into the eighteenth century. The increased exploitation of indigenous peoples by Europeans after 1492 was primarily responsible for the transformation of European ideas about race. As exploitation of natural resources and colonization by Europeans increased, there was a societal need to account for this exploitation (West & Zimmerman, 1987). Initially, this justification was on religious grounds. For example, religious fervor was an important determinant of Spanish policy in the New World, and it was argued that it was necessary to have a religious presence in the New World. A continuing controversy about the nature of the indigenous peoples of the Americas and their subsequent treatment hinged on the nature of their souls and their capacity to be converted to Christianity. In 1550, Ginés de Sepúlveda argued that the native

peoples of the Americas were incapable of being converted because they were so inferior in terms of wisdom, virtue, and basic humanity. Bartolemé de Las Casas idealized the lives of the native peoples and argued that they were in fact capable of understanding Christianity and should be converted. In the end, Las Casas may have been indirectly responsible for the continued miseries of the native peoples as forced conversions to Christianity destroyed native cultures (Goldberg, 1993).

From the sixteenth to the eighteenth century, there were changes in the way slavery was practiced, which required changes in justification for Europeans and Americans. Initially, slavery was an extended form of indentured servitude, with the prospect of freedom for African slaves. Many of the American colonies had substantial populations of freed Africans who were Christianized and partly integrated into colonial society as artisans and other laborers (Adams & Sanders, 2003; D'Emilio & Freedman, 1997). As economic reliance on the forced labor of slaves to clear and work the land increased in the American South, it added impetus for change to a permanent enslavement for both slaves and their descendents. The practice of slavery made fortunes in the New World and in Europe, as the infamous Triangle Trade moved slaves from Africa to the New World in return for rum, molasses, and other goods, which bought manufactured goods for sale in Africa. As slavery became increasingly integrated into the economic and social fabric of the colonies, Americans attempted to account for this practice to each other and to the world by asserting the inferiority of Africans.

As Enlightenment ideas came to the fore in the eighteenth century, discussion shifted to concepts of basic human rights. Humans have rights to life and liberty, and we have a moral obligation to guarantee those rights; we also have the right to rebel in the face of abrogation of those rights by an unjust government. Enlightenment values suggest that what separates humans from other animals is the ability to reason. Linnaeus used the binomial *Homo sapiens* ("thinking man") to differentiate humans, while John Locke (1689/1931) suggested that only rational beings should be afforded natural equality and, thus, full moral treatment. There was a logical disconnect between the brutality and permanence of slavery and the increased calls for basic human rights to life and liberty by American colonists. Abolitionists on both sides of the Atlantic remarked on this hypocrisy at the time (Adams & Sanders, 2003). There needed to be a resolution of the dichotomy between the ideal of the human right to life and liberty and the loss of these rights for African slaves and, to a lesser extent, Native Americans. The solution was found in redefining the important characteristics that determined whether one was human, and pointing to the lack of these characteristics in Africans.

John Locke's writings are widely cited as strong influences on American ideas on liberty and political Liberalism. But it has also been suggested that some of his work served as direct justification for African slavery and confiscation of Native American lands (Goldberg, 1993; London, Pieterse, & Parekh, 1995).

Locke's concept of *nominally essential qualities*, qualities that are created from a society's shared ideas about an object, was used to justify racial hierarchy (Goldberg). The logic is as follows: societies identify qualities that define objects. So, we note that balls are round and roundness is an essential quality of an object called ball. If Englishmen decide that the color black is an indication of irrationality, then irrationality becomes part of the essence of blackness. All objects (including persons) that share that essence also partake of the quality of irrationality. Africans are black of skin; therefore, they are irrational and irrationality is a nominally essential quality of African-ness. Tying the nature of Africans to irrationality is an important step in the moral justification of slavery because rationality is seen as the hallmark of humanity (Goldberg). By defining Africans as irrational beings, they were denied moral treatment as well as the right to engage in rebellion and escape. For those who trafficked in African slaves, it provided a fig leaf to defend their social and moral right to engage in the practice. At the end of the eighteenth century, it allowed a compromise between Southern slave owners and Northerners who were uncomfortable with the practice so as to ratify the Articles of Confederation and, later, the U.S. Constitution (Adams & Sanders, 2003).

This act of intellectual legerdemain was not universally agreed upon at the time of the Enlightenment. Johann Gottfried von Herder (1800) criticized Kant's anthropological views on race and on the supposed inferiority of blacks. In *Outlines of a Philosophy of the History of Man*, Herder pointed out that dark skin color is not uniform in Africans; that the cuticles, bodily fluids, and other tissues are not black in color; and that the climate darkens pale European skin to resemble Africans; thus implying that these differences are not permanent. He also pointed out that the lack of empirical knowledge of African civilizations precluded comparisons between African and European cultural achievements. Finally, he pointed out that the known diversity of physical forms in Africa makes it difficult to form judgments of Africans as a whole. James Beattie (1770/1997) argued against Hume's ideas of the innate inferiority of Africans by pointing out that if a slave can neither read, write, nor speak a European language and is not permitted to do anything without the permission of his master, then Europeans should not expect the slave to distinguish himself.

In summary, these ideas of the inferiority of Africans, which were floated as reasons for justifying slavery, became reified as "truths" of what it means to be African. Reification occurs when a society creates an interpretation of an event, and then, without additional evidence, believes that the interpretation reflects concrete reality. It was forgotten that the viability of organizing people into races was argued and contested from race's inception. It was also forgotten that the stigmatization of the black race was originally posited as a justification for African enslavement. Ideas of irrationality and inferiority came to be seen as a natural entailment, or the essence, of blackness. These ideas about race were then generalized, so that race was thought to represent natural categories for all

humans, categories that exist independent of social forces. This forgotten set of controversies explains why there has been an obsession about racial differences in intelligence in the United States until the present day (e.g., Herrnstein & Murray, 1994). Ideas about the irrationality of Africans, which allowed their poor treatment, became reified ideas about native intelligence of persons of African descent in general. These reified ideas also become justification for present social inequalities and inequalities in distribution of resources.

RACE AND SEXUALITY

The link between race and inferiority also explains why sexuality became so important to European and American imaginings about race. Sexuality became an important part of the construction and reinforcement of Africans as irrational beings. If the sexual behavior of Africans is animallike, then it becomes more evidence for their irrationality. Sexuality was also seen as an arena to assert control over African bodies. Sexual exploitation of African slaves began as soon as they were captured. Women and children were permitted to walk freely on the decks of many slave ships to allow ready sexual access by sailors. Both slave owners and overseers engaged in sexual relations with male and female slaves (Collins, 2004; D'Emilio & Freedman, 1997). The rape of female slaves was widespread, but the state of sexual relations between whites and slaves was more complex, and spanned from sexual assault to romantic attachments. It is difficult to parse the differences between voluntary and involuntary sexual relations between slaves and owners,[1] but examination of slave narratives strongly suggests that the choices for women were sharply circumscribed (Jacobs, 1861/2000).

The regulation of sexuality was an important part of Western Christianity in general. St. Augustine, the fourth-century Christian theorist, was a member of the Manichaeans, a religious sect that believed that all matter including flesh was evil and corrupting and that spirit was good. He left the sect, but Manichaean ideas about the corrupting influence of the physical realm on the soul permeated his writings and became part of Christian dogma (Mendelson, 2000; Parrinder, 1987). Humans can and must control their sexuality in ways that other animals cannot, in order to reach the Divine. During the Enlightenment, the use of "reason" allowed for the control of sexuality. African sexuality was posited as uncontrollable, and so it became additional evidence for the irrational nature of Africans. So, even as slavers sexually assaulted their captives, and slave owners engaged in voluntary and involuntary sexual liaisons with slaves, a continuing narrative of African sexual lasciviousness and Christian sexual temperance became a part of our ideas about race.

By the end of the eighteenth century, sexual and racial ideologies became mutually supporting. Assumed differences between African sexuality and European sexuality were cited as additional evidence for the "naturalness" of sexuality. White Christian men and women were expected to act in certain

ways; in order to maintain a white racial identity, sexuality must be approached in a Christian fashion. The juxtaposition of white sexuality against black sexual incontinence strengthened the idea of what it meant to be white.

The historian Barbara Welter (1978) described the nineteenth-century concept of the Cult of True Womanhood, or the cult of domesticity, which asserted that (white) womanly virtue resided in piety, sexual purity, submissiveness, and domesticity. This ideal, explicitly promoted by eastern U.S. ministers and woman-oriented literature from about 1820 to 1860, was implicitly racial as well—African American women worked outside of the home both before and after Emancipation, and their purported lack of sexual purity was evidenced by supposed illegitimacy during this time (Walker, 1998). Of course, slaves were not legally allowed to marry, since they were property and thus could not enter into contracts. Nonlegal marriages were performed in slave communities by African Americans. These ties were binding, and families struggled to keep in contact even if their members were spread out in other communities (Gutman, 1976). Despite this, high rates of conception outside of legal unions were seen as evidence of African American lack of sexual control and indifference to ties of kinship (D'Emilio & Freedman, 1997).

Sexual Policing of the Boundaries of Race

The first Africans documented to have set foot in America did so in Virginia in 1619. The racial and ethnic boundaries between blacks and whites have been the focus of much of the negotiation of race. In part, American culture grew out of the interaction between Africans and whites; eventually, both slave and slave owner wore the same clothes, ate the same food, and worshipped the same god, albeit in different churches. This long physical intimacy led to sexual intimacy, so that both often shared the same parent as well. In this context, it became difficult to see the boundaries between slaves and free persons as each began to resemble the other, and so state laws were enacted to adjudicate white lineage. The law of hypodescent, or the one-drop rule, was used: if a person had one ancestor who was of African descent, then that person was considered to be black. This simplified the policing of racial boundaries.

Racial boundaries were policed even more strictly after Emancipation in 1865, because blacks were no longer separated from whites by the fact of slavery. The practice of lynching, or extralegal execution (usually by hanging), was said to occur mainly in order to stop sexual assaults by ethnic minority men. However, lynching often took place in areas where blacks were exercising political power, and most historians suggest that it was a thinly veiled tactic of intimidation or redistribution of assets (D'Emilio & Freedman, 1997; Messerschmidt, 1998; Painter, 1991). It was also suggested that sexual assault was actually the purported cause of lynching in only one-third of the cases (Painter). Blacks were often seen as political rivals, particularly in the American

South, where, in many counties, they actually outnumbered whites. During Reconstruction, lynching, among other tactics, was used to control access to the ballot for African American voters. After Reconstruction, lynching was used to uphold Jim Crow laws, as well as to discourage upward economic mobility by African Americans (Messerschmidt; Painter).

During the late nineteenth and early twentieth century, *scientific racism*—race-based biological explanations for the subaltern status of African Americans—dominated the discourse concerning race in America. Charles Darwin's work on the origin of species was invoked to explain differences between races, as well as the consequences of racial competition for those races that were not able to compete well. All persons of African descent were considered to be inferior because of heritable physical traits that distinguished them from all other groups. Explanations of the evolution of the black race and social policy based on these explanations fell into two broad streams during this period: *accommodationist racists*, who believed that blacks were at a lower stage of evolutionary development and, with proper caretaking, could progress and eventually join (white) society; and *competitive racists*, who believed that change was not possible for blacks and segregation was necessary to preserve the achievements of the white race (Fredrickson, 1987). The sexuality of blacks was thought to present a moral danger to white American society, as a corrupting influence on upstanding citizens. Black sexual needs were purported as unrefined by civilization and thus needed to be controlled by the state for their own good as well as society's good. Their presence was seen as a danger to racial purity and evolutionary fitness; their status in society was thought to be determined by heredity and unchecked reproduction was believed to threaten the ability of the nation to compete with other nations. Antimiscegenation laws, or state laws prohibiting sexual intercourse or marriage (and thus reproduction) of persons from two different races, date from this time.

> Section 4189 of the same Code declares that "if any white person and any negro, or the descendant of any negro to the third generation, inclusive, though one ancestor of each generation was a white person, intermarry or live in adultery or fornication with each other, each of them must, on conviction, be imprisoned in the penitentiary or sentenced to hard labor for the county for not less than two nor more than seven years." (Code of Alabama, cited in *Pace v. State [of Alabama]*, 1883)

Although these laws were largely found in the South and were enforced largely among black-white unions, they were more often enforced when black men attempted to marry white women. White men still maintained sexual access to black women, whether that access was voluntary or not. Often, white men were not prosecuted for the rape of black women; when blacks acted in extralegal ways by attacking white male rapists to protect themselves from

sexual assault, they were themselves the target of lynching (D'Emilio & Freedman, 1997, p. 217).

In the mid-to-late twentieth century, there was a gradual increase in the number of interracial unions in the United States. Interethnic marriages were fairly common among European ethnic groups, and antimiscegenation laws were not uniform across the country (Pagnini & Morgan, 1990). As the liberation movements of the 1960s and 1970s (Civil Rights and Black Power movements, Gay Liberation and Women's Liberation movements) liberalized sexual interactions in general, pressure was applied to overturn these laws at the national level. The U.S. Supreme Court declared antimiscegenation laws unconstitutional in *Loving v. State of Virginia* in 1967. The number of interracial unions increased from 310,000 in 1970 to 1,160,000 in 1992. This was an increase from 0.7 percent of all marriages in 1970 to 2.2 percent in 1992 (Qian, 1999). At present, the ways in which ethnic and racial boundaries relating to sex are enforced are informal and implicit (such as through social pressure and stigma) rather than through the formal actions of the government. If we examine the research literature on sexual networks, we see that sexual interactions among racial groups are still largely endogamous (within racial groups) (Laumann, Gagnon, Michael, & Michaels, 1994); when exogamy (between racial groups) occurs, it tends to recapitulate class and gender boundaries (Qian).

In summary, the history of the concept of race and its implementation in American society has led to a sociocultural context in which sexuality, race, and ethnicity form a mutually reinforcing framework. As individuals negotiate this framework, they may or may not be aware of the ways in which the sociocultural context affects the sexual choices that one makes as an individual. However, individuals are also integrated into this framework—each one of us has a sexual, ethnic, and racial identity that influences our sexual interactions as members of the groups we see ourselves a part of.

EXAMINATION OF SEXUAL ATTITUDES AND BEHAVIORS IN SELECTED RACIAL GROUPS IN THE UNITED STATES

How has the history of race and sexual interactions between races influenced sexual behavior in different racial groups? In the following sections, I examine white, black, and Latino/a sexual attitudes and behaviors. It is a significant challenge to locate sexual scientific data in ethnic groups because of the indeterminacy of most investigations with regard to racial and ethnic group membership. For example, two of the largest and most comprehensive national surveys of adult sexuality, the Kinsey studies (e.g., Kinsey, Pomeroy, & Martin, 1948) and the National Health and Social Life Survey (NHSLS) (Laumann et al., 1994) break their data down into racial groups (white, black), but for the white and black data, there is no systematic analysis of the ethnic

composition of these groups. These data will therefore focus on broader racial categories in examining sexual behavior and beliefs. Each of the following sections will (1) describe the group under study, (2) focus on elements of the history and present social conditions relevant to sexual behavior and beliefs within the racial group, and (3) describe data on sexual behaviors and beliefs collected within the past twenty years.

White Americans

White Americans form the largest racial group in the United States, topping 194 million or 69.1 percent in the 2000 U.S. Census. This does not include the 3.4 million who self-identified as white and another race and are not of Latino origin, or those Latinos who also self-identified as white (16.9 million). In terms of ancestry, the 2000 Census asked respondents to write in their ancestry or ethnic origin. The three highest ethnic ancestries reported in the census data by those who self-identified as white-only were German (29.8 million), Irish (18.9 million), and English (16.4 million).

History

The importance of white racial identity and culture for sexual behavior may not be apparent to most Americans. White identity often goes unremarked and unnoticed by the individual and the society because of the way in which ideas about whiteness and American identity are created and experienced in the United States.

Because there was no long-standing American ethnic identity in terms of a shared history, ties of kinship and blood, or geographic origin held by all Americans, such an identity had to be created and recreated throughout the nation's history. Through most of American history, one of the basic elements of American citizenship was a white identity. This was policed through custom and law; nonwhites were denied citizenship by law (e.g., Naturalization Act of 1790). Racial ideas were applied not only to those groups whose skin color, hair texture, and facial structure marked them as different, but also to European ethnic groups as well. For example, in the United States during the eighteenth and early nineteenth centuries, the Irish were not considered to be members of the white race. Differences in language, religion, and cultural practices, particularly around sexual and courtship practices, led to widespread discrimination for the Irish.[2] Similar experiences awaited other European immigrants (e.g., Italians, Russians, Greeks) into the United States during the nineteenth and twentieth centuries. Discriminatory practices led to extreme pressure for those groups who might become white to assimilate or subsume their ethnic identities and cultural practices into an undifferentiated American identity. The rhetoric around the concept of the "melting pot" suggests that immigrants shed their differences and become American. Immigrant groups

who do not choose to "fit in" by retaining their language of origin or cultural practices face pressure from society to conform.

The loss of a specific ethnic identity and cultural experience may lead white Americans to perceive themselves as lacking a race or ethnicity because these two factors may not appear to be salient in their daily life. In many parts of the United States, whites may not have any meaningful interaction with ethnic minority persons, either because of de facto segregation or because of low numbers of ethnic minority persons in general. Researchers who are not immune to social and cultural influences on theorizing may also perceive race and ethnicity as factors that affect nonwhites primarily, and thus ignore the possible effects of white racial cultures on sexuality. While there is substantial empirical evidence for white sexual behaviors and attitudes, as well as differences between racial groups, there is not as much empirical or theoretical work on the effect of white racial identity on sexual behavior or attitudes.

Sexual Behavior and Beliefs

Much of the data in this section is from the NHSLS. This is a large-scale probability sample of 3,432 U.S. men and women between 18 and 59 years of age, of which 2,707 respondents self-identified as white. When we examine age at first vaginal intercourse, white men and women tended to engage in intercourse later than other groups. For the cohort of NHSLS respondents born between 1963 and 1967, the mean age at first intercourse for black men was 15½; white men, 17½; white women, 17¾; and black women, 17 (Laumann et al., 1994, p. 325). This difference may be related to differences in the onset of puberty. The mean ages at the onset of pubic hair, breast development, and menarche, respectively, were 9.5, 9.5, and 12.1 years for black girls; 10.3, 9.8, and 12.2 for Mexican American girls; and 10.5, 10.3, and 12.7 for white girls (Wu, Mendola, & Buck, 2002).

The developmental progression of engagement in sexual activity in adolescence is fairly consistent for white men and women. Smith and Udry (1985) examined longitudinally the order in which black and white adolescents engaged in precoital behaviors in their progression to intercourse. For white adolescents, there was a predictable progression from the unclothed caressing of breasts to feeling male and female sex organs and then vaginal intercourse.

In the NHSLS data, white respondents tended to be liberal and fairly secular in their attitudes about sexuality: 44 percent of white men and 57 percent of white women reported that religion shaped their sexual behavior, while 22 percent of white men and 30 percent of white women agreed that premarital sex was wrong (Mahay, Laumann, & Michaels, 2001). In terms of sexual behavior, whites were also less conservative than other groups: 75 percent of whites engaged in oral sex in their lifetime, although the percentage of men engaging in active anal intercourse was roughly similar across racial groups (approximately 3–4 percent). The median number of partners since age

18 for whites was three, which was higher than for all other groups except blacks (four partners) (Laumann et al., 1994, p. 181).

Homosexuality. In the sexuality literature, there are distinctions made among sexual identity, sexual behavior, and sexual orientation or desire. The percentage of homosexual- and bisexual-identified persons varies from less than 1 percent for black women to 3.7 percent for Hispanic men in the NHSLS. For white men, this is 3 percent and for white women, 1.7 percent. For women, this was the highest reported percentage, and for men it was the second highest (Laumann et al., 1994, p. 305).

Stereotypes in American society suggest that homosexuality or rather gay and lesbian identities seem to be associated with whites, particularly among ethnic minority groups (Boykin, 2005). Media depictions of gay men and lesbians are more likely to be white, which is consistent with the numbers of whites in the population as a whole. The Gay Liberation movement in the 1970s was a largely white male movement, and much of the activism around HIV/AIDS in the 1980s and 1990s was conducted by middle- and upper-middle-class white gay men (Epstein, 1996). Whites also tend to be less likely to hold negative attitudes toward homosexuality in general, although religious conservatives (Burdette, Ellison, & Hill, 2005) and white men tend to have higher levels of sexual prejudice (Bonilla & Porter, 1990; Herek & Capitanio, 1996).

Sexual dysfunction. Sexual dysfunction has not been discussed in racial terms in the research literature until recently (Lewis, 2004; Working Group on a New View of Women's Sexual Problems, 2001). But examination of the literature suggests that quite a bit is known about sexual dysfunction in white populations. Very often, the data on sexual dysfunction does not contain the ethnic background of the research participants; when it does, the vast majority of the studies examine largely white samples and cannot make informed analyses of the causes or prevalence of sexual dysfunction in ethnic minority populations (e.g., Benet & Melman, 1995; Feldman, Goldstein, Hatzichristou, Krane, & McKinlay, 1994). Eleven to 29 percent of white women reported sexual problems in the NHSLS; these ranged from a lack of interest in sex (29 percent), to inability to experience orgasm (24 percent), to anxiety about sexual performance (11 percent). Seven to 29 percent of white men reported sexual problems such as climaxing too early (29 percent) and an inability to experience orgasm (7 percent) (Laumann, Paik, & Rosen, 2001). While these rates seem high, they are lower in comparison to other racial/ethnic groups.

Latinos

Latinos form the second largest racial group in the United States.[3] In the 2000 U.S. Census, 35.3 million people (12.5 percent of the U.S. population) self-identified as Hispanic or Latino. The largest ethnic ancestries reported were Mexican (20.6 million), Puerto Rican (3.4 million), and Cuban

(1.2 million). There is enormous diversity found within Latino ethnic groups. Major challenges lie in defining this population, deciding exactly who fits into this category, accounting for differences in self-definition, and understanding the relationship between culture of origin and host culture and its effects on sexuality.

For example, do we define being a Latino as being a citizen of a Spanish or Portuguese language country? How then do we account for Chinese Cubans, who came to Cuba in the nineteenth century as laborers? Are they Asian or Latino? In the U.S. Census, Hispanic/Latino status is described as an ethnicity and Latinos can also self-identify as members of other races. Thus, a Latino respondent can identify as black and Hispanic, or white and Hispanic, or Native American and Hispanic. On the face of it, this makes sense; because of the diversity of skin colors and ethnic group intermarriage and immigration, Latinos can be of African, Chinese, Amerindian, or Asian Indian descent among other groups, sometimes within the same person. The individual histories of Latin countries may also determine the racial characteristics of their inhabitants. Argentina was founded by the Spanish and for many years has carried out an explicit policy of promotion of white European immigration. Because of this, the ethnic breakdown in Argentina is 97 percent white (mostly Spanish and Italian) and 3 percent nonwhite, mestizo (mixed white and Amerindian ancestry), Amerindian, or other groups (Central Intelligence Agency, 2005a). The Dominican Republic, on the other hand, because of a larger African slave population and high rates of intermarriage, has an ethnic breakdown of 16 percent white, 11 percent black, and 73 percent mixed (CIA, 2005b).

Another challenge lies in the expectation that a person from Argentina and a person from the Dominican Republic have had similar experiences before immigration to the United States. A white Argentinean may be of high social class in Argentina, and if they appear white to American eyes (including English fluency), they may also enjoy that class and racial status in the United States without ever experiencing racial discrimination. Yet, they are members of the same racial/ethnic category as a dark-skinned Dominican, who may experience quite a bit of racial discrimination. Social class is an important aspect of identity and varies across national origin and immigration status in the United States. Given this, it may be difficult to characterize Latino sexual behavior as a whole, although there is some research suggesting that there are enough similarities between Latino ethnic groups to make such a discussion meaningful (Carballo-Dieguez, Dolezal, Nieves-Rosa, & Diaz, 2000). There are multiple levels of complexity in the analysis of Latino sexualities. The best course available in assessing the work in this area is to be as painstaking as possible in the ethnic identification of Latino respondents—what is the country of origin of the sample; what is the level of acculturation, age of arrival, generation, and length of residence in the United States for immigrant samples.

History

From reading this chapter, as well as much of the scholarship on race, it may seem that racial interactions were primarily between whites and blacks in the United States. However, there are long and continuing histories of Latino-white interactions that vary across particular Latino ethnic groups. In general, the treatment of Latinos often paralleled the treatment of Native Americans in the United States. For example, the appropriation of land and other material resources belonging to Mexicans and Mexican Americans occurred in the Southwest and California before and after the Treaty of Guadalupe Hidalgo in 1848 (Carrasco, 1998). The interactions between whites and Mexicans in the Southwest were complex. Mexicans were seen as inferior, particularly as tensions rose between Mexico and the United States. But it is important to remember that in the early nineteenth century, white Americans were initially immigrants into much of the Southwest, and so there was integration of whites into Mexican culture. After the Treaty of Guadalupe Hidalgo and the discovery of gold in California, the relationship between the numbers of whites and Mexican Americans changed, and we see the implementation of public policy to limit the economic power of Mexican Americans (Takaki, 1993).

Sexual relations between Mexicans and whites were different than that between blacks and whites. They typically occurred in one of three fashions (D'Emilio & Freedman, 1997). At first, white men intermarried Mexican women and assimilated into Mexican society. This occurred earlier in the nineteenth century, when small numbers of white male trappers, miners, and traders interacted with Mexican society. Later, as more whites entered the Southwest, Mexican women assimilated into white society through intermarriage. They often had to endure increased stigmatization as dirty and immoral, particularly as relations between Mexico and the United States soured in the wake of the Mexican-American War (1846–1848). Their husbands attempted to reinvent stigmatized Mexican women as Spanish "ladies" in order to ease their integration into white society. The third type of sexual relation was more exploitative, as white men used their social privilege in similar ways as with blacks to subjugate and control Mexican mestizo sexuality (D'Emilio & Freedman, 1997). This exploitative relationship was mirrored in the law as well, as Mexican labor was alternatively called for and cracked down upon by the United States throughout the nineteenth and twentieth centuries (Carrasco, 1998). Tensions in the southwestern part of the country and California among whites, blacks, and Latinos exist to the present day, and continue to affect the perception of Mexicans and Mexican Americans in the United States.

Acculturation is a significant issue for Latino immigrants (Zea, Reisen, & Díaz, 2003). The terms of immigration—whether there was a significant population of the migrating group in the United States, the social class and resources of the group, and the relationship between the home country and

the United States—all help in determining how immigrating members of the group negotiate American society. This also has effects on the context in which sexuality occurs. For example, traditional Mexican ideas about marriage and the sexual relationship between men and women changed for Mexicans migrating to the United States. Ideals of companionate marriage present in the country were internalized by acculturating Mexican Americans and their children. These ideas also were introduced into Mexico through the media, returning migrants, and direct communication between Mexicans living in the United States and in Mexico (Hirsch, 2003). The lack of distance between these two countries, the political situation in Mexico, and the pattern of temporary and permanent migration to the United States were strong influences on ideas of marriage for Mexicans. It is also important to remember that not all Latinos are immigrants. Mexican Americans have been in California for 300 years, well before it was a part of the United States. In 1848, when the Treaty of Guadalupe Hidalgo ceded control of California and the rest of the Southwest, the Mexican inhabitants were granted immediate American citizenship according to the terms of the treaty.

Sexual Behavior and Beliefs

The major challenge in outlining sexual beliefs and behaviors of Latinos from empirical data lies in sampling biases. As many researchers in this area have noted, sexual experiences vary in persons within the same ethnic group, as the (social and physical) distance from the country of origin changes, as well as across generations (e.g., Hirsch, 2003). Given this, data that are collected for Latinos should contain information about national origin and generational status for immigrant samples if at all possible. For example, the NHSLS does contain information about the national origin of Latinos, but these data are not always made a part of analyses in the literature.

With regard to age at first intercourse, Upchurch, Levy-Storms, Sucoff, and Aneshensel (1998) reported a median age of 16.5 years for Latino males and 17.3 years for Latino females in a largely Mexican American sample. Another interesting finding was that Latinas were nearly half as likely to engage in sexual activity as white females. This difference was not likely due to differences in the onset of puberty, but rather differences in family structure. When differences in family structure were controlled for, the difference in sexual activity was not a significant one. The NHSLS data suggests that Latinos are more likely to engage in their first sexual experience with a partner they were in love with (Mahay et al., 2001).

In the NHSLS data, Mexican American respondents tended to be more traditional in their attitudes about sexuality than were whites. This difference did not manifest in the percentages, but in the statistical analysis, which controlled for age, religion, and educational status. Fifty-one percent of Mexican men and 60 percent of women reported that religion shaped their

sexual behavior, while 27 percent of Mexican men and 42 percent of women agreed that premarital sex was wrong (Mahay et al., 2001). The statistical analyses showed that Mexican Americans were nearly three times as likely to state that premarital sex was wrong, and nearly twice as likely to state that religion shaped their sexual behavior. In terms of sexual behavior also, Mexican Americans were more conservative than whites; 65 percent of Mexican men and 61 percent of women engaged in oral sex in their lifetime. When controlling for other variables, Mahay et al. suggest that Mexican Americans were half as likely to have engaged in oral sex. The median number of partners since age 18 for Latinos was two, which was lower than for all other groups except Asians (one partner) (Laumann et al., 1994, p. 181).

Overall, examination of the NHSLS data suggests that Latinos find fewer sexual practices appealing when compared to whites. Although Latinos were more likely to espouse conservative sexual values, the percentage of premarital sex was not different for them compared to whites. This and other data suggest that there is evidence for a romantic script that adolescent and young adult Latinos followed in their initial explorations of sex. The data also suggest that Latino sexuality may be tied in a more explicit fashion to gender, as Latinas were much more likely than other groups to state that their first sexual experience was with someone they loved.

The gender scripts *machismo* and *marianismo* suggest that sexuality is a positive expression of gender, but only under certain circumstances. Marianismo is a cultural script employed by Latino ethnic groups to organize the behavior of women. This scenario constrains the heterosexual behavior of women as passive partners within relationships with men and, within sexual relationships, places expectations of sexual abstention before marriage and a restraint of sexual expression after marriage (Seal, Wagner-Raphael, & Ehrhardt, 2000). Machismo suggests that men must prove their masculinity through acts of bravery, fearlessness, and strength, and that these acts must have a public aspect, as machismo is a performance whose appreciation must come from other people (Cheng, 1999). According to these scripts, young women with a desire for sex have to couch their desire in romantic terms, stating that they had sex because they were in love and their male partner wanted to have sex. Young men have to attempt to prove their masculinity by boasting of sexual prowess and demonstrating that prowess as much as possible (Díaz, 1998). Of course, there are many cultures in the United States that also have similar gender norms, but the strength of these scripts in Latino communities and their interaction with other norms have powerful effects on the sexual behavior of Latinos. There is strong evidence of this when homosexuality is explored in Latino samples.

Homosexuality. In examining homosexuality in Latino communities, the cultural distinctions across ethnic groups about what constitutes homosexuality become apparent. In the NHSLS data, 3.7 percent of Latino men self-identified as either homosexual or bisexual, the highest of all the racial groups (Laumann

et al., 1994, p. 305). But this percentage may be compromised by the meaning of this self-identify for Latinos. For many heterosexually identified Latino men, being the insertive partner in same-sex anal intercourse (*el bugarron*) does not make a man a homosexual; it is the act of being penetrated that makes one homosexual. Homosexuality is thought of as a problem of gender such that men who have same-sex desires and act on them by being penetrated are not real men (*no hombre hombre*) (Carrier, 1976; Díaz, 1998).

For many homosexually oriented men, their identities as a man and as a Latino are at odds with their sexual desires, and thus they may organize their behavior to conform to ideas of masculinity. Some men may internalize engendered sexual prejudice, be more concerned with the loss of an erection and avoid becoming comfortable using condoms, and ignore HIV prevention messages aimed at gay men because those men are *loca* (crazy females) and thus different from themselves (Díaz, 1998). Others may choose to drink alcohol or use drugs in order to help dissociation from sexual feelings or feelings of shame (Hughes & Eliason, 2002). Familism, a cultural ideal that emphasizes the importance of family and family emotional bonds, also makes it difficult for men to negotiate homosexuality. Since homosexuality is so stigmatized, it increases the difficulty of coming out to one's family and increases the shame and emotional pain if a man is rejected by his family. There may also be conflict between cultural values of *respeto* (respect for others) and familism such that Latinos may not come out to their families because to do so would breach the respect shown to elders (Rosario, Schrimshaw, & Hunter, 2004). Some Latino men choose to avoid this possibility by living a double life, which can lead to more stress (Meyer, 2003).

Latina lesbians experience significant stigma as well, as they must negotiate compulsory heterosexuality and the expectation that as women they must have a family and children of their own (Espin, 1987). There are cultural possibilities for strong and enduring emotional ties between women (*amigas intimas*) (Espin, 1993), but a lesbian identity is strongly stigmatized in Latino communities. There is the perception here, as in black communities, that homosexuality is a behavior that was forced on Latinos by (white) Americans. The stigma attached to the word may be so strong that some Latinas use the words *amigas* or *companeras* in their self-identification. Again, there is an expectation that homosexuality is a gender problem, so that homosexually oriented women may feel pressure to conform to a butch or masculinized role (Espin, 1993). These cultural meanings may also compromise the percentage (1.1 percent) of Latina women who self-identified as either homosexual or bisexual (Laumann et al., 1994, p. 305).

Attitudes toward homosexuality are largely negative among Latinos. In the NHSLS data, Mexican American men and women constitute the highest percentage of respondents who stated that homosexuality was wrong (84 percent and 85 percent, respectively) (Mahay et al., 2001, p. 215). Controlling for other variables, Mexican American men are twice as likely and women

three times as likely as whites to endorse this negative attitude. Many Latinos face racial and ethnic discrimination and prejudice within white gay and lesbian communities as well (Díaz, Ayala, Bein, Henne, & Marin, 2001; Siegal & Epstein, 1996).

Sexual dysfunction. Interestingly, when examining the NHSLS data on sexual dysfunction, Latinos tend to endorse the lowest levels of these sexual problems. However, most of the differences between Latinos and whites in the statistical analyses conducted by Laumann et al. (2001) are not significant. Twelve to 30 percent of Latina women reported sexual problems in the NHSLS. These ranged from a lack of interest in sex (30 percent), to inability to experience orgasm (22 percent), to anxiety about sexual performance (12 percent). Five to 27 percent of Latino men reported sexual problems such as climaxing too early (27 percent) and anxiety about their performance (5 percent) (Laumann et al., 2001).

When we examine women's experience of sexuality in marriage, there is evidence of generational and perhaps migrational differences in their perceptions of their sexual lives. Hirsch (2003) reported that in more traditional marriages based on mutual respect and social decorum (*respeto*), Mexican women expected no sexual pleasure in their sexual interactions with their husbands. If it did occur, then it was seen as a bonus; if it did not, then it was a private matter for the woman to deal with (Hirsch, 2003, p. 213). In the more companionate marriages experienced by the urban, more educated, and/or immigrant women, trust and mutual disclosure (*confianza)* led to greater expectation of intimacy and sexual pleasure for women and for men. Although this division between immigration, education, location, and type of marriage expectations is not a hard and fast rule (respeto and confianza are found through Mexican society in Mexico and abroad), these factors are important in understanding how sexual problems are defined and discussed (Fontes, 2001).

Blacks or African Americans

The U.S. Census uses the terms "black" and "African American" synonymously, as does the vast majority of the research literature on sexuality, so it may not be possible to make clear distinctions between racial and ethnic data in this section. Black Americans are the third largest racial group in the United States, with 34.7 million or 12.3 percent who self-identified as black or African American alone in the 2000 Census. One million self-identified as black alone or in combination with other races (e.g., black and white) and of Latino origin, and nearly 1.8 million as black and one or more other races. Of those who answered black as their only racial affiliation, the largest ethnic ancestries are as follows: 21.7 million self-identified as African American, 1.1 million as African, 604,000 as Jamaican, and 452,000 as Haitian. An additional 2.1 million answered black or Afro-American. The remaining of the total 34.7 million gave answers as diverse as Fijian (199 respondents) to Herzegovinian (2 respondents).

Without knowing the salience of these ethnic identities for the individual, it is impossible to determine their effects on the sexual experiences of individuals, but there are broad statements that can be made about cultural scenarios about African Americans in general.

Twenty-first-Century Perceptions/Stereotypes of African American Sexuality

In many ways, the present perceptions of African American male and female sexualities are an extension of the ideas we have explored earlier. For the past thirty years, the sexuality of native African Americans has continued to be presented largely as a problem. In the psychological and public health literatures, much focus has been placed on increases in adolescent pregnancy and illegitimacy as problems found in black communities, although the birthrate in all communities had increased during the mid-twentieth century, and actually peaked in the 1950s (Luker, 1996). The number of babies born to women out of wedlock across all age-groups has remained stable or declined, depending on which group of women one chooses to focus on, and the rates of black adolescent pregnancies out of wedlock dropped 40 percent in the 1990s (Martin et al., 2002). Yet, in popular culture and the media, myths of black women as "baby factories," and high rates of illegitimacy in black communities as indicative of black sexual immorality continued to be produced throughout the twentieth century (Walker, 1998).

Multiple sexual stereotypes about blacks are continually in flux, transformed by new representations in popular culture both within and outside of black communities. Present scenarios about black women include the "black bitch," a loud, rude, and sexually aggressive woman, and the "ho" or "hoochie mama," a materialistic, sexually available woman who uses her sexuality for material gain (Collins, 2004). These stereotypes, which are stigmatized because they violate patriarchal expectations about women's sexuality and its control, coexist in hip hop culture alongside black female performers who speak out against misogyny and objectification.

Much has been made of hip hop as the major creator of sexual stereotypes about black men and women, as well as its production by African Americans. Because it was created by poor and working-class African Americans and Latinos (hip hop was invented in dance clubs and parties in the Bronx, in the late 1970s), hip hop has heightened credibility as an authentic portrayal of African American (sexual and gender) values. But the largest consumers of hip hop are white: according to music industry sales statistics, 70–75 percent of hard-core rap albums are purchased by white consumers (Speigler, 1996). Although the musicians and producers are largely persons of color, consumers ultimately control what is produced by their purchasing patterns; many of the major labels that were originally owned by African Americans (e.g., Def Jam Records, Russell Simmons) have been bought by mainstream recording

companies. This suggests that although hip hop may have reflected, and for many still reflects, working-class and poor African American cultural values of masculinity and femininity, there may also be a commodification and packaging of hip hop to reflect expectations about African American male and female sexuality by non–African American consumers. This suggestion would be anathema for hip hop artists, for whom "keeping it real" or maintaining black working-class ties and values, and not selling out, is a core value.

African American male sexuality has continued to be represented as dangerous and violent, and also close to the primitive, and thus more potent than other groups who have been exposed to the emasculating effects of civilization. Past cultural scenarios of the primitive, rapacious black "Buck" and the Reconstruction-era rapist, who is a danger to white womanhood, have been updated to presentations of the hypermasculine black (working-class) man. Images of black hypermasculinity present an urban aesthetic of physical prowess and strength, respect through the imminent threat or use of violence, misogyny, leeriness of emotional ties to lovers, and a particular kind of sexual aggressiveness (Henry, 2002). This aggressiveness is demonstrated through the persona of the "playa," who collects sexual conquests, often through implicit or explicit deception of their female partners (Anderson, 1997; Collins, 2000; hooks, 2004). "Pimp culture" is also an element found within hip hop; the pimp is glorified as a man who makes money and controls women despite social sanctions against him. The pimp is transgressive—he goes against mainstream social values and so holds street credibility for black and white consumers alike.

Yet, hip hop culture is multifaceted. It is not only "booty flyin' across the screen," but is also a major venue for poetry, political commentary, and activism by young African Americans and Latinos (Kitwana, 2003; Rivera, 2002). Some of the same artists who extend hypermasculinity and misogyny in their work are also advocates for political change, often within the same album (Kitwana, 2003; Powell, 1998). Older African Americans, as well as feminist-oriented critics, contest the values displayed in hip hop culture as misogynistic and counter to the values of civil society (Powell).

Hip hop, however, has a visibility and perceived authenticity in the United States that makes it a major player in the production and distribution of ideas about African Americans (Kitwana, 2003). Its worldwide distribution through music, videos, and motion pictures inspired by hip hop sensibilities makes it central among the first experiences of non-American audiences to African Americans.

In the context of the protean nature of hip hop and black cultures in general, it is interesting to examine the sexual behavior of blacks in the United States. High rates of HIV infection in black communities may also have had an effect on individual sexual behaviors, even though it may not have had an effect on the discussion of HIV in American popular culture at large. A Kaiser Family Foundation report focusing on media coverage of HIV/AIDS from 1981 to

2002 noted that less than 2 percent of all recent HIV/AIDS reporting centered on ethnic minorities, although HIV/AIDS is the leading cause of death for African Americans between 25 and 44 years of age (Kaiser Family Foundation, 2004).

Sexual Behavior and Beliefs

The overall picture of the sexual experiences of blacks is in stark contrast to the cultural stereotypes of black sexuality, which in general suggests that African Americans are sexually voracious, enjoy more sex, and enjoy sex more than other ethnic or racial groups. With regard to specific sexual practices, African Americans tend to be more conservative sexually as compared to other racial groups. According to NHSLS data, black men and women are less likely (20–30 percent less) to engage in fellatio and cunnilingus than other ethnic/racial groups, both the last time they engaged in sexual activity and ever in their lifetime (Mahay et al., 2001). Both genders are also less likely to have found fellatio and cunnilingus as appealing sexual activities. Black women are less likely to have engaged in anal sex in their lifetime (9.6 percent). Anal sex, while not a part of the sexual repertoire of most Americans, had been experienced by 26 percent of American men and 20 percent of American women in the NHSLS (Laumann et al., 1994, p. 99). Black men and women are more likely to have not masturbated at all in the past year. However, the amount of pleasure experienced by black men and women does not seem to be different when compared to other groups.

When we examine age at first vaginal intercourse, black men tend to be younger than white men, white women, and black women. For the cohort of NHSLS respondents born between 1963 and 1967, the mean age at first intercourse for black men was 15½; white men, 17½; white women, 17¾; and black women, 17 (Laumann et al., 1994, p. 325). As suggested earlier, this difference may be related to differences in the onset of puberty, and girls who mature earlier begin to date and engage in sexual behavior earlier than later-maturing girls (Brooks-Gunn, 1987).

Data from other studies suggest that the order in which adolescents progress to vaginal intercourse is different for black adolescents than for whites. In Smith and Udry's study (1985), there was not a consistent progression over time for most black adolescents; some experienced a similar progression from petting to intercourse while others did not. This is also supported by other qualitative research that suggests there is a historical cohort effect such that African American men who came of age sexually in the 1950s and 1960s experienced a progression similar to that reported in Smith and Udry's study (Bowser, 1994). Younger men who came of age in the 1980s were more likely to have engaged in vaginal intercourse as one of their first sexual encounters rather than moving from petting to intercourse.

Homosexuality. Attitudes about homosexuality/sexual identity are contradictory in black samples. Research has been sparse in this area, but suggests that blacks are more likely to hold negative attitudes toward homosexuality than whites (Ernst, Francis, Nevels, & Lemeh, 1991). It has been suggested that religiosity may be one reason for high levels of sexual prejudice (homophobia) in African American samples, as well as strong endorsement of masculine ideology (Battle & Lemelle, 2002). Cultural descriptions of black hypermasculinity are heterosexually oriented, and cultural stereotypes about black sexuality in general are implicitly heterosexual. Some early-twentieth-century commentators suggested that homosexuality would be unknown in blacks because homosexuality is unnatural; thus blacks, who were closer to nature, would not exhibit this unnatural behavior (Collins, 2004). These attitudes are also found within black communities; many homosexually oriented black men and women have reported that they have been told that homosexuality is a white phenomenon (Edwards, 1996; Peterson, 1992). Other homosexually oriented black men and women refuse to identify as gay or lesbian because these labels are seen as being white labels, or because they have experienced racial prejudice in white gay communities (Boykin, 2005; Greene, 2000). Other terms in use in African American communities include "same-gender loving" and "two-spirited" (Malebranche, Peterson, Fullilove, & Stackhouse, 2004). There is also evidence that black men who have sex with men (MSM) are less likely to identify as homosexual and are more likely to consider themselves heterosexual (Edwards, 1996). This has clear implications for public health interventions targeted toward gay men: black MSM may be less likely to listen and act upon public health interventions that they do not perceive as relevant to their own lives.

Sexual dysfunction. The research literature suggests that black men and women experience high rates of sexual dysfunction (Laumann et al., 2001; Lewis, 2004; Wyatt, 1997). Thirteen to 44 percent of black women reported sexual problems in the NHSLS; these ranged from a lack of interest in sex (44 percent), to inability to experience orgasm (32 percent), to experiencing pain during sex (13 percent). Thirty-two percent reported that sex was not pleasurable as well. Nine to 34 percent of black men reported sexual problems such as climaxing too early (34 percent) and being unable to experience orgasm (9 percent) (Laumann et al., 2001). Additional analyses showed that black women are nearly twice as likely as white women to report lack of interest in sex, while black men are more than twice as likely as white men to report that sex is not pleasurable (Laumann et al., 2001). Gail Wyatt (1997) writes of the challenge of many African American women to enjoy sex in the face of negative stereotypes about black female sexuality. Tricia Rose (2003), in presenting a set of narratives from black women about sexuality and intimacy, comments on the frequency of physical and sexual abuse in childhood that her respondents mentioned. Although there is little data on erectile dysfunction (ED) across racial/ethnic groups other than whites, I have suggested elsewhere

that African American men suffer disproportionately from medical conditions such as diabetes and hypertension that are associated with ED, such that between 900,000 and 1.1 million African Americans may experience ED (Lewis, 2004). It is important to realize that despite the challenges faced by black men and women in negotiating sexuality, there is little difference in the amount of unhappiness in sexuality reported in the NHSLS.

EXPLAINING RACE, ETHNICITY, AND SEXUALITY

How do researchers explain these differences among black, white, and Latino sexualities? I have to acknowledge the difficulty in writing this part of the chapter, because there is little explicit theory about race and sexuality in the psychological and sexual scientific literature. In many ways, all of the anthropological literature on sexuality in differing cultural contexts is about the relationship among culture, sexual behaviors, and meanings of sexuality. But in the sense that we connect race, ethnicity, and sexuality in the United States, there is little theory about the normative connection among these aspects of identity (Lewis & Kertzner, 2003).

In many ways, the scientific research on human sexuality in the United States is largely the study of white American sexualities. For example, Kinsey's groundbreaking work *Sexual Behavior in the Human Male* is based on a total sample of 5,300 white American and Canadian men. Kinsey did collect data from black American and Canadian men, but in this work, he suggests that he has not collected the numbers needed to make inferences from comparisons across races. Note that Kinsey, as many other researchers, states his analysis (or lack of analysis) primarily in terms of racial comparisons rather than by examining sexual behavior within ethnic groups. Lastly, although Kinsey and his colleagues interviewed only white males, they titled their book *Sexual Behavior in the* Human *Male*. The equation of "human" and "white" has not been unusual in the social sciences in the past, and is a problem that still exists to a lesser extent today (Graham, 1992).

Whiteness has not been commonly examined or remarked on in the sexuality research literature, except in relation to ethnic "minority" groups. When this occurs, it seems as if there is a belief that the study of white Americans removes the influence of race/ethnicity, as if whiteness was a lack of ethnic or racial identity. An alternate view is that white racial identity is normative, and something extra needs to be added to the analysis when ethnicity and race are examined, namely, the presence of nonwhite participants (Azibo, 1988). When comparative work is done, often there is an inequity in the groups examined, with white and middle-class samples compared to samples of ethnic minority persons living in poverty. Even when variables such as income are controlled for, so that persons from different racial/ethnic groups but of similar income level are compared, other factors may impact

how income is experienced in two different groups. These differences are attributed to cultural differences, although social class and factors outside of the individual (e.g., stigma) may influence sexual practices and beliefs.

There are many studies that document racial and ethnic group differences in sexual behavior and attitudes. These studies answer, to a greater or lesser extent, questions of *who* does *what* and *when* in sexuality research. These descriptive studies, when the quality is high, can provide a wealth of information about varieties of human experiences of sexuality. However, questions of how and why the connections between sexuality and ethnic/racial group membership occur have not been addressed in the sexuality literature. This is consistent with the larger challenge of lack of theorization in the field in general (Stevenson, 2002). One broad distinction between theories about sexuality lies between essentialism and social constructionism (DeLamater & Hyde, 1998).

Modern essentialism in sexuality research is described as the belief that (1) sexuality is determined (often biologically) such that individuals have no choice in their sexual behavior, orientation, or identity; (2) there are underlying "true" essences or categories that organize human sexuality (e.g., "homosexuals," "heterosexuals," "men," "women"); (3) these essences are universal, so they are shared by all members of the group and cut across historical, national, and cultural boundaries (DeLamater & Hyde, 1998). *Social constructionism* suggests that our definitions of sexuality, race, and ethnicity are socially agreed upon and are reproduced when we act on these conventions of sexuality, race, and ethnicity. Because they are socially agreed upon, it is argued that they have no independent existence apart from the culture/society they are produced in (Bohan, 1993).

Essentialism is often confused with biological determinism, which states that biological factors are responsible for the behavior under study. The important idea in essentialism is that essences are internal to the person, persistent across the lifetime, and the behaviors associated with the essence will inevitably occur (Bohan, 1993). Biological determinism can be a type of essentialism, but there can be other explanations for the origin of essences. For example, cultural essentialism suggests that culture determines how a member of a cultural group will behave. Biological reasoning and the use of the natural are often invoked to explain why these essences occur, but there are also examples of cultural essentialism as well.

Racial essentialism clearly describes how race was conceived of from the sixteenth to the early twentieth century. During this period, the focus on biology as a way of explaining racial group differences naturalized differences between groups. In the twentieth century, sociologists and anthropologists fought against these ideas of racial biological essentialism by highlighting the cultural and social aspects of American life and their effects on ethnic minority sexual behavior. For example, W. E. B. Du Bois (1903/1990) examined the historical and economic antecedents to the breakdown of African American

monogamy, which in turn led to family dissolution, lack of moral values, and, ultimately, criminal behavior, alcoholism, and other forms of damage to African American communities. The balance of work on ethnic/racial minority sexuality in the twentieth century can be seen as a tension between biological models of essentialism and sociocultural explanations for differences between white and ethnic minority, largely, African American samples.

As sociocultural explanations of racial/ethnic differences became more social constructionist in their approach, they moved from suggesting that all members of a race receive the same socialization to questioning the basis of shared ideas about sexuality. There also came to be a focus on the meaning of sexual behavior to the individual and the society of which they were a part. At the present time, essentialist ideas about race and sexuality have fallen out of vogue in academic circles, particularly if they focus on biological ideas about race. The biological meaningfulness of race has been challenged by biologists, anthropologists, and now geneticists, who suggest that genetic data does not support the typology of race as conceived in the nineteenth and early twentieth centuries (e.g., Graves, 2001; Lewontin, 1972; Montagu, 1942/1997).

Sexual Scripting Theory

Present theorizing about sexuality and race acknowledges that culture is responsible for the ways in which members of ethnic/racial groups come to organize their sexual lives, but there are not many theories that explicitly address the process. One theory that does begin to address the cultural acquisition of sexual knowledge is Sexual Scripting Theory (SST). John Gagnon and William Simon presented this theory in their book *Sexual Conduct* (1973), arguing that sexuality was not a single, unitary natural phenomenon. They suggest that sexuality is "far from being natural" and is "located well within the realm of the social and the symbolic" (Plummer, as cited in Simon, 1996, p. x). In SST, social groups create *sexual scripts*, which are sets of behaviors, beliefs, and the meanings attached to them that are constructed by an individual and social group, and are agreed as sexual. Because sexual scripts are not limited to sexual behavior but include meaning, a sexual scripting approach begins to address the challenge of understanding the meanings of sexual behavior to those who are being sexual. These scripts change over historical time and across national boundaries.

Sexual scripts are held at three differing levels: (1) the cultural or social level, where abstract ideas about sexuality are created and shared among members of the culture; scripts found at this level are described as *cultural scenarios*; (2) the interpersonal level, where individuals act on their chosen set of sexual ideas in conjunction with other persons; scripts at this level are called *interpersonal scripts*; and (3) the intrapersonal level, where individuals' internalized ideas about their own sexuality are located; scripts at this level are

called *intrapsychic scripts*. Each of these levels is analytically distinct yet inextricably linked to the other.

Cultural scenarios are the scripts built by cultural or social groups for explaining the (sexual) experiences of people. Cultural scenarios provide the raw material for the construction of more personal scripts by members of that culture by limiting choices of behavior and beliefs and by setting rules of appropriate behavior and responses to others' behavior. The majority of ideas about black sexuality discussed earlier in this chapter are cultural scenarios. These scenarios include beliefs concerning black (and white) masculinity held by African Americans, European Americans, and other racial/ethnic groups; expectations of male-female relations; and moral prescriptions for appropriate and inappropriate sexual practices, among others. Scenarios can be about persons outside of the group as well as within the group. These scenarios impact on relations between groups; sexual scenarios can have a deadly effect when combined with social power because of the emotional and societal valence contained within them. Historical analyses, such as the analysis of race in this chapter, can highlight the construction of cultural scenarios over time, making clear why some scenarios have more currency at present than others.

Cultural scenarios, which refer to the beliefs about the behavior of groups, are abstract in SST—the theory does not directly address the actual behaviors and beliefs in individuals acting in a concrete world. An excellent example of a cultural scenario is the concept of marianismo. The actual behavior engaged in by Latinas, and the extent to which marianismo is adhered to or resisted by individuals can be very different from the scenario, and is affected by the social environment in which the actual behavior occurs. The actual "rules" that an individual woman holds for how she interacts with her partners are interpersonal scripts. Some women may enact the marianismo scenario with their husbands in their own life without thinking about or changing their behavior at all. Other women may interact with their partner and find that neither is satisfied with enacting marianismo between themselves. Individuals take these external cultural scenarios, internalize them as a part of the creation and continuation of the self, and in conjunction with other persons, and use transformed cultural scenarios as interpersonal scripts to organize actual behavior in real-world contexts.

Interpersonal scripts govern the actual interactions between the actor and other persons, but also allow room for improvisation. Cultural scenarios are not simply downloaded verbatim into individuals. Individuals select the cultural scenarios that are most consistent with their own ideas and experiences of sexuality and incorporate them into their own menu of sexual acts. Interpersonal scripts help in the production of behavior—overt, observable events that occur in the interaction of social actors in the real world. Because interpersonal scripts are behavioral scripts, this is the level that is usually examined in much of the sexuality research. There tends to be little reference to cultural scenarios or intrapsychic scripts.

Intrapsychic scripting is the compilation of events, persons, and possibilities that cause sexual excitement for the individual, whether or not it is socially sanctioned. These scripts provide the individual motivation to act in a sexual manner, at the same time demarcating what is rejected sexually (Simon & Gagnon, 1987). Intrapsychic scripts form a part of sexual identity (e.g., "I like women, therefore I'm straight") and are part of the cognitive and affective frameworks that form our sexual selves.

In my own work, I characterize statements like "My mother told me that men should use condoms all the time" as cultural scenarios about safer sex; the actual words and techniques a person uses to get their partner to use a condom as interpersonal scripts; and the person's own ideas about condoms, "Condoms don't feel comfortable and I don't like them," as intrapsychic scripts.

The usefulness of this theory is that it may answer questions about the relationship between the collective and the individual. Sexual scripting can explain why individuals have similar ideas about sexuality within a particular racial/ethnic group, as well as why there is enormous variety in the sexual activities in which people actually engage. It also explains rather well the dynamic nature of sexuality, as individuals can, over time, create and implement new forms of sexuality. If these new forms are enjoyed by a number of people, then they can become new cultural scenarios employed by others. Unfortunately, although SST organizes ideas of sexuality well, and appears to have been reasonably applied to investigations of sexuality by racial/ethnic group in the research literature (Gilmore, DeLamater, & Wagstaff, 1996; Mahay et al., 2001), there is not yet a set of mechanisms for determining how individuals internalize scenarios or make choices of what scenarios to internalize (Weis, 1998).

CONCLUSION

Examining race or ethnicity is just one way of organizing and understanding sexuality. Sexuality is defined and experienced within a web of biological, psychological, and sociocultural factors. This web is dynamic, meaning that it changes in historical time, in ontogenetic (individual developmental) time, and as individuals become more experienced sexually within the context of their society and the sexual communities in which they live. Other important loci of identity (e.g., gender, social class, religion) also clearly impact on the construction of sexuality and in turn are also constructed by sexuality. This brief overview does not do justice to the rich literatures necessary to develop a complete snapshot of this moving target. But it is clear that reductionistic approaches that narrow and homogenize do not lead to a clear and veridical understanding of race, ethnicity, and sexuality. Interdisciplinary approaches with multiple methods of analysis should allow the field to move from a mere description of sexuality to a deeper appreciation of sexuality in context.

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NOTES

1. Of course, the issue of agency calls into question whether any sexual relationship between slaves and their owners can be considered consensual in the face of this clearest of power differentials. How does one describe the choices faced by slaves such as Harriet Jacobs (1813–1897), who was forced to choose between her owner, a man who wished to make her his concubine, and another white man, whose sexual interest and fathering of her children would protect her from her owner's advances? This tactic did not work in the end. After the birth of her two children, Jacobs was forced to live in a crawlspace in her grandmother's home for seven years to hide from the advances of her owner. Jacobs's experiences were narrated in her autobiography, *Incidents in the Life of a Slave Girl* (1861/2000).

2. During the mid–nineteenth century, political deals made between Irish American ward leaders and white, Anglo Saxon elites for Irish votes led to increasing civil rights for Irish Americans and assimilation into white racial culture (Ignatiev, 1996).

3. I use the term "race" here because although the U.S. Census designated Hispanic/Latino as an ethnic category, the social treatment of Latinos in the United States suggests that Latinos are treated as if they are a different race (Haney-Lopez, 1997). Since race has little biological validity, the only currency that race holds is in its social effects (Graves, 2001). Concerns about intermarriage, passing, structural inequalities such as access to health care and housing, as well as the grouping of multiple national groups into a single category suggest that "Latino/a" acts as a race in all but name.

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11

Commercial Sex: Pornography

Dan Brown

Human sexuality has perhaps stimulated more attention than any other aspect of human behavior (Kinsey, Pomeroy, & Martin, 1948). From ancient times, artistic representations of human sexuality have portrayed such images as exaggerated sexual organs (Webb, 1982) and explicit participation in sexual intercourse (Brewer, 1982). Perhaps the height of commercialized use of sexual images in the ancient world occurred by 800 B.C.E. with the works of the Greeks and the Romans (Lane, 2001). Pornography, derived from *pornographos*, the Greek term for writing about prostitutes (Hyde, 1964), is at least as old as prostitution itself (Zillmann & Bryant, 1989). Walter Kendrick (1987) traces the term *pornography* through successive generations of dictionaries, finding that it did not appear in Samuel Johnson's work of 1755 and concluding that the term was born sometime between 1755 and 1857, when the word appeared in a medical dictionary. However, scientific and legal consensus about a definition of pornography remains elusive. A 1986 federal government commission charged with studying pornography defined the term as "material predominantly sexually specific and intended for the purpose of sexual arousal" (U.S. Department of Justice, 1986, pp. 228–229). A more complete discussion than that contained here of definitional factors related to pornography is available elsewhere (Brown, 2003).

James V. P. Check and Ted H. Guloien (1989) describe the distinctions between erotica, degrading pornography, and violent pornography. Dolf Zillmann (1984b), distinguishing pornography from erotica by the absence of

coercion and violence, explains the typical themes of pornography as including fellatio, cunnilingus, and sexual intercourse in a multitude of positions, especially anal intercourse, in most instances involving more than two people and frequently portraying females as being overly attentive to serving male sexual appetites. Some authors (e.g., Brownmiller, 1975) suggest that all erotica are degrading, especially to women.

William A. Fisher and Azy Barak (1989) group pornography into three types. *Degrading pornography* is sexually explicit content that debases or dehumanizes people, perhaps reducing inhibitions against treating them with cruelty. *Violent pornography* refers to "material that prescribes the normativeness and utility of sexual violence, usually directed against women" (p. 290). *Erotica*, in their scheme, refers to sexual content that is nondegrading and nonviolent. They explain that systematically categorizing sexually explicit content into these three categories remains beyond the reach of current research (Fisher & Barak, 2001).

Court action against displays of pornography generally requires demonstration that the work in question is *obscene*, as defined by the U.S. Supreme Court in *Miller v. California* (1973). The *Miller* decision holds that a finding of obscenity requires that an average person, applying contemporary community standards to evaluate the whole work, would find it appealing to the prurient interest by portraying in a patently offensive way some sexual behavior that is proscribed by a state law. The work must contain no serious literary, artistic, or scientific value. Only child pornography is automatically obscene in the United States, and prosecutions against persons for activity regarding other forms of pornography require that a court rule the material to be obscene.

SCOPE OF PORNOGRAPHY USE

Pornography in the United States grew from a relatively hidden underground business in the 1950s to a publicly available commercial juggernaut in the twenty-first century. Revenues earned by the pornography industry exceed gate receipts of all American sporting and musical events combined (Lane, 2001). Reflecting growing public concern about the availability of pornography, two federal commissions reported on pornography (U.S. Commission on Obscenity and Pornography, 1970; U.S. Department of Justice, 1986).

Eric Schlosser (1997) summarizes the pornography industry, noting its start after World War II and transformation from a minor operation to an important phenomenon. He cites sociologist Charles Winick as observing that sexuality in America changed more in the last twenty years than in the previous 200 years, partly because the ease of in-home access to pornography changed the under-the-counter pornography culture.

The first commission on pornography (U.S. Commission on Obscenity and Pornography, 1970) found parts of the pornography industry to be

somewhat "chaotic" (p. 7), rather than well organized and centralized. Richard Morais (1999) recalls that *Forbes* magazine reported in the 1970s about pornography as a business of organized crime that operated as a largely underground cash enterprise. He observes that the Supreme Court's *Miller* decision, applying the First Amendment protection of free speech for pornography, allowed pornography to be sold openly as a legal product.

Schlosser found that about 100 hard-core pornographic films were produced in 1978. Subsequently, Morais reports, legal pornography revenues reached $56 billion worldwide by 1998, and he lists several large multinational companies offering pornographic products and enjoying listing on major stock exchanges. Businesses, such as Castle Superstores, openly sell pornographic and sex-related products that once were hidden from public view.

Scope of Print Pornography

Only 21 percent of the mass-market book industry was deemed by the 1970 Commission on Pornography as falling within its mission. That figure included paperback books and book club books. The commission found the market strengthening for adults-only paperback books, for which "it is probably not possible to exceed the candor, graphic descriptions of sexual activity, and use of vulgar language" (p. 15).

Among best-selling paperback books that sold between January 1969 and July 1970, the commission identified eighteen sexually oriented titles that remained on the list for at least one month. During 1969, 40 percent of the top twenty hardcover fiction books qualified as sexually oriented, and three of the top four nonfiction titles related to sex. The $179 million category of adult trade books made up only 6.8 percent of the $2.6 billion book industry at the time of the commission's report.

Frederick Lane (2001), writing about the entrepreneurs of pornography, lists several magazines that emerged as entertainment for the troops in the World War II era. By the time of the 1970 commission report, a variety of magazines could be described as sexually oriented, but the commission struggled with criteria to define whether particular publications should be so identified. The commission's final report discussed such categories as "romance" and "barbershop" magazines as possibly pornographic, but it identified a category of magazines, "men's sophisticates" (p. 14), as having the greatest degree of sexual orientation among the mass-market magazines. These publications specialized in nude females in modeling poses. About 41 million such magazines sold in 1969, earning about $31 million or about 1.2 percent of the mass-market periodical industry sales.

Perhaps the best-known illustration of pornography as commercial success story is Hugh Hefner's empire built around *Playboy* magazine, a publication treated as outside the other groups of sexually oriented magazines by the 1970 commission. *Playboy* began on a shoestring in 1953, printing 175,000 copies in

its first year and 400,000 in its second, and selling 5.5 million copies per month in 1969 (Lane, 2001).

Scope of Film and Video Pornography

Describing the pornographic films of the era, the 1970 Commission on Pornography included a category of "skin flicks" (U.S. Commission on Obscenity and Pornography, 1970, p. 9) with low production costs and emphasis on sexually arousing content. Such films, called *exploitation films*, received little advertising, were little known among the public, and tended to play in a limited number of theaters. However, the commission noted that the distinctions between these films and major releases were beginning to blur by the late 1960s, with sexual themes and nudity becoming more common in mainstream films.

Schlosser (1997) described a major assault on the industry after the report of the Attorney General's Commission on Pornography in 1986. Ironically, that effort occurred when the pornography industry was enjoying unprecedented growth. William A. Linsley (1989) cites 165,000 people involved in the commercial activity surrounding delivering pornography to the public—monthly sales of 20 million pornographic magazines, weekly ticket sales of 2 million to X-rated movies, annual box office receipts of $500 million for the films, and 10–15 percent of the videotape market.

In 1990, 1,275 new hard-core films entered the American market (Morais, 1999). Between 1991 and 1996, the production of new hard-core pornographic videos grew by 500 percent to almost 8,000 new productions in 1996 (Schlosser, 1997). In 1998, 8,948 new hard-core video productions appeared for public consumption (Morais).

Pamela Paul (2004) reports annual production of 11,000 pornographic films in 2003, dwarfing the approximately 400 motion pictures produced by all the major Hollywood motion picture studios combined. Schlosser (1997) cites data from *Adult Video News* as showing that pornographic video rentals in the United States grew from 75 million in 1985 to 490 million in 1992, an increase of 656 percent. Reflecting the success of the pornography industry, that monthly pornography trade publication reaches nearly 300 pages and is filled with advertising (Morais, 1999).

By 1996, 665 million pornographic video rentals occurred, representing another 35.7 percent increase. Paul (2004) found that by 2003, more than 800 million rental pornographic videos and DVDs were seen by Americans annually, and 20 percent of all video rentals were pornographic. In-home orders in 1996 for pornographic pay-per-view films topped $150 million, and guest orders in hotels for pornographic films reached about $175 million in the United States.

Schlosser (1997) reports that 1996 American spending on sexually explicit entertainment exceeded $8 billion, similar to the $8.3 billion they spent on

purchasing all sorts of books and maps during that year. Pornography spending in 1996 exceeded the $6.3 billion spent by Americans in 1996 at motion-picture box offices and the $6.4 billion that they spent attending all spectator sporting events (U.S. Bureau of the Census, 1998). Seidman (2003) cited reports by Egan (2000), Laslow (1999), and Rich (2001) that yearly sales of pornographic materials surpassed $10 billion, more than half of which went for videos and films.

The focus of pornography on home consumption also brought new business entities into the industry that previously had nothing to do with selling sex (Schlosser, 1997). Major corporations in industries such as telephone, cable television, hotel, and motel chains provide pornography for fees. Because pornography consumers no longer need adult theaters, many of them folded. Los Angeles adult theaters dwindled to about six by 1997, after once exceeding thirty. Similarly, adult bookstores declined and began showing videos on-site.

Nonchain video stores often turn to pornography to compete with chains. Schlosser (1997) cites Paul Fishbein of *Adult Video News* as reporting that 25,000 American video stores, almost twenty times the number of adult bookstores, offered hard-core pornography in the mid-1990s.

Scope of Computer Pornography

Computers offer options in the delivery of pornography. Subscription services provide channels for generally available content, such as bulletin boards and conferencing arrangements, and confidential content delivered to individual accounts. Additional revenues flow from sales of sexual devices, other forms of pornography, and advertising by sexually oriented businesses.

In the early 1990s, access to computer bulletin boards via telephone modems often involved charges for the time connected, as well as fee for receiving images. Despite slow modems and expensive services, one pornographic bulletin board service earned $3.2 million in 1993 (Lane, 2001).

With peer-to-peer computer file exchange software, users can trade files with people anywhere in the world. However, this vehicle accounted for less than 1 percent of the child pornography on the Internet after 1998 (Subcommittee on Commerce, Trade, and Consumer Protection, 2004).

Marty Rimm (1995) conducted the first systematic research on pornography over the Internet in 1994, finding a wealth of pornographic imagery and text easily available to consumers. Researchers identified Internet pornography users in all fifty states, most of Canada, forty different countries, and other territories worldwide. Among sampled Usenet newsgroups, 83.5 percent of all materials posted within one week to the sample group contained pornography. Among all the more than 100,000 items posted to the top forty Usenet groups within one month, 20.4 percent were pornographic. About 9 million people visited the five most popular sexually explicit Web sites in April 1998,

representing about 15 percent of the total number of Web users in that year (Cooper, Scherer, Boies, & Gordon, 1999).

Small hobbyists were not the only people exchanging pornography on the Internet. Print pornography peddlers like *Playboy*, *Penthouse*, and *Hustler* host some of the most popular online sites. The *Playboy* Web site opened in 1994, offering free previews of monthly magazines. The site received 4.3 million visits in October 1997 and generated revenues of $2.5 million in one quarter during 1999 (Lane, 2001).

Morais (1999) cited Forrester Research reports of Internet pornography revenues reaching about $1 billion annually, including such enterprises as the Internet Video Network, a channel reaping $7 million each year from such content as strip shows. Lane (2001) cites estimates by industry analysts of Internet pornography revenues of nearly $2 billion annually by the fall of 1999. According to Paul (2004), by July 2003, the Internet contained 260 million pages of pornography, up by 1800 percent from 1998. She reports that pornography accounted for 7 percent of Web pages indexed by Google, an Internet search engine. That proportion represents 231 million pages of Web pornography.

The federal government's General Accounting Office (GAO) reported that 400,000 commercial pornographic Web sites operated in 2003, and the number grew to 1.6 million by the issuance of a report by a congressional subcommittee in May 2004 (Subcommittee on Commerce, Trade, and Consumer Protection, 2004). The report notes that 34 million people visit pornographic Web sites each month, about 25 percent of the monthly Web traffic.

Rosen (2004) cites data from the Internet Filter Review showing that pornography on the Internet makes up $2.5 billion of the worldwide $57 billion business of pornography. This Internet contribution includes, according to the review, 4.2 million pornographic Web sites that are visited annually by 72 million people, including 40 million Americans. About 25 percent of all searches conducted daily on the Internet seek pornographic materials (Rosen), and sex is the most frequently sought topic on the Internet (Cooper et al., 1999).

Internet pornography has become so widespread that people confront it without meaning to. A national survey (Finkelhor, Mitchell, & Wolak, 2000) of 1,501 children of ages 10–17 who regularly use the Internet found that 25 percent of the respondents had found on the Internet, within the previous year, unwanted images of naked people or of people having sex. Among these incidents, 94 percent involved naked people, 38 percent referred to people engaged in sex, and 8 percent portrayed violence in addition to the nudity or sex.

A congressional report (Subcommittee on Commerce, Trade, and Consumer Protection, 2004) found that Internet pornography peddlers frequently use false domain names and fake advertising to entice people to their Web sites when they are not seeking sexual content. Searches conducted by the GAO found pornography in 56 percent of searches using terms that are popular in finding children's materials online. Pornographers intentionally lure children

to their Web sites by using nonsexual terms, such as *Cinderella*, enticing visitors to retrieve files on peer-to-peer exchanges that allow Internet users to trade files of various types, including music.

Scope of Telephone Pornography

In the 1980s, the pornography industry found new ways of reaching audiences, such as Dial-A-Porn telephone (Brown & Bryant, 1989). Telephone companies in the 1920s offered dial-up services with such content as weather reports. The Federal Communications Commission ruled in the early 1980s that the telephone companies were responsible only for transmission and billing, while information providers using telephone services were responsible for content. Dial-A-Porn began in 1983 after winning a 1982 New York lottery that determined what dial-up services could operate in that state, expanding the business by leasing telephone lines from other lottery winners. The services offered credit-card billing for calls to paid performers and monthly billing of calls to designated prefixes, such as 976.

Typical content of Dial-A-Porn calls included verbal descriptions of sexual activities, sometimes as imaginary participation, and one service logged 180 million calls during the year ending February 28, 1984. During that year, such calls accounted for 44 percent of the calls to 976 exchanges operated by Pacific Bell (U.S. Department of Justice, 1986). By 1996, Americans spent more than $750 million annually in making such calls (Schlosser, 1997).

Lane (2001) provides details of how the phone sex business operates, calling it an extremely simple business to enter and operate to earn impressive revenues. A range of people, from small business entrepreneurs to individuals in foreign countries, operate profitable phone sex enterprises, and large American corporations such as AT&T earn hundreds of millions of dollars each year from the combination of phone sex and Internet access.

Examples of Video Game Pornography

Atari introduced the home video game *Pong* to the public in 1975 and enjoyed popularity in American homes by the early 1980s (Lane, 2001). In 1982, AMI introduced adult games for the Atari player, selling 750,000 cartridges by the end of that year. Those games connected with a television set, and the graphics were poor. An alternative emerged for the early versions of personal computers as text-based games.

Adult games, such as *Softporn* in 1984, engaged players in seeking to win by engaging in sex acts with characters in the games. Similar games that included sexually oriented text, but not sexually explicit visuals, sold $20–25 million during 1991 alone. Omitting explicit visuals permitted selling the games through well-known retail outlets.

In 1996, *Tomb Raider* was released for game consoles, becoming popular and spawning spin-offs in various media, including motion pictures. The game sold 2.3 million copies in 1998. Although *Tomb Raider* was not sexually explicit, amateur Web sites began offering chances to see the buxom lead character, Lara Croft, in the nude and play games with Croft appearing naked. None of the explicit imitators sold as well as *Tomb Raider* because of their inability to market through mainstream retail outlets (Lane, 2001). Clearly, video game pornography justifies increased research attention because of popularity and the child audience.

PUBLIC OPINION POLLS ABOUT PORNOGRAPHY

Public opinion surveys in the United States from the 1930s through the 1980s show that pornography use was common (Bryant & Brown, 1989). The 1985 Attorney General's Commission on Pornography contended that such surveys show that the public was becoming more tolerant of pornography (U.S. Department of Justice, 1986), although some disagreed (e.g., Smith, 1987).

The survey of perhaps the largest number of people was conducted by the Institute for Sex Research, including more than 10,000 people between 1938 and 1963 (Gebhard & Johnson, 1979). Because of the abundance of young, white-collar respondents, the survey results do not necessarily represent the entire population. Asked whether they had ever seen a film containing sexual intercourse or homosexuality, 16.1 percent of white males who had attended college said they had. So did 29 percent of white males who never attended college, and 17.3 percent of black males. Such films had been seen by 2 percent of females who had attended college, 7.2 percent of females who never attended college, and 4.5 percent of black females.

The 1970 Commission on Pornography found that 33 percent of females and 54 percent of males had seen pornography by age 17, up from 10 percent and 20 percent respectively at age 12 (Abelson, Cohen, Heaton, & Suder, 1971). Another such study reported that 19 percent of males and 9 percent of females reported having seen explicit sexual material by age 12, 54 percent and 33 percent respectively at age 17, and 74 percent and 51 percent respectively by age 20 (Wilson & Abelson, 1973).

A 1978 Gallup poll covering 1972–1977 reported that 52 percent of respondents believed that sexually explicit books, magazines, and films contain useful sexual information. Respondents who found explicit content to have harmful consequences seemed to outnumber those who saw pornography as positive. For example, 67 percent agreed with a statement that pornography leads to a decline in public morals, 76 percent agreed with a statement that it causes a loss of respect for women, and 73 percent agreed with a statement that it instigates rape or sexual violence in some people. Only 34 percent agreed that pornography safely assists people with sexual dysfunction, and 47 percent agreed with a statement that it improves the sex lives of some couples.

A Gallup poll of more than 1,000 adults conducted in 1985 for *Newsweek* magazine reported that 37 percent of the respondents reported having purchased a magazine like *Playboy* (Press et al., 1985). *Hustler* magazine purchases were reported by 13 percent of the respondents, 7 percent reported attending an X-rated movie within the previous year, and 9 percent reported having purchased or rented such a videotape or film within the previous year.

Bryant and Brown cited a summary by T. W. Smith (1987) of polling data showing reported the proportion of respondents who had seen sexually explicit films within the previous year, covering 1973–1986. Fluctuating as low as 15 percent in 1978, the data reflected a steady upward trend from 1978 through 1986 to 24.8 percent.

Testifying before the Attorney General's Commission on Pornography, Jennings Bryant (1985b) reported data from telephone surveys showing a much higher rate of using pornography. From three groups of respondents, each including 100 males and 100 females, he found that 94.3 percent of the total 600 respondents had seen sexually explicit R-rated films, with the mean at 14.4 films per person. The groups included students aged 13–15 and 16–18 and adults aged 19–39. Nearly everyone in the latter two groups reported having looked at or read *Playboy* or *Playgirl* or similar magazines, with adult males reporting experience with an average of 26.5 issues. The average age of first experience with such materials among all three groups was 11 years for males and 12 years for females.

When the survey addressed consumption of hard-core pornography depicting people engaged in sexual activity, the average age among all respondents was 13.5 years, and 69 percent of both males and females reported having seen X-rated films. Among the members of the group aged 13–15, 92 percent reported having seen such a film, whereas the adults reported first exposure at an average age of about 18 years. Among the16- to 18-year-olds, 84 percent reported having seen an X-rated film. Among all respondents, 70 percent of females and 55 percent of males reported having been introduced by someone else to hard-core films.

Bryant compared these figures with those obtained from students enrolled in college classes, which provided nearly 100 percent participation in the surveys, finding about half of the usage reported in telephone surveys. He acknowledged that people willing to participate in a telephone survey about their experience with pornography might be more liberal in their sexual attitudes than those who would not consent, calling for more research to clarify the differences in findings from the different surveys.

Alan Sears (1989) cited a July 1986 *Time* magazine poll showing that 72 percent of the surveyed members of the public wanted a government crackdown on pornography, and 92 percent favored such action against child pornography. He also cited a 1986 Gallup poll reporting that 73 percent of the respondents would ban certain types of extremely explicit pornography.

Paul (2004) contends that pornography on the Internet fostered a huge increase in pornography consumption and promoted greater interest in hardcore pornography over milder forms. Despite the warnings such as those described in this chapter from social scientists, the majority of respondents to surveys about online sexuality find little harm in online pornography. Paul cites a survey of 7,037 adults by the San Jose Marital and Sexuality Center as reporting that two-thirds of the users of online sexually explicit Web sites find no impact on their sex with partners. However, 75 percent of the respondents indicated that they masturbated while looking at these sites.

Ethan Seidman (2003) cited Goodson, McCormick, and Evans (2000) in reporting that 43.5 percent of a sample of Texas college students had seen sexually explicit Internet content at least once. Seidman surveyed 102 male and 208 female college students, finding greater usage of pornography than previously published reports. He found that both men (80 percent) and women (59.2 percent) actively sought pornography within a year of the survey. More than a third of the men reported using pornography at least once each week, but only 1.5 percent of the women reported such frequent use. Among women, 43.1 percent reported never having seen pornography within the previous year, but only 20.8 percent of the men had not. Men typically use pornography alone, often masturbating at the same time. Women more often use pornography with a partner and without masturbating. Seidman reported that this pornography use was *not* predicted by lack of availability of sexual partners, elevated anxiety, feelings of ineptitude in romance, feelings of depression, or interpersonal difficulties.

A national survey (Rideout, 2004) of 1,001 parents of children aged 2–17 conducted by the Kaiser Foundation in July and August 2004 addressed parental concerns about the media. "Inappropriate" content seen by children viewing entertainment media was described by 63 percent of parents as making them "very concerned" (p. 5). Television was of greatest concern to 34 percent of the respondents, but 20 percent named all media equally, 16 percent named the Internet, 10 percent named movies, 5 percent named video games. Among the types of media content prompting parental concern, excessive sexual content received the most emphasis, being named by 60 percent of the responding parents. Relating to the beliefs that sexual and violent content on TV affects behavior of children, 53 percent of the parents agreed that behavior is affected "a lot" (p. 7).

Clear conclusions about pornography use in America seem inappropriate in light of the wide variance in definitions, wording of survey questions, composition of survey samples, and response biases of respondents (Bryant & Brown, 1989). However, most Americans have apparently seen pornography by the time they reach high school. Few people report no exposure, and most report being introduced to pornography by peers. Stereotypical categorization of pornography users as loners with poor social skills seems inaccurate, with users typically coming from all walks of life. Although most research reports

that differences in use of pornography exist between males and females, some authors (e.g., Burt, 1976; Thomas, 1986) contend that such differences stem from the type of pornographic content offered in the marketplace.

CONTENT OF PORNOGRAPHY

Print Media

Through the 1950s, open display of pornography was rare in the United States, with such printed materials being relegated to back rooms of places that appeared from the street to be ordinary newsstands (Brown & Bryant, 1989). With increasing public display of printed pornography by the 1960s, the materials used for pornographic magazines improved through the use of four-color printing on glossy paper. The predominant sexually explicit magazine content portrayed simulated sex acts with no exposed genitals because such display would have likely opened the publishers to prosecution for distributing obscenity (U.S. Department of Justice, 1986).

By the mid-1960s, nudist magazines dared to display genitalia, and soon after, other magazines began to feature attractive models engaged, not only in nudist camp activities, but also in sexual behavior. By the late 1960s, magazines featured photographs of both male and female genitalia, usually portraying a single individual but sometimes more than one person. Although sadomasochism emerged in publications during the period, portraying less explicit sexual photographs, such content was not a major factor in the commercial marketing of pornography.

Textual descriptions of sexual matters became generally considered to be immune from prosecution for obscenity law violations after U.S. Supreme Court decisions liberalized views about published obscenity by the late 1960s. The U.S. Commission on Obscenity and Pornography reported that many textual works published by the early 1970s presented extremely graphic descriptions of sexual matters. Most of these books were "designed to appeal to heterosexual males, but about 10% portrayed material attractive to male homosexuals, about 5% focused on fare catering to fetish enthusiasts, and almost none were intended to appeal to females" (Brown & Bryant, 1989, p. 6).

Romance magazines also seemed to promise in photographs more sexual emphasis than the text delivered in the 1960s. An analysis of eight different romance magazines of the era revealed frequent kissing and coitus, but rarely found homosexual activity or oral-genital contact. The practice of promiscuity in the stories resulted in severe consequences (Sonenschein, 1970).

The 1970 Commission on Pornography and Obscenity identified adult paperback novels as containing a considerable amount of pornography (Massey, 1970). One of the largest examinations of these books reported increasing frequency of paperback sexual content from 1967 through 1970, followed by a leveling off from 1970 through 1974. This degree of emphasis

represented three to fifteen times the proportion of space devoted to sexual content in such mass-market sex novels as *Fear of Flying*. This paperback sexuality tended toward fulfillment of male sexual fantasy, with a recurring theme of female beauty rescued from sexual resistance by a virulent male (Smith, 1976).

Crime magazines in the 1980s frequently relied on sexually oriented cover images and sexual violence to attract readers. About twenty publications in this category attracted a circulation of nearly 1 million in 1980, despite the tendency of the magazine stories to fall short of the amount of emphasis on explicit sex (Dietz, Harry, & Hazelwood, 1986).

By 1986, the Attorney General's Commission on Pornography reported more than 2,300 magazine titles available for sale in sixteen pornography outlets found in six eastern American cities (U.S. Department of Justice, 1986). Few of these magazines received the attention of systematic research. However, an analysis of pictures and cartoons in all *Playboy* and *Penthouse* issues from 1973 to 1977 found increasing amounts in both numbers and proportion of sexual violence in both publications, with 13 percent of the cartoons published in *Penthouse* being sexually violent (Malamuth & Spinner, 1980). Another study of *Playboy* issues from 1954 to 1983 found that only 8.7 cartoons per thousand and 3.8 pictorials per thousand contained sexual violence (Scott & Cuvelier, 1987).

An examination of all 430 magazines offered for sale during 1979–1980 at an adult bookstore in Times Square in New York City revealed that almost all of the content was offered for a target audience of males (Winick, 1985). More than 80 percent of the models appeared to be of ages 20–30, and wide variation of attractiveness occurred. Activities suggested mostly middle-class occupations, and more than half of the models appeared to be married. Satisfaction with sexual activity predominated, with few examples of forced sex. Examination of the bondage content, however, revealed an imbalance of power among the sexual partnerships, with 71 percent of such relationships portraying male dominance.

Sari Thomas (1986) studied the 1980s portrayals of gender and social class in pictorial pornography. She divided nine magazines that focused on sexually explicit photographs as designed to appeal to different sociological groups: upwardly mobile heterosexual males, working-class heterosexual males, homosexual males, and heterosexual females. *Playboy*, *Penthouse*, and *Oui* represented the content that targeted upwardly mobile heterosexual males. These magazines emphasized air-brushed photographs of young, mostly white, and extremely beautiful females in poses that seemed to naturally suggest sexual activity. *Blueboy* and *Mandate* magazines portrayed male models emulating the style of *Playboy*, *Penthouse*, and *Oui*. *Cheri*, *Gallery*, and *Hustler* magazines represented working-class pornographic publications, offering a wider variety of female models differing in age, race, and beauty. These photographs depicted more graphic displays of sexual organs in poses that appeared to be designed to sexually arouse male viewers.

Thomas (1986) found that the female models portrayed in photographs in publications targeted to males were generally younger than the males who appeared in *Playgirl* magazine. She estimated the ages of the female models at 18–35, compared with 25–40 for the male models. Body types among the male models lacked the somewhat exaggerated proportions that were apparent among the female models, as well as the degree of physical attractiveness. Males were also presented in poses more akin to merely posing for a picture, rather than those of sexual allure.

Films and Electronic Media

Naked females appeared in films by 1899, and filmed sexual intercourse appeared soon thereafter (Slade, 1984). By the 1920s, nude males appeared in a small number of films targeting homosexuals. From the early practice of showing pornographic films in all-male clubs, they became known as *stag films*, and they tended to run for only 10–12 minutes. Stag films tended to be of poor quality, black and white, and silent. They were sold in plain, numbered containers lacking titles and featuring females revealing their breasts, although underground outlets offered explicit versions showing sexual intercourse. In the 1960s, after several U.S. Supreme Court decisions made convictions for selling obscenity more difficult to prosecute, the technical quality of stag films began improving, and the explicitness of content grew bolder. By the end of the 1960s, films with focus on female genitalia, sexual intercourse, and oral sex were common, and the numbers on containers had been replaced with both titles and suggestive scenes.

Early stag films and those available through the 1950s tended to avoid any semblance of plot. However, by the 1960s, the genre adopted the storytelling characteristics of the more mainstream media. The 1970 U.S. Commission on Obscenity and Pornography reported that the topics for sexually explicit films included "perversion, abortion, drug addiction, wayward girls, orgies, wife swapping, vice dens, prostitution, promiscuity, homosexuality, transvestism, frigidity, nymphomania, lesbianism, etc." (p. 74).

In the 1970s, pornographic films emerged as an economic force. More than 2,000 such films were produced in 1973, with the pace slowing down a bit to 700–800 annually after 1975 (Slade, 1984). A study of pornographic films from their outset to the 1970s found little violence in the genre, violence being at variance with the usual theme of insatiable female sexual appetites. The increase in the presence of violence in such films during the 1970s appeared to be substantial, but remained present in a relatively small proportion, probably not exceeding 10 percent. Although pornographic films tended to portray less frequent violence than more mainstream films of other types, the degree of violence portrayed in pornography is more extreme, tends to show females as victimized by males, and tends to omit portrayal of negative consequences of sexual abuse (Brown & Bryant, 1989).

With the introduction of the video cassette recorder in the latter part of the decade, the most popular-selling prerecorded video cassettes contained pornography, and the industry grew bolder in a variety of ways. More graphic content, including homosexuality and sadomasochism, became common, and adult theaters openly promoted their wares (U.S. Department of Justice, 1986). During this period, public protests tended to focus on hard-core materials that were often promoted as triple-X to highlight their explicit brand of pornography, as opposed to adult or X-rated films and videos. The latter classification appeared in full view of the buying public in legitimate multi-interest outlets (Palys, 1986).

Palys studied 150 sexually explicit videos, finding that they contained an average of eleven sex scenes each. Among his sample videos, 77 percent of the analyzed scenes contained sex acts, and he separated the videos into two categories: *adult* and *triple-X* videos. The fifty-eight adult videos included more aggression, and the triple-X videos contained more oral sex.

Bradley S. Greenberg (1994) cites findings from an examination (Cowan, Lee, Levy, & Snyder, 1988) of forty-five pornographic videos as showing that more than half of the scenes portrayed "domination or exploitation" (p. 168), usually men abusing women. These videos resembled Palys's (1986) triple-X category. More than half of the videos (60 percent) included sex acts, with the average video including ten such acts. Heterosexual activity occurred 78 percent of the time, 11 percent included lesbian sexual behavior, 2 percent portrayed bisexual activity, and 9 percent displayed masturbation. No male homosexuality occurred in the sample.

EFFECTS OF PORNOGRAPHY

Much of the literature about the effects of pornography deals with negative impact, but Kinsey suggested using sexually explicit films for sex education in the late 1940s (Yaffe, 1982). For example, preadolescent and adolescent school children, normal adults, medical students, health professionals, people with mental disabilities, and people with sexual dysfunction have been involved with such therapeutic use of pornography (Bryant & Brown, 1989).

Observing that many Americans believe pornography is vulgar but without effects on its viewers, Victor Cline (1994) suggests that such a view denies the idea of education in suggesting that people are not affected "by what they see" (p. 230). He notes that pornography has useful results, specifically for couples who want to modify their sexual behavior or attitudes. He observes that such patients would have specific prescriptions of materials to view delivered by a licensed therapist, similar to the way a patient with a different problem would receive a prescription for chemical medication. The patients would not merely turn to whatever pornographic images happened to become available because so much of pornography that is commercially

available serves as *miseducation*, conveying false, misleading impressions about human sexuality. Cline describes pornography as offering up models of unhealthy and antisocial sexual behavior, such as "sadomasochism, abuse, humiliation of the female, involvement of minors, incest, group sex, voyeurism, exhibitionism, bestiality, and so on" (p. 231). Rimm's (1995) analysis of pornography available online also confirms a marked disparity between the sexual behaviors that Americans profess to practice and the sexual behaviors portrayed in pornography.

Although pornography use in therapeutically supervised situations can have a positive effect in generating sexual arousal, enhancing sexual satisfaction, Cline (1994) treated approximately 300 people with sexual illnesses over a period of many years in his clinical psychology practice, concluding that "pornography has been a major or minor contributor or facilitator in the acquisition of their deviation or sexual addiction" (p. 233). He reports finding a cause-effect relationship between pornography use and harm from the use among his patients.

Feminist writers accuse pornography of degrading women and subordinating them to men, and leading to hostile male attitudes toward women (Brownmiller, 1975). Catherine MacKinnon and Andrea Dworkin (1997) cowrote an antipornography ordinance that was enacted in December 1983 by the city of Minneapolis. The law promulgated the concept of pornography as a violation of human rights and was later considered by Indianapolis, Los Angeles County, the Commonwealth of Massachusetts, Germany, Sweden, and the Philippines (MacKinnon & Dworkin). MacKinnon (1997) provides a long list of harms of pornography as revealed in the testimony of women at the December 1983 Minneapolis hearings about the ordinance.

The 1986 Attorney General's Commission on Pornography also reported a litany of harms from women's testimony saying that they were victimized by pornography producers and users. The report listed categories of harm resulting from consumption of pornography, including physical harm, psychological harm, and social harm (Sears, 1989).

Zillmann includes such harms of pornography as compulsive use and self-serving attitudes about the sexual desires of others (Zillmann, 1994a). Most of the public's attention in the discussion about the possible harm generated by pornography seems to center around sexual violence. Bryant and Zillmann (2001) list a number of harms of the use of pornography and contend that harm involving sexual violence, although of legitimate concern, represents only the most blatant of concerns. They recommend more attention to subtle harms of pornography links with sexual callousness among young people and interference by pornography in the intimate lives of partners. This interference occurs because pornography reduces the arousal produced by sexual cues that normally occur in relationships, and leads to unrealistic beliefs about sexual behaviors that are acceptable to partners. Pornography users may develop improbable ideas about reasonable sexual abilities, leading to sexual dissatisfaction

with the sex life with a current partner. Bryant and Zillmann observe that research evidence documents the occurrence of these harms.

RESEARCH ON PORNOGRAPHY

The 1970 Commission on Pornography financed a great deal of new research about pornography, and the Attorney General's Commission attempted to call forth the results of scientific research in policy formation, but the results were more or less surprising, depending on whether the researchers maintained objectivity. Zillmann and Bryant (1989) pointed out that not everyone in the scientific community agreed that social science research was the best available method to inform such policy making. They observe that some social scientists used the opportunity to advocate positions consistent with personal consumption preferences and attitudes, leading to questioning of the validity of research on pornography. To address that problem, they produced a book designed to offer diverse views from which readers could draw more informed conclusions.

In that book, Kathryn Kelley, Lori Dawson, and Donna M. Musialowski (1989) describe the three faces of sexual explicitness as including empirical investigations, the interface of internal fantasy and external stimuli, and the potential of sexually explicit materials in dealing with sexual deviance and dysfunction. These authors defined sexual explicitness as clearly obvious representation of sexual activity and found that many of the variations observed in responses are associated with a theme of personality traits. They list sexual attitudes and experience as other important mediators of responses to sexually explicit content. They acknowledge that the same content may produce opposite reactions in different people and that sexually explicit content may produce responses deemed both negative and positive.

Physiological changes such as blood pressure readings and other measurements of the sympathetic nervous system are readily observable in people viewing pornography. Enjoyment of pornography, in fact, depends on increased levels of sympathetic activity (Zillmann, 1984b). Long-term consumption of pornography tends to reduce initial resistance to such material (Zillmann, 1989), and enjoyment of pornography has been demonstrated to remain even or decrease after prolonged exposure. Zillmann and Bryant (1982, 1984) showed that these effects persisted after two weeks following the end of such viewing. In plain language, consuming pornography quickly tends to reduce the enjoyment of consuming it. The activity no longer produces the level of excitement that occurred at first look, and more extreme imagery is needed to produce the same degree of early excitement.

A systematic study of the research literature published in peer-reviewed scholarly journals between 1971 and 1991 produced 152 empirical studies of the effects of pornography (Lyons, Anderson, & Larson, 1994). Analysis of this body of research resulted in the conclusion that using pornography produces

measurable causal effects, particularly for aggressive pornography and for written pornography. Apparently, written pornography produced more powerful effects, perhaps because of its stimulation of the imagination in users and because of the relatively higher likelihood that visual pornography will soon become boring. Consistent with this finding, audio pornography ranked after written pornography and before visual pornography in consistently producing statistically significant effects.

Some people are more at risk than others to suffer lasting effects from using pornography. Among males who are predisposed to sexually aggressive behavior, pornography users display degrees of sexual aggression that exceed four times that of sexually aggressive males who do not use pornography (Malamuth, Addison, & Koss, 2000). Aggressive males may differ in their responses to pornography from nonaggressive males (Allen, D'Alessio, & Emmers-Sommer, 2000; Malamuth & Check, 1983; Malamuth, Check, & Briere, 1986).

Viewing Behavior

The primary research technique for measuring prolonged consumption of pornography also emerged from the work of the 1970 Commission (Howard, Reifler, & Liptzin, 1971). The protocol involved exposure to pornography followed by an interval of no exposure before taking measurements of possible effects. The pioneering study showed pornographic films to college students over a three-week period. Eight weeks after the end of the screening, measurements were taken during the showing of a pornographic film and also afterward. The physiological measures confirmed that the primary response after steady exposure to pornography was boredom from seeing similar material. Although pornography's initial impact on physiological arousal is powerful, content that once was exciting soon loses its capacity to elicit a thrill (Zillmann, 1984b).

Zillmann and Bryant (1986) found that participants who engaged in prolonged pornography consumption and were subsequently allowed to choose their own viewing materials preferred more unusual forms of sexually explicit content, such as bestiality and sadomasochism. This effect occurred with both male and female participants and reflected the results of interviews about repeat customers at adult book and video stores. Zillmann (1994a) predicts that experienced consumers of pornography will turn to sexually explicit materials containing violence because of the loss of excitement generated by more common forms. He suggests that if explicit sexuality appears openly in nonsexual environments, such as on billboards, on public transportation, on materials at checkout counters, on television, and other generally available public displays, people seeking sexually gratifying stimulation will soon turn to more radical forms of sexual imagery to meet their requirements (Zillmann, 1984a). This same habituation to pornography, he explains, corresponds with frequent references in clinical literature that habituation occurs

frequently in monogamous relationships. Primate males tend to lose their tendencies toward sexual excitement to the same sexual stimuli over time, although the phenomenon remains to be proved with research on humans.

Investigations of whether couples who view pornography together change their sexual behavior produced conflicting results. Couples with ten years or more of marriage changed sexual repertoires little and showed no expansion after four weekly sessions of viewing pornography (Mann, Sidman, & Starr, 1971). However, more recent reports (Bryant, 1985a; Wishnoff, 1978) showed that sexually experienced couples adjusted behavior after steady exposure to pornography.

Pornography and Aggression

Aggression tends to decline with exposure to pornography for both males (Zillmann, Bryant, Comisky, & Medoff, 1981) and females (Baron, 1979). Zillmann (1984b) explains this reduction by observing that common pornography contains generally pleasant nonviolent, noncoercive material. The conclusion is consistent with findings that aggression among viewers resulted from aggressive content, rather than from sexually explicit images in the content (Zillmann, Bryant, & Carveth, 1981). Both males and females enjoy watching pornography, which stimulates sexual desire, and research disproves the notion that sexual frustration from ending the viewing of such material increases aggression (Sapolsky & Zillmann, 1981).

These conclusions have both agreement (Malamuth & Ceniti, 1986) and disagreement from other researchers who measured the results of prolonged repeated exposure to aggressive pornography. In laboratory settings, Edward Donnerstein (1980a, 1980b) and his colleagues (Donnerstein & Berkowitz, 1981) found that viewers were aggressive toward women after viewing pornography. Other studies (e.g., Linz, Donnerstein, & Adams, 1989) linked aggression and viewing aggressive pornography when the content displays sexual aggression rather than mere sexual content.

Also, not everyone agrees that nonviolent pornography generates no aggressive behavior, although researchers concede that the level of aggression generated by such fare is less than that arising after viewing aggressive pornography (Lyons et al., 1994; U.S. Department of Justice, 1986). Does such promoted aggression rise to the level of criminal behavior?

Pornography and Criminal Behavior

The final report of the Attorney General's Commission (U.S. Department of Justice, 1986) links viewing pornography and imitating violent behavior seen in it, and some authors (e.g., Russell, 1988) charge that viewing pornography causes rape. Although rapists and child molesters have admitted using pornography as a stimulant before and during their crimes (Marshall,

1988), scientific proof of a causal connection is not available, and research has not demonstrated that youths' consumption of pornography leads to their becoming sex offenders (Davis & McCormick, 1997).

Ethical and legal restrictions on research protocols make it difficult, if not impossible, to prove that using pornography causes violent behavior. Consequently, the frequency with which pornography viewers imitate what they see lacks scientific analysis (Harris, 1994).

College men who saw pornography were more likely than viewers who did not, to say that they might rape someone if they could be sure of avoiding prosecution (Check & Guloien, 1989). Describing such admissions by research participants as evidence of sexual callousness, Bryant and Zillmann (2001) found that sexual callousness strengthens from viewing of both violent and nonviolent pornography. Research findings have not yet demonstrated that violent pornography is more powerful than nonviolent pornography in producing impact on imitative behavior (Zillmann, 2000). Even when the pornographic content includes scenes of suffering by rape victims, participants viewing the content show no greater tendency to admit a willingness to commit rape than those who saw noncoercive pornography.

It is also difficult to prove a link between actual illegal behavior and viewing pornography. Researchers acting ethically and legally cannot conduct studies that would show such causation. Doing so would subject the research participants to the possibility of great harm. Therefore, whatever researchers know about such connections comes from interviewing criminals and studying their crimes. Bryant and Zillmann (1996) found such evidence conflicting and inconclusive.

When pornography was more easily available, rates of sex crimes in Japan and Denmark declined, but the same was not true in Australia and the United States. Mere availability does not explain these results, and researchers need more knowledge of the effects of cultural differences when evaluating the effects of pornography on criminal sexual behavior.

James Weaver (1994), summarizing research connecting pornography with sexual callousness, concedes that research fails to prove the connection. Young people today are more likely to have received initial sexual orientation from pornography than are people of earlier generations. Weaver further notes that consuming pornography produces a loss of respect for "female sexual autonomy" (p. 224) and lessening of male restraint of aggression against women. These two factors commonly appear in the beliefs and attitudes of male sexual offenders. M. Douglas Reed, analyzing the clinical evidence about pornography, states: "Pornography to addicted sex offenders is as dangerous as matches and gasoline to an arsonist" (1994, p. 265).

Child pornography involves criminal behavior. Federal law (U.S. Code, 2004) prohibits producing, advertising, or distributing sexually explicit images of models under the age of 18. Kenneth Lanning and Ann Burgess (1989) describe child pornography as a record of child abuse because it cannot be

produced except by victimizing a child. Possessing child pornography is illegal under both state and federal laws and is not openly sold anywhere in the United States. However, Lanning and Burgess observe that child pornography is exchanged in almost every American community.

They divide child pornography into commercial and homemade, depending on the purpose for which the content is created. They explain that pedophiles are primarily responsible for importing child pornography into the United States because their motivation includes collection, as well as commercial sale. Commercial dealers find the risks of prosecution too great to justify their own production, but the quality of homemade productions sometimes is good enough that it becomes commercially distributed.

Prolonged Pornography Consumption and Family Values

Zillmann and Bryant (1988a) studied the effects of prolonged exposure to pornography on family values. They found that the short-run, immediate gratification values of pornographic content undermine those of the family, which center on caring, responsibility, and commitment. Consumers of such fare reported diminished desire for marriage and having children, especially female children.

Zillmann cites several detailed analyses (Brosius, 1992; Brosius, Staab, & Weaver, 1991; Palys, 1984; Prince, 1990) of the content of pornography showing that images predominantly portray people engaging in sexual activity soon after first meeting, expecting no long-term relationships with each other, and maintaining contact only for as long as completing sex requires. Furthermore, pornography often features sex with many partners, all of whom appear to feel ecstasy from the experience. Schlosser (1997) writes that pornography deals with a wide variety of content preferences, including heterosexual, homosexual, interracial, bondage, fetishes, and more. These images, suggests Zillmann, undermine notions that sex should be part of personal commitment, even promoting the idea that such commitment is confining and likely to prevent achievement of sexual fulfillment.

Zillmann and Bryant (1988b) found that prolonged consumption of pornography affected the perceptions of pornography users, who may be presumed to seek greater sexual satisfaction through such consumption. However, the research findings suggest that the portrayal of idealized sexual performance and sexual partners generates the opposite impact. Verifying that such idealizing may be no different from that occurring in nonpornographic content, such as advertising, they used the Indiana Inventory of Personal Happiness. The instrument revealed that satisfaction with nonsexual issues remained unaffected, although all items related to sexuality reflected this rising dissatisfaction.

A related study (Weaver, Masland, & Zillmann, 1984) found that users of prolonged pornography reported less satisfaction with sexual partners, even when their partners were part of a long-term relationship. The partners

seemed less attractive and less satisfying as sexual performers. Questions about the partners' willingness to remain faithful emerged, as did greater willingness for pornography viewers and their partners to sanction sexual relationships outside of marriage. Recreational sex attained higher-rated importance for prolonged pornography viewers, and they expressed greater willingness to use sex as a tool for gaining favor.

Prolonged consumption of pornography itself significantly changed perceptions about family values and fostered greater acceptance of sexual promiscuity (Zillmann, 1994a). These findings were attributable specifically to the pornography use, as distinguished from being the result of generally changing attitudes in society. Such prolonged pornography use was accompanied by a decline in expectations that intimate sexual partners will remain faithful to each other, a finding that consistently occurred among males, females, students, and nonstudents. Prolonged use of pornography produced greater acceptance of sexual behavior with people other than marriage partners as well as with people other than the regular partner outside of marriage. Additionally, the prolonged pornography users showed greater tolerance for their partners straying from faithfulness. In other words, this consumption weakened notions that sexual intimacy should be reserved for a person's exclusive sexual partner, whether in or out of marriage.

This fostering of acceptance for multiple sex partners also demonstrates consequences for ideas about sexual activity and health. Prolonged use of pornography fostered beliefs that sex without restraints is "wholesome and healthy; and moreover, that any sexual restraint poses health risks" (Zillmann, 1994a, p. 206).

Prolonged pornography use led to lowered acceptance of the importance of marriage to society and greater likelihood of believing that marriage will become obsolete. Again, these findings emerged in males, females, students, and nonstudents. Pornography consumption also reduced expressed desire to have children, apparently making family commitments seem unnecessarily burdensome.

In addition to affecting ideas about marriage, prolonged consumption of pornography affected perceptions of grounds for divorce. Sexual infidelity became less accepted as suitable grounds for divorce among pornography users, and unacceptable sexual interest and initiative became more acceptable grounds. For reasons unrelated to sex, pornography consumption produced no differences in perceptions about grounds for divorce.

Sexual Callousness toward Women and Rape

Several feminist authors have accused pornographers of teaching women to perceive themselves as lacking power and behaving more submissively (Baldwin, 1984). The general notion of perceiving females as submissive and fearful has been called the *cultural climate hypothesis* (Krafka, Linz, Donnerstein, &

Penrod, 1997). Research support for this phenomenon is available from studies showing aggressive pornography to males (Donnerstein, Linz, & Penrod, 1987). Aggressive pornography was defined as sexually explicit images of the use of force or coercion, usually involving rape or assault. A lesser degree of support emerged from display of such content to females (Krafka et al., 1997).

The rape myth suggests that women invite rape, and research shows that the influence of mild pornography leads men to hold women responsible for being raped. People who saw such images also gave less credibility to claims by women that they were raped (Wyer, Bodenhausen, & Gorman, 1985). The stimulus materials contained images of women in sexually alluring poses. Women who saw the materials were less inclined to react the same way, however, giving the alleged rape victim more credibility and less responsibility for the alleged rape than women in a control group.

Another study assessed recommended rape sentences after conviction based upon whether the respondents had experienced prolonged exposure to pornography (Zillmann & Bryant, 1982). Although women issued longer prison sentences to the convicted rapists than did men, both women and men gave more lenient sentences after three weeks of exposure to pornography during a six-week study.

Prolonged exposure to both nonviolent and violent pornography has been demonstrated to increase the likelihood that males report willingness to commit rape (Check, 1985). Even eliminating from experiments men with predispositions to violence and men who might have been angry before seeing violent pornography produced this same attitude toward women (Donnerstein, 1984). After viewing pornography in which women were victimized by violence in scenes rated as sexually arousing, men rated the female victims as having suffered less injury than did men who did not see that content (Linz, 1985).

Edward Donnerstein and Daniel Linz (1986) found that young adults displayed increased tendencies of sexual callousness toward women after seeing violent pornography over a prolonged period. Unlike Zillmann and Bryant, however, these authors concluded that the violence, instead of the sexually explicit content, produced the effect. The same authors were involved in other published research that found desensitization of male viewers of violent pornography in which females were victimized (Linz et al., 1989). Studies do, however, reveal that realistic portrayals of the consequences of sexual violence produced less male sexual arousal than violent pornography portraying female victims who become sexually aroused during the assault against them (Linz & Donnerstein, 1989).

Seeing films portraying sexually aggressive females led males to project similar perceptions onto women judged by others as not being sexually permissive (Zillmann & Weaver, 1989). In other words, women perceived in pretests as nice girls were seen by male viewers of sexually explicit content as

being promiscuous. Women who saw such films were less willing to see innocence in female victims in cases involving clearly guilty male perpetrators of violence against women, including rape. The same effect appeared in male viewers when they saw sexually explicit films portraying rape and erotic violence, but the effect failed to appear when males saw content portraying consensual sex and female-instigated sex. The authors concluded that viewing pornography trivialized rape among both men and women, contradicting earlier studies by Linz and Donnerstein (1990) and Donnerstein et al. (1987) that the violence, not the sex, produced sexual callousness.

After analyzing the available research on television violence, Haejung Paik and George Comstock (1994) supported Zillmann and his colleagues, concluding that the sexual content, not the violence, was primarily responsible for generating sexual callousness. Other authors (Jansma, Linz, Mulac, & Imrich, 1997) suggest that measuring interactions between men and women after they view sexually violent pornography would improve the research about sexual callousness, citing Elizabeth Perse's (1994) finding that acceptance of rape myths influences decisions to use pornography. Bryant and Zillmann (2001) observed that meta-analyses (e.g., Allen, D'Alessio, & Brezgel, 1995; Allen, Emmers, & Giery, 1995), or comprehensive studies of wide collections of research investigations, have concluded that nonviolent pornography is almost as powerful as violent pornography in promoting sexual callousness against women.

Effects of Internet Pornography

Access to sexually explicit content on the Internet is usually either characterized as sexual exploration, or pathological, related to addictive behavior and compulsive attitudes. Both mental health professionals and the public seem to believe that too much Internet sexuality is harmful, just as both groups believe that too much sex is harmful (Cooper et al., 1999). In one of the earliest studies (Durkin & Bryant, 1995) of using the Internet for sexual purposes, online sexual communication was seen as helping people maintain sexual fantasies that might have disappeared sooner without the interactive and immediate feedback. Cooper et al. (1999) cited previous works (Cooper & Sportolari, 1997) in noting that sexual communication via the Internet reduced the emphasis on physical appearance relative to shared interests, values, and emotions.

Their survey of 9,177 visitors to the MSNBC Web site found that 92 percent spent eleven or fewer hours per week engaging in online activities related to sexuality, and 61 percent admitted falsifying their age in online sexual pursuits. All of the participants in this survey were people who use the Internet for sexual content. Five percent admitted pretending to be a person of a different sex during these activities. Although 87 percent of the respondents professed to feel no shame or guilt, 70 percent kept their online sexual activity

secret. The researchers found no differences in survey respondents' use of the Internet for sexual purposes and their general use of sexual materials off-line, mostly for entertainment rather than sexual arousal. Twenty percent of the respondents reported feeling sexually aroused while using the Internet for sexual purposes, while 88 percent found the experience exciting. No interference with any part of living was reported by 68.2 percent of the respondents, and only 12 percent believed that they were downloading sexual materials from the Internet too frequently.

People spending eleven or more hours weekly in online sexual pursuits were defined as heavy users, and they were more likely to use Internet chat rooms and newsgroups than other users. The authors of the survey found that heavy Internet use for sexual purposes was associated with factors related to psychological difficulty. These factors include distress, sexual compulsiveness, and sensation seeking. An important proportion, about 8 percent, of users of online sexual materials scored high on these measures, seemed distressed, and admitted that their behavior causes some problems in their lives. This proportion resembles the proportion of the general population that suffers from sexual compulsivity, reported by these authors at about 5 percent. More research is needed to determine the direction of this association between time spent seeking sex online and psychological distress. To date, research has not been able to say whether distressed people seek sex online or whether seeking sex online leads to distress.

SHOULD PORNOGRAPHY BE CENSORED?

In Favor of Censoring Pornography

Although the 1970 Commission on Pornography found pornography mostly inoffensive and recommended the repeal of laws restricting its availability to adults (U.S. Commission on Obscenity and Pornography, 1970), the 1986 Commission differed. The latter commission ruled that the production and distribution of pornography violates civil rights of the public and is an abuse that can be legally and constitutionally stopped (U.S. Department of Justice, 1986).

Regardless of how strongly some people may be offended by pornography, it enjoys protection under the First Amendment to the U.S. Constitution (Zillmann, 1994b). The First Amendment protects the right to publish and distribute and to consume content. This freedom is staunchly defended, not only by the pornography industry, but also by such groups as the American Civil Liberties Union. Sears (1989) contends that an absolute application of the First Amendment ignores damage to performers who may be coerced in the production of pornography, damage to people confronted with the content, and potential damage through the relationships between consumption and antisocial behavior. He suggests several citizen alternatives to censorship, such

as organizing pickets, supporting boycotts of businesses, and campaigning to inform the public about the negative effects of pornography.

Sears points out that government has the power to restrict the publication and sale of obscenity and child pornography, which enjoys no First Amendment protection and the mere possession of which can be constitutionally prohibited. Sears disagrees with common claims that laws restricting obscenity are too confusing to enforce. He contends that such laws are clearer than many other laws that receive regular enforcement, such as fraud, antitrust, and self-defense. After reviewing the history of U.S. Supreme Court decisions regarding obscenity and pornography, Sears finds an array of constitutional legal tools to fight such content. He includes both civil actions to control display, such as zoning, as well as criminal prosecution for illegal production and distribution. Sears contends that the Court has upheld the principle of restricting obscenity and pornography in ways that are adaptable to the emerging new technologies.

Another defense of pornography involves claims of privacy, which Sears dismisses. He argues that visual pornography forfeits any legitimate claim to privacy after production teams record and publish what might otherwise be considered private behavior.

Against Censoring Pornography

Linsley (1989) contends that the sheer numbers of people producing and consuming pornography show public acceptance of it. He suggests three premises that must be met to justify censorship of pornography: clearly defined pornography, identifiable harm, and proof that censorship preserves essential freedom.

Linsley contends that pornography and obscenity have become inseparable in the minds of many, and both are practically impossible to define. He quotes decisions of the U.S. Supreme Court to establish the inability to consistently define pornography, to distinguish between content judged as obscene and protected speech, citing such examples from *Miller v. California* (1973) as *prurient interest*, *patent offensiveness*, and *serious literary value*. The term *pornography*, he contends, is subjective and lacks legal foundation. Such nebulous terms cannot fairly be used to proscribe conduct because citizens cannot know in advance which acts violate the law.

Congressional Action and First Amendment Conflicts

Congress attempted to regulate the sending of obscene or indecent content via the Internet to minors, those under age 18, with the Communications Decency Act of 1996 (CDA). This law was struck down by the U.S. Supreme Court (*Reno v. American Civil Liberties Union*, 1997) as overbroad.

The Court directed that less intrusive measures be used before the First Amendment rights of adults could be threatened by attempts to restrict the

availability of content to children. The Court also criticized the law for using vague definitions of such terms as *indecent* and *patently offensive* in describing content that could be restricted, noting that valuable educational and artistic materials could be included using such terms as the basis for regulation (Rosen, 2004).

Congress passed the Child Pornography Prevention Act of 1996, including computer-generated sexually explicit images of children under content banned as child pornography. Again, the U.S. Supreme Court found the law unconstitutionally vague (*Ashcroft v. Free Speech Coalition*, 2002).

Congress again focused on Internet pornography and children with the Child Online Protection Act (COPA) in 1998, particularly on content designed for commercial purposes. Congress used language from *Miller v. California* (1973) to specify what would be restricted. The U.S. Supreme Court ruled in the *Miller* case that community standards would govern what is obscene, but the Court ruled (*Ashcroft v. Free Speech Coalition*, 2002) that local standards could not effectively be applied to the Internet and called instead for a national standard in such a venue (Rosen, 2004). These cases illustrate the conflict between protecting the rights of those considered to be particularly vulnerable to the influence of Internet and computer-generated pornography and the First Amendment.

CONCLUSIONS

Reaching the bottom line on the impact of pornography depends on perspective. The economic impact is unquestionable. Researchers differ about the effects on attitudes and behavior. For example, some analyses of the research on pornography effects (e.g., Fisher & Grenier, 1994) question the findings and methods of research on aggressive pornography. These objections have been criticized (Malamuth et al., 2000) as being inaccurate, unrepresentative, and lacking validity.

Existing research tends to focus mostly on sexually violent pornography and its impact on rape to the exclusion of emphasis on more subtle and common forms of pornography (Zillmann, 1989). Strategies used in this research often follow disparate methodologies that produce findings that fail to fit into a consistent body of knowledge, resulting in a lack of clear understanding of research results and fodder for those who would attack research about pornography. Such critics use different studies with inconsistent findings as ammunition for their attacks. Despite clear social science research findings about the harms of using pornography and despite clear testimony about suffering from victims of pornography, some researchers and members of the legal community do not accept that pornography causes harm.

However, other systematic meta-analyses (e.g., Allen, D'Alessio, et al., 1995; Allen et al., 2000; Allen, Emmers, et al., 1995) have been praised

(Malamuth et al., 2000) for their rigorous methodology. These studies report consistent and strong effects from the use of pornography.

Despite these differences, Zillmann (1994b) argues that research provides a strong foundation for public policy dealing with pornography. Inconsistencies in the body of research are explainable to the satisfaction of informed researchers, and the bulk of the findings are consistent in demonstrating harm from pornography. Conceding that censorship is neither desirable nor constitutional, he recommends that policy makers focus on education designed to enlighten the public about such ills as sexual callousness, support for rape and rapists, and other improper sexual attitudes. While falling short of demonstrating that pornography ruins families and personal relationships, the scientific evidence supports the contention that prolonged consumption of pornography influences the attitudes and dispositions of the users toward intimate sexual partners, sexual health, marriage, and family values.

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12

The Sex Trade: Exotic Dancing and Prostitution

Vern L. Bullough and Richard D. McAnulty

I was a prostitute for eight years, from the time I was fifteen up until I was 23, and I don't know how you can possibly say, as busy as you are as a lady of the evening, that you like every sexual act, that you work out your fantasies. Come on, get serious! How can you work out your fantasies with a trick that you are putting on an act for?

—L. Bell, 1987, pp. 49–50

Every night, between the peak hours or 9 p.m. and 1 a.m., perhaps a quarter of a million Americans pick up the phone and dial a number for commercial phone sex. The average call lasts 6 to 8 minutes, and the charges range from 89 cents to $4 a minute. . . . Three quarters of the callers are lonely hearts seeking conversation with a woman. The sexual content of the call is often of secondary importance. . . . most calls are answered by "actresses"—bank tellers, accountants, secretaries, and housewives earning a little extra money at the end of the day.

—Schlosser, 1997, pp. 48–49

We are not bad people. We are regular people. You know, I live in a regular neighborhood. I'm a regular person. . . . Just I'm a dancer. I think it's important for people to know that we are just regular people and that we do have lives. We do have families, we do have kids, you know, and we're

> *not . . . out to wreck homes. . . . We're just out there to make a dollar, just like anybody else.*
>
> —H. Bell, Sloan, & Stickland, 1998, p. 358

In its various forms, the sex trade is one of the most lucrative industries in the world. The global pornography industry alone generates over $55 billion in revenues each year, making it the third most profitable industry after the trade of weapons and of illicit drugs (Morais, 1999). The global sex industry thrives in some parts of the world, southeast Asia in particular. In Thailand, prostitution fuels the sex industry, which employs tour operators and travel agencies that offer special package deals. Sex tourism contributes upward of $4 billion per year to the Thai economy (Bishop & Robinson, 1998). The sex trade caters to men. The vast majority of the sex tourists to the capital of Thailand, nearly 90 percent, are men. In fact, the customers of prostitutes, whether male or female, are men. Although less visible in other parts of the world, including the United States, the sex trade thrives in most cultures.

Of all the forms of sex trade, one in particular has a long and controversial history—prostitution. The lengthy existence of the various forms of commerce reveals that there are sufficient numbers of consumers to sustain these trades. Topless or exotic dancing also has a long history; as a form of entertainment for hire, however, it is probably a more recent phenomenon.

This chapter offers an overview of the above two common forms of sex trade. Research on prevalence and the different forms of these practices is reviewed. Additionally, research findings on sex trade workers and their customers are summarized. Finally, we also consider the sociocultural and individual factors that support the sex trade, along with divergent perspectives on the benefits and problems associated with the trade.

EXOTIC DANCING

We use the term "exotic dancing" to refer to any form of sexually suggestive dancing for hire. The dancers are designated by a variety of terms, including topless dancers, strippers, exotic dancers, and adult entertainers. The latter term is apparently preferred by dancers because it carries less of a negative connotation than the other labels. Entertainment featuring nude or topless dancing has gained popularity in recent years. In one national sex survey, 16 percent of men and 4 percent of women reported having been to a club featuring nude or seminude dancers (Laumann, Gagnon, Michael, & Michaels, 1994). According to the *Exotic Dancer Directory*, an industry publication, there are over 2,000 clubs offering adult entertainment in the United States. It is estimated that most major metropolitan areas have several dozen clubs that offer adult entertainment, and these numbers seem to be steadily growing. These clubs provide acts consisting of performances by dancers in various stages of undress. Depending on local ordinances, the entertainers may be

topless or completely nude. Although illegal in the United States, some countries such as Thailand permit live sex acts featuring sexual intercourse and lesbian acts on stage (Manderson, 1992). In the United States, the only physical contact between dancers and customers that is sometimes permitted involves "lap dancing." Lap dancing consists of individual, and usually private, performances during which the dancer may rub her thong-clad genitals against a customer's clothed lap. The entire performance takes place in the customer's lap or between his legs. As one performer described it, a lap dance basically involves "the dancer grinding her genitals against his, and the man knows he can expect to get off" (Lewis, 1998). Although some instances of lap dancing allegedly escalate to actual sexual activity, including mutual masturbation and oral sex, most dancers object to the association of exotic dancing with prostitution. Most dancers insist on the enforcement of the "no touching" provision that is required by club management and local jurisdictions as a way of reinforcing the distinction between the "art" of exotic dancing and the practice of prostitution (Lewis, 1998).

Exotic dancing is not a new trade. There are several historical accounts of scantily clad female dancers providing entertainment for royalty. The biblical Dance of the Seven Veils allegedly involved an exotic dance by King Herod Antipas's own daughter to entertain the audience. Burlesque theater was a precursor to modern striptease or exotic dancing. One of the first descriptions of topless dancers was offered by Skipper and McCaghy (1970) who conducted a field study of thirty-five performers. Using a semistructured interview, the authors gathered information on the physical, social, and psychological attributes of "strippers." They characterized the participants as usually being the firstborn in a family from which the father figure was absent, as reaching puberty precociously, having sexual experiences at an early age, and possessing the physical endowment (large breasts) desired in the trade. The dancers tended to demonstrate early independence, often leaving home at an early age. Presumably, this early departure from home represented an urge to escape an aversive environment. Their need for affection was met by their occupational choice, the public display of the body as a means of securing approval and recognition. In addition, the opportunity to dance topless for pay came about at a time of great financial need in these women's lives. The authors concluded that performers "became strippers more by chance than design, more by drift than aspiration" (p. 400). Thus, this description of dancers provides the picture of a troubled childhood, with early sexualization, and an opportunistic motivation for entering the profession.

A similar depiction of topless dancers as relatively unstable and desperate women was offered by Salutin (1971). Salutin added that dancers, by necessity, were uninhibited about their bodies, inclined to engage in prostitution occasionally, and sexually promiscuous. In Salutin's estimation, although most dancers were married or were in a long-term heterosexual relationship, most were open to sexual experimentation in various forms, which she attributed

directly to the occupation. Again, the portrayal of topless dancers is mostly negative, accentuating the image of a "deviant profession."

Enck and Preston (1988) analyzed the nature of interactions between dancers and customers. Their conclusions were based on the observations of a student who secured a waitress job in a topless club (she elected not to be listed as a coauthor because of the stigma associated with her profession). Enck and Preston emphasized the "counterfeit intimacy" that characterized the interactions between dancers and patrons. In their analysis, performances are orchestrated to provide an illusion of sexual intimacy, thus constituting a form of role-playing in which the actors have distinctive parts and goals. For dancers, the ultimate goal is to generate an income, and the method is by acting in a sexually provocative fashion. Several ploys used by dancers were identified, including making each customer feel special, sexually desirable, and appearing emotionally and/or sexually needy. For the customer, the primary goal is to obtain a "sexual experience." Customers' ploys include claiming an emotional attachment to a dancer, complaining of being lonely or deprived, and boasting of physical or financial resources. Despite their portrayal of the interactions as shallow and "counterfeit," Enck and Preston postulated that the profession provides a source of fulfillment, for customers and dancers alike, that conventional or "legitimate" institutions had failed to provide for these individuals. Therefore, adult entertainment is sometimes viewed as a useful and legal outlet for unmet needs.

In contrast to the negative portrayals of adult entertainers provided by earlier studies, findings of a more recent study revealed a more positive picture. The personality profiles and background characteristics of thirty-eight topless dancers were compared to those of a control group of restaurant waitresses (McAnulty, Satterwhite, & Gullick, 1995). Overall, the dancers were not found to be more psychologically maladjusted. Both groups were above average in extraversion and openness to new experiences, and the dancers had higher incomes, earning four times the salary of waitresses. The dancers viewed themselves as more physically attractive, but also reported more preoccupation with body image than did the waitresses. No differences were found in criminal history. The vast majority of all participants reported a heterosexual orientation, and virtually all were in dating or committed relationships. Anecdotal information suggested that none of the dancers engaged in prostitution, which was strictly prohibited by club regulations and is illegal.

One finding consistently reported in studies of topless and nude dancers is that the primary motivation for entering the profession is financial (McAnulty et al., 1995; Skipper & McCaghy, 1970). The same finding has been noted for male strippers (Dressel & Petersen, 1982). Although many people consider adult entertainment to be a deviant occupation, topless dancers are not inherently deviant individuals. Some researchers have suggested that deviance is mostly in the eyes of the beholder. In other words, a career or lifestyle is deviant *only* if society labels it so. Undoubtedly, individuals attracted to a

profession like exotic dancing will tend to be more disinhibited and more comfortable with their bodies than most. Some of these same issues will be revisited as we cover another profession, prostitution. However, unlike topless and nude dancing, prostitution is almost always considered a deviant occupation.

PROSTITUTION

Prostitution refers to the profession involving the indiscriminate exchange of sexual favors for economic gain, or the commercialized sale of sexual services in which sex is a commodity (de Zalduondo, 1991). For the prostitute, the practice represents a means of deriving or supplementing an income. Therefore, prostitutes are referred to as sex trade workers. In some cases, the prostitute may exchange sexual acts for illicit drugs; for example, the so-called crack whores trade sex for crack cocaine (Fullilove, Lown, & Fullilove, 1992). A person who trades sexual favors for a job promotion would not be labeled a prostitute, although this includes some of the same elements as prostitution. What separates prostitution from this example is the repeated and indiscriminate nature of selling sexual services.

Historical Perspective

Prostitution has been called the "oldest profession." In reality, it is probably not any older than such social roles as medicine man and priest. However, prostitution has always been and continues to be one of the most controversial occupations. Much ambivalence toward the practice of selling sexual favors as an occupation is reflected throughout history. On one hand, prostitution is often viewed as a deplorable practice, but its lengthy existence reveals that there has always been a demand for sex at a price. This ambivalence is illustrated by the writings of early religious figures. Biblical texts refer to Mary Magdalene as a "woman of the city, a sinner," and many references to harlots are found throughout the Bible. In the fourth century, the Christian bishop Augustine viewed prostitutes as shameful while also noting that they served as useful outlets for lustful desires. Similarly, Thomas Aquinas, Italian priest and philosopher of the Middle Ages, believed that prostitutes helped prevent the spread of lustful sins (Bullough & Bullough, 1977). Napoleon Bonaparte is quoted as saying that "prostitutes are a necessity. Without them, men would attack respectable women on the street." In Victorian-era England, prostitutes were viewed as unfortunate but essential sexual outlets for men's needs; the trade prevented "worse offenses" such as having sexual encounters with other men's wives or with virgins (Taylor, 1970).

The ambivalence toward prostitution is evident in the various governmental policies and interventions. President Juan Perón of Argentina ordered the legalization of prostitution in 1954. The Argentine government and public

health department reasoned that legalizing the commerce of sex would help control the spread of sexually transmitted diseases and prevent men from engaging in sexually deviant behavior (Guy, 1991). In the same country, Dr. Nicolás V. Greco wrote that banning prostitution led men to seek "artificial methods" (such as masturbation) or "sexual perversions" (homosexuality in this case) for sexual release. Greco and others believed that prostitution encouraged heterosexuality and, therefore, reinforced the institutions of marriage and family. Lacking any scientific evidence to support these views, Greco quoted St. Thomas Aquinas and St. Augustine. Prostitution has remained a legal institution in Argentina since 1955. Historical records suggest that prostitution has generally been viewed as a necessary "evil," one that might be tolerated to prevent worse evils.

Prostitution across Cultures

In most cultures, prostitution is viewed as a deviant profession. This is clearly illustrated by the choice of terms used to describe prostitutes in our culture—such as "hooker," "whore," and other terms that are perhaps less pejorative, such as "working girls," "ladies of the night," and *femmes fatales* (from the French for "deadly women"). There is much variability in the prevalence of prostitution across cultures and in cultural attitudes toward the sale of sex. Many societies have quietly tolerated the practice, while others are more accepting of prostitution within specified boundaries. In ancient Greece and Mesopotamia, temple prostitutes, both male and female, were common and the practice was associated with religious rituals. Having sex with the prostitutes was considered a form of worship. Temple prostitution was also practiced in India. The Hindu temple of Samanâtha reportedly had over 500 "dancing girls" who provided music for the god and sensual pleasure for male worshippers (Bullough & Bullough, 1978). Prostitution also flourished in medieval Europe.

Some societies have banned the practice outright, whereas it is regulated in some parts of the world. In countries where prostitution is legalized, such as France and the Netherlands, prostitutes must be registered and submit to periodic medical evaluations for sexually transmitted diseases. Prostitution is more prevalent in male-dominated, or patriarchal, societies, where women have a comparatively low status. In such societies, women typically are considered inferior, have fewer opportunities for success and independence, and are expected to cater to men's needs and desires (Cusick, 2002). Prostitution is most prevalent in patriarchal, economically depressed countries that do not have severe sanctions for nonmarital sex, such as Mexico, Brazil, Ivory Coast, and Thailand. Thailand alone, for example, has an estimated 2 million female sex workers (Buckingham, Meister, & Webb, 2004). Prostitution also flourishes in societies that prize female virginity. Under conditions of a limited supply of eligible female partners, there is often a demand for a sex trade. In situations where men greatly outnumber available women, there is competition for fe-

male partners, and some men will be willing to pay for sexual encounters. Declining numbers of eligible women could be due to higher mortality rates (which was common in the past due to severe anemia and complications during childbirth), a cultural requirement of female virginity, or a double standard that tolerates male sexual experimentation but demands female sexual restrictiveness. In general, prostitution is most common in restrictive societies and least common in sexually open societies. Presumably, in an open and tolerant society, where the genders have equal rights and opportunity, there would be no need for a clandestine sex trade (Goode, 1990). However, it should be noted that even liberal countries such as Denmark report a thriving sex trade. And in a study of Norwegian men, 13 percent admitted having paid for sex with a prostitute (Høigård & Finstad, 1986/1992).

Prostitution in the United States

Even in societies where prostitution is illegal, such as the United States (outside of a few counties in Nevada), it exists and even thrives in some urban areas. In the state of Nevada, prostitution is legal but regulated. Each county in the state has the right to allow prostitution in designated areas. Nevada's best-known brothel, the Mustang Ranch, closed in 1999 amid allegations of fraud. Potterat, Woodhouse, Muth, and Muth (1990) estimated that 80,000 women worked as prostitutes in the United States in the 1980s. However, these are probably underestimates due to the clandestine nature of the profession and the tendency of some prostitutes to drift in and out of the trade. Potterat and colleagues estimated that prostitution tends to be a short-term career, four to five years for most. However, Freund, Leonard, and Lee (1989) found that the streetwalkers they studied had been in the trade for an average of eight years. In the Janus and Janus (1993) survey, 4 percent of the women admitted having traded sex for money. In one study in New York City, 22 percent of the gay and bisexual male adolescents admitted to exchanging sex for money or drugs (Rotheram-Borus et al., 1994). Interestingly, we find no comparable survey of heterosexual male adolescents.

Although it is impossible to accurately estimate the number of prostitutes in the United States, survey results suggest that fewer men have experience with prostitutes today than in the 1940s. Kinsey, Pomeroy, and Martin (1948) noted that two out of three white males that they surveyed admitted having had sex with a prostitute at least once, and up to 20 percent described themselves as regular customers. Later surveys suggested a significant decline in men's experiences with prostitutes. In the Janus survey (Janus & Janus, 1993), 20 percent of men admitted having paid for sex. A similar pattern is noted in the number of men who report that their first sexual encounter occurred with a prostitute: approximately 54 percent of high school graduates and 20 percent of college graduates who participated in Kinsey's survey were sexually initiated by prostitutes, compared to 10 percent in a survey conducted more than

twenty years later (Hunt, 1974). This pattern was also documented by Laumann et al. (1994) who found that 7 percent of 55- to 59-year-old men had their first sexual encounter with a prostitute, compared to 1.5 percent of 18- to 24-year-olds. The preferred explanation for this trend is the decreased double standard during the second half of the twentieth century, which made more women open to premarital sexual experimentation. Consequently, this increase in available sexual partners reduced men's inclination to pay a stranger for sexual activity (Edgley, 1989).

The Prostitute

The term "prostitute" is derived from the Latin word *prostitutus*, meaning "to set forth" or to be exposed for sale. This refers to the advertising of sexual services by the prostitute, whether in manner of dress, verbal propositions, or location. The corresponding legal term, "solicitation," is a reference to the offer of sexual activity for a fee.

The consistent pattern in contemporary society and throughout history is for the customers of prostitutes to be men. The most common form of prostitution involves women who sell sexual favors to heterosexual men. The second most common group consists of homosexual male prostitutes who cater to gay men. Male prostitutes who make themselves available to women are called "gigolos," and they are reportedly very uncommon. Lesbian prostitutes are considered extremely rare. Despite what customers may believe, the prostitute does not engage in the practice for personal sexual satisfaction, but rather as a financial enterprise. Prostitutes do not generally derive pleasure from their repeated encounters with customers and, in fact, generally resent them. For the practitioner, prostitution entails the provision of a service for a fee. Female prostitutes earn over thirteen times the salary of nonprostitutes (Earls & David, 1989). By definition, the transactions are void of emotional involvement. The briefer the encounter is, the sooner the prostitute can return to work and generate more income. One prostitute commented, "[W]hen I have intercourse I move around just a little. Then the customers get more turned on, so it goes faster. Otherwise, it's so gross; besides, I get sore if it takes too long" (Høigård & Finstad, 1986/1992, p. 68). Street prostitutes may have a dozen or more anonymous sexual encounters during the course of an evening (Cordelier, 1976/1978; Heyl, 1979). In one study of prostitutes, the average number of customers per day was four, with some prostitutes reporting up to ten encounters in a day (Freund et al., 1989).

Female Prostitutes

There are different classes of female prostitutes. From society's perspective, the most deviant form involves *streetwalkers*, the most common and visible prostitutes. Streetwalkers are virtually indiscriminate in accepting customers, have a relatively low fee for services, and generally have numerous patrons in

one night. Compared to the other types of prostitutes, streetwalkers are more vulnerable to arrest and abuse by customers. Most streetwalkers work for a pimp, usually a man who provides protection in return for a large percentage of monies earned by the prostitute.

Over 60 percent of the streetwalkers studied by Freund et al. (1989) engaged in fellatio and 23 percent had vaginal intercourse with customers. Consistent with reports from female prostitutes, kissing is uncommon (Freund, Lee, & Leonard, 1991). As one prostitute stated, "Like most girls, I personally refuse to let a client kiss me on the mouth. . . . I make a distinction between my vagina and my mouth. I think it's only normal, we've got our dignity too" (Jaget, 1980, p. 167).

Streetwalkers advertise their services in several ways. They tend to wear provocative and revealing clothing and will generally frequent areas known for prostitution. Finally, upon gaining the attention of potential customers, they often make subtle ("Want to party?") or direct ("I can show you a good time") propositions. The cost of services is negotiated early in an encounter, with fee varying depending on the type of sexual act requested; fellatio is often cheaper than intercourse (Winick & Kinsie, 1971).

Prostitutes who work in *brothels* (whorehouses), and special massage parlors or clubs have higher status. Being in an establishment that employs prostitutes has some advantages: it is safer, and business is often more regular. However, there is also a risk of arrest because police squads periodically raid such facilities. Outside of a few counties in Nevada, there are no legally recognized brothels in the United States although some clandestine facilities definitely exist. In countries where prostitution is legal and regulated, brothel prostitution is prevalent. Typically, brothels are managed by a "madam" who collects a percentage of all earnings in the establishments (Heyl, 1979). Massage parlors are sometimes fronts for brothels. The masseuse will generally provide a massage, with other services (often fellatio or masturbation) available to clients for an additional charge. Such extra services are of course illegal in the United States. This association between prostitution and massage parlors has led many legitimate masseurs and masseuses to emphasize that they do not provide sexual services. One way to stress the legitimacy of massage services is by specifying that they consist of "therapeutic massages."

At the highest level of prostitution are the *call girls*, who often operate through an escort service. Escort services advertise that they provide male or female escorts for social occasions. Their advertisements stress that their services are confidential and discreet. One large city in the southeastern United States advertised no less than 106 such escort agencies. The nature of their advertisements suggests that these agencies are thinly veiled covers for prostitution (e.g., "Fantasy Girls," "Wild College Girls," "Affairs of the Heart").

Call girls demand a higher price, are more selective, and typically have a small regular clientele (Greenwald, 1970). They often operate independently and live a luxurious life in comparison to other types of prostitutes (Winick & Kinsie, 1971).

Contrary to streetwalkers and brothel prostitutes, call girls do not usually have multiple encounters in one evening. The case of Heidi Fleiss, "the Hollywood Madam," made the headlines in 1993 for operating an exclusive call-girl service that catered to wealthy men in California (Fleiss was quoted as saying, "I took the oldest profession on Earth, and I did it better than anyone on Earth"). This case was sensational to the media and public not because it involved prostitution but due to the allegations that Fleiss's customers included politicians and popular actors (Birnbaum, 1993).

Equivalent roles to those of contemporary prostitutes could be found in ancient Greece, where *pornoi* (a term meaning "the writing about [or by] prostitutes") referred to the lowest class of prostitutes and *hetairae* (meaning "companion") represented the higher-class courtesans (Bullough & Bullough, 1978, 1995). The latter held high unofficial status, were educated and socially sophisticated, and commanded a higher price for their services. Ancient Greek culture epitomized gender inequality. Therefore, wives were responsible for childrearing and domestic duties, while the hetairae served as social and sexual companions. In both cases, woman was considered man's property, either for his sexual enjoyment or for domestic comfort.

Male Prostitutes

Although both are old practices and probably involve similar prevalence rates, male prostitution has received less attention than female prostitution. Prior to 1963, even less was known of male prostitution than is known today. That year, John Rechy published *City of Night*, a novel about the travels of a boy from Texas who becomes a prostitute and plies his trade throughout the United States. The novel served as a window into the seamier side of male prostitution and increased public awareness about the "profession."

Male prostitutes tend to practice their trade intermittently in comparison to female prostitutes (Winick & Kinsie, 1971). The vast majority of male prostitutes offer their services to gay men. Interestingly, the majority of male prostitutes do not describe themselves as being gay. In their study of 224 male street prostitutes, Boles and Elifson (1994) found that only 18 percent described themselves as homosexual, while nearly 36 percent considered themselves to be bisexual, and 46 percent were heterosexual in their self-reported sexual orientation. The average age was 28 years and most had been in the trade for close to ten years. The services offered by male prostitutes vary as a function of their reported sexual orientation: heterosexual prostitutes were unlikely to participate in anal intercourse whereas nearly 65 percent of homosexual male prostitutes engaged in receptive anal intercourse. Twenty-three percent of bisexual male prostitutes participated in receptive anal intercourse (Boles & Elifson). In a study of male prostitutes in London, West and de Villiers (1993) reported that the ages ranged from 16 to 21 years. Fellatio and masturbation of customers are the most commonly reported sexual activities

by male prostitutes. Anal intercourse occurs somewhat less frequently and commands a higher fee.

As for female prostitutes, the primary motive for male prostitution is making money (Boles & Elifson, 1994). Some male prostitutes report initially being attracted to the excitement of life of the streets and the prospect of multiple sexual encounters. However, the novelty rapidly wears off and the main reason for continuing is financial. As one male prostitute put it, "I'm hustling money—not sex" (Boles & Elifson, p. 44). Male sex trade workers apparently earn less money than their female counterparts (Shaver, 2005).

Several types of male prostitutes have been identified. *Hustlers* are viewed as the male counterpart of streetwalkers. Like streetwalkers, they tend to have multiple indiscriminate encounters during the course of an evening. These encounters may take place in public places, such as parks, rest rooms, or in customer automobiles. However, in contrast to streetwalkers, hustlers generally do not have pimps. *Drag queen* sometimes refers to gay prostitutes who cross-dress while working.[1] The majority of gay cross-dressers, however, are not prostitutes. Some of the customers of drag queen prostitutes may mistake them for women, especially if the prostitute restricts his sexual activity to performing fellatio on the customers. *Call boys* are equivalent to call girls in that they have a regular clientele and live a more comfortable life. *Kept boys* are financially supported by an older male, or "sugar daddy," in exchange for sexual favors. Finally, *gigolo* refers to heterosexual males who are paid for sex by female customers, although gigolos are fairly rare. Compared to female prostitutes, very little research has been conducted on the types of male prostitutes, with the exception of hustlers. This classification of male prostitutes is somewhat arbitrary because some will function in several of these roles over time (Earls & David, 1989).

Child Prostitutes

One of the most disturbing aspects of the sex trade is the exploitation of children. Worldwide, it is estimated that several million children and adolescents are involved in prostitution (Willis & Levy, 2002). In the United States alone, over 244,000 children are at risk of sexual exploitation, which includes prostitution and child pornography (Estes & Weiner, 2001). Child prostitution has been reported throughout the world, from Boise, Idaho, to Bangkok, Thailand, and London, England. Both boys and girls are involved and their ages range from 10 to 17. Many adult prostitutes actually started their careers in adolescence when they ran away to escape physical, mental, or sexual abuse at home. According to Williard (1991), low self-esteem and a lack of marketable skills may lead some runaways into prostitution as a means of survival on the streets. Most commonly, an adult, either a pimp or even a parent, is involved in their initiation in the trade. Campagna and Poffenberger (1988) described a pimp who recruited 12- to 14-year-old girls from a shelter for runaways while

another met desperate youths at bus stations. The initiation into prostitution often included instilling a false sense of security and the lure of easy money. The use of drugs is another common means of facilitating the exploitation of children and adolescents.

Child prostitution has long-term adverse effects on the victims. Of particular concern is the global trafficking of women and children as sex trade workers involving as many as 700,000 victims per year (U.S. Department of State, 2002), 30 percent of whom are children (Kelly, 2002). With increased recognition of the problem of sexual exploitation of children, efforts are being made to prosecute the exploiters and prevent the tragic effects on the victims. In August 1996, nearly 2,000 representatives from 122 countries assembled in Stockholm, Sweden, for the first World Congress against Sexual Exploitation of Children. This meeting called for international attention on the plight of sexually exploited children, concluding that it is the responsibility of each nation to protect children and to prosecute perpetrators of such crimes, which are apparently increasingly prevalent.

Customers of Prostitutes

Far more interest has been shown in prostitutes than in their customers by both researchers and the legal system. We know that prostitutes are more likely to be arrested than their customers, and the criminal charges are more serious (Boyle & Noonan, 1987). According to Margo St. James (1987), a former female prostitute and an advocate for the rights of sex trade workers, few men are arrested for prostitution. Those few men are usually male prostitutes rather than customers. This trend in prosecuting prostitutes more severely than their customers is not new. In the eighteenth century, convicted male customers were fined but the female prostitute was publicly flogged. Her crime has consistently been viewed as worse than his. Prostitution remains the only sexual offense for which more women than men are convicted.

In the trade, customers are referred to as "johns" or "tricks." Their demographic characteristics cross all socioeconomic and racial strata. In one study of the customers of an escort service, based on an address listing obtained during a raid, the majority of clients were Caucasian, married, and affluent (Adams, 1987). Monto (2005) reported that a significant proportion of customers are married, although they are less likely to be married than noncustomers, and they are more likely to be dissatisfied with their marriages. Customers tend to visit prostitutes from their own ethnic and racial background (Monto, 2004). From their interviews with 101 customers of New Jersey streetwalkers, Freund et al. (1991) reported that 42 percent were married and most resided in the surrounding areas. Average age in the sample was 40. Most men were regular customers (93 percent made monthly visits and 63 percent reported weekly encounters) and had been visiting the prostitutes for more than one year. Furthermore, 55 percent of the customers were

"regulars" who had sex with the same prostitute during their outings. Sex usually occurred outdoors, such as in back alleys, or in the client's car. The preferred sexual activity was fellatio, and vaginal intercourse was a close second (see also Monto, 2001).

Several motives for using prostitutes have been delineated, including variety, loneliness, sexual deviance, curiosity, and deprivation (Edgley, 1989; Monto, 2004, 2005; Pitts, Smith, Grierson, O'Brien, & Misson, 2004). Some customers seek the anonymous and indiscriminate nature of sex with a prostitute. The encounters do not require emotional commitment or preliminary courting, just sex. The prostitute holds no expectation of the client other than financial remuneration. The customer may believe that he is unable to obtain sexual favors without paying for them. Several situations would apply, including men whose wives object to certain sexual practices (such as fellatio), men who have serious physical deformities or social anxiety, and those who have deviant or kinky sexual proclivities. For example, some customers solicit from prostitutes unusual sexual activities that their regular partners find objectionable, such as bondage, spanking, or the use of unusual costumes or sex toys. The illicit and risky nature of an encounter with a prostitute is attractive to some men. Finally, some customers employ the services of prostitutes when their regular partners are unavailable, due to travel or illness.

Although there is an implicit agreement between the customer and the prostitute that the exchange will be superficial and temporary, customers usually want the illusion that the prostitute is interested in them personally and sexually. In fact, customers may become frustrated or angry if the prostitute seems detached, unresponsive, or hurried (Monto, 2004). As with exotic dancing (Enck & Preston, 1988), the customers of prostitutes are paying for a semblance of intimacy; some even describe the transactions as love relationships and insist that they have a special place in the prostitute's life. The challenge for the prostitute is to negotiate a fee for a brief encounter while maintaining the illusion of sexual desire and interest in the customer (Berstein, 2001).

There are a host of reasons for visiting a prostitute, but sexual initiation is no longer a common motive. Whereas prostitutes functioned essentially as sex educators by initiating many young men in the 1930s and 1940s, in contemporary society, few men seek their sexual initiation from sex trade workers.

The Life of Prostitution

In contrast to the fairly positive depictions of the lives of prostitutes in such films as *American Gigolo* and *Pretty Woman*, the actual existence of most prostitutes is anything but glamorous. Most studies and autobiographies portray prostitutes as frequently coming from dysfunctional backgrounds, as suffering from psychological and medical problems, and as living on the fringe of society (Earls & David, 1989). Such findings lead one to question why an

individual would choose this profession. Do prostitutes select this stigmatized and often risky occupation in full appreciation of these factors, or is it a desperate choice when no other viable options avail?

Motives for Entering Prostitution

The social and personal dynamics of entering into prostitution have been the subject of study. Poverty and limited alternatives are commonly reported factors that may lead a person to select prostitution as an occupation. Most streetwalkers, for example, have limited educational backgrounds; less than one-third of a sample of 309 streetwalkers had completed high school (Kramer & Berg, 2003). In some Third World nations, impoverished parents actually sell their daughters to be placed in brothels. McCaghy and Hou (1994) reported that one-third of Taiwanese prostitutes entered the trade to provide financial assistance to their parents. Another third became prostitutes because of personal debts. The remainder entered the sex trade out of desperation or exploitation. As one prostitute reported, "I was sold to an illegal wine house by my foster father. That is the way I began my life as a prostitute. I was often beaten by him since I was three. When I was sold I did not have much choice" (p. 261).

In the United States and Canada, a significant number of those entering the trade are adolescent runaways. A history of childhood sexual abuse is commonly reported by prostitutes (Potterat, Rothenberg, & Muth, 1998; Simons & Whitbeck, 1991). In one study of 200 adolescent and adult female prostitutes, 67 percent reported being sexually abused by a father or father figure (Silbert & Pines, 1981a, 1981b). Typically, they have escaped a troubled home and find themselves isolated with virtually no financial resources. Williard (1991) estimated that 75 percent of juvenile prostitutes are runaways or "castaways," youths who are actively encouraged to leave home by parents. In their study of adolescent runaways, Rotheram-Borus et al. (1992) found that 13 percent of males and 7 percent of females had provided sexual favors in return for money or drugs. Nadon and colleagues (1998), however, did not find higher rates of childhood abuse in a sample of forty-five adolescent prostitutes when compared to a matched sample of thirty-seven nonprostitute adolescents. Childhood abuse alone does not explain why some adolescents enter the sex trade, although it represents one of several vulnerabilities (Cusick, 2002). It is clear though that prostitution is an alluring option for survival on the streets for a number of destitute males and females (Earls & David, 1989). For these reasons, street prostitution is sometimes referred to as a "survival crime" (Kramer & Berg, 2003).

Rather than an abrupt entry into the trade, becoming a prostitute is usually a gradual, insidious process. Most often, a person is introduced to prostitution by a friend or acquaintance (Cusick, 2002). In some cases, the prospective prostitute is gradually introduced to the sex trade by a man who poses as a boyfriend or caretaker. After earning the trust of the vulnerable

teenager, the "boyfriend" fosters a dependency while restricting contacts with outsiders. The grooming process extends to making the teenager feel helpless and submissive. After pressuring the adolescent to engage in sex with one of the "boyfriend's" male friends, the prospective prostitute is gradually pressured or coerced into having paid encounters with strangers (Swann, 1998). At some point, the novice prostitute realizes that his or her "boyfriend" is actually a pimp.

Risks of the Business

The lifestyle of prostitutes entails many risks, including violence from customers and pimps, criminal arrest, and sexually transmitted diseases. According to Høigård and Finstad (1986/1992), the prostitutes' risk of assault by customers increases proportionately with the number of customers. Nineteen of twenty-six prostitutes they interviewed had experienced violence from customers, ranging from "slaps to rape, from confinement to threats of murder" (p. 58). Nearly two-thirds of the 211 male prostitutes studied by Simon, Morse, Osofsky, Balson, and Gaumer (1992) feared violence by customers.

Substance abuse is another problem commonly reported by prostitutes. Forty-four percent of the young male prostitutes studied by Pleak and Meyer-Bahlburg (1990) admitted having a drug or alcohol problem. All of the male prostitutes studied by Simon et al. (1992) were substance users, primarily alcohol, cocaine, and marijuana, and 80 percent were polysubstance abusers. Boles and Elifson (1994) found that over half of the male prostitutes in their study were injectable drug users: 54 to 71 percent used crack cocaine and 16 to 20 percent had abused heroin. Cocaine was reportedly the drug of choice with nearly 80 percent reporting a history of abuse.

Similar trends are reported among female prostitutes. The vast majority, 86 percent, in one sample of 237 female streetwalkers reported drug usage. One-half of the women had used injectable drugs (Potterat et al., 1998). In most cases, substance abuse preceded women's entry into prostitution, suggesting that they entered the trade as a means of supporting their drug habits. Some female crack-cocaine users report exchanging sex for the drug. In one sample of 150 users, 43 percent admitted having traded oral sex or vaginal intercourse for cocaine (Sterk, Elifson, & German, 2000). Problematic substance abuse may therefore represent another motive for becoming a prostitute.

Although contagion from prostitution accounts for a relatively small percentage of total cases of HIV disease worldwide, in some countries prostitution represents the major vector in the spread of HIV disease. In a study of 1,000 prostitutes in Kenya, 85 percent tested positive for HIV (Lambert, 1988). In some brothels in Thailand, up to 70 percent of prostitutes were infected (Gray et al., 1997; Manderson, 1992). In the United States, estimates of HIV infection among prostitutes range from none to 60 percent, depending on location and the prostitute's number of years in the trade (Lambert). Rates of infection may be higher among male than female prostitutes in the United

States. Simon et al. (1992) reported that nearly 18 percent of the 211 male prostitutes they studied tested positive for HIV. Boles and Elifson (1994) found that 35 percent of the 224 male prostitutes in their study carried HIV and 28 percent tested positive for syphilis. Male prostitutes who identified themselves as homosexual had higher rates of HIV infection (50 percent) than those who described themselves as heterosexual (18.5 percent).

Prostitutes are a potentially high-risk group for contracting HIV because they often engage in two high-risk behaviors for exposure to HIV: having sex involving fluid exchange with multiple partners and injectable drug use. The nature of prostitutes' work, the sex trade, puts them in frequent contact with bodily fluids. Prostitutes who practice unprotected receptive anal sex are especially vulnerable to HIV infection (Karim & Ramjee, 1998). Their lifestyle commonly involves injectable drug use. Although there has been a trend for increased condom use among prostitutes, it is by no means consistent and universal. Many prostitutes who are not injectable drug users have a regular sex partner who is. Therefore, the partner's behavior puts the prostitute at risk for HIV disease since male and female prostitutes rarely practice safer sex with their regular partners (Albert, Warner, & Hatcher, 1998).

Recognizing these problems, several programs have been implemented to reduce health risks among prostitutes and their clients. One such program, EMPOWER (Education Means Protection of Women in Recreation), was developed in Thailand to provide HIV testing, education, and health counseling. Preliminary results reveal that this and other programs are effective in reducing rates of STDs, including HIV, among prostitutes (Hanenberg & Rojanapithayakorn, 1998).

Prostitution in Perspective

Sociologists and feminists have emphasized the gender inequality that is evident in prostitution. Prostitution primarily benefits men, both customers and pimps. Customers obtain sexual enjoyment from prostitutes who, in turn, financially support their pimps. Those women who are most likely to enter the trade are the economically disadvantaged, with limited education and skills, and commonly having a background of abuse (L. Bell, 1987; Shaver, 2005). They apparently enter prostitution because they believe they have few viable resources in society other than their sexuality.

Prostitution is never really accepted in any modern society. Prostitutes generally are held at the lowest ranks of the social ladder. Even in societies where prostitution is legalized, it is "not an expression of society's acceptance of prostitution but instead epitomizes a policy of isolation and stigma toward the prostitute" (Hobson, 1987, p. 233). In other words, prostitution policies and regulations in tolerant societies represent subtle attempts to control or segregate prostitutes from this perspective. In a fair, egalitarian society, many

acceptable options would be available for disadvantaged women and rarely would they select such a deviant occupation. Hobson noted that

> [a] society that institutionalizes prostitution as a work option for the poor makes a statement about its position on inequality. One can see this in the policy toward prostitution in countries like Korea, and until recently, the Philippines. The governments have sought to legitimize prostitution as work, even elevated it to a patriotic endeavor, since sex commerce has brought in foreign tourism and reduced the national debt. (p. 235)

Within the feminist movement, there is disagreement over whether prostitution is degrading to women or an acceptable choice for independent women. Feminists have debated whether the prostitute is the "quintessential oppressed woman or the quintessential liberated woman" (Tong, 1984). As Shaver (2005) noted, categorizing the sex trade as either a career or as an exploitation reflects this ongoing debate. It is also evident in the labels applied to sex trade workers, who are "bad girls" in sharp contrast to "good girls," a carryover of the Victorian dichotomized view of women. Exotic dancers seem to view the transactions with customers as mutual exploitation. As one dancer put it, "It's really double exploitation as far as I can see. The female is exploiting the male for money; selling her sexual magnetism for money. The male is exploiting the woman because he is debasing her . . ." (H. Bell et al., 1998, p. 362). The majority of feminists though have argued that women would not choose a deviant role such as prostitute if they were offered better alternatives. With the proper education, economic opportunities, and positive self-concept, women would be free to select any career, and it seems unlikely that many would opt for such degrading socially rejected roles as prostitute, topless dancer, or actress in sexually explicit films (Bell, 1987).

From the perspective of evolutionary psychology, prostitution and all forms of commercial sex can be understood based on two simultaneous factors—men's inherent desire for casual sex and for sexual variety, and the willingness of some women, either by choice or out of economic desperation, to exchange sexual services for material resources (Buss, 1999). Men, whether viewing pornography or visiting a prostitute, are seeking sexual variety with minimal investment. On the other hand, women who sell sexual favors are motivated by financial remuneration. As Buss noted, "[S]ome women choose prostitution because it provides a quick and lucrative source of income and hence may be seen as a desirable alternative to a nine-to-five job or a demanding husband" (pp. 341–342). Prostitutes, like other women who pursue sex without commitment, are controversial because they compete with other women for men's resources by exploiting men's desires for casual sex. In other words, "prostitutes may siphon off resources that might otherwise go to a man's wife or children" (Buss, p. 342).

From any perspective, the sex trade is flourishing and will continue to do so despite efforts to regulate or eliminate it (Bullough & Bullough, 1995). Clearly, commercial sex, in all its forms, represents one of the most controversial aspects of human sexuality.

NOTE

1. Most drag queens are *not* prostitutes.

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13

Sexual Risk-Taking: Correlates and Prevention

Virginia Gil-Rivas and Leslie Kooyman

Lorena is nervously sitting in a patient room of the local health clinic waiting to receive the results of her HIV test. She is a 23-year-old Latina who just finished college. As she waits for the counselor, her mind is racing, her anxiety grows, and she thinks about the potential consequences of a sexual encounter with someone she met at a party two months ago. They had been drinking, and she ended up spending the night at his apartment having sex without a condom. Lorena had been taking birth control pills, so she was not concerned about pregnancy. He was very fit and played sports, so she assumed he was healthy and disease free. A couple of weeks after this incident, a girlfriend called Lorena to let her know that the guy she had sex with was rumored to have slept with men as well. Lorena did not think much of this news, until her friend cautioned her about the possibility of HIV infection. She had some education about HIV, had read news articles, but she never perceived herself to be at risk.

This scenario illustrates some of the potential undesirable consequences associated with risky sexual behaviors. Sexual risk-taking contributes to the spread of sexually transmitted diseases (STDs), human immunodeficiency virus (HIV) infection, and unintended pregnancy. Risky sexual behaviors include engaging in unprotected sexual activity, having multiple or casual sexual partners, using alcohol or drugs before or during sex, and the inability or failure to discuss risky sexual behaviors prior to engaging in sexual activities (Centers for Disease Control and Prevention [CDC], 2002; Cooper, 2002).

Sexual risk-taking occurs within a social context and is influenced by a variety of individual and contextual factors such as characteristics of the individual (e.g., age, gender), aspects of close interpersonal relationships (e.g., power, conflict), attitudes, beliefs, individual and cultural norms, and social and economic conditions (DiClemente, Wingood, Vermund, & Stewart, 1999; Halperin et al., 2004).

In this chapter, we begin by presenting a brief review of the potential health and social consequences associated with sexual risk-taking. Then we summarize the empirical evidence on individual and contextual factors that independently and jointly have been found to predict risk taking among various groups. We continue with a description of successful STD and HIV prevention and intervention efforts aimed at reducing sexual risk-taking. We conclude by offering suggestions for research, prevention intervention, and health policy.

HEALTH CONSEQUENCES OF SEXUAL RISK-TAKING

Sexually transmitted diseases are one of the major health concerns in the United States with an estimated annual medical cost of $15.5 billion (CDC, 2004c). Recent estimates by the CDC indicate that 19 million Americans become infected every year, and nearly half of those infected (46.7 percent) are adolescents and young adults (Weinstock, Berman, & Cates, 2004). These estimates also revealed that women, ethnic minority groups, and men who have sex with men (MSM) are particularly vulnerable to STD infections (CDC, 2004c).

Approximately twenty-five diseases are primarily transmitted through sexual contact (CDC, 2001c). Not including infection with HIV, the most common STDs in the United States are chlamydia, gonorrhea, syphilis, genital herpes, and human papillomavirus (HPV). Of these diseases, chlamydia, gonorrhea, syphilis, and HIV/AIDS are closely monitored due to their significant impact on the health of the American population. Chlamydia and gonorrhea are particularly common among women, younger individuals (15–24 years old), and African Americans (CDC, 2001c). These bacterial infections are frequently asymptomatic and can only be detected through testing. If untreated, these infections can result in pelvic inflammatory disease (PID), lead to ectopic pregnancy (pregnancies occurring outside the uterus), undesirable pregnancy outcomes (e.g., eye disease and pneumonia in infants), and permanent infertility for both men and women (CDC, 2001b, 2004a). Moreover, chlamydia infections place women at a greater risk for contracting HIV if exposed to the virus (CDC, 2001a).

Syphilis is a curable sexually transmitted bacterial infection that can also be transmitted to the fetus during pregnancy or childbirth. Infection rates are higher among African Americans, Hispanics, women aged 20–24 years, and

men aged 35–39 years (CDC, 2004a). In the late stage of the disease, infected individuals develop cardiovascular and neurological diseases (e.g., loss of motor coordination, paralysis), blindness, and may eventually die (American Social Health Association, 2005; CDC, 2001c). Furthermore, individuals with syphilis sores are two to five times more likely to contract HIV compared to those without this condition.

Approximately 40,000 individuals contract HIV every year in the United States (CDC, 2004a), and about 1,039,000 to 1,185,000 were living with HIV/AIDS by the end of 2003 (Glynn & Rhodes, 2005). The highest rates of infection in 2003 occurred among MSM, followed by infections among adolescents and adults through heterosexual contact. Racial minority groups have been disproportionately impacted by HIV/AIDS, accounting for about 68 percent of all HIV/AIDS diagnoses in 2003 (CDC, 2004c). Worldwide, an estimated 39.4 million people were living with HIV/AIDS, and 4.9 million became infected by the end of 2004 (United Nations Program on HIV/AIDS/World Health Organization, 2004).

HIV is transmitted primarily through sexual contact (exchange of semen, blood, or vaginal fluids) and blood-to-blood contact (e.g., needle sharing). Although the virus may not produce symptoms years after infection, it can be transmitted to others during this time. Over time, HIV destroys immune cells (CD4 and T cells) and, eventually, symptoms of infection appear. If untreated or undiagnosed, the immune system will be gradually damaged and the individual's ability to fight infections seriously compromised, leading to the diagnosis of acquired immunodeficiency syndrome (AIDS) and eventual death. Although there is no cure for AIDS, improvements in HIV/AIDS treatment have resulted in a growing number of persons living longer, healthier, and more productive lives (CDC, 2003). Unfortunately, approximately 25–40 percent of those infected continue to engage in sexual risk-taking, increasing the likelihood of HIV transmission or reinfection (Kalichman et al., 2001).

Despite these potential health consequences associated with sexual risk-taking, and the public health efforts to increase awareness of these risks, rates of STD and HIV infection remain extremely high among the U.S. population. In the next section, we provide a brief review of individual and contextual factors that independently and jointly contribute to sexual risk-taking.

INDIVIDUAL FACTORS ASSOCIATED WITH SEXUAL RISK BEHAVIORS

Although sexual risk-taking occurs at all stages of the lifespan, it is during adolescence and young adulthood that sexual activities are typically initiated and sexual risk behaviors emerge (Tubman, Windle, & Windle, 1996). During adolescence, individuals undergo rapid biological, cognitive, and social changes that contribute to risk-taking behavior in general, and sexual risk-taking in particular (Kelley, Schochet, & Landry, 2004). At the biological level, these

changes include physical development and sexual maturation. Among girls, signs of maturation appear between 8 and 10 years of age, while among boys, signs of maturation appear between 9 and 16 years of age (Kaplowitz, Oberfield, et al., 1999). By the time adolescents enter high school, a good proportion of them would have had sexual intercourse. The most recent Youth Risk Behavior Surveillance data showed that 46.7 percent of ninth to twelfth graders in the United States had engaged in sexual intercourse, and 14.4 percent of those who were sexually active reported having more than four sex partners during their lifetime. Moreover, among those who were sexually active within the previous three months (34.3 percent), only 63 percent reported using a condom and 17 percent reported that they or their partner had used birth control during the last sexual intercourse (Grunbaum et al., 2004).

While sexual activity during adolescence is not necessarily problematic, an early sexual debut (intercourse before age 16) is associated with a greater likelihood of engaging in risky behaviors such as using alcohol and drugs (Dick, Rose, Viken, & Kaprio, 2000), having unprotected sex (Lynch, Krantz, Russell, Hornberger, & Van Ness, 2000), and having multiple sex partners (Capaldi, Stoolmiller, Clark, & Owen, 2002).

Some of the characteristics of romantic relationships during adolescence may also increase the likelihood of sexual risk-taking. These relationships are frequently short-lived and are frequently described as warm, caring, and committed (Miller, Christopherson, & King, 1993). Thus, adolescents tend to have multiple sex partners in a relatively short period of time and tend to view condom use as unnecessary in these committed but brief relationships (Bauman & Berman, 2005). Moreover, an age difference among partners also appears to contribute to sexual risk-taking. Females who are involved with older males are more likely to engage in unprotected intercourse, to have sex while under the influence of alcohol or drugs, to experience sexual coercion by their partner, and to have unintended pregnancies (Gowen, Feldman, Díaz, & Yisrael, 2004), compared to those with similar-age partners.

Several factors have been hypothesized to play an important role in adolescents' risk taking (Annie E. Casey Foundation, 1999). Their strong desire to seek novel situations and their need for higher levels of stimulation compared to older individuals may contribute to these behaviors. In fact, the need for experimentation is an important component of identity development during adolescence and young adulthood. These factors, coupled with adolescents' difficulties regulating their behavior and evaluating potential costs and benefits in situations involving emotional arousal, contribute to risk taking in general (Steinberg, 2004) and sexual risk-taking in particular.

Alcohol and Substance Use

Risk-taking behaviors seldom occur in isolation (Jessor, 1991); in fact, sexual risk-taking frequently co-occurs with the use of alcohol and drugs

(McKirnan, Ostrow, & Hope, 1996; Zweig, Lindberg, & McGinley, 2001). At a global level, heavy and frequent alcohol use is associated with a greater likelihood of having multiple sex partners and unprotected intercourse (Cooper, 2002; Stall & Purcell, 2000). For example, in a national study of adolescents and young adults, Santelli, Brener, Lowry, Bhatt, and Zabin (1998) found that heavier alcohol use was associated with having a greater number of sexual partners. However, situation studies (studies that examine the co-occurrence of alcohol use and sexual risk-taking on particular occasions) have not found a consistent association between alcohol use and sexual risk-taking. In particular, alcohol use is not predictive of the frequency of unprotected intercourse, suggesting that although these behaviors co-occur, alcohol does not play a causal role.

Several explanations for the association between alcohol use and sexual risk-taking have been offered. Some researchers have suggested that alcohol has the ability to reduce sexual inhibitions through its impairing effects on individuals' ability to think about potential negative consequences. Thus, under the influence of alcohol, individuals mainly focus on their sexual arousal and have a limited ability to focus on the more distant consequences associated with these behaviors (Steele & Josephs, 1990). Others have suggested that this association is not the result of the pharmacological effects of alcohol, but rather the result of individuals' beliefs about alcohol's ability to increase their sexual arousal and reduce inhibitions. Therefore, individuals are likely to drink in anticipation of sexual encounters, or in response to specific situations, and then behave according to those expectations (George, Stoner, Norris, Lopez, & Lehman, 2000; Lang, 1985). To date, the empirical evidence has provided some support for both of these explanations. Specifically, the effect of alcohol on sexual risk-taking appears to vary depending on the strength of coexisting inhibiting forces (e.g., perceived costs and benefits) and disinhibiting forces (arousal). Simultaneously, individuals' alcohol expectancies play a role in promoting alcohol use in sexual situations or in anticipation of these situations, leading to sexual risk-taking (Cooper, 2002; George et al., 2000). For example, a recent study by Vanable et al. (2004) concluded that the social context, specifically, sex with a casual partner, predicted both alcohol consumption and sexual risk-taking. The authors concluded that their findings might be explained by both the impairing effects of alcohol intoxication and by individuals' expectations of increased arousal and disinhibition in situations that are viewed as desirable but would be avoided while sober.

As in the case of alcohol, the relationship between drug use and sexual risk-taking is complex. At a global level, drug use before or during sex is associated with having multiple sex partners, trading sex for drugs or money, and weak peer norms for condom use. However, it is unclear whether this association is causal or holds with all types of sex partners (Stall & Purcell, 2000) or situations. In fact, several factors might explain this association. Among some groups, exchanging sex for drugs is common, and in these situations, individuals are less likely to practice safe sex (Windle, 1997). Some drugs can have a significant impact on sexual behavior. For example,

amphetamine and crack cocaine users frequently report that these drugs increase their levels of sexual desire, sexual stamina, and reduce sexual inhibitions (Ross & Williams, 2001). In some circumstances, these drugs are used "strategically" to achieve these effects, particularly in situations or settings that promote sexual risk-taking behaviors (e.g., bars, dance clubs, parties) (Green, 2003). In sum, these findings suggest that the use of alcohol and drugs may not play a causal role in sexual risk-taking; rather, it appears that other individual (e.g., personality, beliefs), contextual (e.g., partner type, social setting), and social factors (e.g., relationship type and quality) may explain their co-occurrence (Ross & Williams, 2001; Weinhardt & Carey, 2000).

Personality

Sensation seeking (the tendency to seek novelty and excitement and the willingness to take risks in order to have these experiences), and impulsivity (the tendency to act without planning or deliberation) (Zuckerman, 1994) have been found to be associated with several risky behaviors, including smoking, alcohol and drug use, and sexual risk-taking (Zuckerman & Kuhlman, 2000). For example, a recent quantitative review by Hoyle, Fejfar, and Miller (2000), of fifty-three studies of college and high-risk populations (e.g., MSM), concluded that these two personality characteristics predicted a variety of sexual risk behaviors, including frequent unprotected sexual intercourse, sex with strangers, multiple sexual partners, and having sex while intoxicated. Sensation seeking appears to contribute to sexual risk-taking in the following ways: (1) by interfering with individuals' ability to engage in safe sex in the "heat of the moment" (Bancroft et al., 2003; Pinkerton & Abramson, 1995), and (2) causing individuals who are high in sensation-seeking to report low levels of perceived risk after engaging in these behaviors (Zuckerman, 1979).

The empirical evidence also suggests that personality characteristics interact with other individual and situational factors to predict sexual risk-taking (Hoyle et al., 2000). More recently, researchers have focused on identifying factors that might clarify the nature of these associations. For example, Kalichman, Cain, Zwebebm, and Geoff (2003) found that sensation seeking was directly associated with higher expectations of increased sexual arousal and disinhibition while under the influence of alcohol. In turn, these expectations were associated with alcohol use in sexual situations and with unprotected intercourse with nonprimary sex partners. Thus, it is possible that personality plays a role in sexual risk-taking through its impact on individuals' expectations, beliefs, attitudes, and norms.

Cognitive Factors

Several theoretical perspectives, such as the theories of reasoned action (Ajzen & Fishbein, 1977) and planned behavior (Ajzen, 1991), have proposed

that individuals' intentions to engage in a particular behavior predict future behavior. These intentions are the result of attitudes (i.e., a positive versus a negative evaluation of a behavior), subjective norms (individuals' perceptions of what others approve of), and perceived behavioral control (ease or difficulty associated with engaging in that behavior). A recent meta-analysis of forty-two studies of predictors of condom use provided support for these theories. As expected, individuals' intentions to use condoms were explained by their attitudes about condom use, subjective norms, and perceived behavioral control (Albarracin, Johnson, Fishbein, & Muellerleile, 2001). However, the strength of these associations differed by gender, age, ethnic background, and education. Specifically, behavioral control had a stronger association with actual condom use among younger, less educated, and ethnic minority groups (Albarracin, Kumkale, & Johnson, 2004). Likewise, the association between intentions and perceived behavioral control was stronger among women, younger individuals, and ethnic minorities. Subjective norms and intentions had a stronger association with condom use among youths, males, and individuals with higher levels of education. More recently, a study by Halkitis, Wilton, Parsons, and Hoff (2004) examined the role of beliefs about HIV noninfection (e.g., the effectiveness of current medical treatment) in risky sexual behaviors among MSM. The findings indicated that those individuals who used drugs and believed that medical treatment advances have reduced the risk of contracting HIV were more likely to report engaging in unprotected anal intercourse with casual partners.

Self-efficacy—individuals' belief that they have the ability to exercise control over their behavior and the demands associated with particular situations (Bandura, 1994)—has been found to be an important predictor of individuals' intentions to engage in safe sex practices. In general, higher levels of self-efficacy regarding one's ability to negotiate safe sex with a partner, prevent HIV/AIDS infection, and refuse unprotected sex predict the frequency of condom use (Parson, Halkitis, Bimbi, & Borkowski, 2000; Polacsek, Calentano, O'Campo, & Santelli, 1999). The strength of this relationship appears to vary by gender, such that the perceived ability to negotiate safer sex is a stronger predictor of protected sexual intercourse among women compared to men (LoConte, O'Leary, & Labouvie, 1997; Longshore, Stein, Kowalewski, & Anglin, 1998).

The brief review presented above suggests that although intentions, expectations, and beliefs are important predictors of sexual risk-taking, other factors may influence the magnitude of this association. In fact, many studies examining the association between cognitive factors and sexual risk-taking have been criticized on various grounds. First, these studies assume that an individual's decision to engage in sexual risk-taking behaviors is based on informed and rational decision-making processes. However, the evidence suggests that many decisions about sexual risk-taking are made in the "heat of the moment" (Gold, 2000). Second, the extent to which cognitive factors play

a significant role in sexual risk-taking might be influenced by social norms regarding sexual risk behaviors and power inequalities in relationships (Amaro, 1995). Finally, the characteristics of a relationship, such as level of commitment and love, may influence individuals' intentions, expectations, and attitudes about specific sexual practices (Bauman & Berman, 2005). Below, we present a selective overview of social and contextual factors associated with sexual risk-taking.

CONTEXTUAL FACTORS ASSOCIATED WITH SEXUAL RISK BEHAVIORS

Aspects of the social context such as characteristics of dyadic relationships (e.g., closeness), gender roles, family and peer influences, group and social norms, and environmental factors (e.g., poverty) play an important role in predicting sexual risk behaviors.

Characteristics of Dyadic Relationships

Sexual risk-taking is strongly influenced by individuals' feelings toward a particular partner (Kelly & Kalichman, 1995). For example, in the context of committed heterosexual (Lansky, Thomas, & Earp, 1998) or homosexual (Hays, Kegeles, & Coates, 1997) relationships, individuals are more likely to view condoms as unnecessary. This attitude toward condom use might be explained, at least in part, by the meaning given to unprotected intercourse in this context. For many couples, the exchange of body fluids is viewed as a sign of greater intimacy and commitment (Odets, 1994; Sobo, 1995). Thus, a request for condom use might be interpreted as mistrust, a lack of commitment to the relationships, an indication of infidelity, or a lack of concern for the pleasure of one's partner (O'Leary, 2000). Unfortunately, the epidemiological evidence suggests that individuals in long-term committed relationships frequently engage in sexual encounters outside of their primary relationship. In the United States (Adimora et al., 2002) and other nations (UNAIDS/WHO, 2004), a good proportion of both single males and those in committed relationships report having concurrent sexual relationships (relationships that overlap over time), increasing the likelihood of the rapid spread of STDs or HIV infections. In some cultures, the acceptance and the greater frequency of concurrent sexual relationships among males might be greater, placing their partners, particularly women, at a greater risk for becoming infected with an STD or HIV by their primary partner (UNAIDS/WHO, 2004; Wingood & DiClemente, 1998).

In addition to one's feelings toward a sexual partner, the extent to which couples are able to discuss STD/HIV concerns, the use of condoms, and their views about sexual risk behaviors play an important role in predicting sexual

risk-taking (DiClemente & Wingood, 1995). For example, among young MSM, Molitor, Facer, and Ruiz (1999) found that individuals' ability to discuss safe sex with their partners predicted the frequency of unprotected anal intercourse.

Gender Roles

Gender roles also play an important role in predicting sexual risk behaviors, behavioral choices, and the ability to initiate and maintain behavioral changes. Among women, the tendency to place a greater emphasis on maintaining harmony and connectedness and providing support in their relationships (Simon, 1995) contributes to their tendency to put their partners' needs above their desire to protect themselves from STD/HIV infection (Misovich, Fisher, & Fisher, 1997). In fact, women frequently avoid making requests to use condoms if they expect that such requests will lead to conflict or violence (Wingood & DiClemente, 1998). Cultural beliefs about women's sexual roles and behavior also act as barriers for women's ability to negotiate safe sex practices with their partners (Gomez & Marin, 1996; St. Lawrence et al., 1998). For example, traditional gender roles assign women less decision-making power, interfering with their ability to make decisions that go against their partners' wishes (Amaro, 1995). These power inequalities also contribute to women's vulnerability to violence within their intimate relationships (Amaro). Among college women, nearly one-third report having been pressured or forced to engage in sexual activities (Muehlenhard, Goggins, Jones, & Satterfield, 1991). Women with a history of sexual victimization are more likely to experience further victimization, to report a history of STDs (El-Bassel, Gilbert, Rajah, Foleno, & Fyre, 2000), and to be at a greater risk for HIV infection (Garcia-Moreno & Watts, 2000) compared to women without such histories. Thus, the amount of power women hold in relationships is an important predictor of both the frequency of condom use and exposure to sexual coercion (Pulerwitz, Gortmaker, & DeJong, 2000). These findings suggest that women's intentions to avoid risky behaviors, and their knowledge and skills about how to prevent HIV/STD infection, might not be the strongest predictors of sexual risk-taking. Rather, women's behaviors are greatly determined by their partners' attitudes and behaviors about safe sex practices (Logan, Cole, & Leukefeld, 2002).

Power inequalities and sexual coercion do not occur only among women; in fact, a study conducted by Kalichman and Rompa (1995) found that 29 percent of gay and bisexual males had experienced sexual coercion involving attempted or completed unprotected anal intercourse. Men with a history of victimization are also more likely to avoid talking with their partners about the use of condoms for fear of the potential consequences (Kalichman et al., 2001). These findings suggest that aspects of close interpersonal relationships are important contributors to sexual risk-taking and STD/HIV infection.

Social Influences

Outside of the dyadic relationship, members of one's social network play an important role in predicting sexual behaviors. Among adolescents, aspects of the parent-adolescent relationship are associated with the age of sexual initiation and sexual risk-taking. Specifically, greater parental warmth and acceptance (Markham et al., 2003), more frequent parent-adolescent discussions about sex and sexual risk-taking (Hutchinson, Jemmott, Jemmott, Braverman, & Fong, 2003; Miller, Forehand, & Kotchick, 2000), and parental knowledge of teen's activities (Huebner & Howell, 2003; Luster & Small, 1994) predict adolescents' decision to delay the initiation of sexual activity, greater use of condoms and contraceptives, and fewer sexual partners. Peers also play an important role in predicting sexual behaviors and sexual risk-taking (K. S. Miller et al., 2000). For example, adolescents' perceptions of their peers' attitudes toward risky behaviors in general (e.g., alcohol and drug use) and norms regarding sexual intercourse and condom use (Kinsman, Romer, Furstenberg, & Schwarz, 1998) are associated with the initiation of sexual activity and the frequency of condom (K. S. Miller et al., 2000) and birth control use (Vesely et al., 2004), even after accounting for individual characteristics (e.g., gender) and parental influences. Similarly, among adults, individuals' perceptions of group norms for condom use are important predictors of intentions to use condoms (Boyd & Wandersman, 1991) and the frequency of unprotected sexual intercourse (Hart, Peterson, Community Intervention Trial for Youth Study Team, 2004). For example, among women (Sikkema et al., 2000) and gay men (Kegeles, Hays, & Coates, 1996), individuals' beliefs about the attitudes toward safer sex held by members of their community and social groups are important predictors of the frequency of condom use.

Environmental Influences

Poverty has been shown to be associated with a variety of health indicators such as health status, physical functioning, and mortality (Kawachi & Berkman, 2000). Several factors associated with poverty, such as violent behavior, substance use, and the exchange of sex for money, drugs, or goods may also contribute to sexual risk-taking and higher rates of STD/HIV infections (Miles-Doan, 1998). Individuals living in poverty frequently experience high levels of stress, greater exposure to community violence (Catalano, 2004), limited access to health services, and might be overwhelmed by the tasks associated with meeting their basic needs for food, shelter, and safety. Thus, under these conditions, individuals may place less emphasis on avoiding sexual risk practices (Logan et al., 2002).

As suggested by the aforementioned review, various individual, social, and contextual factors contribute to sexual risk-taking. Several prevention intervention strategies have been developed with the goal of modifying these

factors and promoting behavior change among various populations. In the next section, we provide a brief summary of successful prevention interventions and describe their key characteristics.

PREVENTION INTERVENTIONS

Primary prevention interventions are aimed at modifying behavioral, cognitive, social, and environmental factors that have been shown to be associated with sexual risk-taking and STD/HIV infection. These interventions have been largely guided by health behavior theories (e.g., health belief model, social cognitive theory) that propose that individuals' intentions, beliefs, and expectations are important predictors of sexual risk-taking and behavior change (Logan et al., 2002). During the past decade, researchers have tailored interventions based on these models to address specific developmental, cultural, social, and situational factors that influence individuals' ability to initiate and maintain behavioral changes (Kelly & Kalichman, 2002).

Prevention intervention approaches can be directed to the individual and to the community (Coates, 1990). Successful prevention interventions aimed at the individual involve face-to-face counseling and group sessions. In general, these programs are based on the social cognitive and reasoned action theories and include the following components: risk-reduction education, activities aimed at encouraging behavioral change and positive attitudes toward safe sex practices, and exercises to increase safe sex communication and negotiation and assertiveness skills. Typically, these interventions involve several group or individual sessions that are provided in community- or clinic-based programs (Kelly & Kalichman, 2002). Small group meetings are thought to provide an opportunity for individuals to interact with peers who support safe sex strategies and who can help them increase their sense of self-efficacy (DiClemente et al., 1999). Overall, interventions aimed at the individual have been shown to reduce the frequency of unprotected intercourse and increase condom use. However, individuals may not always be motivated to participate in multiple session programs that require a considerable time commitment on their part. Several brief interventions modeled after these multiple-session programs have been developed; unfortunately, these interventions have been shown to have minimal effects on sexual risk-taking (Kelly & Kalichman, 2002).

Community-level prevention interventions seek to reduce sexual risk-taking by changing norms and practices within an entire target population. These interventions frequently focus on leaders or popular individuals within a particular community with the goal of promoting changes in beliefs and attitudes toward safe sex practices across existing social networks. These efforts are often implemented in settings frequented by members of the target population, such as bars, barbershops, grocery stores, and restaurants (Kelly & Kalichman, 2002; Ross & Williams, 2002).

Below, we present a summary of the common elements of successful individual- and community-level prevention interventions targeted at specific populations at high risk for STD/HIV infection.

Adolescents

Prevention intervention programs for adolescents are typically delivered in schools, clinics, and community settings (Pedlow & Carey, 2003). School-based interventions are implemented as part of the school curricula and are provided to a broad range of students. The materials covered in these interventions range from abstinence-only messages, STD/HIV education, to the discussion of safe sex practices (Kirby, 2001). The Safer Choices program is an example of a school-based prevention intervention that has shown some promising results. The intervention was implemented in ten schools and was delivered by a teacher and peer leaders. High school students participated in ten sessions that involved role-playing activities, groups, and exercises aimed at building skills. These activities targeted both individual (i.e., attitudes) and social (i.e., parent-adolescent communication) factors that have been shown to influence sexual risk-taking. This program also included student homework that required parental involvement. Seven months after the intervention, students who participated in this program were less likely to engage in unprotected intercourse, more likely to report condom use during their last intercourse, and reported fewer barriers to condom use compared to those who received only AIDS education (Coyle et al., 1999). Although some school-based programs have shown some success, these programs cannot reach out-of-school adolescents who are typically at high risk for STD/HIV infection.

Community-based prevention programs for adolescents are better able to reach high-risk populations. For example, Rotheram-Borus, Feldman, Rosario, and Dunne (1994) conducted a prevention intervention program with runaway homeless adolescents that involved multiple (more than fifteen) face-to-face individual sessions led by skilled trainers. The intervention included HIV/AIDS education, coping skills training, activities aimed at reducing barriers for safe sex, and the provision of medical and health care services. Adolescents who participated in the intervention reported increases in condom use and fewer sex partners at the six months and twelve months follow-ups, compared to those who received only counseling.

Several common key characteristics of successful prevention intervention programs for youths have been identified. The critical components are (1) a focus on reducing one or more sexual risk-taking behaviors, (2) use of health behavior theories to develop the interventions, (3) consistent focus on one clear message about abstaining from sexual activity and/or using condoms, (4) provision of education about how to avoid risky situations and the use of effective prevention methods, (5) provision of modeling and practice of

communication or negotiation skills, and (6) inclusion of activities that focus on social and media influences on sexual behavior (DiClemente et al., 1999; Kirby, 2001).

Women

Successful prevention interventions for women are frequently guided by the principles of social cognitive theory (Bandura, 1994), and include skills training in condom use, safe sex communication and negotiation, and gender-related factors (i.e., power imbalances) that influence sexual risk-taking (DiClemente et al., 1999). These prevention intervention programs have been implemented in community and clinic settings and are frequently peer led.

Kelly et al. (1994) conducted a clinic-based intervention with inner-city African American women. The five-session intervention focused on HIV/AIDS education, addressed individual attitudes toward safe sex, and provided activities aimed at identifying and handling barriers for condom use. Women who participated in this intervention reported greater use of condoms and fewer episodes of unprotected intercourse three months postintervention, compared to those women in a control condition. In addition, women also reported improvements in their ability to negotiate condom use and safe sex practices with their partners.

A community-level intervention for women was implemented by Sikkema et al. (2000). This intervention was delivered in nine low-income housing communities in five different cities. First, the investigators offered workshops on HIV risk reduction. These workshops were followed by ongoing conversations, social events, and community activities led by women who had been identified as popular among their neighbors. Nine other low-income communities served as a comparison group; these communities received AIDS education materials and condoms as part of the intervention. One year after the intervention, women in the communities that received the intervention reported a greater decline in the percentage of unprotected intercourse episodes and increases in condom use, compared to women in the control condition.

Overall, these interventions have had moderate success. In particular, it is unclear to what extent they have resulted in changes in sexual risk-taking in the context of primary committed relationships, the main route of STD/HIV infection among women (Logan et al., 2002; O'Leary, 2000).

Men Who Have Sex with Men

Historically, gay men and MSM have been impacted by HIV longer than any other population. Although significant reductions in infection rates have been reported in recent years, MSM continue to have the highest rate of HIV infection in the United States (CDC, 2004a). Thus, a large number of prevention

intervention programs have been developed to address the factors associated with sexual risk-taking in this population. An example of a successful individual-level intervention for MSM is the National Institute of Mental Health Multisite HIV Prevention Trial Group (1998), a program that was implemented in STD and health clinics in seven U.S. cities. This intervention involved small-group sessions that used teaching, group discussion, role-play and practice exercises, and activities aimed at creating attitude changes and helping individuals set behavioral goals. Those men who participated in these sessions were more likely to use condoms and less likely to report an STD infection twelve months after the intervention, compared to those who received only one AIDS education session.

Kelly et al. (1991, 1992, 1997) developed a series of community-level interventions to reduce sexual risk behaviors among gay men at high risk for HIV infection. These interventions were based on the diffusion of innovation theory (Rogers, 1983), which proposes that new behavior patterns in a population can be initiated by targeting key opinion leaders. Key opinion leaders were trained on how to influence others' views about AIDS-related risks, how to recommend sex-related risk reduction strategies, and how to endorse the benefits and norms associated with safe sex. These interventions resulted in significant declines in sexual risk-taking among residents of the targeted communities.

In general, successful prevention intervention programs for MSM are guided by theoretical perspectives that emphasize the role of cognitive and attitudinal factors, intentions for behavior change, self-efficacy beliefs, and social norms in predicting sexual risk-taking behaviors. In addition, researchers have become increasingly aware of the importance of modifying these interventions to respond to changes in attitudes about safe sex. For example, in recent years, increases in rates of sexual risk-taking among MSM have been reported (CDC, 2000). These increases appear to be explained at least in part by improvements in the efficacy of HIV/AIDS treatment (Halkitis et al., 2004) and "safer sex burnout" among young MSM (Rofes, 1998).

CONCLUSION AND FUTURE DIRECTIONS

As suggested by this review, individual, social, and environmental factors act independently or jointly to influence sexual risk-taking. Moreover, the relative importance of these factors may vary by age, gender, cultural background, relationship characteristics, and socioeconomic conditions. Although the literature suggests that prevention intervention efforts have been successful at reducing sexual risk-taking, these interventions are not equally effective for all populations. These efforts need to be tailored to address the specific needs of each population (DiClemente et al., 1999) and the meaning given by the individual or the community to these behaviors (Ostrow, 2000). Moreover, changes in treatment, social attitudes, and socioeconomic conditions may impact the extent to which these interventions will be effective in the future.

Overall, several key characteristics of successful prevention intervention programs have been identified: the interventions (1) are based on theoretical models and address the interplay between attitudes, beliefs, expectations, behaviors, and environmental influences; (2) are designed with an understanding of the contextual and behavioral factors influencing sexual risk-taking and behavior change; (3) focus on specific sexual risk-taking behaviors (e.g., unprotected anal intercourse, condom use); (4) provide education regarding STD/HIV infection and safe sex practices; (5) provide modeling and training in sexual communication, negotiation, and assertiveness skills; and (6) address the role of situation factors and social and peer norms in sexual risk-taking (DiClemente et al., 1999; Kelly & Kalichman, 2002).

Despite the advances made in prevention intervention research and the declines in rates of STD/HIV infections, these conditions continue to exert an enormous toll on the health and well-being of people in the United States (CDC, 2004b). Thus, it is crucial to implement empirically based interventions that address the needs of vulnerable populations. Moreover, a greater emphasis should be placed on designing interventions that support the maintenance of behavioral change over time (Auerbach & Coates, 2000).

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14

Erotic Plasticity: Nature, Culture, Gender, and Sexuality

Roy F. Baumeister and Tyler Stillman

Erotic plasticity is defined as the degree to which the sex drive is shaped by social, cultural, and situational factors. High plasticity means that the sex drive is highly amenable to such influences, whereas low plasticity suggests indifference or even immunity to such sources of influence.

All theories of sex strike some sort of balance between the influence of social and cultural factors and the influence of natural, biological factors. For example, the question of whether homosexuality is the result of biological influences (such as a gay gene) or social and cultural ones (such as having a clinging, intrusive mother) has come up over and over in every generation of theory, and there is still no definite answer. Most modern experts now accept that both types of causes play some role, so that any major sphere of sexual behavior reflects some combination of natural and cultural or social causes. Even so, the various theories differ widely as to how much of each is important. Some theories heavily emphasize the influence of innate, genetic, hormonal, and other biological factors, whereas others concede only a preliminary and minimal role to those and focus mainly on social, cultural, and situational factors as decisive.

In that context, the degree of erotic plasticity reflects the degree to which culture should be emphasized over nature. If erotic plasticity is high, then nature is not all that important, and most of the variation in human behavior can be attributed to cultural and other social factors. If it is low, then behavior follows straight from genes and hormones, and the influence of culture is at

best a peripheral factor. The question of plasticity thus lies at the heart of one of the most far-reaching and bitter debates in the field of sexuality theory. To be sure, it is possible to state the issue in a less antagonistic manner: high plasticity can be considered an adaptation by which nature makes creatures better able to adjust and change in response to meaningful experience.

The most discussed application of this concept concerns the possibility of gender differences. An article by Baumeister (2000) contended that a basic, fundamental difference is that female sexuality has higher erotic plasticity than male sexuality. In relative terms, this means that women's sexual responses and feelings are more affected by social, cultural, and situational factors, whereas male sexuality is relatively more shaped by genetic, hormonal, and other biological factors. The bulk of this article will focus on the question of gender differences in erotic plasticity.

Assuming that plasticity is not a strictly constant quantity, there is no single answer to the great and hotly debated question of nature versus nurture in sexuality. For some people, the sex drive would be a relatively fixed biological fact, whereas for others it would be subject to considerable influence from the social environment.

Value judgments also introduce a dimension of sensitive problems into debates about sexual behavior. We concur with the view that erotic plasticity is not an inherently evaluative dimension, in the sense that it is not clearly or a priori better to have high versus low plasticity. There might be some ways in which high or low plasticity is better, but these largely cancel each other out, and for the most part it is not clearly better to be one or the other. However, the difference can be hugely influential on behavior, and failure to appreciate its importance can introduce deeply divisive or even offensive misunderstandings.

Ultimately, it may emerge that some individuals have higher erotic plasticity than others. At present, there is no published scale available to assess these differences, but some researchers have begun discussions about creating one, and it is possible that after this work is published, a trait scale may become available.

GENDER DIFFERENCES IN EROTIC PLASTICITY

At present, the best established difference in erotic plasticity is between men and women. The evidence for this will be summarized in the next section. Women have higher erotic plasticity than men. This statement means that female sexuality will be more influenced by, and more variable in response to, social, cultural, and situational factors, as compared to male sexuality. The term "plasticity" is thus used only in the biological sense of being amenable to environmental influence and change. The second meaning of plasticity, as in artificiality or falseness, is not implied in any sense and is not relevant to gender differences in sex drive.

A gender difference in erotic plasticity would lead to a group of other gender differences in sexual behavior, not to mention potentially making it harder for men and women to achieve an intuitive understanding of one another. Self-knowledge in the sexual realm would be more difficult for women than for men to achieve, insofar as women would be seeking to gain knowledge about a moving target, unlike men (see Vanwesenbeeck, Bekker, & van Lenning, 1998). Women would generally show greater change in response to different social and cultural demands, and, indeed, adapting to new sexual rules or otherwise new contingencies should be easier for women than for men. In contrast, the greater plasticity might make women more gullible and susceptible to influence, and ultimately it might become easier to convince a woman than a man to engage in some sexual activity toward which the person was initially disinclined. In adjusting to marriage or other long-term relationships, women should be more willing than men to compromise in the sexual domain. Sexual decision-making ultimately should be more difficult and complex for women than for men, insofar as men can assume that their responses and feelings are relatively constant, and so they do not need to consider much about the specific circumstances in order to make a decision, whereas for a woman the nuances of meaning in the current situation may prove powerfully decisive.

There would also be implications for sex therapy. To be sure, one must recognize that each individual is unique, and the special needs or problems of each individual must be recognized and understood before prescribing treatment. Still, by and large, there should be a general pattern such that different kinds of therapy will be differentially effective by gender. For women, sexual response depends on social and cultural factors, such as meaning, and so a sex therapist would typically need to understand the subjective meanings and interpretations, along with their emotional implications, in order to treat sexual problems. For men, in contrast, sex is more of a physical and biological phenomenon, and so physiological treatments may be recommended as the first option in many cases. Hormonal treatments and other physiological interventions should generally be more effective with men, whereas women may need "talking cure," insight-oriented interventions. In plainer terms, many men's sexual problems will respond to purely physical treatments such as Viagra, but we should not expect sex therapy for women to be quite as physical or as simple.

Evidence and Applications

This section will cover some of the phenomena that have been cited as relevant to the gender difference in erotic plasticity. The differences can be invoked as evidence for the thesis that women have higher erotic plasticity than men. It can also be seen as surveying the range of phenomena that will be different for men versus women as a result of women's greater plasticity.

Do People Change over Time?

The first set of applications is based on comparing people with themselves across time. High plasticity makes people prone to change as they encounter new or different circumstances. If men are relatively low in erotic plasticity, then their sexual patterns should remain essentially the same across their adult life, whereas the higher plasticity of women would make them more prone to change their sexual patterns and preferences as they move through different phases of adult life.

A first pattern, involving fluctuations in the total amount of sexual activity, was noted in the original Kinsey reports (Kinsey, Pomeroy, & Martin, 1948; Kinsey, Pomeroy, Martin, & Gebhard, 1953). Kinsey and his colleagues noted a pattern in women's sexual histories that was almost entirely absent in men's. What they called "total outlet"—the sum of all orgasms per week from any and all modes of stimulation—fluctuated much more widely among women than among men. Thus, a woman might have a happy, busy, and energetic sex life with one partner, but upon losing that partner she might eschew all sexual activity for some months, then resume with a new partner. In contrast, if a man lost his main partner, he would typically make up the deficit with masturbation, casual partners, prostitutes, or other sources. These wide fluctuations in total sexual activity indicate a degree of plasticity that is much more common among women than among men.

Converging evidence comes from studies of long-term sexual adjustment in marriage and through the aging process. Husbands and wives typically agree that wives make more sexual adjustments than husbands in adapting to marriage (Ard, 1977). Studies of the impact of aging on sex typically show a broad reduction in total sex, reflecting an apparent waning of sexual interest as one grows old. One study that searched for exceptions did find some instances in which people had acquired new sexual interests or activities by age 60 that they had not had in their twenties, but these were mainly among women (Adams & Turner, 1985). Thus, a man's sexual tastes seem to emerge early in life and remain fairly constant, whereas some women acquire new sexual interests at various points in adulthood, consistent with the view that women have higher erotic plasticity.

Changes in sexual orientation provide some of the most interesting (from both theoretical and practical perspectives) applications of erotic plasticity. People with low plasticity should presumably be quite fixed and unchanging in their category of desired sex partners, whereas higher plasticity would bring an openness to new partners. Multiple findings and studies suggest that women have higher plasticity in this regard. For example, lesbians are more likely than gay males to have had heterosexual sex (Bart, 1993; Bell & Weinberg, 1978; Goode & Haber, 1977; Kinsey et al., 1948; Kinsey et al., 1953; Kitzinger & Wilkinson, 1995; Laumann, Gagnon, Michael, & Michaels, 1994; McCauley & Ehrhardt, 1980; Rosario et al., 1996; Savin-Williams, 1990; Schäfer, 1976;

Whisman, 1996), and they are also more likely to have heterosexual relationships even after having been exclusively gay for years (Rust, 1992). Circumstances that promote sexual experimentation, such as swinging (i.e., mate-swapping) parties, seem to induce a fair number of heterosexual women but hardly any heterosexual men to experiment with same-gender sex (Fang, 1976; O'Neill & O'Neill, 1970; Smith & Smith, 1970). Likewise, some evidence suggests that there is more consensual same-gender activity in women's than in men's prisons, and women seem to make the transition much more smoothly and easily from an exclusively heterosexual orientation prior to their imprisonment, to homosexual while in prison, and then back to heterosexual upon release from prison than do men (Gagnon & Simon, 1968; Giallombardo, 1966; Ward & Kassebaum, 1965). All of this supports the view of greater plasticity in sexual orientation among women.

Impact of Social and Cultural Factors

A second way to search for evidence about plasticity is to consider specific sociocultural variables and see how much effect they have. If women have higher plasticity than men, then social and cultural factors should generally produce bigger effects on women than on men.

Education and religion are two of the most powerful and important socializing influences in most cultures. The National Health and Social Life Survey (NHSLS) (Laumann et al., 1994) is widely regarded as the methodologically best large-scale survey about sexual behavior in the United States, and it provided extensive data on how education and religion were linked to sex. Almost invariably, it found both variables to have larger effects on women's than on men's sexuality, consistent with the view that women have higher erotic plasticity. Thus, the most educated women differed from the least educated women on multiple dimensions, including oral sex, anal sex, liking for different sexual activities, use of contraception, and same-gender activity, whereas the corresponding differences for men were smaller or not significant. Likewise, the most religious women's sex lives were notably different from those of the least religious, whereas the most and least religious men were largely similar. As variables, religion and education complement each other in a methodologically helpful manner, because higher religiosity tends to be associated with less sexual activity, whereas higher education tends to be associated with more. Thus, two powerful social institutions that pull in opposite directions both seem to have more impact on women than on men.

Other studies have likewise found religion and education to affect women more than men (Adams & Turner, 1985; Harrison, Bennett, Globetti, & Alsikafi, 1974; Reiss, 1967; Wilson, 1975). Sex education also seems to change women's attitudes and behaviors more than men's (Weis, Rabinowitz, & Ruckstuhl, 1992). These findings do not appear to be explainable as floor or ceiling effects, and thus point toward a difference in plasticity.

The recent expansion of research on cultural differences in psychology will likely result in an accelerated accumulation of knowledge about how sex differs across cultures. Although the amount of information available on such issues has been small, the weight of evidence does seem to show greater cross-cultural variability in women's sexuality than in men's. Studies comparing different cultures typically find that women differ more across those cultural boundaries than do men (e.g., Christensen & Carpenter, 1962). One large and systematic compilation of results from nearly 200 cultures found significantly greater variation in sexual behavior among female than male adolescents (Barry & Schlegel, 1984).

Plasticity can be seen not just in the simple fact of cultural variation but also in acculturation. That is, when a person moves from one culture to another, does the person adopt the values and practices of the new culture or retain the habits and tendencies taught in the old one? An extensive study of Latino immigrants to Detroit found that women's sexuality was closely linked to the process of learning and internalizing the new culture, whereas for men, the links between acculturation and sex were weak (Ford & Norris, 1993).

Education, religion, and culture are large, powerful forces, and one can complement them by examining the smaller and more proximal sources of social influence, namely, peer groups and parents. There again, the available evidence supports the conclusion of higher plasticity among women and girls than among men and boys. Peer groups have been shown to have a significantly greater impact on young women than on young men, at least in the sexual arena (Mirande, 1968; Sack, Keller, & Hinkle, 1984). To be sure, some correlational findings could be taken to mean that people choose their peer groups to match their sexual preferences. But other studies have ruled out this alternative explanation by tracking people over time and showing that it is the peer group at time 1 that predicts sexual behavior at time 2, rather than the reverse (Billy & Udry, 1985). In plainer terms, it is not that a girl who loses her virginity then reshuffles her peer group by dumping her virgin friends and acquiring new, nonvirgin friends; rather, having nonvirgin friends increases the likelihood that she will lose her own virginity.

The greater influence of the female peer group finds converging evidence in studies that look at parental influence. A variety of findings suggest that parents have more impact on their daughters' sexuality than on their sons' (Miller & Moore, 1990; Newcomer & Udry, 1987). Parental attitudes, behaviors, and teachings seem to have greater effects on females than on males (Thornton & Camburn, 1987).

Parents are not subject to being chosen or dropped on the basis of personal inclinations, so studies of parents are not vulnerable to the alternative explanation on the basis that sexual wishes are the cause rather than the effect, but there are other issues. In particular, it is plausible that parents try harder to influence their daughters than their sons. Still, some of the parental impact studies do not reflect differential exertion. For example, parental divorce

appears to have a stronger effect on the daughter's subsequent sex life (e.g., toward starting earlier and having more partners) than the son's, and it is fair to assume that almost no divorces are motivated by the goal of making the daughter more promiscuous.

The question whether sexual orientation is chosen or not has been debated at some length and with some political and religious bias (e.g., is it fair to reproach people as sinful for feeling ways they cannot help). One creative and novel approach has been to ask people whether they feel they had some choice as to whether be homosexual or heterosexual. Having choice is one sign of plasticity, insofar as one must be capable of more than one possible orientation in order to be able to choose from them. Only a minority of people claim to feel that their sexual orientation was a matter of choice, but this minority is almost entirely female (Rosenbluth, 1997; Whisman, 1996). Indeed, gay males are more likely than gay females to express the wish that they could change to a heterosexual orientation, but apparently most men feel that this is impossible.

Another approach to assessing social and cultural influences is to consider the environmental factors and compare them against genetic influences. Stronger effects of genes indicate low plasticity. Although the information base for this sort of comparison is limited, there are several findings suggesting that genetic influences on sexuality are stronger among males than among females. One finding is that male identical twins are more likely than other pairs to have begun having sex at the same age (though the finding is limited to more modern times, after the sexual revolution, probably because of limited opportunities available to males before this) (Dunne et al., 1997). Female identical twins are less likely to start having sex at the same age, which implies that the onset of sexual behavior has a stronger genetic component among males than among females (and therefore, conversely, the onset of sexual behavior is more shaped by social and situational factors among females than among males).

The issue of genetic influences on homosexuality has attracted considerable research attention. Most studies find stronger evidence of some genetic input among males than among females. In particular, the preliminary finding of a possible "gay gene" was based solely on a male sample, and no such claim has been made regarding females. A review by Bailey and Pillard (1995) concluded that either male homosexuality is more genetically determined than female homosexuality, or the state of evidence remains inadequate to draw a conclusion. At the time, they favored the latter (more cautious) position, but we suspect that in time the former conclusion will be confirmed. Recent work by Lippa (2003) further supports a greater biological contribution to homosexuality in men than in women. In a study of more than 2,000 participants, he found that the ratio of index to ring-finger lengths differed in males and females. Men typically have a lower index to ring-finger ratio than do females. Homosexual and heterosexual men also showed different ratios. Homosexual men had higher, more typically feminine ratios. However, finger-length ratios

were not related to sexual orientation in women, which suggests a lesser biological contribution to sexual orientation in women than in men.

The pattern of sexual identification in a gay and a lesbian sample is also instructive. Savin-Williams and Diamond (2000) found that women generally self-identify as lesbians first, and then engage in same-sex sexual activity. The pattern was reversed in men. They generally labeled themselves as gay after seeking sexual encounters with other men. Assuming that biology is less involved in self-labeling than it is in the pursuit of sex, this pattern points to the primacy of biology in male sexuality in contrast to the primacy of meaningful self-definition in women.

Given the sensitive political nature of the issue, we hasten to clarify our position. It would be reckless to conclude that sexual orientation is entirely dictated by genes or environment in anyone. Even identical twins, who share exactly the same genes, do not always end up with the same sexual orientation. Most likely, some combination of genetic predisposition, social influences, and formative experiences (see Bem, 1996) contribute to sexual orientation in both genders. Our point is merely that the direct contribution of genes is probably stronger in males, whereas the greater plasticity of females leaves more room for the social environment to shape sexual orientation—perhaps repeatedly.

Indeed, plasticity may underlie some of the startling new findings about sexual orientation in women. Diamond (2000) has noted the stereotype that people merely try to pass as heterosexual because of social and cultural pressures, but once a woman engages in lesbian sex, she may discover that it is her true nature and hence will not go back. Contrary to this, Diamond's longitudinal sample has provided ample cases of women who initially identify as heterosexual, then have a serious lesbian relationship, and when that ends have their next relationship with a man. The person, rather than the person's gender, was apparently the crucial determinant of whom the woman would love and sexually desire. The ability to be satisfied in a sexual relationship with someone of either gender is itself an indication of relatively high plasticity. In a recent follow-up study, Diamond (2003) found that 27 percent of lesbian or bisexual women had changed their sexual identities over a five-year period. Half of these women gave up any identity label, and half had reclaimed heterosexuality. Those who relinquished their lesbian or bisexual identities were similar to those who had maintained it in their sexual identity development. Consistent with the erotic plasticity hypothesis, the crucial factor in altering their identity appears to have been a shift in those they found sexually desirable.

Attitude-Behavior Consistency

A third way that erotic plasticity manifests itself is in low correlations between general attitudes and specific behaviors. If plasticity is low, then the person's general attitudes are likely to predict what he will feel and want (and presumably do) in most situations. In contrast, if plasticity is high, then the

person will find that her behavior depends on specific aspects of the situation, and her general attitudes will not apply all the time. High plasticity means that social and situational factors are influential, in which case, behavior is less consistent.

A variety of evidence confirms that attitude-behavior consistency is lower, at least in the sexual realm, among women than among men. Many researchers have confirmed that girls and women are more likely than boys and men to engage in sexual behaviors of which they do not approve, and, indeed, they may continue doing them despite their own ongoing disapproval (Antonovsky, Shoham, Kavenocki, Modan, & Lancet, 1978; Christensen & Carpenter, 1962). These inconsistencies ranged from adolescent girls who were having intercourse despite advocating abstinence, to adult women who disapproved of casual sex but engaged in it anyway (Croake & James, 1973; Herold & Mewhinney, 1993). A variation on this inconsistency is having sex when one does not desire to have it. Although both men and women in committed relationships periodically report engaging in sex when they did not feel desire (usually because they wanted to please a partner), women report this more frequently than men (Beck, Bozman, & Qualtrough, 1991).

Most people advocate using condoms, especially when having sex for the first time or with a partner one does not know well. But many people act contrary to this, by having sex without condoms or other protection under those circumstances. Still, some work suggests that the gap is larger for women than for men (Herold & Mewhinney, 1993). This is ironic because most people believe that condoms detract from male sexual pleasure more than from that of female, so one might have predicted the opposite result. Plasticity can, however, explain the greater gap for women.

Many people disapprove of extramarital sexual activity or extradyadic sexual activity (e.g., sex outside of a committed relationship) but engage in it anyway. Such inconsistency appears to be higher among women. Hansen (1987) showed that attitudes toward extramarital sex predicted actual behavior fairly closely for men but not for women. Thus, many women may regard extradyadic sex as desirable and exciting yet never engage in it, while others may disapprove of it but do it anyway.

Similar findings emerged regarding same-sex activity. The NHSLS (Laumann et al., 1994) asked respondents whether they liked the idea of having sex with a member of their own gender and whether they had done so during the past year. For males, these questions were very highly correlated, but for women there was much less connection. Thus, again, many women liked the idea but never did it, whereas others disliked the idea but had done it anyway. Specific and situational factors presumably overrode the general attitudes, consistent with high plasticity.

Attitudes about sexuality are conducive to making specific predictions about behavior. One would expect behavior to correspond to the attitude. However, there are other dispositional variables that do not lend

themselves to a priori predictions about sexual behavior. Attachment style is one such variable that appears to affect sexuality. In a sample of nearly 800 participants, Bogaert and Sadava (2002) found that adult attachment style covaries with sexual behavior, and it does so disproportionably in women. Infidelity was related significantly to an anxious attachment style in women, and not in men. Recent condom use was related to both secure and anxious attachment styles in women, but not in men. Age of first intercourse was also related to both secure and anxious attachment in women, and, again, not in men. There were no behavioral variables (although some dispositional variables) that were significantly correlated to attachment style in men, with the exception of attachment.

It is plausible that some of the behaviors (i.e., early intercourse) may have influenced attachment style, so we do not cite this as evidence that female sexuality is necessarily dictated by attachment style. However, it does appear safe to conclude that attachment is a social/situational factor that is more closely tied to female sexuality than to male sexuality. As the scale tips toward a relatively greater social influence in women, it points to a relatively greater role of biology in men.

Differential Arousal in the Laboratory

This broad pattern of gender differences in erotic plasticity should also be observable when tested empirically in the laboratory. Indeed, objective physiological measurements of sexual arousal also indicate that women display greater variability in the stimuli that sexually arouse them than do men. By monitoring penile circumference fluctuations (via plethysmograph) and vaginal vasocongestion (by photoplethysmograph), level of arousal can be directly monitored. Using this technique, researchers have shown that women are aroused by a greater variety of erotic images than are men (Chivers, Rieger, Latty, & Bailey, 2004). Regardless of sexual orientation, men reacted physiologically to seeing sexual acts performed by the gender of their preference: homosexual men were aroused by watching male-male sex, while heterosexual men were aroused by watching female-female sex. Women did not display this same pattern of arousal. Lesbian and heterosexual women were aroused as a result of seeing both male-male and female-female sexual acts.

Clearly, the instrumentation needed to measure vaginal vasocongestion differs from what is needed to measure penile circumference fluctuations, which presents a potential limit to interpretability. The gender differences in arousal plausibly could have been because vaginal vasocongestion is only capable of measuring diffuse sexual arousal, not the gender-of-preference-specific arousal found in men. Chivers et al. (2004) employed a clever solution. Using the same instrumentation employed in the genetic female sample, they tested male-to-female transsexuals. Results indicated that transsexuals who preferred men were aroused by male-male images, while those who preferred

women were aroused by the female-female stimulus. Thus, male-to-female transsexuals showed the same preference-specific physiological reactions as did heterosexual and homosexual males, and did so using instrumentation that did not detect this pattern in females.

Subjective measures of arousal also were consistent with greater plasticity in women. Women indicated that they were aroused by a greater variety of stimuli than were men. However, women's subjective ratings of arousal showed a much weaker correspondence with physiological arousal than did men's. Although this finding does not necessarily follow a priori from the plasticity hypothesis, it is relevant, particularly in light of evolutionary theories of sexuality.

Species propagation cannot occur without a high degree of male arousal, but it can occur without a commensurate degree of female arousal. Therefore, sexual initiation would have been wasteful if the male were not physiologically prepared for penetration. Thus, it would be efficient that the traditional initiator, the male, be more consciously aware of preparedness for mating than the female. The seeming disconnect between women's conscious awareness of arousal and actual physiological arousal is likely to result in a degree of uncertainty about actual physiological arousal. This uncertainty in females may have made them more receptive to male initiation, regardless of their actual arousal. If a female who is somewhat less aroused than her male counterpart is unaware of this fact, she is more likely to consent to mating than if she were aware of it. Therefore, if a degree of uncertainty is indeed related to greater receptivity, the disconnect between consciousness and physical arousal, and the resulting uncertainty, may help explain the pattern of broader sexual receptivity (plasticity) in women.

A classical conditioning study found this same pattern of gender-based differences in erotic plasticity (Hoffmann, Janssen, & Turner, 2004). Researchers paired a picture of an abdomen with an erotic film clip for both male and female participants. Heterosexual male participants were shown a female abdomen, and heterosexual female participants were shown a male abdomen. Both genders became sexually conditioned to the abdomen. That is, repeated pairings demonstrated an increase over baseline in genital arousal when participants were presented with the abdomen. However, when the stimulus paired with the erotic film clip was both sexually irrelevant and presented subliminally, a disparity emerged. Women showed a significant increase in genital sexual arousal when the erotic film was paired with a gun, while men did not show a commensurate increase. This is consistent with the female sex drive as changeable.

Any Exceptions?

A determined search for counterexamples yielded only a handful of suggestive findings. For instance, not all evidence points in the direction of greater

biological contributions in sexual orientation for men than for women. A study investigating the relationship between fingerprint patterns and handedness found a significant relationship between handedness and sexual orientation in women, but not in men (Mustanski, Bailey, & Kaspar, 2002). Fingerprint patterns were unrelated to orientation in both genders. The aforementioned difference in finger-length ratios is a natural point of comparison to this finding. Finger-length ratios are more compelling evidence of biology than is handedness because handedness is subject to social factors, and finger lengths are not. A study investigating shifting handedness trends in Japan found some evidence that men's hand preferences are more malleable than women's (Iwasaki, Kaiho, & Iseki, 1995). This might account for the lack of relationship between handedness and sexual orientation in men.

The most instructive counterexamples of erotic plasticity point toward childhood. For example, males are more likely than females to acquire sexual paraphilias (sexual arousal to atypical stimuli, e.g., nonhuman objects or unconsenting humans), and although the origins of these are poorly understood, most evidence points to some kind of childhood experience that creates the unusual sexual desire. In adulthood, paraphilias have low plasticity and are quite difficult to change or erase.

There is also some evidence that childhood sexual abuse has more severe and long-lasting effects on boys than on girls. A follow-up to the NHSLS found that people who had suffered sexual abuse as children were more likely to have sexual health problems as adults if they were men rather than women (Laumann, Paik, & Rosen, 1999).

Such findings suggest that there may be a phase of plasticity in male sexual development, but it is apparently in childhood. Once the boy reaches puberty, the pattern of sexual tastes and preferences is largely set (though the person may not discover all these until some time later, especially if he regards his desires as socially unacceptable). In contrast, female sexuality may continue to develop and change throughout adulthood. This may help women recover from events of childhood, and, as such, would be one clear benefit of plasticity for some people.

Some research with animals confirms the conclusion of a brief phase of plasticity during male childhood, although cross-species generalizations about sex must be made very cautiously. An experimental study by Kendrick, Haupt, Hinton, Broad, and Skinner (2001) swapped baby sheep and goats at birth, so that each was raised by the other species. The adults were allowed access to both species, and their mating preferences were observed. Consistent with high plasticity, the females copulated with the other species. The males exhibited low plasticity but in a most curious manner: they would only mate with their adoptive species, and not their own true species. This indicates that the male sexual preferences were shaped during childhood and remained fixed during adulthood, even though those preferences were such that they would prevent offspring.

Why the Difference?

The evidence for the gender difference in erotic plasticity is abundant and consistent, but the reason for the difference is far less clear. Several possible explanations could be proposed:

Differential power provides one line of explanation. Because women have generally had less physical strength and less political power than men, they may have had to be more flexible. Lacking power to get what they want, they would instead benefit from accommodating themselves to external influences. This line of argument would predict that women would generally have higher plasticity in most social behaviors.

An intriguing explanation could be developed from the so-called gatekeeper role of female sexuality. The idea here is that men want sex earlier and with more partners, and so it is up to the woman to decide when and whether sex happens. In practice, most women will start out saying no to most sexual invitations, but at some point the woman may change her vote to yes, and at that point sex happens. The close linkage of sex to changing one's decision could require or foster a broader flexibility that could be manifested in erotic plasticity. This line of argument would be specific to sex.

The third explanation invokes strength of motivation. It is plausible that milder drives are more amenable to civilizing influences. Nearly all signs indicate that men have more frequent and intense sexual desires than women (for review, see Baumeister, Catanese, & Vohs, 2001), and women's plasticity might derive from the milder drive. This line of argument would apply wherever there are gender (or other group) differences in strength of motivation.

More research is needed before we can establish which of these explanations is correct. At present, the evidence seems to favor the last one. The relevant test case would be some motivation that is more frequent and intense among women than among men: would then men have higher plasticity? By most accounts, the desire to create and nurture children is stronger among women than among men. Moreover, and crucially, the father role appears to be much more variable across cultural and historical boundaries than the mother role (e.g., Fukuyama, 1999). In other words, when women's desire is stronger, it is also marked by less plasticity, and so this lends plausibility to the argument that the difference in sexual drive is linked to the difference in erotic plasticity.

CONCLUSION

Erotic plasticity makes the sex drive malleable and enables cultural and situational factors to shape and alter it, not least by use of meanings. Plainly, many animals in nature have satisfactory, efficacious sex without any influence of culturally constructed or individually interpreted meanings. Yet, just as

plainly, many human sexual responses depend heavily and sometimes crucially on meaning. The great variety of human sexual response is partly attributable to the plasticity that is prepared by nature and activated by cultural meanings.

A substantial body of evidence indicates that female sexuality has higher plasticity, and is therefore more open to social and cultural influences, than male sexuality. The reason for the gender difference in plasticity is not established with anywhere near the certainty that the fact of the difference is, but at present the best guess is that it is linked to the mildness versus intensity of the desire. High erotic plasticity is not necessarily better or worse than low, but it has wide-ranging implications, including ease of self-knowledge, ease of adaptation to new demands and circumstances, capacity for change across the lifespan, and optimal type of therapeutic intervention. Future work is needed to extend and verify the implications of gender differences in plasticity as well as to establish its basic causes. Future work is also desirable to map out dimensions other than gender that can promote differential plasticity.

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SEX AND SEXUALITY

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Volume 2
SEXUAL FUNCTION AND DYSFUNCTION

Edited by Richard D. McAnulty and M. Michele Burnette

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Preface

We have had many opportunities to teach and interact with both college students and professional audiences about some very important topics and issues in human sexuality in our roles as authors and college professors. When we were approached to write this three-volume set on sex and sexuality, we were intrigued with the idea of having a forum in which to reach a broader audience. That is our goal for this work. With that in mind, we encouraged our contributors to "talk to" a general audience when writing about the topics that were most important to them. The authors we selected to write these chapters represent both established authorities and budding scholars on the various topics in human sexuality. We are confident that they have all helped us accomplish our goal.

To us, few, if any, other topics in the realm of human behavior are more interesting, exciting, or controversial than sex. And we hope that you will agree after reading the chapters from this set. Each chapter stands alone, and you can choose to read as many or as few as you would like—pick the ones that interest you. We hope that you will find this work to be of significant value to you, whether you are in pursuit of a better general understanding of sexuality or are looking for answers to specific questions.

One theme you will find throughout these texts is that human sexual function is affected by a whole host of factors. These factors are biological, sociocultural, and psychological in nature. The scientific study of sexuality is for all practical purposes a "young" field, and we have only touched the

surface in an attempt to fully understand how these factors interact and impact sexuality.

Another theme or concern you will find throughout this work is the question whether "scientific" views of sex are biased by social judgments about normal versus abnormal and/or functional versus dysfunctional sexual behavior. U.S. culture, in particular, holds many strong values and prohibitions about sex. In this context, studying and interpreting research on sexuality in an unbiased manner can be a challenge. Many of our authors caution the reader about this concern.

We wish to thank all the researchers and clinicians, past and present, who have contributed to the science of sex. Many of them have contributed chapters to this set, and for that we are grateful. We also thank our colleagues, families, and friends who supported us during the writing and editing process. Finally, we thank "the team" at Praeger Publishers.

Introduction

Sexual arousal and response is a natural and essential condition of life. Without it, animals would not reproduce and would cease to exist. It seems that a function so essential to our survival would be straightforward so as to ensure that this process would not fail. But observe human sexual behavior, and you will see that it is far from uncomplicated. Human sexual arousal and response is multiply influenced by the integration of emotional, cognitive, interpersonal, physiological, biological, sociocultural, environmental, and perhaps even evolutionary factors. So complex and dynamic are these interrelationships that we will likely always lack a full and complete understanding of them.

Volume 2 of *Sex and Sexuality* opens with an overview of our remarkable reproductive anatomy. Chapter 1, by Burnette, covers the structure and function of all the major reproductive organs of the male and female. This chapter, combined with Chapter 2 by Demakis on the role of the brain and the endocrine system, enhances our understanding of how multiple body systems interact to produce sexual arousal and response. This complex picture becomes even clearer with the addition of Rowland's chapter, Chapter 3, on the psychobiology of sex, in which he discusses models of sexual arousal and response as well as physiological mechanisms (e.g., the senses) and psychological processes (e.g., thoughts, feelings) that play a part in human sexual behavior.

Next, this volume addresses perspectives on sex and intimate relationships. In Chapter 4, Geary offers an interesting discussion of how male and female

differences in sexual preferences and behavior may have evolved through time to improve the chances of species survival. The research on evolution and sexual behavior has largely involved nonhuman species and has been extrapolated to humans. A discussion of sex and interpersonal relationships would be incomplete without a discourse on love. Regan points out in Chapter 5 that a majority of adolescents and adults in the United States believe that sexual interactions should generally occur within the context of a love relationship. Regan discusses types and theories of love with an emphasis on the two types most linked to sexual expression, passionate and companionate love.

Most research aimed at understanding sexual response and function has focused on understanding what has caused inhibition or disruption in the process of sexual arousal and response. The next several chapters address this topic. As we learn from the models of sexual arousal and response, this process is arbitrarily divided into phases, including sexual desire, excitement, orgasm, and resolution. Dysfunction can occur in any of the first three phases. In Chapter 6, Bogaert and Fawcett talk about factors that increase, maintain, and/or decrease a person's desire to engage in sex. In Chapter 7, Febbraro addresses sexual problems that occur during the excitement phase of the sexual response related to difficulties either with feelings of sexual pleasure or with the physiological changes associated with sexual excitement (e.g., failure of a female to adequately lubricate, or premature ejaculation in a male). In Chapter 8, Millner discusses orgasmic problems and disorders, in which she raises and addresses the issue of what constitutes a true orgasmic disorder—for example, if a woman can successfully achieve an orgasm while masturbating but not while having intercourse, does she have an orgasmic disorder? This situational inorgasmia might be considered a problem if, for example, it caused discord between the couple, but it is not necessarily a dysfunction or disorder.

In light of the various sexual dysfunctions that individuals sometimes experience, research and clinical work over the years have focused on finding effective ways to resolve these problems for individuals and couples. Chapter 9 by Kleinplatz provides an overview of interventions for sexual problems and again touches on some of the controversies inherent in determining what constitutes an actual disorder, given the subjective nature of the human sexual experience.

Past research has focused mostly on sexual inhibition when addressing disorders of the desire and arousal phases of sexual response. More recently, hypersexuality, also called sexual compulsivity, has become a focus of research. Sexual compulsivity has become especially popularized by reports of individuals who access pornographic Internet sites uncontrollably. Reece, Dodge, and McBride provide a stimulating discussion of this popular topic and urge caution in making value judgments about what is and is not an appropriate level of sexual interest or activity in Chapter 10. Finally, this volume would be incomplete if we did not include a chapter addressing a long-ignored issue—sexuality in people affected in various degrees by chronic disease,

physical disabilities, and the treatments of these conditions. Too often we discount individuals with significant disease process or physical limitations as asexual, not capable of or interested in sexual activity. This view is damaging to those who long to be complete human beings within the context of some real physical limitations. Fisher, Graham, and Duffecy, in Chapter 11, discuss the importance of this topic and review the impact of "major conditions" on sexual function as well as interventions aimed at reducing their impact on sexual function. Perhaps most importantly, they emphasize that quality of life and psychological well-being are improved when individuals can maintain satisfying sexual interactions.

1

Reproductive and Sexual Anatomy

M. Michele Burnette

The reproductive or sex organs are a remarkable set of anatomical structures. These organs are referred to as both reproductive and sexual because they perform two interrelated functions. They produce and support the developing fetus, and they can provide intense sexual pleasure and intimacy between people. In this chapter, you will learn about all the major reproductive structures in the male and female, as well as the breasts, since they are so closely linked to sexual pleasure in the U.S. culture.

Female and male anatomy are presented in separate sections in this chapter; however, keep in mind that for each structure in the female sexual anatomy there is a corresponding structure in the male anatomy. These are called *homologous* structures because they develop from the same cells in the developing fetus. As you may know, the chromosomes of males and females are different, with males having an XY sex chromosome configuration, and females having an XX configuration. In addition, although we tend to refer to testosterone as a "male" hormone and estrogens as "female" hormones, males and females have varying amounts of both of these hormones in their bodies. However, if a fetus has a Y chromosome, male hormones are produced in greater amounts. And in the presence of adequate amounts of testosterone, the cells that are intended to become reproductive organs differentiate into male organs (e.g., penis, testes). In the absence of a Y chromosome, all fetuses develop female organs (e.g., uterus, ovaries). Thus, this chapter will begin the study of sexual anatomy with that of the female.

EXTERNAL GENITAL STRUCTURES OF THE FEMALE

The external genitals of the female serve two purposes. They both protect the internal structures and play a primary role in producing physical pleasure during sexual interactions (as they are highly sensitive to touch). Collectively, these external structures are referred to as the *vulva,* but this area is often wrongly referred to as the *vagina*, which is an internal structure, and only the opening of the vagina is visible from the outside. Please refer to the drawing of the external genitals (Figure 1.1) as you read this section.

The Mons Veneris

The *mons veneris*, also called the *mons pubis*, is a fatty mound found covering the pelvic bone. Like all the external sexual structures, it is sensitive to touch. During puberty, hair grows on this mound of tissue.

The Labia Majora

The *labia majora*, or *major lips,* are two flaps of fleshy tissue running from the mons veneris to the perineum, just above the anal opening. Sensitive to touch, these structures also become covered with pubic hair during puberty. In a nonsexually aroused state, the labia majora fold together to protect the vaginal and urethral openings. However, when the female is sexually aroused, these structures engorge with blood, which results in the labia opening and flattening out, ultimately exposing the vaginal opening.

The Labia Minora

The *labia minora*, or *minor lips*, are two smaller, hairless folds of skin found in the area within the labia majora. They serve a similar protective function as the labia majora and respond similarly during sexual arousal by opening up and exposing the vaginal opening. The area contained within the labia minora is often referred to as the *vestibule*. Both the labia majora and minora differ vastly in appearance across different females. The labia minora come together at the top to form the clitoral hood.

The Clitoris and Clitoral Hood

Above the urethral opening is the clitoris. The clitoris is the most highly innervated external sex structure—it is most sensitive to touch and temperature and is, therefore, the focal point of sexual stimulation. The clitoris is a cylindrical structure formed by a shaft and a glans. The glans is the most visible part, and, in fact, much of the shaft lies beneath the surface. During sexual arousal,

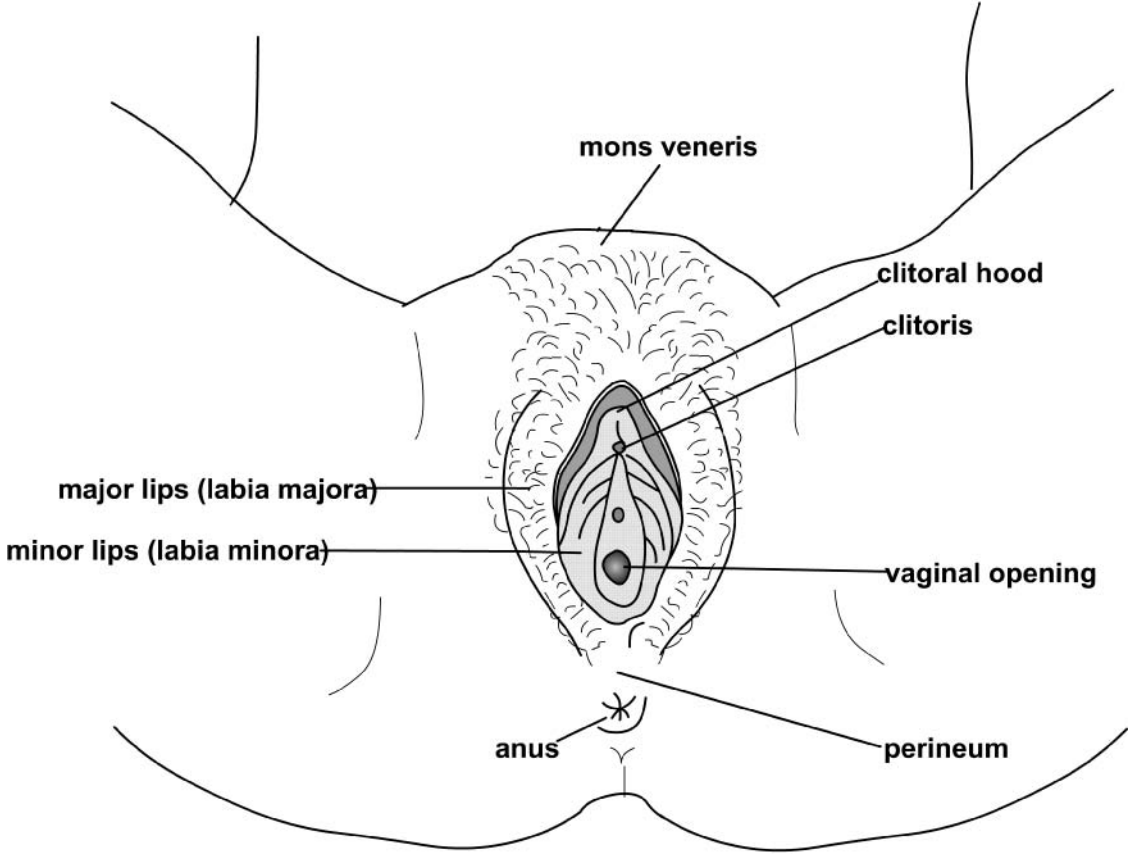

Figure 1.1. Female reproductive system external structures.

two spongy bodies, called *corpora cavernosa*, which are located inside the shaft, will become engorged with blood and cause the clitoris to expand in size and become more accessible to stimulation. The clitoral hood, which results from the labia minora joining together, generally covers the clitoris but will retract somewhat during arousal. Because the glans is so sensitive, it can become over stimulated in some women, causing an unpleasant sensation. At later points of sexual arousal, the glans actually retracts under the hood somewhat, protecting it from excessive stimulation. The amount of stimulation of the glans that is perceived as pleasurable varies considerably among women. Verbal and nonverbal communication from a woman about what does and does not feel good should always be a partner's guide during sexual interactions.

The Vaginal Opening

The vaginal opening, also referred to as the *introitus*, is located below the urethra (through which one urinates). It is the opening to the vaginal canal. It is through the vaginal canal that a woman menstruates and gives birth. Thus, this opening, while appearing very small, has the ability to expand tremendously. At the beginning of a girl's life, the vaginal opening usually has a partial-to-complete thin layer of tissue covering it. This tissue is referred to as the *hymen*. Usually, the hymen is merely a ring around the outer edges of the vaginal opening or a covering with multiple openings in it. Only rarely, the hymen is fully intact and must be opened to allow for menstrual flow once a girl reaches puberty and begins to menstruate. The function of the hymen is unclear beyond the possibility that it offers some protection to the vaginal opening. However, in ancient times and even in some cultures today in which the virginity of a woman before marriage is highly valued and expected, the hymen carries much significance. Upon having intercourse for the first time on her wedding night, a virginal bride is expected to show evidence of bleeding with the rupture of the hymen. In Deuteronomy 22: 13–17 of the Hebrew Bible, this is referred to as the "tokens of virginity," or proof that the female has not previously had sexual intercourse and is therefore worthy of being married. Unfortunately for brides in such oppressive cultures, a woman may not bleed when she has intercourse for the first time if the hymen does not cover the vaginal opening. Even an intact hymen can be ruptured through strenuous physical activity, injury, or through use of a tampon. Thus, the absence of bleeding during first intercourse is not a sign that the female is not "virginal."

The Perineum

The perineum is more of an area than an actual structure, but it is important in that touching or stroking this area can be highly sexually stimulating. This area is found between the vaginal and anal openings. It is also the

area of tissue that is sometimes torn or cut (called an episiotomy) during a vaginal delivery.

INTERNAL GENITAL STRUCTURES OF THE FEMALE

The external structures, which are highly sensitive to sexual stimulation, play a primary role in sexual pleasure and a secondary role in reproduction. By contrast, the internal structures play a greater role in reproduction as opposed to sexual pleasure because they, for the most part, are not highly innervated with touch receptors. Following from the external structures, the discussion of the internal structures will begin with the outermost structure, the vaginal canal and move to the innermost structures. Please refer to the sketch of the internal structures (Figure 1.2) as they are discussed.

The Vagina

The vagina, or vaginal canal, is a tubular structure, but the walls rest against each other when in a nonaroused state. The canal is about four inches long when not in an aroused state and runs between the vaginal opening and the cervix. The walls of the vagina contain folded layers of muscle, which can stretch considerably during childbirth. The walls also constantly secrete a fluid, which provides an optimal environment for "good bacteria" that maintain vaginal pH at a healthy level. These secretions increase considerably during sexual arousal to lubricate the walls for vaginal intercourse. All women experience a small amount of vaginal discharge because of these fluids. This is natural and expected, but if the discharge seems excessive, causes irritation, or has a foul or strong odor, it may indicate infection, such as a yeast infection or sexually transmitted infection. If any of these signs are present, the woman should consult a medical professional.

Only the outer one-third of the vaginal canal is sensitive to touch; thus, it is the only part that plays much of a role in sexual stimulation. Some experts on female sexual anatomy and lay women alike contend that there is an area in the outer third of the vagina which is especially rich with nerve endings and, when stimulated, is most likely to cause an orgasm. This is called the Grafenberg or *G-Spot*. It is reportedly located about two inches up from the entrance of the vagina on the front of the body. Women report that they can feel a raised spot or series of ridges in this area.

The Cervix

The vaginal canal ends at the cervix. The cervix is located between the vaginal canal and the uterus. Viewing the cervix up through the vagina, it appears somewhat like a donut with a very small opening in the center. The opening is to the uterus and is called the *cervical os*. Two important substances

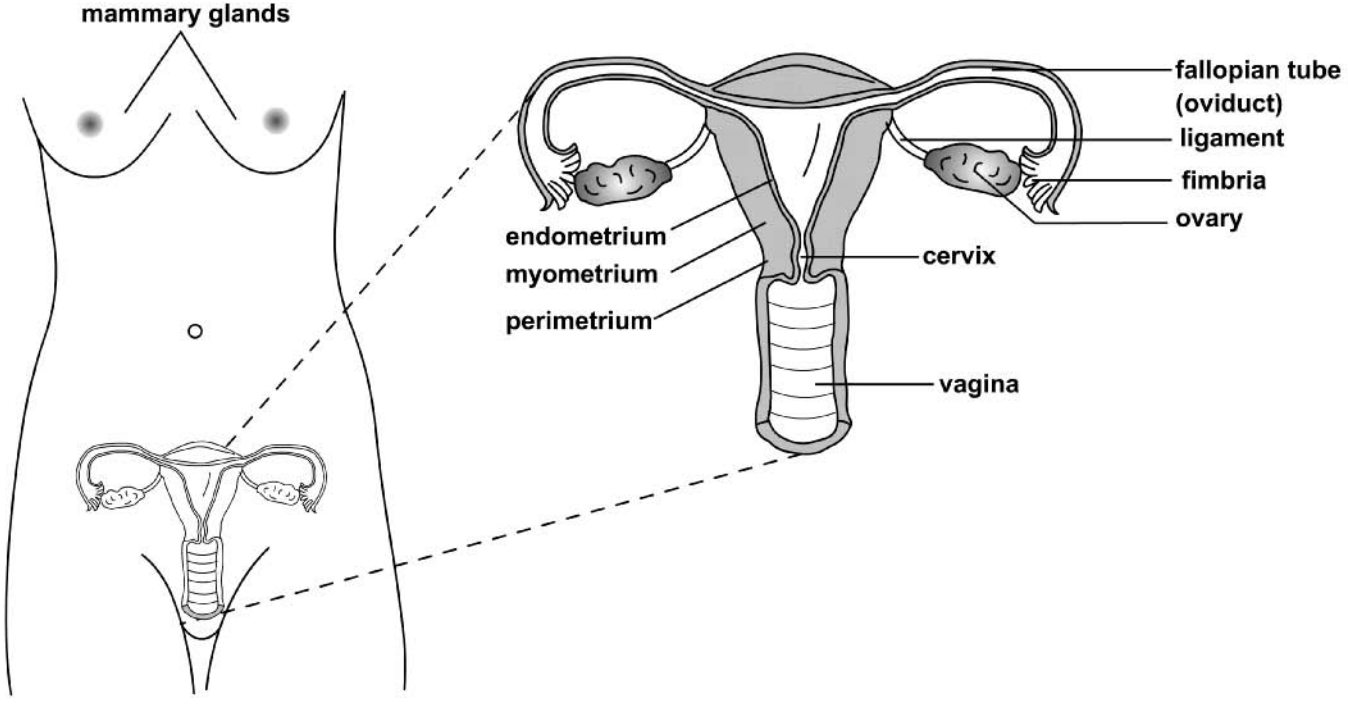

Figure 1.2. Female reproductive system internal structures.

pass through the cervical os—menstrual flow passes out of the uterus through this canal and into the vaginal canal, and during intercourse, ejaculate containing millions of sperm (the male contribution to ultimately producing a baby) must pass through the cervix to the uterus on the way to the fallopian tubes, where an egg, if present, might be fertilized. Mucus produced by glands in the cervix forms a plug in the cervical os, which protects the uterus from harmful bacteria. This plug dissolves during menstruation and ovulation (when an egg cell is available for fertilization by the sperm) to allow passage through the os.

The Uterus

The uterus is the structure that bears the resemblance of an upside-down pear. It has muscular walls and is hollow within. Measuring on average about three by two inches, it is obviously capable of expanding tremendously as this is the reproductive organ that is home to the developing fetus. The uterine walls are formed by three layers. The thin, outer layer is called the perimetrium. The middle layer, or myometrium, contracts during labor to help move the prenate into the vaginal canal. And the inner layer, or endometrium, thickens in response to hormonal changes in anticipation of pregnancy. Once an egg from the female is fertilized by a sperm from a male, the mass of cells that will become a human form attaches to the uterine wall and is nourished by the endometrium. If pregnancy does not occur, the inner lining sheds in the form of menstrual flow.

The Fallopian Tubes

The fallopian tubes, or *oviducts*, are the site of fertilization. These are tubes that connect to the upper portion of the uterus. At the opposite end are these fingerlike projections that partially surround, but are not actually attached to, the ovaries. When an egg is released from the ovary, these projections, called *fimbriae*, coax the egg into the fallopian tube, where millions of tiny, moving, hair-like structures on the fallopian tube walls, called cilia, further coax the egg cell along the tube. The sperm usually unites with the egg cell in the outer third of the tube, the area closest to the ovaries.

The Ovaries

The ovaries, located at the end of the fallopian tubes, are held in place by a ligament attached to the uterine wall. They are two egg-shaped structures measuring approximately ¾–1½ inches long. These critical organs produce egg cells as well as hormones that are essential to female reproduction.

SUMMARY OF MAJOR FEMALE REPRODUCTIVE ORGANS AND THEIR FUNCTIONS

External Organs	Function
Mons pubis	Sexual stimulation
Clitoris, primarily clitoral glans	Sexual stimulation and arousal
Clitoral hood	Sexual stimulation and protection of clitoral glans
Labia majora	Protection of vulva; sexual stimulation
Labia minora	Protection of vaginal opening; sexual stimulation
Perineum	Sexual stimulation

Internal Organs	Function
Corpora cavernosa	Erection of the clitoris
Vagina	Sexual intercourse, menstrual flow, vaginal delivery, possible sexual stimulation in outer one-third
Cervical os	Passage of menstrual flow, semen to and from uterus
Uterus	Fetal development
Fallopian tubes	Passage for egg cell from ovary to uterus; site where sperm joins egg (conception)
Ovaries	Production of egg cell; production of hormones

THE BREASTS

The breasts, also called *mammary glands*, are unique to mammals, which are capable of producing milk and nourishing their young. In the center of the surface of the breast is the *areola*, the circular, darkened area. The *nipple*, a rounded, protruding, and also darkly pigmented structure, is located in the center of the areola. Beneath the skin of the breasts lies a layer of fatty tissue (adipose). Found within this tissue are the *alveolar glands* and the *lactiferous ducts*. The alveolar glands produce breast milk after delivery of an infant. The alveolar glands empty into the lactiferous ducts. These ducts store milk produced by the alveolar glands, and they also open into the nipples, where they release milk when stimulated by a suckling infant.

The amount and distribution of adipose tissue determines the shape and size of the breasts; thus, the size of the breasts bears no relationship to how well the breasts function (e.g., milk production) or how sensitive they are to stimulation. Why, then, is our U.S. culture, and so many others, so concerned about the size of a woman's breasts? In fact, this obsession seems to be a

growing trend—according to the American Society of Plastic Surgeons (n.d.), 264,041 women in North America underwent breast augmentation surgery in 2004 alone. The number of these surgeries has increased 676 percent since 1992 (American Society of Plastic Surgeons, 2005). Unlike most cultures around the world, the U.S. culture "hypersexualizes" breasts, rather than thinking of them as simply body parts intended for breastfeeding babies. The breasts are made taboo, and like the reproductive organs, are covered, and people are often embarrassed by public exposure of breasts (i.e., public breastfeeding). This view of breasts is unique to U.S. culture and those heavily influenced by the United States. In other cultures, however, it is not unusual to see uncovered breasts (e.g., sunbathing in Europe or simply never covering them, as in some African cultures), and they are not titillating. Author of the book *Breasts: The Women's Perspective on an American Obsession*, Carolyn Latteier, was interviewed in 2002 on a TV program called *All About Breasts* on the Discovery Health Channel. She said, "A lot of people think it's just the human nature to be fascinated with breasts, but in many cultures, breasts aren't sexual at all. I interviewed a young anthropologist working with women in Mali, in a country in Africa where women go around with bare breasts. They're always feeding their babies. And when she told them that in our culture men are fascinated with breasts there was an instant of shock. The women burst out laughing. They laughed so hard, they fell on the floor. They said, 'You mean, men act like babies?' " She further suggested that if more women breastfed, using breasts for what they were intended, people would not see breasts as taboo or sexual (Discovery Health Channel, 2002).

EXTERNAL GENITAL STRUCTURES OF THE MALE

The Penis

Please refer to the figure of the external male genitals (Figure 1.3). Perhaps the most prominent genital structure in the male is the penis. The penis is a cylindrical structure consisting of a *glans* and a *shaft*. The penis actually runs beyond the body wall into the pelvic region—this unexposed area is referred to as the *root*. The glans and shaft of the penis are homologous to the glans and shaft of the clitoris. The shaft runs the full length of the penis up to the glans, which is the acorn-shaped structure at the end of the penis. The opening to the urinary tract, called the *meatus,* is located at the tip of the glans. The raised edge where the shaft connects to the glans is called the *coronal ridge*. The glans and the area of the coronal ridge in particular are most heavily innervated and are, therefore, very sensitive to touch. As in women, direct stimulation to this area might become too intense at times for some men.

The skin covering the penis is hairless and very elastic, moving freely across the underlying structures and stretching when the penis becomes erect. The area of tissue on the underside of the penis is homologous to the labia minora in

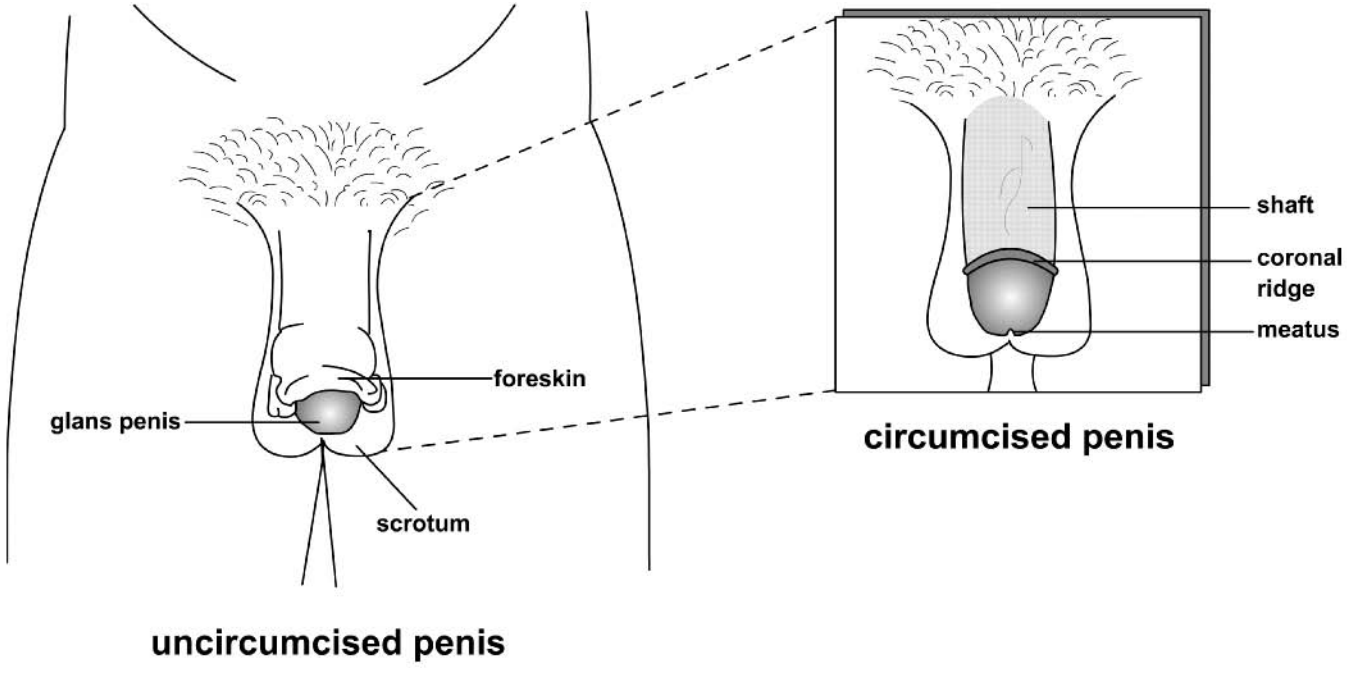

Figure 1.3. Male reproductive system external structures.

the female. A visible line that runs along the underside of the penis is where the tissues fused during prenatal development. Covering the glans is a fold of tissue called the *foreskin*. The foreskin usually retracts beyond the glans during an erection and only slightly when urinating. The foreskin is sometimes removed for cultural or religious reasons in a procedure called *circumcision*. This procedure is usually performed just after birth, although some adults choose to have it removed later in life. Contrary to popular opinion, circumcision is not a medical necessity. Circumcision has been shown to reduce the risk of infections such as urinary tract infections, and more seriously the human immunodeficiency virus; however, equal risk reduction occurs simply by practicing good hygiene (i.e., cleaning under the foreskin while bathing). Given the fact that circumcision is painful and has its own risks (e.g., infection, deformation), parents are urged to weigh all costs and benefits carefully (Kinkade & Meadows, 2005).

Penile Augmentation

Another current social concern regarding the penis is that of penile augmentation. Conduct a quick search of the Internet (or check your junk email box), and you will see that there are countless products being marketed to increase a man's penis size . . . because "size does matter." Manual stretching exercises, stretching by using penile weights, vacuum pumps, pills, and lotions are all scams designed to entice men who have fallen prey to the "male enhancement" industry's campaign to make men feel insecure about their penises and erections. In fact, some of these enhancement strategies can be harmful. For example, both manual stretching and using weights can damage penile tissue. Vacuum pumps can also damage the elastic penile tissue and eventually cause less-firm erections (Mayo Clinic Staff, 2005).

In recent years, penis augmentation surgery has become available, but medical societies do not endorse augmentation surgery for cosmetic reasons only. Surgery typically involves making an incision near the base of the penis and cutting the suspensory ligament that attaches the penis to the pubic bone allowing the root of the penis to hang outside the body. Skin is also grafted from the abdomen to the penile shaft. A potentially significant problem created by this procedure is that because the suspensory ligament stabilizes and supports the upward tilt of the erect penis, the penis may now wobble, or erections may occur at unusual angles. The girth of a penis can also be increased through several methods. A couple of common ones include injecting fat cells from another part of the body into the penile shaft or grafting skin and fat to the outside of the penis. These procedures are of questionable safety, and additional surgery is sometimes required to correct negative effects of the surgery. Some of these complications include low-hanging penises, loss of sensitivity, scarring, shorter penises, hair at the penis base, and fat concentrated in one or more areas causing lumps (Mayo Clinic Staff, 2005).

Interestingly, the typical male requesting this surgery has a penis length within the normal range (Mayo Clinic Staff, 2005; Mondaini et al., 2002). What is "normal?" A recent Italian study showed that the typical flaccid penis is 9 centimeters (3.54 inches) long while the stretched penis is 12.5 centimeters (4.92 inches). The typical circumference at the middle of the shaft is 10 centimeters (3.94 inches; Ponchietti et al., 2001). Other research has shown that 70 percent of men's erect penises range from 5 inches to 7 inches, and a penis is considered "abnormally" small only when it measures smaller than 3 inches when erect (Mayo Clinic Staff, 2005). Men seeking penile augmentation are typically in their late twenties, and they tend to think that the typical penis is larger than the above findings (i.e., they estimate that the normal flaccid penis is 12 centimeters or 4.72 inches). A large number of these males said their concerns started in childhood when they observed that a friend had a larger penis, and a smaller but significant number of them began to worry about their penis size in their teen years after viewing erotic images (Mondaini et al., 2002).

So, does size matter? In a recent Dutch study, 77 percent of the sexually active women surveyed responded that penis size was "unimportant" or "totally unimportant." Women who were concerned about length were also concerned about girth, with girth being more important to them than length (Francken, van de Wiel, van Driel, & Weijmar Schultz, 2002). Other research has shown that women tend to prefer average-sized penises. And some men with large penises express concerns about being too large because women respond in fear to the sight of a large penis or the man fears hurting his partner. In fact, some women do feel discomfort if an especially long penis is thrust against the cervix, and the man must be careful not to insert the penis too far. In addition, it is important to remember that the female has very little sensation in the upper two-thirds of her vagina, meaning that stimulation in this area is unlikely to enhance sexual arousal. In short, bigger is not necessarily better.

The Scrotum

The scrotum, a saclike structure behind the penis, is the homologous structure to the labia majora in the female. The scrotum houses organs called the testes. This sac is thin, hairless or slightly hair-covered skin, which hangs and moves loosely around the testes. The function of the scrotum is critical to reproduction—its job is to maintain the testes at a temperature that is neither too cold nor too hot and therefore damaging or lethal to sperm, which are formed, matured, and stored in the testes. Sperm must be maintained at a temperature of about 93° Fahrenheit, more than five degrees lower than normal body temperature. To maintain this safe temperature, the *dartos muscle*, in the middle layer of the scrotal sac, contracts and draws the testes up closer to the body when they become too cold and loosens so that the testes will fall farther away from the body when they become too hot. The scrotum sometimes contracts when a

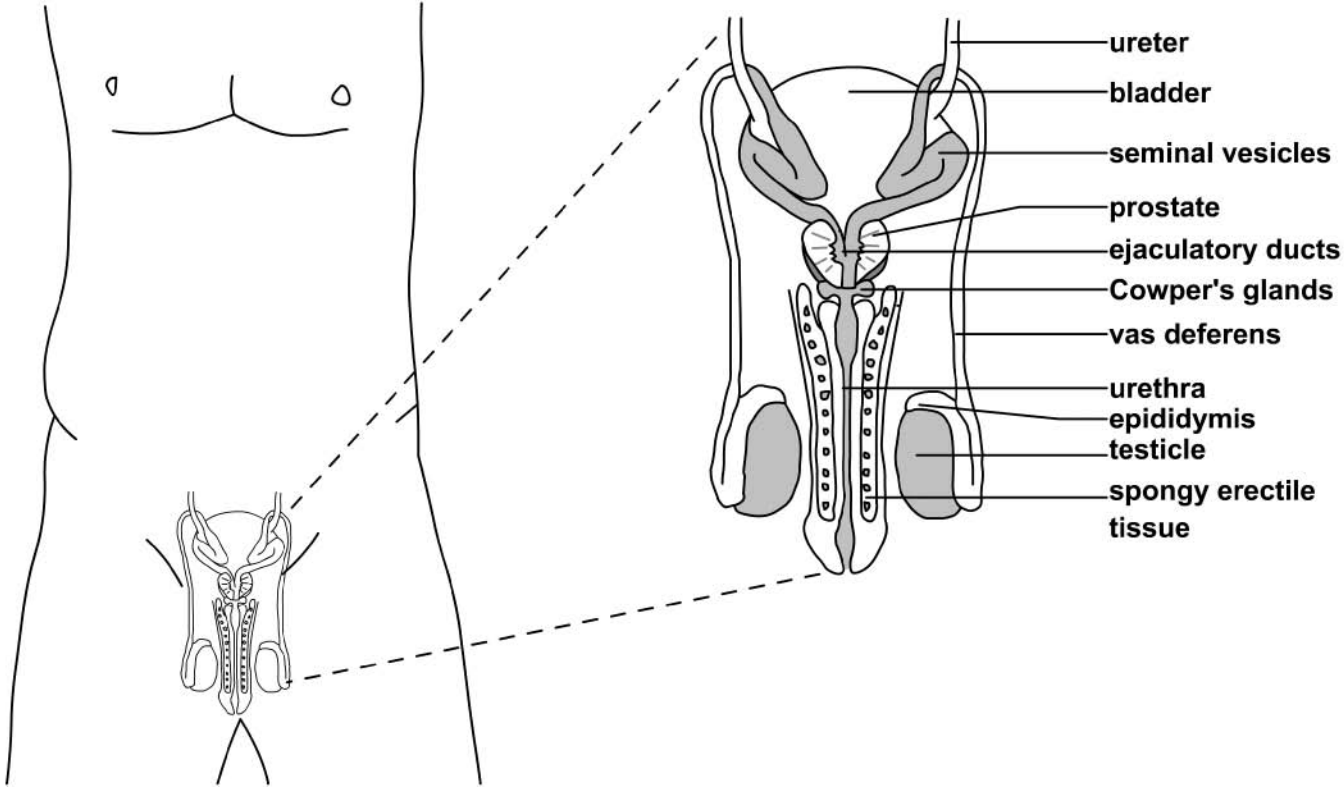

Figure 1.4. Male reproductive system internal structures.

man senses fear, an involuntary response intended to protect the testes from harm (Baldwin, 1993).

The Perineum

The perineum on the male body is the area located between the scrotum and the anal opening. Similar to the female, the perineum of the male is richly innervated and, therefore, sensitive to touch.

INTERNAL GENITAL STRUCTURES OF THE MALE

The internal structures of the male are essential for reproduction and they play a significant role in sexual arousal and response. For example, the first structures described, those found inside the penis, are necessary for a male to achieve an erection. Please refer to the drawing of the internal structures (Figure 1.4) as they are reviewed.

Internal Structures of the Penis

The penis contains three cylindrical bodies, two *corpora cavernosa* and one *corpus spongiosum*. The corpora cavernosa contain spongy, erectile tissue inside thick membranous sheaths. These structures are homologous to the corpora cavernosa in the female. The third cylindrical body, the corpus spongiosum, is also a spongy body containing erectile tissue bound in sheaths. All three of these structures engorge with blood to cause an erection during arousal. The *urethra*, a tube through which urine and ejaculate moves, runs the length through the middle of the corpus spongiosum.

Structures inside the Scrotal Sac

As mentioned earlier, the primary organ housed within the scrotum is the testes. There are two testicles or *testes* (sing.: testis), which are homologous to the two ovaries in the female. One testicle is usually slightly larger than the other. These oval structures are about 1 inch by 1.5 inches. The testicles are divided into lobes. A mass of coiled tubes called *seminiferous tubules* are located within these lobes and contained in a sheath called the *tunica albuginea*. The seminiferous tubules produce sperm. Special cells, called *Leydig's cells*, are also located among the tubules, and they are responsible for producing androgens, hormones that are important for male sexual functioning. These hormones are released into the bloodstream. After being produced in the seminiferous tubules, the sperm travel through the *rete testes*, another set of tubes, to the *epididymes* (sing.: *epididymis*) where they are stored and continue to mature. The epididymes are found resting against the back of the testicles and are best described as crescent-shaped structures. Each epididymis is actually made up of

one coiled tube, which, if stretched and measured from end-to-end, is about 20 feet long. You can actually feel the epididymis by gently rolling the testis between your fingers. Each testis is held in place by a *spermatic cord*, which contains nerves and blood vessels that support the testes. The *cremaster* muscle is also located in the spermatic cord. During sexual arousal, the cremaster muscle contracts, pulling the scrotal sac closer to the body. As with the dartos muscle, contraction and expansion of the cremaster muscle also functions to regulate scrotal temperature. Finally, the spermatic cords also contain the *vas deferens*, which are discussed next.

The Vas Deferens and Ejaculatory Ducts

During ejaculation, the *vas deferens* provide an exit from the testes and a passageway to the *prostate gland*. As noted in Figure 1.4, the vas deferens go up and over the bladder before reaching their destination, which is to join with the *ejaculatory ducts*, through which the seminal vesicles empty into the vas deferens.

The Seminal Vesicles and Prostate Gland

The seminal vesicles are small, elongated structures located outside the prostate gland. The prostate gland is a walnut-sized structure located just beneath the bladder. The seminal vesicles and the prostate gland provide the seminal fluid, 70 percent coming from the seminal vesicles and 30 percent from the prostate gland. Seminal fluid provides a mode of transportation for the sperm. It also contains sugars to nourish the sperm, and it maintains the pH level around the sperm at a safe level; the pH of the vagina is too acidic and would kill the sperm in the absence of seminal fluid. Once the sperm and seminal fluid combine, they are ejaculated through the urethra.

How can the urethra function for urination and ejaculation without the two being mixed? It is simple. A wide sphincter muscle at the opening of the bladder relaxes (and opens) when a male needs to urinate and tenses (and closes) during ejaculation.

The Bulbourethral Gland

Located just below the prostate gland is a tiny, pea-sized gland called the *bulbourethral gland* or the *Cowper's gland*. During sexual arousal, this gland also emits an alkaline substance. Its purpose is not entirely understood, although the prevailing notion is that it neutralizes the acidity in the urethra of the male before ejaculate is released as a protective measure. Some people consider it as a lubricant for sexual intercourse, but it does not occur in sufficient amounts to adequately lubricate. The important thing to remember about this fluid is that it may contain thousands of stray sperm, which made their way to the gland during a previous ejaculation. Thus, barrier-method contraception (e.g., a

condom) should be applied before Cowper's gland emissions and any penis to vulva contact if one would like to be absolutely certain to avoid pregnancy.

SUMMARY OF MAJOR MALE REPRODUCTIVE ORGANS AND THEIR FUNCTIONS

External Organs	**Function**
Shaft of penis	Sexual stimulation; intercourse
Glans of penis	Sexual stimulation
Foreskin	Protection of glans; sexual stimulation
Scrotum	Houses testicles; protects and regulates temperature of testicles
Perineum	Sexual stimulation
Internal Organs	**Function**
Corpora cavernosa	Erection of penis
Corpus spongiosum	Erection of penis; houses urethra
Testicles	Sperm production and storage; hormone production
Vas deferens	Transportation of sperm to meet seminal fluid
Seminal vesicles and prostate gland	Production of seminal fluid
Ejaculatory ducts	Joining of sperm and seminal fluid just before ejaculation
Cowper's glands	Production of fluid to neutralize acidity of urethra to protect sperm
Urethra	Passage of ejaculate and urine

CONCLUSION

At first, the idea of studying sexual anatomy may sound boring, but hopefully you learned that the sexual anatomy is quite interesting. The benefits of understanding how these organs function are considerable from both a psychological and physical standpoint. Such knowledge can make you more comfortable with your sexuality in general and help you to know how you and your partner can derive the most enjoyment from your sexual interactions. In addition, understanding how these organs work might help you to recognize when you might have a physical concern that needs to be addressed.

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2

Sex and the Brain

George J. Demakis

The brain is the most complex organ in the human body and is involved in nearly all that we do, from dancing to reading to having sex. Though its role in sexual behavior is still not fully understood, the increasing research on this topic in recent years has documented the brain's importance—one writer (Rodgers, 2002) even titled her chapter on the topic "Where It Really Happens"—in various areas such as sexual interest, arousal, and orientation, as well as sex differences. Many researchers, in fact, would agree that one cannot understand sex without understanding the brain and, more broadly, how it interacts with other organs and systems in the body to produce, control, and regulate sexual behavior. This chapter explores these issues. I first review common methods of studying sexual behavior, then outline basic neuroanatomy with an emphasis on brain regions important for sex, and then summarize the findings about brain-sex relationships framed by common research methods. What is not covered here and beyond the scope of this chapter are (a) physiological changes that accompany sexual arousal in the genitalia, such as erection in males, (b) brain differences between men and women and how such differences are manifested in behavior and cognition, and (c) brain differences that may be associated with sexual orientation. Each of the literatures on the above topics is voluminous, at times controversial, especially the final point, and deviates from our goal of understanding the brain's role in sexual behavior.

RESEARCH METHODS USED TO STUDY SEX AND THE BRAIN

Our understanding of the brain's role in sex comes from three kinds of research (see Meston & Frohlich, 2000): various types of animal studies; laboratory studies of humans in which aspects of sexual interest or response are elicited; and clinical studies of humans with sexual dysfunction after brain injury. Each of these approaches has its own advantages and disadvantages. First, animal studies allow, in some ways, the most direct study of how various brain regions are important for sexual behavior and have been time-tested. In one approach, a lesion is created by destroying a part of the brain to assess the effect this has on the resulting behavior. If, for instance, a lesion to a specific region of the hypothalamus (described below) reduces the ability of the male rat to copulate (engage in intercourse with a female rat), it is assumed that that region is involved in copulation. This argument is strengthened when similar-sized lesions are made in surrounding brain regions without a reduction in copulatory behavior. In a related approach, the specific brain region of interest can be stimulated with mild electrical current to evaluate whether this induces or increases copulation. Again, if it does so, but stimulation to nearby brain regions does not, the likelihood that the region is involved in copulation increases. The practical advantages of this research are obvious because ethical considerations prevent such research on humans. In fact, huge amounts of such research have been done with different species and on a variety of topics, from behavior to organ systems to disease processes. However, because rats (and other species) are not as complex as humans and their sexual behavior tends to be more stereotyped (i.e., more routine and less variable), it is not always clear if findings obtained from these studies generalize or apply to humans, whose sexual behavior is anything but stereotyped. Clearly, cognition or thinking is more relevant for human behavior and helps generate the diversity of our sexual experience. Animal research also cannot address some of the more interesting aspects of human sexual behavior, such as the experience of orgasm, or the many ways in which culture influences our thinking about all things sexual.

A related line of work with animals that shares some of the above advantages and disadvantages is the large body of research on the influence of hormones—chemical messengers released by the brain—on sexual behavior. There are various ways of conducting such research. For instance, certain hormones can be introduced via injection of medication, or they can be reduced or eliminated with certain medications or through removal of a specific brain region or body part. The most common example of the latter approach is castration of the male animal early in life, which has been shown in numerous animal species to reduce testosterone and many aspects of sexual behavior. Similarly, removal of the ovaries in the female animal has been

demonstrated to reduce estrogen and progesterone, hormones important in the regulation of the estrus (animal) or menstrual (human) cycles and mating behavior.

More broadly, hormones can be considered to have a*ctivating effects,* in which they affect the functioning of the adult brain, and o*rganizing effects,* in which they affect brain development. An example of the former is the effect of testosterone on the amygdala which elicits sexual motivation in the male, and an example of the latter effect is when testosterone influences the preoptic area of the hypothalamus in the developing male rat, an important area for sexual behavior. As can be seen in these latter effects, hormones influence neural growth and death in certain brain regions pre- and postnatally, making the male and female brain different. In general, the research on hormones requires an understanding of how the brain (particularly the hypothalamus) influences and regulates the endocrine system, the system that controls and mediates hormonal influences on our bodies and behavior—understanding the complex relationships among chemistry, biology, and behavior is critical here. Whatever the approach, understanding how hormonal changes influence sexual behavior, and even brain function, has provided a wealth of information about brain-sex relationships.

The second type of research—the use of healthy individuals exposed to sexually relevant information or stimuli—better helps us to understand the brain's role in sexual arousal. This research is typically done in a controlled laboratory setting in which participants are exposed to sexually explicit stimuli, typically photos or video clips, while brain function is assessed. Some research has even had participants masturbate to evaluate brain changes during orgasm. Active brain areas, when compared to base line, or when exposed to other stimuli, are considered to be regions important for sexual arousal or orgasm. Brain activation in such studies can be measured by the electrical activity of neurons (brain cells) with electroencephalogram (EEG) or by the metabolic activity of brain regions with positron emission tomography (PET scan). An advantage of such research is that it provides a noninvasive and ethical view of brain involvement in humans. Moreover, because conditions of the experiment can be manipulated or controlled by the experimenter, it is possible to evaluate brain differences in conditions that share at least some basic similarities with sex, such as the experience of humor or positive emotion. Unfortunately, such research remains relatively rare as it is tremendously difficult to evaluate some aspects of sexuality (e.g., orgasm) in a controlled laboratory setting. Even if sexual arousal can be initiated, perhaps culminating in orgasm, such experiences in a lab are likely to be different than those in real life and may limit the applicability of the findings. A final issue here is that, at least traditionally, the above neuroimaging has been limited in how well it can visualize subcortical brain structures, regions of particular interest for the study of sex (described below), though this has improved in recent years.

The third and final common type of research is the study of changes in sexual functioning or behavior in individuals with brain damage or disease or, less commonly, psychiatric conditions, such as depression or schizophrenia. Ideally, the researcher examines sexual behavior in individuals with damage to specific brain regions and compares them to those with damage to other specific brain regions. Much like the animal studies mentioned above, when damage to an area is related to a decrease in sexual interest or motivation, that area is assumed to be involved in this aspect of sexuality. A variety of patient groups have been studied, including those with traumatic brain injury, stroke, and even Alzheimer's disease. The true challenge of this approach is that naturally occurring brain damage, as opposed to the experimentally placed lesions in animal studies, typically does not occur in only one specific area of the brain, making determination of the role of specific brain areas difficult. Moreover, damage to one area with a tumor or a stroke may also affect other brain areas far from the area of damage as blood flow is altered throughout the brain. A second related approach has evaluated patients treated for psychiatric disorders with psychosurgery, which entails surgical destruction of certain disordered brain regions thought to be causing the psychiatric difficulties. In the past, this approach was used for severe psychiatric difficulties, notably schizophrenia, and is used rarely today. At various times, the destruction or inhibition of brain regions can also be done with medications, an approach sometimes used in the treatment of individuals with severe sexual disorders, such as pedophilic sex offenders. Interpretation of such findings is complicated because there are likely to be complex differences in psychiatric patients involving not only the brain, but also cognition and behavior, that potentially limit our understanding of brain-sex relationships.

In total, what we know about the brain and sexual behavior comes from a variety of research approaches using a wide range of animal and human participants. Rather than competing, it is probably best to see these approaches as complementary—each provides a unique perspective and set of findings for our understanding of the brain's role in sexual behavior, but together, they provide the fullest understanding of brain-sex relationships. Before addressing what we know about such relationships, I briefly outline the main subdivisions and structures of the brain, to guide that discussion, with focus on those areas involved in sexual behavior.

NEUROANATOMY 101 WITH A FOCUS ON SEXUAL BEHAVIOR

I will focus below on the central nervous system, though it is important to note that it is connected with other parts of the nervous system that are responsible for behavior (somatic nervous system) and those responsible for automatic life-sustaining activity, such as heart beat, breathing, food digestion, and salivation (autonomic nervous system). The autonomic nervous system has a

sympathetic division, which is responsible for stimulation or "fight or flight," and the parasympathetic, which is responsible for inhibition or "rest and digest." These systems balance our internal environment and work in opposition to each other; the sympathetic stimulates the heart to beat faster and inhibits digestion, whereas the parasympathetic slows heartbeat and stimulates digestion.

The central nervous system is divided into the brain and the spinal cord. The *spinal cord* is surrounded by the bony spinal column and consists of nerves connecting the brain and the rest of the body, including the muscles, skin, joints, and organs. In this way the brain receives information from the external and internal worlds and then, after processing it, makes decisions, generates emotions, or executes movement. There are also spinal reflexes, such as the knee-jerk reflex, when the leg kicks out after the kneecap is struck, that do not connect with the brain. The *brain* itself has three main subdivisions: the brainstem, the cerebellum, and the cerebrum. The *brain stem* emerges from the top of the spinal cord and hosts numerous structures that, most basically, are important for life-sustaining activities such as the control of breathing, heart rate and blood pressure, and sleep and wake cycles. The *cerebellum* is at the lower back region of the brain and is important for balance and the coordination and regulation of skilled motor movements. Both the brain stem and the cerebellum are typically not under conscious control and tend to function automatically.

Within the *cerebrum*, things become more complex, and it is divided into the *diencephalon* and *cerebral hemispheres*, of which we have two—the right and left hemisphere. The main structures of the diencephalon include the *thalamus* and the *hypothalamus*. A thalamus sits at the top of the brain stem in each hemisphere and is the brain's principal relay station; information from the world is routed through our senses to the thalamus and then to the respective brain areas where more complex processing occurs. Similarly, information from the brain to other body parts is routed through the thalamus. Just in front, and below the thalamus, is the *hypothalamus*, a small structure critical for motivated behaviors such as feeding, drinking, emotion, temperature control, and sex. The desire for any of these needs can be considered to motivate or drive behavior to reach the relevant goal, whether it be a meal when hungry or a mate when sexually aroused. To influence and control these complex behaviors, the hypothalamus sits at the connection of multiple brain regions and integrates emotional (limbic), hormonal (endocrine), and cognitive (cortex) information. In fact, the pituitary gland, considered the body's master gland as it controls the release of hormones, is directly connected to and controlled by the hypothalamus. Examples of hormones, which travel in the bloodstream and influence organs throughout the body, include insulin, which is released by the pancreas to control glucose storage and use; thyroid hormone, released by the thyroid gland to control metabolic rate; and sex hormones, released by the testes or ovaries, that are involved in the development of genitalia and secondary sex characteristics during puberty, as well as later control and

maintenance of sexual behavior. The complex interrelationships among the pituitary gland, various other glands throughout the body, and the level of circulating hormones are controlled by the hypothalamus. We will return to the hypothalamus and the relevant sex hormones a bit later in more detail, as they are particularly important in our understanding of the brain's involvement in sexual behavior.

The two cerebral hemispheres comprise the remainder of the cerebrum. At the highest and most complex level, each can be divided into the four lobes or regions of the *cortex* where complex perception, thinking, language, and control of behavior occur (see Figure 2.1). These lobes, named for the underlying bones, are as follows: *occipital*, responsible for visual processing; *temporal*, responsible for auditory (hearing) processing; *parietal*, responsible for somatosensory processing, such as touch, body position, and pressure; and *frontal*, responsible for inhibition or control of behavior/emotion, planning and execution of movement, motivation, higher-order thinking, and working memory. Because the frontal lobes will be further detailed below, it is important to note that their anterior regions are typically divided into three: orbitofrontal regions are at the base, medial prefrontal are in the middle, and dorsolateral prefrontal are at the sides (see Figure 2.2).

Language, that supreme function of humans, is localized in the left hemisphere in the vast majority of individuals; regions in the left temporal lobe are responsible for the comprehension of language, and regions in left frontal lobe are responsible for the expression of language. Below these cortical areas

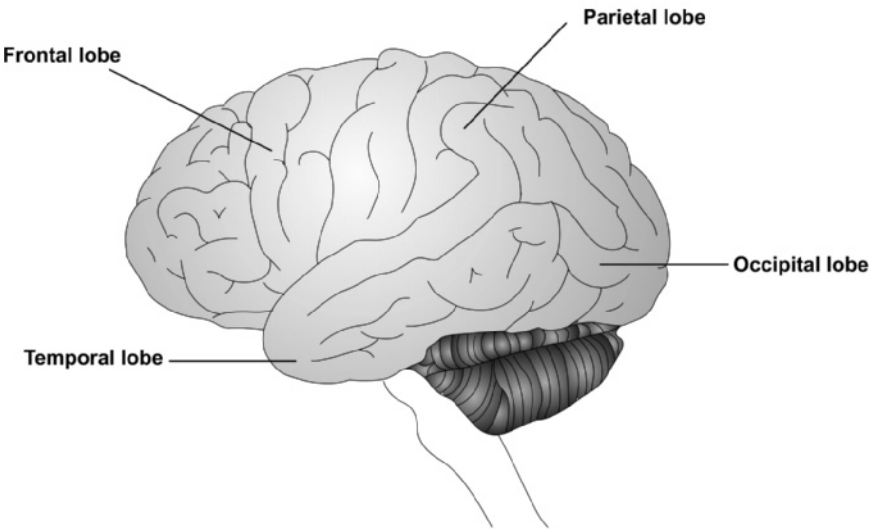

Figure 2.1. The four lobes of the brain, as viewed in the left hemisphere.

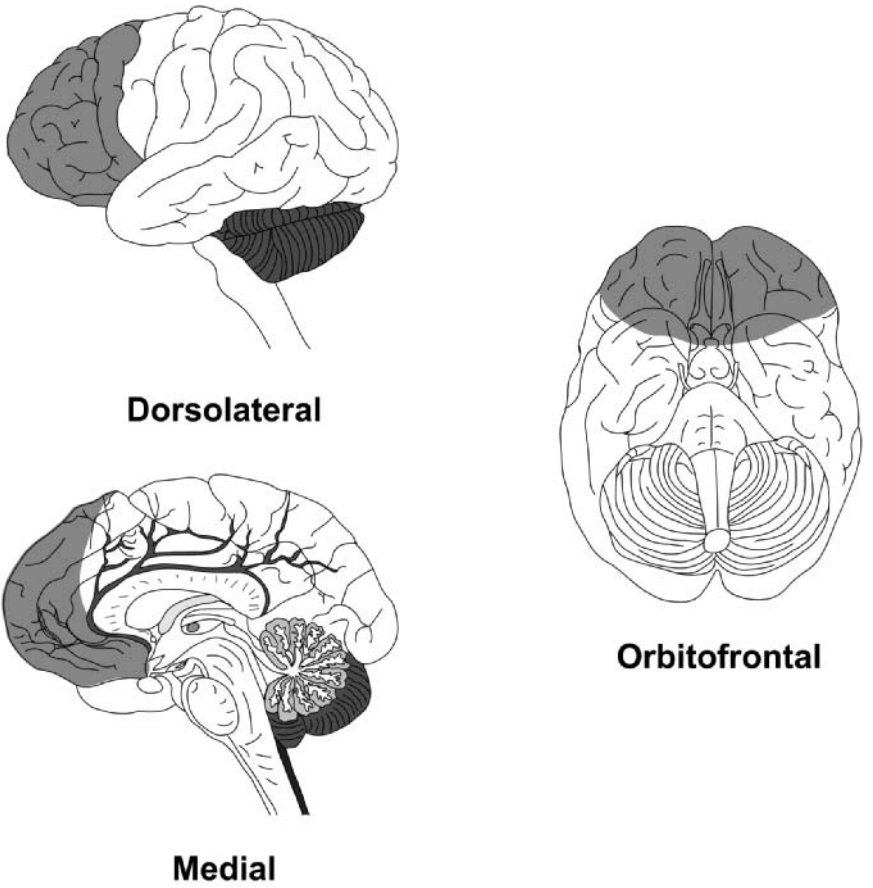

Figure 2.2. Dorsolateral (side), medial (middle), and orbital (bottom) regions of the human cerebral cortex illustrating the three major subdivisions of the prefrontal cortex.

(often termed subcortical), each cerebral hemisphere includes the *basal ganglia*, a set of structures important for the control of movement, and the *limbic system*, several connected brain structures important for, among other things, emotion, memory, and sex. Limbic means "border" in Latin; this system is a horseshoe-shaped rim at the junction of the diencephalon and each cerebral hemisphere. Key structures here include the *hippocampus*, curled into the base of the temporal lobe, responsible for the formation of new memories; and the *amygdala*, which sits just in front of the hippocampus and is involved in certain aspects of sexual and emotional behavior (see Figure 2.3). Other structures of the limbic system include the cingulate gyrus, the septal area, and, as described above, the hypothalamus. We will return to the limbic system, particularly the role of the hypothalamus, below.

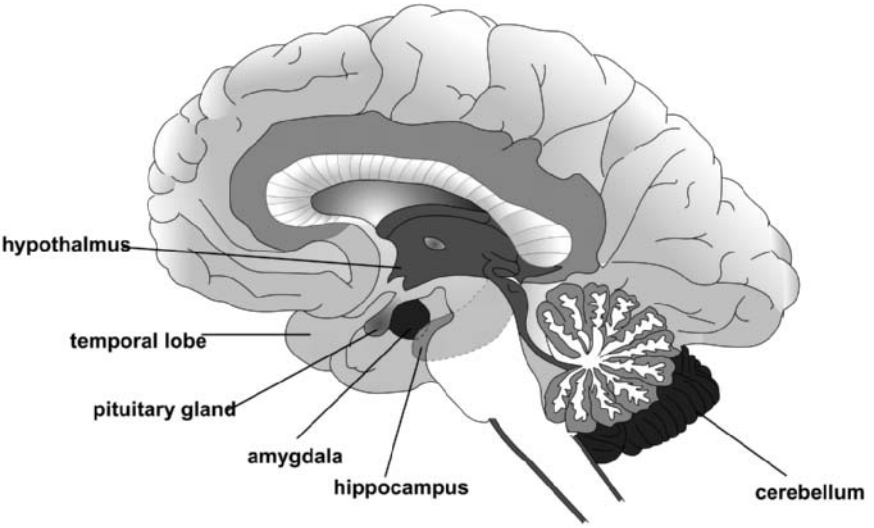

Figure 2.3. Medial view of the right hemisphere illustrating principal subcortical structures including the hippocampus, amygdala, hypothalamus, pituitary gland, and cerebellum.

WHAT DOES THE ANIMAL LITERATURE TELL US ABOUT SEX AND THE BRAIN?

A variety of animal studies have determined that structures within the hypothalamus are critical for sexual behavior (see Figure 2.4). For the male, the specific region appears to be the medial preoptic region (MPOA) of the hypothalamus and possibly surrounding structures as well. When this region is stimulated with a mild electric current, the male engages in copulatory behavior; when the region is damaged with a lesion, such behavior is either reduced or eliminated. While it is relatively clear that this region is important for the actual mechanics of mating, it may not be important for sexual interest or motivation. For instance, in one study, male rats with damage to this area still retained interest in females and sought access to them, despite their inability to mate (Everitt, 1990). Similarly, damaged brain areas in male monkeys have resulted in males that will not mate with females, but may masturbate in view of the females, again suggesting intact sexual interest and motivation. When the MPOA is electrically stimulated in male monkeys, penile erections and mounting occur. Given its clear role in male sexual behavior, it is not surprising that this region is a sexually dimorphic nucleus (i.e., different between the sexes): it is approximately five times larger in the male (Gorski, 1984). The MPOA is also sensitive to testosterone, a male sex hormone or androgen; a male rat castrated in adulthood will cease sexual behavior, but implantation of testosterone in this area reinstates sexual behavior. More

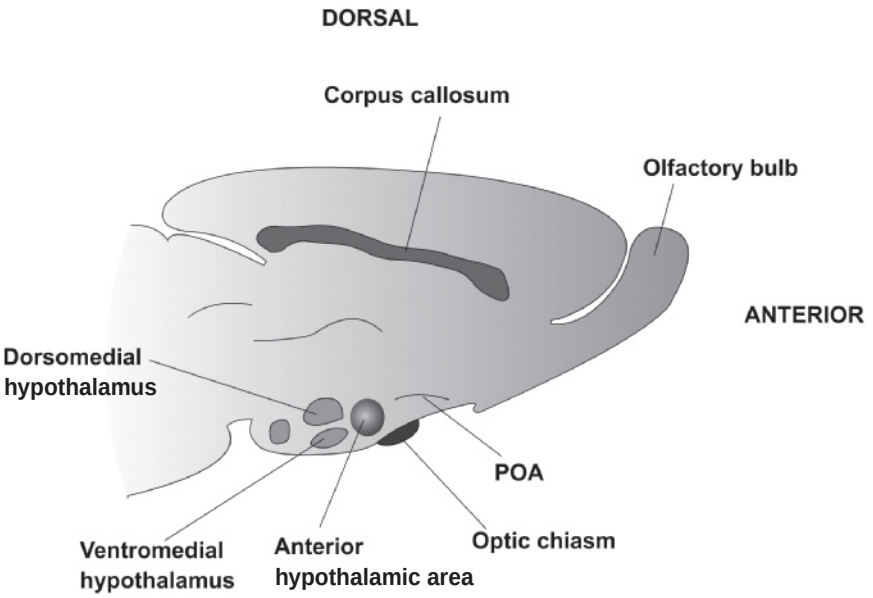

Figure 2.4. A medial view of the male rat brain illustrating the preoptic area (POA), which appears to be particularly important for successful copulation.

broadly, testosterone has been widely demonstrated to be necessary for male sexual behavior, including erections and ejaculations—and even sexual thoughts in humans—in a variety of species.

While the findings described above confirm the importance of the MPOA for male sexual behavior, it is important to be more precise about what this region actually accomplishes. At least as determined from studies on the rat, on which most of the research has been done, it seems important for the integration and organization of multiple sources of information, including that from environmental, physiological, and psychological sources, to copulate (see Nelson, 2000, pp. 199–271). Such information includes, for instance, data about the state of the male's own endocrine system and stimuli associated with the female rat, such as auditory, olfactory, and tactile information about her sexual availability. Without it, the male is unable to generate appropriate sexual behavior and responses in the presence of a receptive mate. Because it serves to integrate such diverse sources of bodily and environmental information, the MPOA is not only critical for sex, but also plays an important role in other motivated behaviors, such as thirst, temperature regulation, and maternal behavior in the female.

In females, the ventromedial hypothalamus (VMN), quite similar in location to the MPOA in males, appears to be critical for mating. In female rats, this region controls lordosis, the characteristic arching of the back and

elevation of the rump while the animal remains still, necessary for copulation. In many animal species, this posture displays females' receptivity for sex and is stereotyped, showing little variability across individuals. Experimental damage to the VMN decreases or abolishes lordosis and other sex-related female behavior (e.g., ear wiggling), whereas electrical stimulation does the opposite. Similar to the males, when certain hormones, in this case estradiol or progesterone, are injected into this area, sexual behavior is activated, even in rats whose ovaries have been removed. The VMN also appears similar to the MPOA in the sense that it serves to integrate multiple sources of information such as that from the motor system, necessary for the characteristic posture of lordosis, and the endocrine system, necessary for the secretion of female sex hormones of estrogen and progesterone that accompany lordosis (see Nelson, 2000, pp. 273–335).

In addition to the findings on the hypothalamus, animal research has also demonstrated the importance of the amygdala—a limbic structure closely connected with the hypothalamus—and the temporal lobes for sexual activity. Another part of the Everitt (1990) study described above lesioned the amygdala rather than the hypothalamus in male rats. These rats did not seek access to females, suggesting decreased sexual motivation, but were capable of mating with females if they were provided. Later when amphetamines that induce the release of the neurotransmitter dopamine were injected into this area, sexual motivation increased. The amygdala, therefore, seems important for sexual motivation and initiation. In a quite different type of study, Kluver and Bucy (1939) removed bilateral (from both cerebral hemispheres) amygdalae and anterior temporal lobes of monkeys and observed a constellation of unique behaviors: tameness and loss of fear, hyperorality (i.e., a tendency to put anything into the mouth whether food or not), visual agnosia (i.e., inability to visually recognize objects), attentional difficulties (i.e., inability to focus on both relevant and irrelevant stimuli), and hypersexuality. In fact, such monkeys demonstrated indiscriminate sexual activity—whether heterosexual, homosexual, autoerotic (masturbation), and sexual activity with inanimate objects, such as chairs. While this research is usually used to highlight the role of the amygdala and related structures in emotion, it is clear that this region is involved in other activities, including sexual behavior. This issue and the potential causes of the increased sexuality will be described below in discussion of individuals who have suffered neurological damage.

WHAT DOES THE RESEARCH ON (MOSTLY) HEALTHY HUMANS TELL US ABOUT SEX AND THE BRAIN?

EEG research has, for the most part, concentrated on cortical involvement in sexual activity and has generally indicated the importance of the right hemisphere. For instance, Cohen, Rosen, and Goldstein (1976) found that

right parietal regions became more activated than left parietal regions in both heterosexual men and women who self-stimulated to orgasm. This asymmetry (i.e., difference between sides of the brain) increased as sexual arousal increased. Another study by Waismann, Fenwick, Wilson, Hewett, and Lumsden (2003) using heterosexual men also found activation in right parietal regions when these men viewed sexually explicit slides. The authors suggested that these findings were obtained because regions of the parietal lobe are responsible for complex aspects of visual processing, such as visual association and pattern recognition. Given the visual nature of the stimuli, these findings would not be surprising. Using a somewhat different approach, Tucker (1983) had a small sample of experienced actors generate either intense feelings of sexual arousal or depression in a laboratory condition. Self-reported sexual arousal was associated with higher right-hemisphere activity. One exception to the above research was a study by Heath (1972), who found increased activity in the septum, a limbic system structure, but none in the right hemisphere, during orgasm in a man and woman undergoing psychiatric treatment. It is unclear how well these findings generalize to other populations because of the severe psychiatric difficulties of the sample. These various EEG studies have now been supplanted by more sophisticated neuroimaging technologies that provide a more detailed analysis of regional brain activation. Simply noting that right hemisphere activity increases during sexual arousal, as has been done in the past, does not provide much specificity nor does it advance our understanding of brain-sex relationships.

The newer generation of neuroimaging studies has provided better neuroanatomical detail of sexual arousal in humans. One well-done and technologically advanced study by Redoute et al. (2000) used PET scans to evaluate cerebral blood flow in heterosexual men presented with sexually explicit (but silent) video clips. This study used a whole-brain scanner that could evaluate specific cortical as well as subcortical brain areas. Specific areas of increased activation, as compared to when neutral video clips were observed, included the following brain regions: limbic system and related structures (anterior cingulate, right frontal orbitofrontal region), parietal lobes, basal ganglia, and the posterior hypothalamus. Areas of deactivation were primarily in the temporal lobes, bilaterally. Karama et al. (2002) used somewhat different technology, functional magnetic resonance imaging (fMRI) analysis of brain activation, during silent video clips of sexual interactions between a man and a woman. These authors found activation in the following brain regions for both sexes: bilateral medial prefrontal, orbitofrontal, insular, and occipitotemporal regions, as well as the amygdala, ventral striatum, and anterior cingulate cortex. Interestingly, hypothalamic activation was observed only in men and was positively correlated with self-reported sexual arousal during the video clips. Males also demonstrated higher levels of self-reported sexual arousal than females. Together, these studies have demonstrated that multiple cortical and subcortical brain regions are involved in sexual arousal; Redoute et al. (2000)

have argued that these areas highlight the cognitive, emotional, motivational, and physiological aspects of sexual arousal. As a caveat, it should be noted that these studies only evaluated arousal and not actual sexual behavior, which might be expected to involve other brain regions as well, particularly those responsible for motor behavior.

Moving from only sexual arousal, Tiihonen et al. (1994) conducted a unique and technically difficult study. They had heterosexual men masturbate to orgasm while being monitored by a PET scan and found increased activation in right prefrontal regions. Blood flow to other brain areas decreased. These authors concluded that this region was important for human male sexuality, particularly its emotional aspects, but not actual genital somatosensory stimulation. In fact, there was no activation in this brain area devoted to processing sensory information from the genitalia, suggesting that orgasm is more than simply the mechanical stimulation of these organs, but rather is a "higher" process mediated by the cortex, including sexually related thoughts, perceptions, memories, and fantasies. While this finding is confined to men and should be considered tentative until replicated, it does accord well with some clinical findings (see below).

Together with the older EEG research, the more recent PET and fMRI findings suggest the importance of the right hemisphere, particularly frontal regions, as well as a variety of limbic regions and structures connected to them for sexual arousal (and, in one study, orgasm). Unfortunately, because much of this research has been done with males, it is unclear how well these findings hold up in women, and one wonders if such patterns of brain activity associated with sexual arousal in a laboratory setting are the same as those experienced in real life. While these are reasonable caveats, research on individuals who have had brain surgery or have suffered neurological damage (described below) confirm these findings and provide an additional method of studying brain-sex relations.

WHAT DOES RESEARCH ON BRAIN-DAMAGED INDIVIDUALS TELL US ABOUT SEX AND THE BRAIN?

Though now relatively rare, previous research done on individuals who have had psychosurgery as a psychiatric treatment sheds light on brain-sex relationships. Probably the most well-known and, until recently, frequent psychosurgery was frontal lobotomy, in which regions of the frontal lobe are damaged, thus disrupting connections between frontal and subcortical regions thought to be disordered in psychiatric illness. These were done in wide numbers in the mid-1900s on individuals with severe psychiatric disorders such as schizophrenia. Walter Freeman (1973), who was the main proponent of this surgery in the United States, followed individuals after their surgeries for many years and concluded that frontal lobotomy tends to be followed by an increase in libido, at least in the short term. For instance, he described a single

man with "religious obsessions" who had not had intercourse for twenty years prior to the surgery, but postsurgery commented on the "increased pleasure" he experienced with sex as he apparently sought out prostitutes. Freeman also described one woman who continued to live with her husband, but had many (fifty!) extramarital sexual relationships. In a classic case study, Ackerly (1964) described J. P., a patient born without a right frontal lobe and with only approximately 50 percent of his left frontal lobe. When he was in school his behavior was odd—at times he was seemingly polite and well-mannered, but at other times he would behave in a socially unacceptable fashion. For instance, he would excessively boast about accomplishments, steal things, wander about, expose himself, and masturbate in public. He was of normal intelligence and did not show remorse for such behavior. By the time he was an adult, he had been arrested for automobile theft, at which time the frontal lobe damage was identified. Similar hypersexuality can also occur in humans who have suffered Kluver-Bucy syndrome, which is relatively rare in complete form, as initially observed in monkeys after removal of the temporal lobes. In one case (Shraberg & Weisberg, 1978), a 23-year-old woman displayed the classic elements of this syndrome following a stroke after childbirth. For our purposes, most relevant was her hypersexuality—she would throw off her hospital gown and then writhe and gyrate her hips to simulate intercourse. This behavior often occurred when hospital staff was present; after approximately two months of hospitalization, it ceased. EEG analysis of this woman's brain revealed abnormalities in the right hemisphere, particularly in the parietal regions and the junction between the parietal and temporal lobes. In addition to the above disorders, poor control over sexual impulses and desires has been observed in many neurological conditions, including dementia and traumatic brain injury, which can obviously be a management and treatment challenge.

Briefly, in one of the few group studies on the topic, Sandel, Williams, Dellapietra, and Derogatis (1996) examined sexual functioning in a group of individuals several years after traumatic brain injury. Though as a group no major differences in sexual functioning were found compared to normative data, individuals with either a damaged right hemisphere or frontal lobe experienced increased sexual functioning on certain variables. Frontal lobe damaged individuals reported more sexual cognitions or thoughts and fantasies, whereas right hemisphere damaged individuals reported higher sexual arousal and more sexual experiences.

What do the above case studies and the research study on sexual impulsivity teach us about the brain-sex relationship? These abnormal increases in sexual interest and activity are likely due to the diminishment of the customary inhibiting effect of cortical structures, primarily frontal and anterior temporal lobes on subcortical brain structures. More precisely, the frontal lobes serve to inhibit or constrain these structures and, when they can no longer do so, the relative influence of these regions is magnified. Because these regions are involved in motivated behavior, such as sex and emotion, when they are damaged these

behaviors emerge as poorly controlled, impulsive, and often socially unacceptable. These may be sexual, as described above, or emotional, as individuals with frontal damage also tend to control and regulate their emotional state poorly. Because of this and other cognitive and behavioral deficits in frontal lobe disorder (see above), it is not surprising that individuals with such damage tend to have difficulty in managing responsibilities, including those at work, home, and school.

Two other very different areas of research on individuals with damaged central nervous systems are relevant for our discussion of the brain and sex. Though considered unethical today, in the past, neurosurgery had been used as a method to reduce or control what was considered deviant sexual behavior. In Germany, Dieckmann, Schneider-Jonietz, and Schneider (1988) lesioned the hypothalamus in fourteen individuals with "aggressive sexual delinquency" that had "resulted in great disorder in their way of life." Though the type of individuals the surgery was performed on was not specifically mentioned here, similar research has been done on rapists and pedophiles. When they followed up eight of the fourteen patients one year postsurgery, all had reported decreased sexual compulsion, and seven of eight reported decreased sexual initiative. All or most reported improvement in their relationship with their partner, as well as in their behavior at home or school. In none of the patients was the fundamental character of sexual interest changed (e.g., a pedophile remained a pedophile), but self-reported sexual motivation and arousal diminished. Though well-done and large-scale studies have not been conducted on this topic, this study and related research supports the animal research that has indicated the important role of the hypothalamus in sexual interest and arousal. Moreover, this research suggests that because the cortex is not affected, individuals' thinking about and perception of the sexually alluring, whether considered legal and/or socially appropriate or not, does not appear to change.

A related area of research, again not widely used today, though advocated by some, is the administration of pharmacological agents, particularly anti-androgen medications, to reduce levels of testosterone in male sex-offenders (see Bradford, 1997, for review of this issue). These interventions have typically only been used with the most severe offenders such as rapists, pedophiles, and sexual sadists. Anti-androgens, particularly cyproterone acetate and medroxyprogesterone acetate (Depo Provera), which is the most frequently used in the United States, reduce the sensitivity of androgen receptors in key brain areas, such as the anterior hypothalamus, other limbic system structures, and the spinal cord and the penis. Such interventions have been known as "chemical castrations" and can be contrasted with surgical castrations (i.e., removal of the testes) that are no longer done today. Though research in this area has again typically not been well conducted, and long-term outcomes of such an approach are not well established, the medications have most commonly been shown to reduce self-reported sexual arousal, fantasy, behavior, as well as libido and erections in some male sex-offenders. Case studies or small-group studies

have also been reported in which the sexual behavior ceased or was reduced or eliminated in male sex-offenders (see Grossman, Martis, & Fichtner, 1999). While chemical castration is legal in some states in the United States, there have been numerous legal challenges to this practice, including that it violates constitutional guarantees, including the right to privacy, equal protection, and the prohibition against cruel and unusual punishment (Miller, 1998). Partly as a result of this, and of the reluctance of some in the medical field to fully participate in such experiments, these approaches remain controversial and are not as widely used or advocated today as they have been in the past. Nevertheless, such findings highlight the important role of androgens in male sexual behavior.

The second and a quite different area of research, the sexual behavior and responsivity of spinal cord damaged patients, provides a somewhat different perspective on sex and behavior. While there is significant variability in location of injury on the spinal cord as well as the resulting sexual behavior, an interesting finding to emerge from this area is that individuals with complete severing of the spinal cord who are quadriplegic can still respond sexually. For instance, with genital stimulation of the penis, males are able to achieve erections and ejaculate, though they typically do not experience orgasm, as the sensory information necessary for this to occur from the penis and genitalia does not reach the brain because of the spinal injury. These men are also typically not able to achieve erection by simply thinking about or fantasizing about sex. Similar findings about the capacity of spinal cord damaged animals to achieve erections and to ejaculate have been observed. In a related case, a young man who was brain-damaged and in a coma was mechanically stimulated to ejaculate so that his wife could be artificially inseminated (Townsend, Richard, & Witt, 1996). Findings in women are a bit more complex, but it also appears that sexual arousal and stimulation are more common than orgasm in women with a variety of spinal cord injuries (Sipski, 2002). Together, these findings indicate that certain reflexive aspects of sexual behavior can be achieved without direct brain involvement and, traditionally, have been conceived of as spinal reflexes. Such reflexes are due to the connection of the external genitalia with the spinal cord and do not require higher-up cortical processing. Before moving on from this issue, it is important to note that while these reflexes may be retained after injury, sexual interest, arousal, and motivation typically decline post–spinal cord injury, which would be expected given the many physical, psychological, and medical challenges these individuals face. For instance, even assuming all aspects of sexuality were functioning normally, the motoric difficulties of an individual with quadriplegia would certainly make sexual activity challenging.

CONCLUSIONS AND CONTEXT

Like all motivated behavior, such as feeding and aggression, sexual behavior is enormously complex and involves multiple body systems, but

particularly the central nervous, endocrine, and reproductive systems. This chapter has reviewed the role of the first two of these in sexual behavior. The various literatures detailed above point to the importance of multiple brain regions, particularly one subcortical structure, the hypothalamus, as well as cortical regions in the right hemisphere, particularly frontal regions. In fact, the hypothalamus has been long known to be critical in all types of motivated behavior, which reflects its unique location within the brain. The hypothalamus sits immediately above, and is directly connected with, the pituitary gland, the body's master gland that has considerable control over the production and distribution of hormones, including those responsible for sexual behavior. It also has close connections with the autonomic nervous system, which has excitatory and inhibitory functions over automatic activities, such as heart beat, breathing, and digestion, and the brain stem, all regions that are recruited in sexual behavior. Higher-up cortical regions of the brain provide the cognitive aspects of sexuality, including sexual thoughts, memories, fantasies, and imagination. Moreover, they provide some control or inhibition of sexual behavior—individuals with damaged frontal regions, particularly in the right hemisphere, demonstrate difficulties with socially appropriate displays of sexual behavior. So without these higher structures our sex lives would certainly be poorer and more poorly regulated, though some of the more physiological and reflexive aspects of sexual behavior may be retained, as they are in individuals with spinal cord injury. Taken together, sexual arousal and behavior is dependent on both the functioning and integration of cortical and subcortical brain regions. This final statement is true for other motivated behaviors too, like feeding, in which there is a strong physiological component, as reflected in decreased blood glucose that interacts with our thoughts, expectations, and even past experience about food to influence the initiation of eating. Similar processes affect the termination of eating.

In closing, one caveat should be kept in mind as the brain-based issues involved in sex are considered. Sole focus on the brain, despite its obvious importance in sexual behavior, is not sufficient. The influence of other factors needs consideration, particularly environmental issues including family, religious, and societal influences, as well as the individual's genetic endowment and previous sexual experience. Many of the other chapters in this volume address these issues. While the brain is key—it is the place where it "really happens"—the influence of these other factors needs to be incorporated for us to more fully understand the complexity of sexual interest, arousal, and behavior.

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3

The Psychobiology of Sexual Arousal and Response: Physical and Psychological Factors That Control Our Sexual Response

David L. Rowland

INTRODUCTION AND OVERVIEW

The ease with which most people experience sexual arousal and response belies the complex integration of physiological, psychological, relationship, and cultural factors underlying it. Research over the past decade has revealed much of this complexity, yet, even now, our understanding of sexual arousal and response remains very incomplete. In fact, many of our insights about normal sexual arousal and performance have resulted from the study of disturbances in the system. Such situations provide strong motivation for us to analyze the system in order to understand and remediate the problem. In doing so, we discover that, despite its critical role in so basic a function as procreation, sexual arousal and response requires a great deal of integration at all levels of the organism.

In this chapter, we discuss the process of sexual arousal and response, including:

- *Models* of sexual arousal and response, reviewed briefly in order to provide a foundation for understanding sexual behavior.
- *Physiological mechanisms,* including (1) sensory systems that respond to both internal and external stimuli (e.g., sight of an attractive person; the smell of someone's cologne); (2) central neural mechanisms that underlie sexual arousal and guide the organism toward behavior (e.g., activity in areas of the spine and

brain); and (3) peripheral response systems that prepare the person for sexual activity (e.g., vaginal lubrication, erection of the penis).

- *Psychological processes,* such as attention, thoughts, and feelings, which provide the link between erotic stimulation and sexual arousal.

CONCEPTUALIZATION OF SEXUAL AROUSAL AND RESPONSE

Various models of sexual arousal and response have been proposed over the past century. Some, for example, take a clinical or medical orientation toward sexual arousal and response, others, an experimental or research orientation that emphasizes the psychophysiological and cognitive-behavioral elements of sexual response.

General Models for Sexual Response

The seed for the modern conceptualization of sexual response was planted by Masters and Johnson (1966) whose "sexual response cycle" attempted to provide descriptive labels for the sequence of physiological (mainly genital) events occurring during sexual arousal and orgasm. The sequential phases of *sexual excitement, plateau, orgasm,* and *resolution* corresponded to specific genital changes beginning with increased blood flow to the genitalia, on to the muscular contractions of orgasm, and finally to the period of deactivation following climax. The model's strong focus on genital response (Rosen & Beck, 1988) and the semantic problem of using discrete verbal labels (Robinson, 1976) for a physiologically continuous process were its significant limitations.

Kaplan's (1974) model of sexual response incorporated three components: *desire, excitement*, and *orgasm*, essentially compressing Masters and Johnson's physiological phases into two components, excitement and orgasm. More importantly, desire, a psychological construct closely connected to motivation, was added to account for differences in the frequency and intensity of sexual activity among individuals. This triphasic model has strong clinical appeal since its components coincide with the types of problems often encountered by the clinician. Specifically, individuals with sexual problems may lack an interest or desire for sex, may not be able to become sexually excited (e.g., get an erection or show vaginal lubrication), or may indicate a problem with orgasm (e.g., too soon in men, or not at all in men and women). Indeed, Kaplan's approach to describing sexual response has been incorporated into diagnostic manuals for classifying sexual dysfunctions (*Diagnostic and Statistical Manual of Mental Disorders*, American Psychiatric Association, 2000). Like Masters and Johnson's model, Kaplan's was primarily descriptive, viewing sexual response as a set of interrelated components, with each component comprising a requisite step for the next. This triphasic model not only recognized separate physiological and

psychological aspects for each component, but it also pointed out the interdependence among the response components. For example, problems with orgasm could result from insufficient arousal; or problems with arousal might actually be seated in the desire phase.

Since these initial conceptualizations, a number of alterations or alternative models have been proposed. For example, a distinction between spontaneous desire (libido) and stimulus-driven desire (arousability) has been suggested. Whereas the former seems more typical of men, the latter is more descriptive of women, a difference that may have evolutionary, physiological, and clinical significance (Basson, 2002; Levin, 2002, in press; Tiefer, 1991). Regarding the evolutionary perspective, males' success at producing offspring is largely tied to their willingness and ability to compete for females—hence a high level of biologically mediated sexual drive increases the likelihood of participating and succeeding in the competition. Because mammalian females expend greater effort than males toward the offspring (gestation, lactation, etc.), their success depends more heavily on choosing males with the "right" set of credentials or qualities. As a result, females will be more discriminating in their choice of males than vice versa, and this discrimination (and subsequent interest) will be driven largely by external (physical and behavioral) cues provided by the potential mate (Daly & Wilson, 1978). Such differences in reproductive strategies would be supported by physiological infrastructure (e.g., gonadal, endocrinal, sensory-perceptual, and emotional differences) between the sexes.

Most would agree that this sharpening of the conceptualization of desire is both warranted and overdue. Not only do the above distinctions fit well with many men's and women's reports of their own experiences of arousability, but they also recognize the importance of both internally and externally mediated stimuli essential for sexual interest and arousal. They also appear consistent with the kinds of problems that often surface in sexual dysfunction clinics. In addition, this reconceptualization provides greater linkage of desire with arousal, as for most women and many men, the stimuli that generate interest in becoming aroused (sexual interest) are the same as those that elicit arousal itself (e.g., behaviors and sight of the partner). Finally, this reconceptualization is important from a clinical perspective, as it formally incorporates an idea that has long been known to clinicians in the treatment of sexual problems, namely the importance of taking a systemic approach that includes physiological, psychological, and relationship factors toward understanding sexual response and its disorders.

Given the previous comment, it is not surprising that increasing emphasis has been placed on the role of the dyadic (i.e., a couple's) relationship in understanding (and treating) sexual response (Schnarch, 1988, 1991). According to the systemic or "biopsychosocial" model, sexual response is the culmination of three interacting domains. (1) The biological—the physiological mechanisms that prepare and enable genital response. (2) The psychological—the

affective and cognitive predispositions and interpretations that lead to and sustain the response. And (3) the relational—the dyadic interactions that promote intimacy, meaning, and mutually satisfying outcomes in sex. Consideration of functioning within each domain is important to understanding overall sexual response. Not only can functioning within one domain affect that of another (i.e. negative feelings toward a sexual partner or situation may inhibit sexual interest and arousal) but factors within domains may interact with each other as well. For example, the experience of past sexual failures (e.g., inability to reach orgasm) may result in a negative predisposition toward future sexual interactions. Relevant to this approach, there is evidence that women are more likely than men to engage in sexual behaviors even when they do not find them to be sexually arousing (Geer & Broussard, 1990), suggesting a stronger role for sociocultural factors (e.g., pleasing one's partner) in determining their sexual behavior.

Focus on Sexual Arousal

While the above models are particularly useful for clinical analysis, they are primarily descriptive in nature and often provide little or no insight into the kinds of factors that might actually impact sexual arousal and response. As a result, some theorists have restricted their focus to the *arousal* or excitement component of sexual response, at the same time attempting to specify both direction and magnitude of effects of each of the domains (physiological, psychological, relational) on sexual response (subjective arousal as well as genital response). These models are often diagrammed with many boxes or circles (each representing a different domain of influence) and connecting arrows, suggesting bidirectional and interactive relationships that sometimes seem to bear little resemblance to the sexual problems brought to the clinician and much less to the personal experience of sexual arousal. Yet, while they lack the simplicity of descriptive models, they are important to researchers and clinicians in that they identify factors likely to influence each of the components of the sexual response cycle—desire, arousal, and orgasm—and suggest ways in which they themselves are likely to influence one another. In this respect, these detailed models are far more comprehensive, suggesting causal, correlated, and hierarchical relationships among factors. They also carry greater heuristic value (in that they suggest where to look for factors that cause variation in responses) than the rather simple models used for clinical categorization and diagnosis.

Because models of sexual arousal have typically emerged from the psychological and behavioral sciences (rather than the biomedical or clinical sciences), it is not surprising that one major element tying them together is their greater attention to the role played by informational, affective-emotional, and attitudinal factors. Byrne, for example (Byrne & Kelley, 1986; Fisher, Byrne, White, & Kelley, 1988), offers a model of sexual response based on the classic S-O-R (stimulus-organism-response) paradigm. Here, both innate and

learned stimuli (the "S" in the model) operate on a number of brain-mediating processes (the "O" in the model) including those representing memories and images, beliefs and expectations, and emotions and subjective perceptions. These systems guide physiological responses and sexual activity (the "R" in the model). The end responses and activities are themselves evaluated and fed back to influence future sexual situations, leading people to exhibit differences on the "O" and "R" dimensions. Those people whose experiences, beliefs, and emotions are likely to lead them to seek out and respond to sexual interactions are categorized as *erotophilic*, while those who are likely to shun or avoid sexual interactions are categorized as *erotophobic*.

A model of male sexual arousal similar to Byrne's has been advanced by Barlow (1986; Cranston-Cuebas & Barlow, 1990), who has differentiated the response of sexually functional men from that of dysfunctional men mainly based on their cognitive (or thought) processing and attention. Thus, men who successfully become aroused to sexual stimuli do so because their thought processing is more "task-relevant." In contrast, men with erectile problems too often focus on "task-irrelevant" processing such as worrying about performance, trying to meet unrealistic expectations, or monitoring of their own response instead of attending to the erotic cues from the partner. This task-irrelevant processing interferes with arousal and sexual response.

The recently proposed "dual control" theory (Janssen & Bancroft, in press) represents an attempt to unify some of the above concepts into a single model. This model assumes that the weighing of excitatory and inhibitory processes determines whether or not sexual arousal or response occurs within an individual in a given situation. Although based primarily on data from men, the model empirically distinguishes between inhibitory factors due to the threat of performance failure (e.g., not getting an erection, ejaculating too early, and so on) and those due to the threat of performance consequences (e.g., the threat of a venereal disease, unwanted pregnancy, getting caught, etc.). These inhibitory factors are useful in predicting erection problems in men as well as their propensity toward sexual risk-taking behaviors (e.g., unprotected sex).

Synthesis of Models

Because various models differ in their focus or utility, some are frequently cited by clinicians, others by researchers. No single model can adequately serve all the needs within the field of sexology. Clearly, a good understanding of sexual arousal incorporates important aspects of a number of the models.

- First, a constellation of psychological (thoughts, attitudes, beliefs, emotions), relationship, and cultural factors influences and guides individuals to seek or shun sexual interactions.

- Second, certain preconditions are necessary for sexual response to occur, including the appropriate external stimuli (partner, sexual situation, etc.) and internal conditions (endocrine, neurophysiological pathways, etc.). These internal conditions are mediated through both psychological and physiological pathways and contribute to the ability to respond to psychosexual stimuli and thus experience sexual arousal.
- Third, sexual response itself consists of a progression of responses, beginning with sexual arousal, which has both a central (brain) component and a peripheral (autonomic/genital) component. The subsequent behavioral response (a sexual act) is maintained through ongoing psychological and peripheral physiological processes, which, through feedback mechanisms, may culminate in orgasm and resolution.
- Finally, the positive experiences associated with sexual arousal and response often reinforce and increase feelings of passion and intimacy between the couple, strengthening the partners' sexual bond. These, together with a sense of commitment, typically contribute to the satisfaction, longevity, and success of long-term relationships (Sternberg & Barnes, 1988).

PHYSIOLOGY OF SEXUAL AROUSAL AND RESPONSE: GENERAL FRAMEWORK

Physiological systems are involved in sexual response in three ways:

1. Physiological *input* systems ensure sexual readiness (arousability) or induce sexual arousal itself. These systems may show seasonal or circadian fluctuations, they may convey information about general environmental conditions or context (is it the right time, the right place, the right mate?), or they may transmit specific sensory stimulation from a potential mate. In humans, where there are few rigid biological constraints regarding sexuality, the roles of these systems are typically subtle and vary substantially across genders or from one individual to another. However, sensory neural pathways that transmit visual (e.g., sight of an attractive partner) and tactile (e.g., stroking of the genitals) information to the brain might fall into this category, as would endocrine factors that prime the organism for sexual action.
2. Spinal and brain systems mediate sexual arousal and feelings. Presumably, input systems produce alterations in neural activity in specific brain regions that, in turn, induce a state of central activation and arousal. While there is substantial evidence from the animal literature, in humans, the relevant mechanisms and brain systems are only now being clarified through PET and MRI studies.
3. Finally, physiological *response* systems are involved in the internal (autonomic) and external (somatic) responses necessary for preparing and maintaining the organism's body, including the sex organs, for sexual behavior. These changes have been documented quite extensively in humans, although the relevant

neuroanatomical structures and biochemical mechanisms that mediate these responses are not always well understood.

PHYSIOLOGICAL INPUT MECHANISMS THAT PREPARE THE INDIVIDUAL FOR SEX

Many physiological systems are responsible for maintaining the organism in a "motivated" (arousable) state and for mediating sensory information that induces sexual arousal. Many species, for example, require specific photoperiodic (day-night rhythms) stimulation related to seasonal cycles and/or ambient temperature conditions for seasonal development of the gonads. The gonads—ovaries in the female, testes in the male—must be active and producing hormones (e.g., estrogen in the female, testosterone in the male) for successful reproduction in all mammalian species. Furthermore, olfactory, visual, auditory, and tactile cues from a potential mate often serve as "releasers" of sexual response in many birds and mammals. In humans, the sexual meaning of most cues often results from subtle conditioning and socialization processes—processes about which most people (and scientists) are not fully aware. Furthermore, these processes are undoubtedly both complex and idiosyncratic (peculiar to each individual) and therefore defy easy investigation.

Nevertheless, some types of stimulation appear to be universally interpreted as sexual (e.g., tactile stimulation of the genitals), and therefore the physiological systems underlying them are likely to play an important role in sexual response. In both men and women, for example, stimulation of certain areas of the body (genitals, nipples) is interpreted as being erotic/sexual and therefore is reliably arousing (Barbach, 1974; Rowland & Slob, 1992). In addition, the sight and smell of the partner's (or another individual's) body may be arousing, although the nature and explicitness of effective stimulation appears to differentiate the sexes, a point discussed later. In most instances, however, the erotic nature of the stimulation is also defined by the context in which it occurs. For example, genital touching by one's sexual partner in the bedroom may be highly erotic whereas similar touching by a physician as part of a physical examination may be neither pleasant nor arousing.

Not only must the organism receive arousing stimulation, but it must also be in an *arousable* state. Variation in arousability in humans has typically been attributed more to psychosocial than biological factors. Nevertheless, in most mammals, arousability is largely under the control of the *gonadal hormones* (see Baum, 1992; Carter, 1992b; Pfaus, Kippin, & Coria-Avila, 2003, for reviews). These hormones, produced by the ovaries in the female and testes in the male, are secreted in response to stimulation from the brain via the pituitary gland and its gonadotropic hormones. In postpubescent females, the secretion of gonadal hormones is sequential, with estrogen dominating during the first half of the menstrual cycle and progesterone during the second half. In males, the

picture is simpler. Secretion of pituitary gonadotropins is tonic rather than cyclic, and as a result, the production and secretion of androgens is fairly constant over long periods of time. Of the various androgens, testosterone exerts the greatest effect on the central nervous system and has been implicated most in sexual arousal and behavior.

In many nonhuman mammals, the relationship between gonadal hormones and sexual arousal is well understood. In males, circulating androgens cross the blood-brain barrier and act (probably after conversion to estrogen) upon hypothalamic, and other brain, structures to maintain the organism in a sexually prepared state. Without these hormones, sexually experienced males of some species show little or no interest in sexual behavior in the presence of a receptive female. In the nonhuman female, estrogen and progesterone serve essentially the same function as androgen in the male. This state of easy arousability controlled by the sex hormones in nonhumans is typically referred to as the "motivational" component of sexual response.

The human counterpart of motivation—libido or desire—is not controlled by gonadal hormones but may be influenced by them. Specifically, testicular hormones (particularly testosterone) contribute to a man's interest in sex: the removal of these hormones is associated with diminished interest in, and desire for, sex (see Bancroft, 1989; Carter, 1992a) whereas their reinstatement increases nocturnal erections, spontaneous sexual thoughts, and sexual desire. In this respect, testosterone appears to have much the same impact on both human and nonhuman males in that it underlies sexual interest. Yet, there is at least one important distinction between men and nonhuman males. Men with insufficient testosterone are quite capable of becoming sexually aroused in response to erotic visual stimulation (Davidson & Myers, 1988), suggesting some independence between sexual arousal and testosterone-mediated interest in sex. In other words, a lack of testosterone does not render a man "nonarousable" or impotent as is seen in most nonhuman males. Such men may rely more heavily on conditioned (erotic) stimuli than on an internally mediated (hormonal) state to trigger arousal. Furthermore, an important caveat should be noted. Because testosterone appears to contribute to feelings of sexual interest in men, one should not construe that an apparent lack of sexual interest in men can necessarily be traced to a lack of testosterone. Many psychological and relationship factors may explain a lack of sexual desire, including the perceived level of attractiveness of the partner, feelings of resentment and hostility toward the partner, attempts to exert control over the relationship, and difficulty of dealing with one's own or a partner's sexual dysfunction.

Whereas gonadal hormones appear to play a significant role in male sexual response, their role in human female sexual response remains unclear. In most female primates (apes, monkeys, humans), ovarian hormones influence, but do not control, the expression of sexual behavior. Furthermore, female primates may engage in sexual behavior even when gonadal hormones are minimal. In women,

attempts to correlate desire, arousability, and arousal (measured through self-report and/or genital response measures) with different phases of the menstrual cycle, at points when different hormones dominate, have met with only partial success (see Davidson & Myers, 1988; Meuwissen & Over, 1992).

Interestingly, in women, sexual arousal may be associated with the presence of both estrogens (Cutler, Garcia, & McCoy, 1987; Grio, Cellura, Porpiglia, Geranio, & Piacentino, 1999) and androgens (Davis 1998, 2001; Sarrel, 1999). Recent thinking on the topic suggests that estrogens and androgens work together to enhance sexual arousal and response in the female (Wallen, 2001). Specifically, with respect to estrogen, a number of studies report higher libido in women during follicular (early in the cycle) and ovulatory (midcycle) phases of the menstrual cycle (Dennerstein et al., 1994; Wilcox et al., 2004) than during the luteal (late in the cycle) phase. With respect to androgens, which are secreted by both the ovaries and adrenal glands in women, deficiency at any age typically leads to complaints of loss of sexual function (Davis, 2001; Sarrel, 1999). Furthermore, in naturally and surgically menopausal women, administration of estrogen plus small amounts of testosterone provides greater improvement in psychological (e.g., lack of concentration, depression, and fatigue) and sexual symptoms (e.g., libido, sexual arousal, and ability to have an orgasm) than estrogen alone (Davis, 1998; Sherwin, Gelfand, & Brender, 1985). However, probably much more so than men, variability in sexual interest in women is likely to be contextual and partner-based, and as such, is less dependent on internally regulated biological endocrine systems.

While the specific mechanism through which gonadal hormones might facilitate sexual arousal in men and women is unknown, the effects are probably occurring at multiple levels. For example, these hormones may prime structures in the brain, thereby lowering the threshold to activation in the presence of sexually relevant stimuli. They may, however, also work on spinal and peripheral neural systems. For example, prepubescent males may experience genital stimulation as pleasant, but they seldom experience it as erotic. The rise of gonadal hormones during and after puberty may well be responsible for "eroticizing" certain types of sensory stimulation—perhaps by transforming ordinary somatic sensory stimulation (such as genital touching) into *autonomic* information. Autonomic activation is generally associated with emotional responding and is necessary for feelings of excitement and arousal (Motofei & Rowland, 2004, in press).

CENTRAL MECHANISMS OF SEXUAL MOTIVATION AND AROUSAL

Although models of human sexuality often distinguish among the desire, cognitive-emotional, arousal, and response aspects of sexuality, such distinctions become blurred at the level of the central nervous system and brain. For

example, a physiological substrate in the brain for "desire" may be nonexistent. Desire might simply entail a state of high sensitivity (low threshold) in the pathways involved in arousal.

Even in relatively simple animal models of sexual behavior (e.g., rat), the interaction of a number of structures is essential for sexual response, as sensory, information-processing, motivational, and motor (movement) elements of sexual response are integrated to generate a "purposeful" action. Furthermore, the activity within these structures may themselves be under the influence of multiple internal and external modulators. For example, many of the structures known to be involved in the control of sexual arousal and behavior are also sensitive to the presence of circulating steroid (gonadal and adrenal) hormones (Pfaff & Schwartz-Giblin, 1988). Specifically, hormone-sensitive cells have been found in the medial preoptic area and parts of the hypothalamus (areas generally associated with biological motivation), extrahypothalamic limbic areas such as the hippocampus (areas generally associated with emotion, memory, and arousal), and in several midbrain structures (areas associated with reward) (see Figure 3.1).

In males of many species, several neural structures, particularly the medial preoptic area (MPOA) and other forebrain limbic areas, appear to play a central role in mediating sexual responses. This center may be responsible for translating sensory input into appropriate behavioral output (Baum, 1992; Pfaus et al., 2003; Sachs & Meisel, 1988). This structure does not operate in isolation but receives input about the organism's arousal state from the amygdala (part of the limbic system) and about the external environment (who, what, when, where, etc.) via cortical structures. Steroid hormones such as testosterone can modulate the activity of the MPOA, as can input from the other brain areas.

The preoptic area is also involved in the regulation of sexual behavior in the female, but its role is inhibitory—MPOA activation inhibits sexual receptivity. The primary brain structure responsible for activating sexual behavior in the female appears to be the ventromedial nucleus (VMN) of the hypothalamus. Removal of this area interferes with sexual response in the female and reduces the tendency of the female to approach the male (Clark, Pfeifle, & Edwards, 1981). It is not clear whether the VMN is involved in the motivational or consummatory (i.e., response-executing) components (or both) of sexual response. However, as with the MPOA in the male, the VMN may act to facilitate sexual response in the female by increasing the connection between sexual sensory stimuli and autonomic/behavioral output. This effect might be achieved by raising the aversion threshold to mounting by the male (thereby increasing receptiveness to the stimulation), or by activating the sympathetic nervous system in preparation for both precopulatory behaviors such as soliciting by the female and copulation itself (Pfaff & Schwartz-Giblin, 1988).

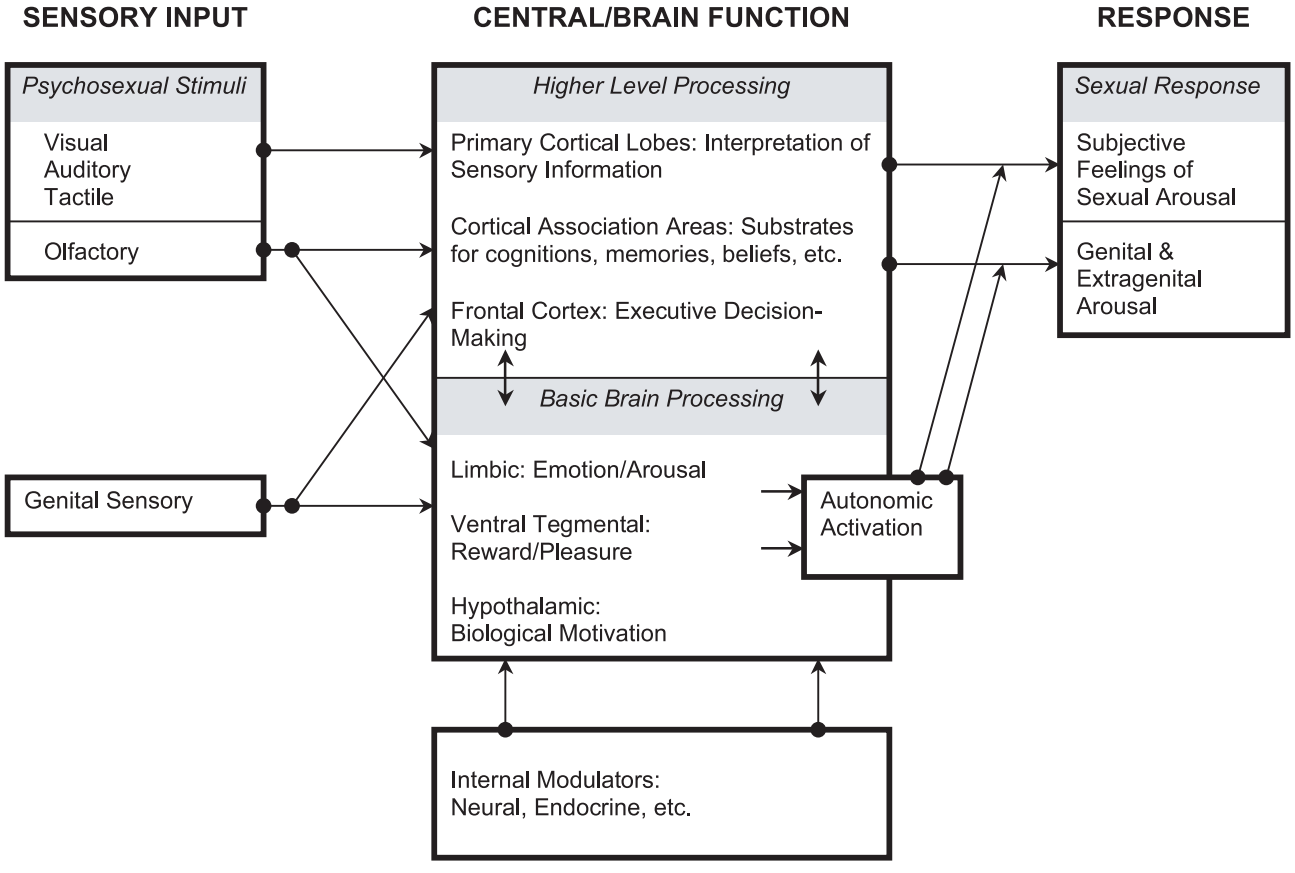

Figure 3.1. Psychobiological components of sexual arousal and response.

The extent to which the preceding findings apply to humans is only now being clarified through MRI and PET research, procedures that can detect changes in brain activity during states of sexual arousal. Interestingly, preliminary studies on humans suggest that some of the neural activation during sexual arousal may be shifted from lower (MPOA and VMN) to higher brain centers in men and women. This finding is not surprising in view of the fact that sexual response in humans depends more heavily upon contextual factors such as those arising from the relationship with the sexual partner, those related to social behavior, and those related to attitudes, beliefs, and moral codes. In men, changes have been noted in the ventral tegmental area, a midbrain-forebrain region involved in mediating pleasure and reward. Concomitant changes in the frontal, occipital, and temporal lobes have also been noted (Holstege et al., 2003; Stoléru et al., 1999). Generally, these brain regions are responsible for the processing of external (sensory) stimuli by giving meaning and interpretation to them and for evaluating, deciding, and executing specific appropriate motor/behavioral responses. Activity changes in hypothalamic and amygdaloid areas have also been noted in men, but not necessarily in the areas known for the involvement in sexual response in rodents. In women, many of these same structures appear to undergo change during arousal and orgasm (Karama et al., 2002). However, there appears to be less activation of hypothalamic and thalamic regions in women, perhaps offering an explanation for differences in sexual arousal typically seen across men and women when viewing erotica. The limitation of these MRI and PET studies is that although we have learned which specific brain areas are activated (or deactivated) during sexual arousal and orgasm in men and women, exactly how their activation relates to the subjective experience of arousal and orgasm is unclear (Levin, in press). Indeed, many of these same brain structures underlie other (i.e., non-sexual) cognitive and mental functions.

Nevertheless, several conclusions relevant to understanding human sexual behavior may be drawn from both animal and human studies.

1. Grouping human sexual response into discrete phases or components (e.g., sensory, motivational, affective, cognitive, etc.) is largely based upon introspective analyses. While such conceptualizations may prove useful for research and communication purposes, discrete neural analogs (in terms of structures or activities within the brain) for these constructs are unlikely to exist.

2. Although many similar brain regions appear to underlie sexual behavior across species, differences do emerge, at least when comparing rodents and cats with humans. Not surprisingly, in humans there appears to be a greater involvement of higher brain structures responsible for information processing and decision making, and less involvement of lower centers responsible for biologically motivated behaviors. Thus, substantial differences probably exist in the precise role that various neural structures play, as well as the way in which they interact with other structures.

3. Differences also occur across the sexes, both at the human and nonhuman level. With respect to these differences in humans, the findings imply that sexual arousal and response, although sharing common elements in many ways, may also be experienced quite differently by men and women.

PERIPHERAL AUTONOMIC AND SOMATIC (MOTOR) RESPONSES

One of the biological challenges of the mammalian organism with respect to sexual response is that of converting general sensory input into autonomic stimulation and response. These two neural systems—the somatic sensorimotor and the autonomic motor systems—are anatomically distinct and serve different purposes. The somatic sensorimotor system responds to information about the environment (visual, auditory, touch, etc.) and innervates striate muscles involved in making voluntary motor responses (movement of the arms, eyes, and so on) and executing overt behaviors. In contrast, the autonomic system is involved primarily in the control of internal, smooth muscle (involuntary) responses, ranging from heart muscle contractions, breathing, and digestion (to name a few) to erection and vaginal lubrication. But with respect to sexual arousal and response, both systems require activation, thereby necessitating both connection between and integration of these two systems. The way in which these two motor systems might function together to result in an integrated and coordinated sexual response is complex and not particularly well understood.

For now, let it suffice to say that during sexual arousal the autonomic nervous system (ANS) is activated via somatosensory stimulation to prepare and maintain the organism for sexual behavior. Activation of the autonomic system is responsible for mediating extragenital, smooth muscle changes—which are similar across the sexes—such as increased blood pressure, transient increases in heart rate, vasocongestion in the breast and pelvic regions, and, ultimately, an overall increase in muscle tension. Genital changes, though different, tend to follow parallel courses in men and women.

Mechanisms of Erection and Ejaculation

Both divisions of the autonomic nervous system—sympathetic and parasympathetic—are involved in arousal and activation of the genitals. Traditional functional classification of these systems (i.e., a homeostatic or regulatory role for the parasympathetic component and an emergency/arousal role for the sympathetic component) does not necessarily extend to activation of the genitals. Thus, the parasympathetic and sympathetic components of the ANS both appear to contribute to sexual excitement, penile erection, and ejaculation (for reviews, see Batra & Lue, 1990; Benson, 1988; Motofei & Rowland, in press). Stimulation of parasympathetic fibers of the pelvic nerve arising from

the sacral area of the spinal cord can generate an erection. Recent studies, however, also suggest a possible role for the sympathetic nervous system in erection (Benson, 1988), since blockage of this system produces penile engorgement and erection as well (Rowland & Burnett, 2000; Siroky & Krane, 1983).

The ANS influences erectile tissue through changes in the dynamics of blood flow of the pudendal arteries (Rowland & Burnett, 2000). These arteries supply blood to the corpora cavernosa, the two lengthwise chambers on the back side of the penis, and the corpus spongiosum, the chamber that runs down the front side of the penis (i.e., if you are facing a man with a flaccid penis) and expands to form the glans penis. Erection is the result of increased arterial flow through vasodilation and shunting of the arterial blood away from immediate venal flow into the cavernous spaces of the penis. At first, this increase in arterial flow occurs without an increase in blood pressure, and therefore is probably the result of smooth muscle relaxation of the arterial walls. When full erection occurs, intracavernosal pressure is increased. Although restricted venal drainage from the increasingly erect penis presumably contributes to inducting or maintaining erection, its role has only recently received possible clarification (Batra & Lue, 1990). During erection, when intracavernosal pressure is high, small blood vessels are compressed against the relatively unyielding walls of the chambers, known as the tunica albuginea, and the resulting blockage may decrease venal outflow, increasing the effect of the inflow of blood in keeping the penis erect and firm.

Ejaculation is generally viewed as the efferent (motor) component of a reflex process resulting from sensory stimulation of the coronal region of the penis, although in rare instances it appears that the sensory component is not critical to this process (e.g., spontaneous ejaculation). At the genital level, ejaculation involves two steps, including (1) seminal emission and bladder neck closure, and (2) forced expulsion of fluid (Motofei & Rowland, in press), and requires involvement of the sympathetic, parasympathetic, and somatic motor systems. During the first stage—emission—semen is deposited into the urethral tract, an event associated with "ejaculatory inevitability" in men. At this time, the bladder neck also closes to prevent urine from mixing in the urethral tract and semen from flowing back toward the bladder. The deposition of semen in the urethral tract then triggers the spasmodic (clonic) contractions responsible for ejaculation—a complex process that involves involuntary contraction of muscles that are normally under voluntary control. Local sensory receptors transmit this information to the brain, which is then associated with the subjective experience of orgasm. Obviously, the trigger for the ejaculatory sequence is under the control of brain systems and is related to the man's level of sexual excitement and arousal (Motofei & Rowland, in press). However, since ejaculation involves a series of muscle contractions, local mechanisms at the level of the pelvic musculature have also been suggested (e.g., stretching of muscles to a point of vigorous contraction). Furthermore, there is evidence to

suggest that the posterior pituitary hormone, oxytocin, may facilitate these contractions (Carmichael et al., 1987). Exactly what makes these rapid contractions so rewarding is simply unknown. However, other autonomic functions in the pelvic region such as urination and defecation appear to share similar, though less intense, properties. For example, smooth muscle stretching and tension buildup from withholding urine and/or feces is associated with pleasant sensations when release finally does occur.

Mechanisms of Vaginal Lubrication and Female Orgasm

Although a number of internal (vagina, uterus) and external (clitoris, labia) structures respond to sexual stimulation in the woman, the vagina and clitoris are most directly involved in sexual response (see Levin, 2002, in press, for reviews). As with men, sympathetic, parasympathetic, and somatic pathways innervate the genital region and mediate these responses. Sympathetic and parasympathetic nerves connect via the pelvic and pudendal nerves, and their stimulation can produce increased blood flow to the vagina and affect smooth muscle tone in the vagina. It has been suggested that parasympathetic input dominates during the earlier stages of arousal and the sympathetic component dominates during orgasm. Somatic pathways are responsible for controlling striate muscles (those under voluntary control) around the vaginal opening and in the pelvic and abdominal areas.

During sexual arousal, vaginal smooth muscle shows a gradual increase in tone. In addition, autonomic input stimulates blood flow to the vagina through vasodilation, leading to vaginal vasocongestion (increased retention and volume of blood). The lining of the vaginal wall as well as the labia and clitoris becomes engorged with blood. Specifically, as sexual arousal occurs, an increasing number of the capillaries open and the flow through them increases (Wylie et al., 2004), processes that stimulate vaginal lubrication. At the peak of sexual arousal all the capillaries are open and the flow is maximal (Levin, in press).

The gradual accumulation of blood in the vaginal wall in response to sexual stimulation provides the stimulus for vaginal lubrication, a process akin to sweating (called transudation) from the blood circulating through the vessels underlying the vaginal lining. As the woman approaches orgasm, the uterus elevates to produce a "tenting" effect in the inner third of the vagina, and the outer vagina forms the orgasmic platform, a state of maximal vasocongestion (Levin, 2002, in press; Masters & Johnson, 1966). As in the male, the trigger for orgasm itself is unknown, but probably results from a reflexive muscle response to accumulating afferent input. Without entering the debate about the anatomical locus of orgasm (clitoral versus vaginal), it is probably safest to say that several pelvic and genital structures (clitoris, uterus, cervix, etc.) contribute to the overall experience of orgasm in women. Clearly, the clitoris and, possibly, the periurethral glans (area below the clitoris surrounding the

urethra) are homologous to the penis and are for most women the epicenter of orgasm. While there is no universally accepted homologue to ejaculation in the female, some women may produce an ejaculate-like fluid from the anterior wall of the vagina, an area sometimes referred to as the G-spot (Alzate & Hoch, 1986; Levin, in press).

In contrast to the male, there is ongoing debate regarding the function of orgasm in the woman, as it plays no critical physiological role in successful reproduction (i.e., in women, pregnancy occurs without orgasm, whereas in men ejaculation/orgasm is necessary for reproduction). Hypotheses regarding the presumed role of female orgasm abound, and include such functions as preparation of the uterus for impregnation, facilitated transport of sperm toward the uterus, or even dissipation of vasocongestion in the vaginal region. Regarding this last point, Levin (in press) argues that relaxation of vaginal tone from orgasm allows continued blood flow through capillaries as muscle tone reaches a maximum and ensures maintained vaginal lubrication during sexual intercourse. A second function of female orgasm may be that of facilitating vaginal tenting and allowing for elevation of the cervix, a crucial movement for facilitated sperm transport toward the uterus.

Given these sex differences in structure and function related to orgasm, as well as the brain structures involved, the mechanisms of orgasm may be sufficiently dissimilar in women and men so that the experience of orgasm is different as well. Specifically, female orgasm tends to be more variable in its description, longer in duration, more dependent on learning factors, less reliable in its occurrence, and less sensitive to refraction than male orgasm. In reference to this last point, various studies have estimated that anywhere from 15 percent to 42 percent of women experience multiple orgasms—one orgasm right after another (Darling, Davidson, & Jennings, 1991). In contrast, multiple orgasm in men is still viewed as "case study" material, although the traditional view of a prolonged male refractory period (a time just after ejaculation during which no amount of stimulation will result in excitation) has recently been challenged by research suggesting that a subpopulation of men may be capable of achieving multiple orgasms, although each may not be accompanied by ejaculation (Dunn & Trost, 1989).

PSYCHOLOGICAL FACTORS AFFECTING SEXUAL AROUSAL

The long-held distinction between "physiological" and "psychological" is a somewhat artificial one (Rowland & Cooper, 2005; Sachs, 2003), as this dichotomy suggests that these domains are independent of one another. In fact, all "psychological" processes (such as sensing, feeling, learning, thinking, intending, and acting, as well as the self-awareness of these processes) are in actuality personal or subjective experiences of a set of underlying neurophysiological events. Nevertheless, because many sensory, cognitive, and

affective processes impacting sexual arousal cannot be easily reduced to a specific physiological substrate or process, and because these psychological constructs or ideas relate well to people's own experiences, it is sometimes more beneficial to discuss them as "psychological" processes.

The Nature of Erotic Stimulation

What makes certain kinds of sensory stimulation erotic and other kinds not, or why one stimulus may be arousing for one individual but not for another, is surprisingly difficult to answer. Several overall principles, however, help explain individual and group differences in the arousal value of specific stimuli. First, much of what is arousing is probably established through a process of conditioning—particular visual, tactile, olfactory, and auditory stimulation become associated with the reward of sexual pleasure. Several studies have shown that sexual arousal can be readily conditioned to nonsexual or neutral stimuli (such as boots). Second, some stimuli may be more readily associated with sexual arousal than others because they are higher in their "biological relevance." Thus, heterosexual men's and women's sexual arousal is much more easily conditioned to the sight of the abdomen of a person of the opposite sex than to a neutral object (Hoffmann, Janssen, & Turner, 2004). Third, the capacity to translate ordinary sensory information into sexually arousing information may require (or at least be facilitated by) the presence of gonadal hormones. As mentioned earlier, eroticization of stimuli appears to coincide largely with the onset of puberty and the production of hormones from the testes and ovaries. And fourth, context is ever relevant in determining whether any particular stimulus at any particular time will have erotic value. As an example, repetition of the same psychosexual stimuli can either facilitate or inhibit arousal; that is, both familiarity and novelty of sexual stimuli—polar ends of a continuum—have the potential to increase (or decrease) sexual arousal, depending on a variety of other factors.

One specific area that has received substantial attention on this topic is that of gender differences in patterns of arousal to various kinds of sexual stimuli. Despite some long-standing beliefs, men and women do not seem to respond differentially to romantic versus explicit visual (erotic pictures or films) sexual material. Rather, the sexes are similar along one important dimension—the more explicit the material, the greater the self-reported arousal and genital response (see Rosen & Beck, 1988, for a review). However, qualifying factors are important. First, the context in which the sexual stimulation occurs appears to affect men's and women's arousal differently. For example, group-sex situations are not as sexually arousing to women as they are to men (Steinman, Wincze, Sakheim, Barlow, & Mavissakaliam, 1981). "Women-friendly" films which emphasize foreplay, stroking, enjoyment, and desire on the part of both male and female characters are rated more sexually arousing by women, although genital response is not necessarily affected (Laan, Everaerd, van Bellen, &

Hanewald, 1994). Second, while autonomic responses such as heart rate and pulse can be compared across sexes, and do indeed show similar patterns during arousal (e.g., Heiman, 1977), there is no means of directly comparing magnitude of penile versus vaginal responses. Third, even though both men and women may exhibit physiological arousal, they may report different emotions and feelings associated with the sexual stimuli. Finally, in studies of this type, participants tend to engage in a self-selection process, particularly when the study is conducted in a laboratory setting where sexual response is actually monitored (as opposed to surveys or questionnaires). Women volunteers for such studies tend to be less sex-role stereotyped than nonvolunteers, whereas men volunteers tend to be more sex-role stereotyped (Wolchik, Brever, & Jensen, 1985). Because sex-role stereotyping could explain these findings as readily as sex differences per se, one has to be cautious about drawing strong conclusions regarding the nature of sexually arousing stimuli for the two sexes.

Recent research has also investigated the role of other sensory systems on sexual arousal. Olfactory stimulation from a potential mate is essential to normal copulatory behavior in most mammalian species, including nonhuman primates, but its role in human sexual attraction and arousal appears to be more subtle and variable (see Vandenbergh, 1988). Among humans, the scent of one's partner may play an important role in sexual arousal and response. The ability of olfactory stimuli to augment arousal may be more than just a conditioned response; some argue that mammals (including humans) are biologically predisposed to recognize and respond to certain smells as sexual. For example, women may find musky smells, a typical "male" smell that is a byproduct of androgen, to be sexy. In many species, musk presumably plays an important role in reproduction by serving as a male identifier and attractant to females seeking a fertile mate. The argument has been made that in humans the effect of such smells may be subliminal, that is, below people's level of conscious awareness (Cutler et al., 1987).

In contrast with the subtle and variable effects olfactory stimuli have on arousal, tactile stimulation of the genitals is strongly associated with sexual arousal in both men and women. Yet, even this most basic type of stimulation is context dependent. In laboratory studies on men, penile tactile stimulation presented without visual erotic stimulation is only mildly arousing compared with the same stimulation given in conjunction with visual sexual stimulation (providing an appropriate sexual context) (Rowland & Slob, 1992). Furthermore, loss of sensitivity in the genital region—from aging or disease—is associated with impaired sexual response in men, although this probably exacerbates existing problems rather than actually causing them (Rowland & Perelman, in press). In women, the role of genital sensory stimulation in sexual arousal has received only passing attention in laboratory studies, probably because its role is so obvious and because of difficulties in applying controlled tactile stimulation to the vaginal and clitoral regions. One recent study (Slob,

Bax, Hop, Rowland, & van der Werff ten Bosch, 1996) investigating the effect of vibratory stimulation of the labial region found that when women viewed an erotic videotape, the vibratory stimulation enhanced self-reported sexual arousal, but did not augment genital response.

A Role for Sexual Fantasy

Sexual fantasy and thoughts play an important role in arousal for many men and women. Sexual fantasies and thoughts alone (i.e., without any physical genital stimulation) can produce moderately high levels of sexual excitement and genital response (Rowland & Heiman, 1991; Whipple, Ogden, & Komisaruk, 1992). In fact, the use of sexual thoughts and fantasy provides a means for achieving some voluntary control over a response system that is largely viewed as involuntary. For example, training designed to increase the vividness of erotic fantasies can enhance both genital response and subjective sexual arousal or excitement (Smith & Over, 1990) and has been used as part of the treatment for a number of sexual problems in both men and women. On rare occasions, fantasy alone (in the absence of genital stimulation) has been known to lead to orgasm.

The Role of Emotional Response in Sexual Arousal

Emotions are frequently associated with sexual response, and they undoubtedly contribute to feelings of passion and intimacy toward one's partner, particularly during states of sexual arousal. Both sexual and emotional arousal involve activation of the autonomic nervous system, and this underlying commonality has led some researchers to posit that sexual arousal, for all practical purposes, fits the criteria of a positive emotion (energizing, rewarding, etc.). So it is not surprising that researchers and clinicians assume that people's emotional states are strongly interconnected with their sexual response.

The role of emotion (sometimes called "affect") in sexual response has, until recently, been presumed to be straightforward. Barlow (1986), for example, proposed that emotional response is determined largely by the contextual cues in which the sexual activity takes place. A positive emotional state (e.g., enjoyment, excitement) increases attention to erotic cues from the partner and/or situation, which in turn leads to autonomic and genital arousal. In some instances, the sexual situation may evoke a negative emotional response (embarrassment, guilt, aversion, etc.) that then interferes with sexual arousal and enjoyment. This intuitively appealing model offers a reasonable framework for interpreting the way sexual arousal and emotions interact, but it also oversimplifies it.

In order to understand the complex way in which emotions and sexual arousal interact, it is first necessary to realize that emotions are comprised of

multiple dimensions. These include a positivity-negativity dimension, a level of physiological arousal, and a cognitive recognition and labeling process (i.e., interpreting the situation as fear, anger, joy, or whatever, depending on the situation). Each of these dimensions has the potential to affect sexual arousal differently. For example, are positive emotions likely to affect sexual arousal differently than negative emotions? Is the intensity of the emotional state (and thus the level of physiological activation) important? Finally, is the particular emotion relevant—for example, might one negative emotion (such as embarrassment) have a different impact on sexual arousal than another negative emotion (such as sadness or distress)? Research to date suggests that each of these elements may affect sexual arousal in different ways. For example, even though positive emotions are generally associated with sexual arousal, a high level of positive *mood* (i.e., a positive state that is devoid of physiological arousal) does not necessarily facilitate sexual arousal (Laan, Evereard, van Berlo, & Rijs, 1994; Mitchell, DiBartolo, Brown, & Barlow, 1998). Yet, increasing a person's general physiological arousal level (i.e., by getting them excited or upset but not in a sex-related way) may increase sexual arousal in both men and women, independent of whether the state is experienced as positive or negative (Beck, Barlow, Sakheim, & Abrahamson, 1987; Hoon, Wincze, & Hoon, 1977). And finally, specific emotional statements impact arousal differently—embarrassment and guilt are much more strongly associated with impaired sexual response than sadness or disgust (Rowland, Tai, & Slob, 2003).

A second important aspect regarding the interaction between emotions and sexual arousal is that emotion comes into play at several points and at several levels within the context of a sexual situation. Specifically, an individual's emotional state may be influenced by events or circumstances unrelated to the sexual situation, but these emotions may impinge upon the sexual situation. Or, the sexual situation itself may evoke a positive or negative emotional response. Or, the specific acts/events of sexual arousal and sexual behavior, because of their typically rewarding nature, may engender a strong emotional response. Thus, as is described in the next paragraphs, the role of emotion is likely to be quite different at distinct points in the process of sexual arousal or in distinct sexual situations.

Consider situations that evoke emotional feelings but that are not tied specifically to the sexual situation. Most studies indicate that any emotional stimulus, positive or negative (consider anxiety and anger as examples of the latter), that induces a general state of arousal has fairly strong potential for increasing sexual arousal. For example, the negative feelings experienced by a person upset over an incident in the workplace might well enhance sexual arousal (because the person's general level of arousal is increased). Yet, this relationship may hold only when those levels of arousal are mild to moderate. Extreme emotional arousal has strong potential to interfere with basic genital response (erection, vaginal lubrication). Specifically, the sympathetic nervous

system activation associated with strong emotional arousal is generally incompatible with the initial phases of erectile response and vaginal lubrication, processes requiring strong parasympathetic activation.

On the other hand, emotions that are derived specifically from the sexual context may have more direct effects on sexual response. These effects depend on a complex interplay between the arousal strength of the stimulus, the specific emotional state that is elicited (anger, fear, frustration, excitement, enjoyment, etc.), and the degree to which the feeling is tied to sexual performance and self- or partner-evaluation within the sexual situation. As an example, positive feelings and expectations associated with an attractive and/or familiar sex partner might well facilitate sexual arousal. But negative feelings associated with worry and fear of evaluation by the partner (performance anxiety) may inhibit sexual arousal and response. If the fear and worry emanate from the sexual situation but are not evaluative in nature, then as indicated before, they may *not* inhibit sexual arousal. A couple may find having sex in forbidden places (e.g., the mile high club) highly arousing even though the situation induces a certain level of anxiety and fear. In contrast, the evaluative nature of sexual interactions, either from oneself or from one's partner, can often generate feelings of "sexual" anxiety (am I attractive? am I able to please my partner? am I responding okay? etc.) that interfere with sexual arousal and response. (Elliott & O'Donohue, 1997; Rowland & Heiman, 1991). Indeed, psychotherapy for men and women with sexual dysfunctions is often aimed at reducing sexual anxiety by reframing the sexual experience from one that involves fear, embarrassment, and worry about performance to one that emphasizes greater self-efficacy, confidence, and positive expectations.

Finally, emotional states during sexual arousal itself are consistently associated with high levels of positive emotion. That is, when the emotional state is measured as a part of the sexual response, positive emotion clearly dominates. And generally, the higher the sexual arousal, the greater is the positive emotional response. In fact, multivariate statistical procedures typically identify these two concepts as being part of the same dimension, at least in sexually functional men and women. Such findings imply that sexual arousal may itself represent a type of emotional state.

Those who view sexual arousal as a type of "emotional state" typically subscribe to "cognitive arousal theory," which holds that the experience of an emotion depends on both physiological arousal and a cognitive interpretation of that arousal, an interpretation that relies heavily on contextual cues and past experiences (Schachter & Singer, 1962). Sexual arousal nicely fits this general model (Everaerd, 1988). In a sexual context, appraisal of a situation as "sexual" elicits physiological arousal and primes a cognitive (thought) labeling process so that the experience is identified and stored in memory as one that is "sexual" (Janssen & Everaerd, 1993). The autonomic and sympathetic nervous system responses that follow (e.g., Meston & Gorzalka, 1996) may further augment the subjective experience of the emotion. Although there are few

studies showing a common underlying basis for emotion and sexual arousal, one recent report (Everaerd & Kirst, 1989) used "prototypes" (clusters of attributes or qualities that people use to describe that emotion) of various emotional states and compared them against ones for sexual arousal. The prototype for sexual arousal overlapped considerably with the emotional prototypes for "joy," "warm feeling," and "merry." Given the above, it is not surprising that in sexually functional individuals, sexual arousal and positive affect appear to be strongly interwoven (Rowland et al., 2003).

Perhaps in summary, one can safely say that positive feelings both facilitate and result from sexual arousal and successful performance. At the same time, negative emotions (fear, embarrassment, worry, or anxiety), particularly when they emanate from issues of performance evaluation, are often associated with sexual impairment and may contribute to, maintain, or result from the dysfunction. Yet, negative emotions, because of their ability to increase general levels of arousal, may in some instances also facilitate sexual arousal.

The Role of Cognition in Sexual Arousal

The cognitive component of sexual arousal refers to the way in which information is processed and interpreted in a sexual situation. Unlike emotions, which can easily be categorized as either positive or negative, the thought processes that occur during sexual response can literally be infinite. Therefore, this aspect of sexual arousal has focused on particular strategies of information processing that might account for variability in sexual response, particularly comparing sexually functional men and women with those having a sexual problem (Cranston-Cuebas & Barlow, 1990; Janssen & Everaerd, 1993; Sbrocco & Barlow, 1996). Furthermore, because emotions include a cognitive component (e.g., recognizing, identifying, and labeling the situation as such), the suggestion has been that the characteristics that distinguish sexually functional from sexually dysfunctional men and women is actually the cognitive component of the negative emotion that is being experienced. In the broadest of terms, two interrelated cognitive strategies have emerged as significant differentiators of sexually functional and dysfunctional men and women: attentional focus and self-perceptions (the latter includes attributions and negative expectancies).

The role of *attention* has occupied a prominent position in the search for cognitive factors that affect sexual arousal. Since it is not possible for an individual to process all information from the environment, selectivity is required. Within a sexual situation, attention typically focuses on cues relevant to generating sexual arousal. Not surprisingly, tasks that distract the individual from erotic cues diminish sexual response (see Cranston-Cuebas & Barlow, 1990 for review). Tasks that focus the individual's attention on the endpoint of becoming sexually aroused, a situation analogous to performance demand (Heiman & Rowland, 1983), generally increase sexual arousal. However, this

pattern of responding to attentional cues appears to be quite different for men and women with problems of sexual arousal (e.g., erectile dysfunction). They show inhibited response in situations where they feel increased demand to become sexually aroused (Abrahamson, Barlow, & Abrahamson, 1989; Beck, Barlow, & Sakheim, 1983). This increased demand results in a process called "spectatoring," whereby individuals detach themselves from the sexual experience as they monitor their own sexual responses. In doing so, their attention is drawn away from the erotic cues of the situation and partner toward distracting and "less productive (arousing)" stimuli. In fact, sexually functional men and women show less arousal when distracting tasks are introduced into a sexual situation, whereas dysfunctional men and women show no difference or even improved arousal under these conditions. Thus, as Sbrocco and Barlow (1996) note, performance demand, spectatoring, and fear of inadequacy are all forms of task-irrelevant activities that distract individuals from processing relevant stimuli from the sexual context (van Lankveld & van den Hout, 2004; van Lankveld, van den Hout, & Schouten, 2004).

Self-perceptions of physiological and emotional responses also constitute an important part of information processing during sexual arousal. Sexually functional individuals of both sexes tend to be reasonably accurate in estimating their level of genital response in comparison with dysfunctional individuals. Dysfunctional men and women tend to underestimate their genital arousal. Why such a difference? It might well be part of a strategy of setting low expectations (negative expectancies) so as to minimize the embarrassment of failure, or an underestimation simply resulting from low self-efficacy. Consistent with this notion, sexually dysfunctional people tend to attribute their failure to perform adequately to things about themselves ("internal attribution style" interpreted as "something's wrong with me"). In contrast, sexually functional men and women tend to attribute failure to perform adequately (when it does happen) to things outside of themselves ("external attribution style" interpreted as "something's wrong with the situation") (Nobre & Pinto Gouveia, 2000; Weisberg, Brown, Wincze, & Barlow, 2001). Along with this, dysfunctional men and women are less likely to attribute their successes in performance to themselves and more to circumstances or factors outside themselves. In other words, dysfunctional men and women exhibit a cognitive style in which they tend to take blame for their failures while not accepting credit for their successes.

There is no doubt that such cognitive sets become part of a vicious cycle, whereby failure induces negative expectancies, increasing focus on task-irrelevant cues, decreased arousal and performance, and eventual avoidance of sexual situations altogether. Such avoidance may have significant effects on the partner, who may interpret these behaviors as not wanting intimacy or contact, as being unattractive or undesirable, and so on. Fortunately, cognitive-behavioral therapeutic approaches to sexual problems have identified ways to break the negative feedback cycle and place the individual back on a track that

regains a sense of self-efficacy regarding arousal and performance. In doing so, the positive association typically characteristic of sexual interaction and intimacy can be reestablished.

CONCLUDING THOUGHTS

Individuals vary considerably in the intensity and frequency of sexual arousal and behavior. These differences can be attributed to myriad physiological, psychological (cognitive-affective), and sociocultural factors. Specifically, physiological systems involved in sexual response can be altered by such conditions as disease, aging, pathophysiological agents, and pharmacological substances. For example, prolonged and heavy use of a pathophysiological agent such as nicotine, which diminishes vasomotor response, may have deleterious effects on erectile response in men; antidepressant drugs are known to inhibit ejaculation in men and produce anorgasmia in women. Some conditions may affect sexual response in one sex, while having minimal or no effect in the other. Diabetes, a condition known to produce peripheral neuropathy, often interferes with erectile ability in men but appears to have negligible effects on sexual arousal in women (Slob, Koster, Radder, & van der Werff ten Bosch, 1990). At the other end of the spectrum, some physiological agents may facilitate sexual arousal and response. Throughout the ages, reports abound on the use of putative aphrodisiacs (e.g., the bark of the yohimbine tree supposedly enhances arousal) (see Rowland & Tai, 2003, for a review).

The importance of psychological factors to functional sexual response cannot be overstated. Numerous factors, ranging from the erotic value of the stimuli, expectations of the situation, and self-efficacy on the one hand, to affective response, self-perceptions, and methods of cognitive processing on the other, have been shown to impact sexual arousal significantly, and may account for differential patterns of responding between sexually functional and dysfunctional individuals. Even when a sexual dysfunction has a strong somatic basis, psychological factors are implicated. Men and women who fail sexually, whether from somatic or psychogenic causes, are likely to react with worry and feelings of loss of control which affects future sexual responses.

Beyond physiological and psychological influences, relationship and sociocultural factors play important roles in sexual arousal. Among other things, the quality of the relationship between the sexual partners, the individual's personal priorities and values, and customs and expectations of one's culture play critical roles in defining any sexual situation, and therefore will impact sexual arousal and behavior.

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4

An Evolutionary Perspective on Sexual and Intimate Relationships

David C. Geary

After a hiatus of more than 100 years following Darwin's (1871) and other naturalists' early theories on human evolution, social and biological scientists are once again using our understanding of evolution to shed light on human behavior (Alexander, 1979; Betzig, 1986; Buss & Schmitt, 1993; Geary, 1998). The topics that have captured much of this recent attention are sexuality and sex differences in sexual preferences and behaviors. Fortunately, biologists have studied sexual and reproductive behavior and its evolution in hundreds of nonhuman species and now have a firm grasp of the how and why of these behaviors, including an understanding of when and why there is variation in their expression across social and ecological contexts (Amundsen, 2000; Andersson, 1994; Dunbar, 1995; Zahavi, 1975). In the first section, I provide a brief introduction to theory and research on sexual and other reproductive behaviors in nonhuman species. This introduction provides a new perspective for thinking about and coming to fully understand human sexuality, and associated sex differences. These topics are in fact quite broad and complex and so I focus on two features of human reproductive behaviors in the second section; specifically, the mate-choice preferences of women and men, and differences in these preferences. I conclude the section with a discussion of historical and cultural variation in mate-choice preferences and sexual behaviors. My goal here is to illustrate the power and utility of the evolutionary approach for conceptualizing human sexuality and sex differences in sexuality.

EVOLUTION AND SEXUAL BEHAVIOR

In addition to discovering the principles of natural selection, Darwin (1871) discovered the processes that operate within species and result in the evolution of sex differences. These processes are called *sexual selection*, and involve competition with members of the same sex over mates—*intrasexual competition*—and discriminating choice of mating partners—*intersexual choice*. In most species, these are largely restricted to male-male competition over access to females, and female choice of male mating partners (Andersson, 1994). I first describe why this pattern is so common, and why exceptions evolve. Because our interest is in mate choices, I then focus on the evolution of intersexual choice in nonhuman species.

Compete or Choose?

For most species, sexuality is about reproducing, and in order to reproduce one must compete for mates or chose the right mate. As I stated, males tend to compete and females, choose. But why this pattern of sex differences? About 100 years after Darwin's insights regarding sexual selection, scientists determined that sex differences in the tendency to compete or choose depend largely, but not exclusively, on the degree of each sex's investment in parenting (Trivers, 1972). The sex that provides more than his or her share of parental investment becomes, in effect, an important reproductive resource for members of the opposite sex. One important result is competition among members of the lower investing sex, typically males, over the parental investment of members of the higher investing sex, typically females. Members of the higher investing sex are thus in demand, and can be choosy when it comes to mates. In turn, any sex difference in the tendency to parent is related to a more fundamental sex difference in the potential rate with which males and females can produce offspring (Clutton-Brock & Vincent, 1991). This potential rate of reproduction interacts with social conditions, the operational sex ratio (OSR, which is discussed later) in particular, to create the mating dynamics that are observed in many species, including humans.

How Fast Can Males and Females Reproduce?

The basic issue is the biological limit on how many offspring males and females can "potentially" produce, in the best of all possible worlds, in their lifetime (Clutton-Brock & Vincent, 1991). For female mammals, this limit is determined by gestation time and length of postpartum suckling, whereas for males, the limit is determined by the number of females to which they gain sexual access. In any given breeding season, females will typically have one offspring, whereas males who successfully compete will have many offspring. Thus, the potential rate of reproduction is many times higher in male mammals than in female mammals; the same is true for most nonmammalian species.

One result of this sex difference in rate of reproduction is an evolved bias of mammalian females toward high levels of parental investment—which includes gestation and suckling—and mammalian males toward competition for mates and no parental investment. This is because males who successfully compete dominate the mating pool, and sire many more offspring through this competition than they would if they parented. Thus, the evolved behavioral biases for males are a preference for multiple mates, and more variability in reproductive outcomes than females. Some males sire many offspring, and many males sire no offspring, a dynamic that intensifies male-male competition.

Operational Sex Ratio

The OSR is the ratio of sexually active males to sexually active females in a given breeding population, and is closely related to the rate of reproduction (Emlen & Oring, 1977). An OSR of 1:1 occurs for populations with as many sexually mature females as males. However, any sex difference in the rate of reproduction will skew the OSR, because pregnant females typically leave the mating pool and may not return for many years. Female chimpanzees, for instance, will suckle their young for four to five years and are not sexually receptive during this time. The result is many more sexually receptive males than females in most populations, which, in turn, leads to intense male-male competition over access to a limited number of sexually receptive females. Male-male competition, in turn, creates the conditions under which female choosiness can evolve. For species in which females have a faster rate of reproduction, as when males incubate eggs, females compete and males choose (Amundsen, 2000).

In some situations, the sex with the higher potential rate of reproduction is better off by investing in parenting than in competing for mates, as is common in canines and about 15 percent of species of primates. For instance, in many species of the South American monkeys, shared territorial defense, concealed ovulation, female-on-female aggression, twinning, and perhaps other still unknown factors, functionally negate the sex difference in the potential rate of reproduction and result in a more balanced OSR, monogamy, and high levels of male parenting (Dunbar, 1995). Generally, male parenting occurs in species in which males are reproductively more successful when they parent than when they compete, although a mix of competing and parenting is evident in many species, including humans (Geary, 2000). In any case, when males parent, they become choosier and females compete for access to the best male parents.

Choosing a Mate

One of the advantages of investing more in parenting than in competing is that this investment becomes a valuable resource, one that members of the

opposite sex will fight over (Andersson, 1994). The resulting demand for this investment creates the ability to choose mates. Because females invest more in parenting than males, female choice is much more common than male choice across bird, insect, fish, reptile, and mammal species. One result of female choice is the evolution of exaggerated male traits, such as the colorful plumage of the males of many species of birds. These exaggerated traits are often an indicator of the physical or genetic health of the male, or serve as an indicator of his ability (e.g., vigor in searching for food) to provide parental investment (Andersson, 1994; Zahavi, 1975).

The physical and genetic health of males is related, in part, to their immune system; specifically, the ability to resist infection by parasites, such as worms, viruses, and so forth in the local ecology (Folstad & Karter, 1992; Hamilton & Zuk, 1982). It appears that a healthy immune system is partly heritable, and thus the offspring of males with exaggerated traits survive in greater numbers than do the offspring of other males (Saino, Møller, & Bolzern, 1995). Thus, male ornaments are barometers that are strongly affected by the condition of the male, and female mate choice reflects the evolution of females' ability to read these barometers. Although the research is less extensive, there is evidence that similar mechanisms may operate in species in which males parent or females vary greatly in their reproductive success. In these species, males tend to be choosy when it comes to mates and females often have exaggerated traits (Amundsen, 2000; Andersson, 1994).

HUMAN MATE CHOICES

The same processes that govern sexual selection in nonhuman species help to explain sex differences and the dynamics of sexual and reproductive relationships in humans (Darwin, 1871; Geary, 1998). The literature in this area is in fact quite large, and thus I only focus on mate choices in the following sections; discussions of male-male and female-female competition can be found elsewhere (Campbell, 2002; Geary, 1998). Humans' mate choices are considerably more complicated than choices in most other species because many men invest heavily in their children. The reasons for the evolution of human fatherhood are beyond the scope of this chapter (Geary, 1998; 2005b), but once it evolved, it changed the dynamics of sexual selection. In addition to the standard mechanisms of male-male competition and female choice, men's parenting resulted in the evolution of female-female competition and male choice. Many of these features of sexual selection are of course related; for instance, women compete over traits that men prefer in a mate and vice versa (Buss, 1989). My focus in the first two subsections is on women's and men's mate-choice preferences, respectively. In the final subsection, I discuss how these preferences can be modified in response to cultural and social conditions.

Women's Mate-Choice Preferences

Intimate and often complicated relationships between women and men are a common theme in romance novels and other literatures that are more often read by women than by men (Whissell, 1996). Studies of themes that emerge across this genre suggest that the relationship dynamics and the traits of the central male character may reflect, at least in part, the evolved mate-choice preferences of women. The dynamics reflect the often conflicted interests and sexual tensions of the main characters, and the difficult time that women have in focusing the behavior of these men such that the men behave in ways that are consistent with the women's best interest. More often than not, the central male character is physically attractive, successful, and ultimately commits his time and resources, as in marriage, to the relationship with the central female character. In reality, these men are few and far between, if they exist at all, and thus a divide exists between women's preferred mates and their actual mate choices. The latter involve trade-offs between one trait, such as monetary success, against another trait, such as physical attractiveness (Gangestad & Simpson, 2000; Li, Bailey, Kenrick, & Linsenmeier, 2002). Here, I first describe research on the specifics of what women prefer in a mate, as well as the trade-offs they are willing to make when actually choosing a mate. I then describe the conditions under which some women seek short-term sexual relationships or multiple mating partners.

Long-Term Partners

Cultural success. One finding that has consistently emerged across Western and traditional societies is that women prefer long-term partners who are culturally successful, or are likely to become successful, all other things being equal (Buss, 1989; Irons, 1979; Sprecher, Sullivan, & Hatfield, 1994). The specifics of this success vary from one culture to the next, and can range from ownership of cows to ownership of stock portfolios. Across these contexts, culturally successful men are those who wield social influence and have control of the forms of resource that women can use for their own well-being and that of their children; money buys safe housing, health care, food, and social influence. The reason for this is clear: In all cultures that have been studied, the children of culturally successful men have lower mortality rates than the children of other men (Geary, 2000). Even in cultures where mortality rates are low, children of culturally successful men benefit in terms of psychological and physical health, longevity in adulthood, and opportunities (e.g., educational access) to become culturally successful themselves (Adler et al., 1994). These are exactly the conditions that would result in the evolution of women's preference for socially dominant and culturally successful marriage partners.

The salience of a prospective mate's cultural success is highlighted when women have to make trade-offs between a marriage partner's cultural success versus other important traits, such as his physical attractiveness. Li et al. (2002) studied these trade-offs by giving young women and men a marriage partner budget in which they could spend a fixed amount of "mate dollars" on their partner's traits; as spending on the trait increased, the partner's relative standing on the trait increased. Initial investments are made on necessities in a prospective mate, and any excess mate dollars are spent on luxuries. Across three studies, they found that women's initial investments were disproportionately in men's resources, such as their social level or yearly income, although women also invested in other traits (see below). As their budget increased and they had excess mate dollars, women invested proportionately more in other traits, such as kindness. In short, when women are forced to make trade-offs in a prospective marriage partner's traits, his cultural success is rated as a necessity and most other characteristics a luxury.

Personality and behavior. Women's preference for a culturally successful long-term partner is complicated by competition from other women and because these men are often self-serving and are better able to pursue their interest (see below) in multiple mating partners than are other men (Betzig, 1986, 1992; Pratto & Hegarty, 2000). A culturally successful partner who will not be focused on the relationship and any children from the relationship is not a good prospect for a long-term partner. The personal and behavioral characteristics of men are thus important considerations in women's mate choices. These characteristics provide information on the ability and the willingness of the man to make a long-term investment in the woman and her children (Buss, 1994). The bottom line is that women want culturally successful marriage partners, and they want some level of influence over the behavior of these men (Geary, 1998).

In addition to cultural success and social influence, women rate the kindness and intelligence of a prospective long-term partner very highly. In a multinational study, Buss (1989) found that women rated a prospective husband who was kind, understanding, and intelligent more highly than a prospective husband who was none of these, but had the potential to become culturally successful. In studies by Li et al. (2002), women rated a prospective marriage partner's kindness and/or intelligence as a necessity, along with his cultural success. As their budget increased, women added a few luxuries to this list, such as creativity, friendliness, and sense of romance. These studies indicate that women prefer culturally successful men and men who have the personal and social attributes that suggest they will invest these resources in a family.

However, the trade-offs women are willing to make, and the personal and behavioral attributes they prefer in a long-term mate, can vary from one context to another. As an example, many women prefer men with whom they can develop an intimate and emotionally satisfying relationship, although this

appears to be more of a luxury than a necessity. In fact, the preference for this type of relationship is more common in middle-class and upper-middle-class Western culture than in many other cultures or, in fact, in the working-class of Western societies (Argyle, 1994; Hewlett, 1992). I am not saying that the development of an intimate relationship is not important or not preferred by women in non-Western cultures. Rather, in many non-Western contexts women are more focused on keeping their children alive than on developing intimacy with their husband.

Good looks and good genes. As I noted above, women will often make trade-offs between a partner's cultural success and his physical attractiveness. This does not mean that a partner's attractiveness is not important—it is—but, rather, it is more of a luxury than a necessity. Indeed, in romance novels and other literatures that appeal to many women, the central male character is almost always socially dominant, culturally successful, and handsome as well, and this makes biological sense (Whissell, 1996). Handsome husbands are more likely to sire children who are attractive and thus sought out as mating and marriage partners in adulthood, and these men and their children may be physically healthier than other men and their children, but these relations are complex and remain to be resolved (Geary, 2005b; Hume & Montgomerie, 2001; Weeden & Sabini, 2005). Whether or not handsome husbands are healthier, women prefer men who are somewhat taller than average, and have an athletic (but not too muscular) and symmetric body shape, and shoulders that are somewhat wider than their hips (Cunningham, 1986; Singh, 1995; Waynforth, 2001). Women rate symmetric facial features as attractive, as well as somewhat larger than average eyes, a large smile area, and prominent cheekbones and chin. When they can, women put these preferences into practice; for instance, physically smaller and less-robust men are less likely to be chosen as marriage partners than are taller and more-robust men (Nettle, 2002).

There is also evidence that women's mate and marriage choices are influenced by men's immune-system genes (Ober, Elias, Kostyu, & Hauck, 1992; Wedekind, Seebeck, Bettens, & Paepke, 1995). Women, of course, are not directly aware of these genetic differences: Immune-system genes are signaled through pheromones and women are sensitive to, and respond to, these scents, especially during the second week of their menstrual cycle, that is, when they are most fertile (Gangestad & Thornhill, 1998). And women show a preference for the scents of physically attractive men, even though they have never seen these men. This suggests that attractive and presumably healthy men have a variety of related physical and pheromonal traits that distinguish them from other men and that can influence women's choices of sexual partners. It is not simply the quality (i.e., presumed resistance to disease) of the man's immune-system genes; what matters is how these genes match up with those of the woman. In terms of disease resistance, the best outcome for offspring occurs when there is high variability in immune-system genes, and

one way to achieve this is through having children with a partner with different immune-system genes. Women, in fact, find scents of men with dissimilar immune-system genes as more pleasant and sexy than the scents of men with similar immune-system genes, and conceive more easily with these men (Ober et al., 1992; Wedekind et al., 1995).

Some of the more intriguing research in this area has revealed that women's preference for physically attractive men varies across the menstrual cycle and with her physical attractiveness (Gangestad, Thornhill, & Garver, 2002; Little, Burt, Penton-Voak, & Perrett, 2001). Penton-Voak et al. (1999) demonstrated that women preferred men with masculine facial features (e.g., prominent chin) around the time of ovulation, and men with more feminine facial features at other times in their cycle; implications are discussed below, under "Short-term partners." Little et al. (2001) found that physically attractive women rated masculine looking men as more attractive long-term partners than did other women, presumably because attractive women are better able to keep these men focused on the primary relationship.

Short-Term Partners

Because women pay the cost of pregnancy, they are on average more sexually cautious than men, but do at times engage in short-term sexual relationships (Buss & Schmitt, 1993; Bellis & Baker, 1990; Essock-Vitale & McGuire, 1988; Gangestad & Thornhill, 1998; Oliver & Hyde, 1993; Symons, 1979). Sometimes women engage in these relationships when they perceive the potential for development of a longer-term relationship, suggesting that they sometimes use sexuality as a means to initiate a relationship with a potential marriage partner. At other times, women initiate a short-term sexual relationship outside of the context of a marriage or other long-term relationship, and in still other contexts women and their children may be better off when the women have multiple sexual partners (Bellis & Baker, 1990; Lancaster, 1989). I first provide a brief description of the dynamics of women's extra-pair relationships, and then describe the contexts in which most women benefit from multiple sexual relationships.

Extra-pair sex. It has been estimated that between 12 percent and 25 percent of women will engage in some type of affair during their lifetime (Banfield & McCabe, 2001; Bellis & Baker, 1990; Glass & Wright, 1992). The reasons for these affairs are many, but the most potentially volatile situation is one in which the woman's affair results in pregnancy by her extra-pair partner and cuckoldry of her husband; cuckoldry means that the husband has been deceived into raising the child of another man. The definitive study on how often this happens has not yet been conducted, but it is clear that it happens more frequently than many people wish to admit. The best estimate at this time is that as many as 10 percent of children may be the result of these relationships, although the rate varies widely across contexts and ranges from

about 1 percent in Switzerland to more than 20 percent in many lower socioeconomic communities (Cerda-Flores, Barton, Marty-Gonzalez, Rivas, & Chakraborty, 1999; Sasse, Muller, Chakraborty, & Ott, 1994).

The dynamics of when women actually engage in an extra-pair sexual relationship appears to be influenced by hormone fluctuations (Gangestad & Thornhill, 1998; Gangestad, Thornhill, & Garver, 2002; Penton-Voak et al., 1999). Women show systematic changes in sexual fantasy and attractiveness to extra-pair men around the time of ovulation. Women are not only more likely to fantasize about, and sometimes engage in, an affair during this time, they are also more sensitive to and attracted by male pheromones (Gangestad et al., 2002). Gangestad and Thornhill (1998) found that the scent of facially symmetric men was rated as more attractive and sexy than was the scent of less symmetric men; but only during this fertile time frame. Penton-Voak et al. (1999) found that women rate masculine faces, those with a more prominent jaw, as especially attractive around the time of ovulation.

The emerging picture is one in which women may have an evolved sensitivity to cues to men's health (assuming attractiveness signals health) that peaks around the time women ovulate and are thus most likely to conceive. The pattern also suggests that, for some women, sexuality involves a mixed social and reproductive strategy (Gangestad & Simpson, 2000; Vigil, Geary, & Byrd-Craven, submitted). The mixed strategy may be most effective if these women are psychologically and socially attentive to the relationship with their primary partner and thus maintain his investment in her and her children, and only become attracted to extra-pair men at the time of ovulation. Many of these women never engage in an affair, and those who do seem to prefer an extra-pair partner with whom they have a level of emotional intimacy as contrasted with a stranger (Banfield & McCabe, 2001). In any case, when extra-pair relations do occur, they are typically initiated by the woman around the time of ovulation.

Serial monogamy and polyandry. For many women, marriage to a culturally successful and physically attractive man who is devoted to her and her children is not achievable. This is especially true in contexts where most men do not have the resources to support a family. To adjust to this circumstance, some women develop a successive series of relationships with a number of these men, or several men simultaneously, each of whom provides some investment during the course of the relationship. These women are practicing serial monogamy and sometimes polyandry, and in some circumstances are better off than are women monogamously married to men with low incomes. In recounting one such comparison of low-income women in the Dominican Republic, Lancaster (1989) noted that

> women who excluded males from the domestic unit and maintained multiple liaisons were more fecund, had healthier children with fewer pre- and post-natal mishaps, were able to raise more children over the age of five, had better nourished children (as measured by protein per

> capita), and had better psychological adjustment (as measured by self-report and lower maternal blood pressure). (pp. 68–69)

Among the Ache and Barí, South American Indian societies, women will often engage in sexual relations with men who are not their social partners, especially after becoming pregnant (Beckerman et al., 1998; Hill & Hurtado, 1996). By tradition, these men are called secondary fathers and are socially obligated to provide food and other resources, as well as social protection, to the woman's child, although not all of them do so. The result seems to be a confused paternity such that both primary and secondary fathers invest in the child. The advantages of having a secondary father are substantial. The mortality rate of Ache children with one secondary father is about half that of children with no secondary father or two or more secondary fathers; with more than one secondary father paternity is too uncertain, and thus these men do not invest in the child. The benefit of a secondary father cannot be attributed to qualities of the mother, as 80 percent of Barí children with a secondary father survived to adulthood, as compared to 61 percent of their siblings without a secondary father (Beckerman et al., 1998).

Men's Mate-Choice Preferences

As anyone who has been involved in a heterosexual relationship knows, what women want and expect from a long-term, or even short-term, partner is not always what men want, although there are often many similarities. In the following sections, I describe men's preferences for long-term and short-term partners, respectively, and point out the most salient differences in relation to women's preferences.

Long-Term Partners

When men are looking for long-term partners, typically for marriage, they are in effect committing to invest a significant amount of their time and resources in the relationship with their partner and any resulting children. This is not to say that they are willing to invest as much as their partners would prefer for them to, as it is typically not the case. Still, from an evolutionary perspective, men are predicted to be, and are, more similar than different from women in terms of the traits they seek in a long-term partner (Kenrick, Groth, Trost, & Sadalla, 1993). In the following sections, I highlight a few of the key areas in which men and women differ in their mate preferences.

Cultural success. Outside of the strictures of Western culture, men are typically allowed to marry as many women as they can support, although only about 10–15 percent of men actually marry polygynously (Murdock, 1981); even in Western culture, the same end can be achieved with serial marriages (Forsberg & Tullberg, 1995). In these non-Western societies, men are more

concerned with the traits described in the "Good looks and fertility" section than with their partners' cultural success (Gil-Burmann, Peláez, & Sánchez, 2002; Li et al., 2002; Sprecher et al., 1994). They do expect their wives to contribute to the family, as with foraging, but they are not typically concerned about their cultural success per se. In Western societies, monogamous marriages are socially imposed and thus marriage for culturally successful men—those who would have several wives in other societies—has a sexual and reproductive cost: Their sexual behavior is restricted, at least in terms of marriage vows, and sometimes legally, to a single relationship, and they typically have fewer children (Flinn & Low, 1986; Forsberg & Tullberg, 1995). As a result, culturally successful men in such cultures and those who strive for cultural success tend to be more choosy when it comes to marriage partners than other men, or successful men in polygynous cultures. For many of these men, the cultural success of their prospective wife is important, but is more of a luxury than a necessity, in contrast with women's expectations for the cultural success of their husbands.

Personality and behavior. When it comes to a marriage partner, men throughout the world prefer women who are intelligent and kind, although these traits are often a luxury and not a necessity (Buss, 1989; Li et al., 2002). One behavior that is a necessity for men, however, is their partner's sexual fidelity. Men's concern for their partner's sexual fidelity is an evolutionarily coupled feature of the earlier described cuckoldry risks, and the costs associated with investing in the child of another man. The social and psychological manifestation of this concern is sexual jealousy, which has a near universal influence on the dynamics of men's and women's relationships (Buss, 1994; Symons, 1979). It is not that women do not become sexually jealous, they do: it is a matter of degree and a matter of how men and women react to an actual or perceived infidelity. In one study, women reported their partner engaged in more monitoring of their behavior during the week the women were most likely to ovulate, the time frame when these same women reported an increase in sexual fantasy and interest in an extra-pair man (Gangestad et al., 2002). This and related studies are consistent with the view that men's sexual jealousy evolved at least in part as a response to women's ability to cuckold.

Good looks and fertility. Both women and men prefer attractive partners, but this preference is consistently found to be more important—a necessity and not a luxury—for men than for women (Buss, 1989; Li et al., 2002). Men's ratings of women's physical attractiveness are driven by several specific physical traits, including a waist-to-hip ratio (WHR) of 0.7; facial features that signal a combination of sexual maturity but relative youth; body and facial symmetry; and age (Cunningham, 1986; Kenrick et al., 1993; Kenrick & Keefe, 1992; Sprecher et al., 1994). A measure of leanness to obesity independent of height, that is, the body mass index (BMI), is also associated with rated attractiveness (Weeden & Sabini, 2005). Leaner women tend to be rated more attractive than heavier women, although, as noted later, the attractiveness of relatively

thinner to relatively heavier women varies with availability of food and other resources (Anderson, Crawford, Nadeau, & Lindberg, 1992; Pettijohn & Jungeberg, 2004).

In any case, this combination of cues has been hypothesized to be indicators of women's health and fertility. To illustrate, women's fertility is low in the teen years, peaks at about age 25, and then gradually declines to near zero by age 45 (Menken, Trussell, & Larsen, 1986). Teenage mothers experience more complications during pregnancy than do women in their twenties, and these risks begin to increase in the thirties, and increase sharply after age 35. Given this, it is not surprising that men's preferences are sensitive to indications of a women's age (Kenrick & Keefe, 1992). Other aspects of men's preferences may or may not be indicators of health and fertility. In a review of this literature, Weeden and Sabini (2005) found that women with attractive faces, as rated by men, and a waist-to-hip ratio in the middle range tended to be in better health than their peers, but the strength of these relations was not large. Women with ratios greater than 0.85 are at risk for a number of physiological disorders and appear to have greater difficulty conceiving than do women with lower ratios. Other studies suggest that BMI might be a better predictor of health than WHR. Facial and body symmetry, in contrast, was not found to be consistently correlated with women's health. One possible exception is breast symmetry. Women with symmetric breasts are rated as attractive by men, and these women appear to be more fertile than other women (Møller, Soler, & Thornhill, 1995).

Short-Term Partners

Unlike women, men, like the males of most other species, often pursue short-term sexual relationships as an end initself. At least it seems to be so; but in fact, it can result in the currency of evolution—children. One important difference between these sexual relationships and those described in the "Long-term partners" section is men's investment in children; for short-term partners, men have no intention of investing in any resulting children, whereas for long-term partners they typically do. That men are interested in short-term sexual partners and differ in important respects from women on this dimension of sexuality is illustrated in the respective sections below on sexual attitudes and fantasy, and use of prostitutes.

Sexual attitudes and fantasy. Some of the largest sex differences in this area involve attitudes toward casual sex and the frequency of masturbation (Buss & Schmitt, 1993; Clark & Hatfield, 1989; Oliver & Hyde, 1993). About four out of five men were more enthusiastic about the prospect of casual sex than the average woman, and about six out of seven men report masturbating more frequently than the average woman; the latter suggests that men are more likely on average to be sexually frustrated than women. Men's attitudes toward casual sex are put into practice if the opportunity arises. In a set of studies in which

undergraduates approached attractive but unfamiliar members of the opposite sex and asked them for a date, to go to their apartment, or to engage in casual sex, Clark and Hatfield (1989) found that one out of two of the men and one out of two of the women accepted the date. When asked to engage in casual sex, three out of four men agreed, but none of the women agreed.

There are also differences in the quantity and nature of the sexual fantasies of men and women (Geary, 1998). Young men are twice as likely as young women to report having sexual fantasies at least once a day, and four times as likely to report having fantasized about sex with more than 1,000 different people. Although there were no sex differences in feelings of guilt over sexual fantasies, men and women differed considerably in the content of their fantasies. Women are two and a half times as likely to report thinking about the personal and emotional characteristics of their partner, whereas men are nearly four times as likely to report focusing on the physical attractiveness of their partner. Moreover, women are twice as likely to report fantasizing about someone with whom they are currently romantically involved with or had been involved with, whereas men are three times as likely to fantasize about having sex with someone they are not involved with and have no intention of becoming involved with. The latter is of course consistent with a desire for short-term sexual relationships as an end in itself.

Prostitution. The demand for prostitutes is driven almost entirely by men (Bonnerup et al., 2000; Turner et al., 1998). It is difficult to estimate the number of men who have resorted to prostitution as a means to secure short-term sexual partners, because men are reluctant to admit to this behavior. In a survey of 1,729 adolescents and young men between the ages of 15 and 19 in the United States, 2.5 percent reported having had sex at least once with a prostitute (Turner et al., 1998). Given the age range in this sample, the percentage of men who resort to prostitution at some point in their lifetime must be considerably higher than 2.5 percent. Indeed, for a random sample of 852 Danish and Swedish adults between the ages of 23 and 87, one out of six men, but none of the women, reported having visited a prostitute at least once (Bonnerup et al., 2000).

Historical and Cross-Cultural Variation

Although there are sex differences in mate preferences and sexual behavior, it should be clear that there is not one reproductive strategy for women and another for men. In addition to common themes in women's and men's preferences, such as for an attractive partner, the strategies adopted by both sexes often vary across contexts, historical periods, and characteristics of the individual (Anderson et al., 1992; Flinn & Low, 1986; Gangestad & Simpson, 2000; Guttentag & Secord, 1983; MacDonald, 1995; McGraw, 2002; Pettijohn & Jungeberg, 2004). Individuals with traits that are desired by the opposite sex, such as culturally successful men or physically attractive women, are in higher

demand than are their same-sex peers and therefore are able to exert more influence in their inter-sexual relationships. However, wider social and ecological factors also influence the sexual behavior and choices of marriage partners of these and other people, as I briefly overview in the following sections.

Operational Sex Ratio

Recall that the OSR is the term used by biologists to describe the ratio of reproductive-age males to reproductively available females in the local population, and imbalances in the ratio influence the reproductive strategies adopted by both sexes, including humans (Guttentag & Secord, 1983). In industrial societies, population growth or "baby booms" can skew the OSR such that there are too many women. The oversupply results from the preference of women for older marriage partners and of men for younger marriage partners (Kenrick & Keefe, 1992). With an expanding population, the younger generation of women will be selecting marriage partners from a smaller pool of older men. The resulting imbalance in the OSR can influence more general social patterns, including divorce rates, sexual mores, and the willingness of men to invest in their children, among others. As Guttentag and Secord (1983) noted, "Sex ratios by themselves do not bring about societal effects, but rather that they combine with a variety of other social, economic, and political conditions to produce the consequent effects on the roles of men and women and the relationships between them" (p. 137).

One of the more extreme of these social effects occurred in the United States from 1965 through the 1970s. During this time, there were more women than men looking for marriage partners in many parts of the country, which enabled men to better pursue their sexual preferences. In comparison to other historical periods, this epoch and others in which a similar skew occurred are characterized by liberal sexual mores (i.e., many short-term sexual partners for both sexes); high divorce rates; increases in the number of out-of-wedlock births and the number of families headed by single women; an increase in women's participation in the workforce; and a lower willingness of men to invest in fatherhood. During these periods, men are better able to express their preferences for a variety of sexual partners and relatively low levels of investment in children. A sharply different pattern emerges when there is an oversupply of men. During these epochs, women are better able to enforce their preferences than are men. As a result, these periods are characterized by an increase in the level of commitment of men to marriage, as indexed by declining divorce rates and a greater willingness of men to invest in their children.

Cultural Mores and Resource Availability

Wider social mores or values also influence the dynamics of sexual relationships, and one of the most important of these is the prohibition against

polygynous marriages (MacDonald, 1995). In societies in which polygyny is not constrained by formal or informal rules, culturally successful men (about 10–15 percent of men) will typically marry several women. One crucial consequence is some men sire many children and many men sire no children. The result is an increase in male-on-male aggression and other changes in reproductive dynamics.

Western culture has a history of monogamous marriages, but polygynous sexual relationships by culturally successful men, that is, these men typically had a single wife with whom heirs were sired, as well as many mistresses (Betzig, 1986, 1992). In Western Europe, cultural prohibitions emerged slowly during the Middle Ages such that the ability of dominant men to engage in polygyny was gradually reduced (MacDonald, 1995). The result is a system of socially imposed monogamy, whereby nearly all men have the potential to develop sexual and reproductive relationships. One consequence is that culturally successful men become especially choosy when it comes to marriage partners, as they are constrained to invest their resources in a single woman and her children. The intensity of competition among women to marry these men is also predicted and appears to increase accordingly (Geary, 1998). These days, polygyny is achieved in Western culture through serial monogamy, which has an important reproductive consequence for men but not for women (Forsberg & Tullberg, 1995). This is because men, but not women, who engage in serial monogamy have more children than their peers who stay monogamously married.

The resources needed to raise a family and the availability of these resources in the local ecology also influence sexual behavior and reproductive patterns (Flinn & Low, 1986). When resources are scarce and it takes the efforts of both parents to keep children alive, the ability of a prospective long-term partner to secure resources becomes crucial in the mate-choice decisions of both sexes. In these societies, polygyny is rare, and monogamy and high levels of fathers' investment in children are the norm. A parallel pattern is found even in wealthy societies, at least for women. In the United States, women's criteria for marriage partners vary with the cost of living. In cities with a high cost of living, women placed a greater emphasis on the man's earning potential than did women living in other cities (McGraw, 2002). In Spain, women with economic resources appear to place less emphasis on men's socioeconomic status than do women with fewer resources (Gil-Burmann, Pelaez, & Sanchez, 2002).

More general, culture-wide standards of beauty also vary with ecological conditions. In an analysis of cross-cultural differences in the relative plumpness or thinness of women—waist-to-hip ratio stays steady with moderate changes in weight due to the pattern of fat distribution—as the preferred body type, Anderson et al. (1992) found that relative plumpness was preferred in nearly twice as many societies (44 percent) as relative thinness (19 percent). Plumpness tended to be favored in societies in which the food supply was

unpredictable, but thinness was not necessarily the preferred standard in societies with excess food. In a related study, Pettijohn and Jungeberg (2004) found that economic and social well-being in the United States were related to the facial and body features of the *Playboy* playmate of the year. When times were difficult (e.g., increase in unemployment rate), the playmates tended to be taller, heavier, and had more mature (e.g., smaller eyes) facial features. Thinner playmates tended to be found with economic prosperity and higher levels of social well-being. These studies suggest that cultural and historical variation in the ideal for women's beauty varies, at least in part, with stability and availability of food and other resources.

CONCLUSION

Many people are uncomfortable with the proposal that human behavior in general and human sexuality in particular are the result of a long evolutionary history and are essentially about surviving and reproducing. But this discomfort does not make these proposals incorrect, and in fact an evolutionary perspective on human sexual behavior is the only theoretical lens that provides the full range of explanation and understanding of these phenomena. Darwin's (1871) insights on the processes of sexual selection and later discoveries regarding the importance of parenting and potential rates of reproduction for shaping the evolution and here-and-now expression of sexual behavior and sex differences in this behavior have provided compelling explanations of these behaviors in hundreds of species (Andersson, 1994; Clutton-Brock & Vincent, 1991; Trivers, 1972). It readily follows that these same mechanisms will yield many insights on human sexuality and human sex differences (Geary, 1998; Symons, 1979), and this is indeed the case, as I illustrated with women's and men's mate preferences and variation in these preferences across historical periods and different cultures. With this chapter, I have in fact only scratched the surface regarding the power of this approach and hope that it has piqued the readers' interest in reading more and thinking more about this topic.

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5

Love

Pamela C. Regan

> Well, I can't speak for anyone else, but for me, the only way I'd have sex with someone was if we were deeply in love. If two people are in love, then sex seems like a natural way to express those feelings. (19-year-old woman interviewed by the author)

> The decision to have sex is a personal choice that everyone should be free to make. Some people have sex just because they enjoy it, or because they have the chance to do it. That's fine; it's a personal decision. Other people, and I'm one of them, think that sex is best when it's done out of love, with someone you're involved with. (20-year-old man interviewed by the author)

As the quotations above illustrate, many people view love and sex as intimately connected. In fact, attitude surveys conducted around the United States reveal that the majority of adults and teenagers feel that sexual activity is most appropriate when it occurs between two people who are involved in a loving, committed relationship (Reiss, 1964; Sprecher, McKinney, Walsh, & Anderson, 1988). And being in love—and wanting to express those feelings of love to the partner—is one of the primary reasons couples engage in intercourse with one another (Jessor, Costa, Jessor, & Donovan, 1983; Leigh, 1989). Love also is related to many other significant interpersonal events in human life,

including marriage and other forms of long-term pair-bonding, reproduction and child rearing, and intimacy and social support. Thus, it is hardly surprising that most people eagerly seek out love and believe that forming a successful love relationship is essential for their personal happiness (Berscheid & Regan, 2005). This chapter explores the topic of love. We begin by considering general theories of love and the measurement instruments that are associated with them. Next, we explore the two types of love that are most closely related to sexuality; namely, passionate love and companionate love. Specifically, we examine theories about the nature of passionate and companionate love, consider how scientists typically measure or assess feelings of love, and discuss research that illuminates the role that these two important varieties of love play in people's lives.

WHAT IS LOVE? GENERAL THEORIES ABOUT THE NATURE OF LOVE

Throughout history, scholars from a variety of disciplines have speculated about the nature of love. In their efforts to determine what is common to all types of love and what is unique to each particular variety, they have tended to follow two general approaches. Early theorists developed their classification systems from a consideration of existing literature and from previous philosophical, theological, and scientific discourse. Contemporary theorists have relied on empirically based methods (derived from the collection and analysis of data provided by research participants). Despite their different approaches, both early and contemporary theorists agree that love is a multifaceted phenomenon.

Early Taxonomies of Love

Early scholars interested in understanding the nature of love focused on identifying and cataloging different proposed varieties or types of love. One of the earliest known written treatises on love appeared in France during the late twelfth century. Written by Andreas Capellanus, *The Art of Courtly Love* considers the origins, manifestations, and effects of love, as well as how love can be acquired, increased, decreased, and terminated. Capellanus (ca. 1184/1960) argued that love consists of two basic varieties—pure love and common love. Pure love is durable (it "goes on increasing without end"), is based on affection, and is the kind of love "that anyone who is intent upon love ought to embrace with all his [or her] might." Common love is fragile and based upon sexual feelings and desires. According to Capellanus, this particular variety of love "gets its effect from every delight of the flesh and culminates in the final act of Venus" (p. 122).

Other early scholars also proposed that multiple varieties of love exist, each containing specific features and characteristics. For example, in the late 1800s,

William James (the founder of American psychology) differentiated between maternal love, which he argued was largely altruistic in nature, and another variety of love (to which he neglected to give a label) that was characterized by sexual appetite, emotional intensity, and exclusivity (i.e., directed toward one particular individual to the exclusion of all others) (1950). During the same period of time, the German physician Richard von Krafft-Ebing (1945) identified four distinct types of love. These were *true love*, a hardy mixture of altruism, affection, closeness, and sexuality; *sensual love*, a fleeting, fragile love based on sexual desire and romantic idealization of the loved one; *sentimental love*, about which Krafft-Ebing had little to say other than that it was self-indulgent and "nauseating"; and *platonic love*, which was grounded in compatibility and feelings of friendship.

Half a century later, psychotherapist Albert Ellis (1954) proposed an even greater number of possible love varieties, ranging from parental love and familial love, to conjugal love, romantic love, and sexual love, to self-love, religious love, love of animals, and love of humanity. Existential theorist Erich Fromm (1956) also believed that love existed in a number of different forms. According to his taxonomy, varieties of "real love" include brotherly love, motherly love, fatherly love, erotic love, self-love, and love of God. Each of these types of love contains four basic features—caring, respect, responsibility, and knowledge—along with its own unique features. For example, motherly love is distinguished by altruism and unconditional regard, whereas erotic love is short-lived and sexual.

Unlike his contemporaries Ellis and Fromm, religious writer and theorist C. S. Lewis proposed the existence of only four primary types of love, each based on earlier distinctions made by Greek philosophers. *Affection* (called *storge* [stor-gay] by the Greeks) is based on familiarity and repeated contact and resembles the strong attachment seen between parents and children. This type of love is found among friends, family members, acquaintances, lovers, and between people and their pets. Affectionate love has a "comfortable, quiet nature" and consists of feelings of warmth, interpersonal comfort, and satisfaction in being together (Lewis, 1988). The second variety of love depicted by Lewis is *friendship* (*philias*). Common interests, insights, or tastes, coupled with cooperation, mutual respect, and understanding, form the core of this love type. More than mere companionship, Lewis argued that friendship develops when "two people . . . discover that they are on the same secret road" and become kindred souls (p. 67). *Eros*, or "that state which we call 'being in love,' " is the third variety of love (p. 91). Unlike the other kinds of love that exist, Lewis proposed that erotic love contains a mixture of fluctuating emotions ("sweetness" and "terror"), as well as a strong sexual component, feelings of affection, idealization of the loved one, and a short life span. The final love type he identified is *charity*, a selfless, altruistic love that is based on tolerance, forbearance, and forgiveness.

Psychometric Approaches to Love

As we have discussed, all of the early theorists agreed that love is a multifaceted experience and that more than one variety of love exists, and they developed their love classification systems by relying heavily on existing theoretical discourse and literature. Contemporary social scientists, while recognizing the importance of this earlier, theory-based work, have adopted a psychometric approach to understanding the nature of love. This approach involves collecting information about the love experiences of people involved in actual ongoing relationships, and then using statistical methods (including cluster analysis and factor analysis) to identify common themes and dimensions underlying those experiences. The assumption made by researchers who adopt this approach is that identification of the common elements in people's actual love experiences provides an effective way of distinguishing among different love varieties. The love taxonomies proposed by psychologist Robert Sternberg and sociologist John Lee were both developed using this approach.

The Triangular Theory of Love

On the basis of factor analysis of the self-reported experiences of men and women in dating relationships, as well as a consideration of previous social psychological theory and research on love, Sternberg (1986; 1998) suggested that love could be understood in terms of three basic components—intimacy, passion, and decision/commitment. Each of these components can be envisioned as forming the vertices of a triangle (see Figure 5.1).

The *intimacy component* of love is primarily emotional in nature and involves feelings of warmth, closeness, connection, and bondedness in the love relationship. Signs of intimacy include wanting to promote the welfare of the loved one; experiencing happiness, mutual understanding, and intimate communication with the loved one; having high regard for the loved one; giving and receiving emotional support; being able to count on the loved one in times of need; sharing oneself and one's possessions with the loved one; and valuing the presence of the loved one in one's life (Sternberg & Grajek, 1984). The *passion component* is motivational in nature and consists of the drives that are involved in romantic and physical attraction, sexual consummation, and related phenomena. Although passion takes the form of sexuality in many love relationships, Sternberg suggested that other needs (including the need for affiliation, for dominance over others, and for self-esteem) can contribute to the experience of passion. The *decision/commitment component* of love is primarily cognitive in nature and represents both the short-term decision that one individual loves another and the long-term commitment to maintain that love.

According to Sternberg, these three basic love components differ with respect to a number of properties, including stability and conscious controllability. For example, the intimacy and decision/commitment components are

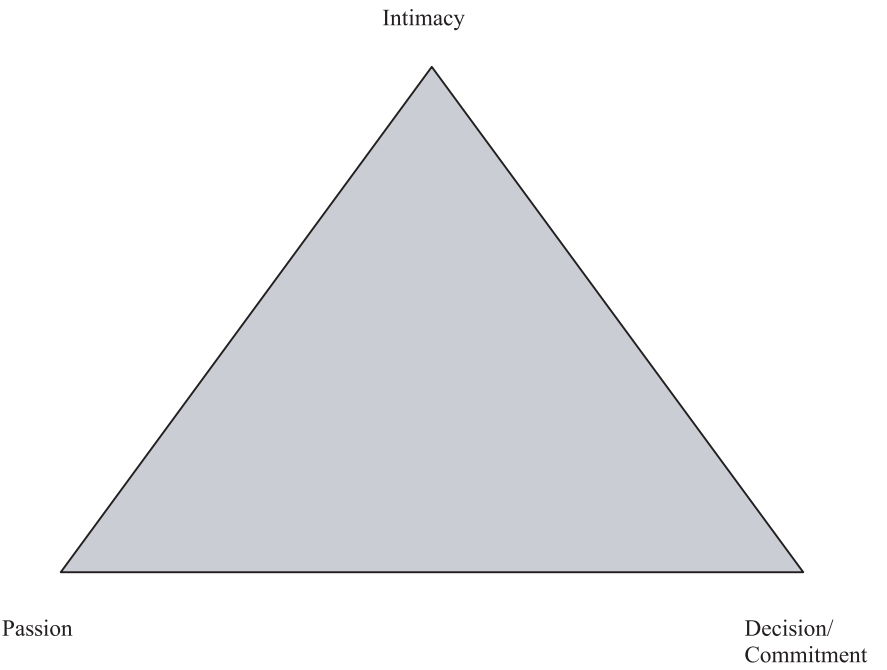

Figure 5.1. Sternberg's Triangular Theory of Love.

usually fairly stable in close relationships. Once we develop feelings of intimacy for someone and become committed to the relationship we have with that person, these features tend to endure over time. The passion component, however, tends to be less stable and predictable. In addition, although people possess a great deal of conscious control over the commitment that they make to a relationship, and even some degree of control over their feelings of intimacy, they usually have very little conscious control over the amount of passion that they experience for their partners.

The three basic components of love combine to produce eight different love types or varieties of love relationship, summarized in Table 5.1. *Nonlove* (no intimacy, passion, or decision/commitment) describes casual interactions that are characterized by the absence or very low amounts of all three love components. Most of our transient, everyday interactions or casual associations fall into this category. *Liking* (intimacy alone) relationships are essentially friendships. They contain warmth, intimacy, closeness, and the other positive emotions associated with intimacy, but lack passion and decision/commitment. *Infatuation* (passion alone) is an intense, "love at first sight" experience that is marked by extreme attraction and arousal in the absence of any real emotional intimacy and decision/commitment. In *empty love* (decision/commitment alone) relationships, the partners are committed to each other and the

Table 5.1. Sternberg's Taxonomy of Love Relationships

	Love Component		
Kind of Love Relationship	*Intimacy*	*Passion*	*Decision/ Commitment*
Nonlove	Low	Low	Low
Liking	High	Low	Low
Infatuation	Low	High	Low
Empty love	Low	Low	High
Romantic love	High	High	Low
Companionate love	High	Low	High
Fatuous love	Low	High	High
Consummate love	High	High	High

Note: According to Sternberg, the three basic components of love—intimacy, passion, and decision/commitment—combine to produce eight different varieties of love.

relationship, but lack an intimate emotional connection and passionate attraction. Sternberg believed that this type of love characterized couples at the end of a long-term relationship (or at the beginning of an arranged marriage). *Romantic love* (intimacy + passion) consists of feelings of intimate closeness and connection coupled with strong physical attraction. *Companionate love* (intimacy + decision/commitment) relationships are essentially long-term, stable, and committed friendships that are characterized by high amounts of emotional intimacy, the decision to love the partner, and the commitment to remain in the relationship. This type of love is often seen between best friends or between partners in long-term romantic relationships in which sexual attraction has faded. Couples who experience *fatuous love* (passion + decision/commitment) base their commitment to each other on passion and desire rather than deep emotional intimacy. These "whirlwind" relationships are typically unstable and at risk for termination. Finally, *consummate love* (intimacy + passion + decision/commitment) results from the combination of high levels of all three components. According to Sternberg, this is the type of fulfilling, "complete" love that many individuals strive to attain, particularly in their romantic relationships.

Because the three basic components of love occur in varying degrees within a relationship, most love relationships will not fit cleanly into one particular category but will reflect some combination of categories.

The Colors (Styles) of Love

Using the metaphor of color, Lee (1973, 1977, 1988) developed a system in which the various types of love were classified as either primary or secondary. Like Sternberg, Lee not only drew on existing discourse but also employed psychometric techniques in his quest to understand the nature of

love (including cluster analysis of love "symptoms" derived from literature, as well as factor analysis of data resulting from a card-sorting task in which men and women described their own personal love stories by sorting 1,500 cards containing brief descriptions of love-related events, behaviors, or emotions). The results of these analyses produced a taxonomy containing three primary and three secondary colors or styles of love.

The first of the three primary love styles is *eros*. Resembling passionate love, eros is an intense experience whose most typical symptom is an immediate and powerful emotional and physical attraction to the loved one. According to Lee, the erotic lover tends to be "turned on" by a particular physical type, is prone to fall instantly and completely in love with a stranger (in other words, experiences "love at first sight"), rapidly becomes preoccupied with pleasant thoughts about that individual, feels an intense need for daily contact with the beloved, and wishes the relationship to remain exclusive. Erotic love also has a strong sexual component. For example, the erotic lover experiences intense sexual attraction to the loved one, usually seeks some form of sexual involvement fairly early in the relationship, and enjoys expressing his or her affection through sexual contact. Lee (1988) described the typical erotic lover as being "eager to get to know the beloved quickly, intensely—and undressed" (p. 50).

The second primary color of love is *ludus*, a variety of love characterized by emotional control and a marked absence (and even active avoidance) of commitment. The typical ludic lover views love as a game that should be played with skill and cool detachment (and often with several partners at the same time). As the quintessential commitment-phobe, the ludic lover has no intention of including the current partner(s) in any future life plans or events and is bothered if a partner should show any sign of growing involvement, need, or attachment. In addition, people who adopt this love style tend to avoid seeing their partners too often, believe that lies and deception are justified, and expect their partners to maintain control of their emotions at all times. Like erotic love, ludus also has a physical or sexual component. However, unlike erotic lovers, ludic lovers tend to be attracted to a wide variety of physical types and they view sexual activity as an opportunity for pleasure rather than for intense emotional bonding.

Storge is the third primary love color. Described by Lee (1973) as "love without fever or folly" (p. 77), storge resembles the concept of "affection" described earlier by Lewis. This variety of love is stable and durable, and is based on a solid foundation of trust, respect, affection, and commitment. Indeed, the typical storgic lover views and treats the partner as a valued friend, does not experience the intense emotions or physical attraction to the partner associated with erotic love, prefers to talk about and engage in shared interests with the partner rather than to express direct feelings, is shy about sex, and tends to demonstrate his or her affection in nonsexual ways. To the storgic lover, love is an extension of friendship.

Like the primary colors, the primary love styles can be combined to form secondary colors or styles of love. The three secondary styles identified by Lee contain features of the primary styles, but they also possess their own unique characteristics. *Pragma* is a variety of love that combines elements of storge and ludus. Lee (1973) referred to this love style as "the love that goes shopping for a suitable mate" (p. 124). The pragmatic lover has a practical outlook to love and seeks a compatible lover. Essentially, he or she creates a shopping list of desirable attributes and selects a mate based on how well that individual meets these requirements (and, not surprisingly, the pragmatic lover will drop a partner who fails to "measure up" to expectation).

Mania is a secondary love style that reflects the combination of eros and ludus. However, manic lovers lack the self-confidence associated with eros and the emotional self-control associated with ludus. This obsessive, jealous love style is characterized by self-defeating emotions, desperate attempts to force affection from the loved one, and the inability to believe in or trust any affection the partner or loved one actually does display. The manic lover is desperate to fall in love and to be loved, begins immediately to imagine a future with the partner, wants to see the partner daily, tries to force the partner to show love and commitment, distrusts the partner's sincerity, and is extremely possessive. Lee (1973) felt that this was the most potentially destructive love style, calling it "irrational, extremely jealous, obsessive, and often unhappy" (p. 15).

The last secondary color of love is *agape*, which combines eros and storge. Agape is similar to Lewis's concept of "charity," and represents an altruistic, selfless love style that implies an obligation to love and care for others without any expectation of reciprocity or reward. This love style is universal in the sense that the typical agapic lover feels that everyone is worthy of love and that loving and caring for others is a duty of the mature person. With respect to personal love relationships, agapic lovers will put aside their own needs and interests and devote themselves to the partner, even stepping aside in favor of a rival who seems more likely to meet the partner's needs. Although Lee felt that many people respected and strived to attain the agapic ideal, he believed that the give-and-take that characterizes most romantic relationships precluded the occurrence of purely altruistic love.

Measuring Love Styles

The availability of a reliable measurement instrument is extremely important for the scientist (or anyone, for that matter) who is interested in understanding love and identifying the experiences and events with which love is associated. Not surprisingly, given its strong psychometric basis, Lee's classification system inspired the development of a multi-item scale that is designed to measure each of the proposed love styles (Hatkoff & Lasswell, 1977; Lasswell & Lasswell, 1976). This scale, originally created in the 1970s, was subsequently revised extensively by Clyde and Susan Hendrick and their

colleagues (Hendrick & Hendrick, 1986, 1990; Hendrick, Hendrick, & Dicke, 1998; Hendrick, Hendrick, Foote, & Slapion-Foote, 1984). Called the Love Attitudes Scale, this instrument contains items that reflect the important components of the six love styles as originally conceptualized by Lee. Sample items include:

- My partner and I have the right physical "chemistry" between us. *Eros*
- I feel that my partner and I were meant for each other. *Eros*
- I believe that what my partner does not know about me would not hurt him/her. *Ludus*
- When my partner gets too dependent on me, I want to back off a little. *Ludus*
- Our friendship merged gradually into love over time. *Storge*
- Our love is really a deep friendship, not a mysterious, mystical emotion. *Storge*
- In choosing my partner, I believed it was best to love someone with a similar background. *Pragma*
- A main consideration in choosing my partner was how he/she would reflect on my family. *Pragma*
- When my partner does not pay attention to me, I feel sick all over. *Mania*
- I cannot relax if I suspect that my partner is with someone else. *Mania*
- I cannot be happy unless I place my partner's happiness before my own. *Agape*
- I would endure all things for the sake of my partner. *Agape*

The Love Attitudes Scale has been used in many empirical investigations. In general, the results of these studies reveal that love experiences vary as a function of individual difference and group variables. For example, many researchers find that women score higher on the love styles of storge and pragma than do men, whereas men tend to score higher on ludus (Hendrick & Hendrick, 1988, 1987, 1995; Rotenberg & Korol, 1995). There also are multicultural and cross-cultural differences in love style. Within the United States, Asian American adults often score lower on eros and higher on pragma and storge than Caucasian, Latino, and African American adults (Dion & Dion, 1993; Hendrick & Hendrick, 1986). Latino groups, on the other hand, often score higher on ludus than Caucasian groups (Contreras, Hendrick, & Hendrick, 1996). Cross-cultural comparisons reveal that Americans tend to endorse a more storgic and manic approach to love than do the French, who, in turn, tend to demonstrate higher levels of agape (Murstein, Merighi, & Vyse, 1991).

Interestingly, only a few researchers have examined the role of love styles in ongoing romantic relationships. In general, there is a tendency for individuals to pair with people who have a similar love style—erotic lovers fall passionately in love with other erotic lovers, agapic people pair with other equally selfless

individuals, and so on (Davis & Latty-Mann, 1987; Morrow, Clark, & Brock, 1995). In addition, there is some evidence that love styles are associated with relationship outcomes. For example, research on dating couples conducted by Hendrick and her colleagues revealed that men and women who adopted an erotic style of loving tended to feel particularly satisfied with their romantic relationships (Hendrick, Hendrick, & Adler, 1988). In addition, the partners of women who scored high on eros (erotic or passionate love) or agape (selfless love) were highly satisfied, whereas the partners of women who scored high on ludus (game-playing love) were not very satisfied. More recently, Brenda Meeks, Susan Hendrick, and Clyde Hendrick (1998) examined the correlation between relationship satisfaction and various love styles in a sample of dating couples. Their results revealed that men and women who endorsed an erotic or storgic approach to love also tended to be highly satisfied with their relationships. Those who possessed a ludic love style, however, were less satisfied. Taken as a whole, these results suggest that game playing, lack of friendship, and lack of passion are not conducive to interpersonal happiness.

When considering this particular area of research, it is important to keep in mind that not everyone possesses one style of loving. Some people may have several love styles that characterize their approach to relationships. It is also possible for a person's love style to change over his or her lifetime or during the course of a given relationship. For example, the emotional intensity and passionate attraction associated with an erotic love style, or the jealous preoccupation associated with a manic love style, may occur more often during the beginning stages of a romance when the partners are uncertain about their feelings and the future of their relationship. Over time, however, these feelings may be replaced by more storgic or agapic feelings as the partners grow closer and their attachment stabilizes.

Both Sternberg and Lee developed their love classification systems by examining the self-reported experiences of adult men and women involved in romantic (dating, cohabiting, or marital) relationships. Similarly, the measurement instrument developed to reflect Lee's theory of love, the Love Attitudes Scale, also focuses on these kinds of relationships (for example, respondents are instructed to answer the items with respect to their current or previous romantic partner). Thus, the classification systems proposed by Sternberg and Lee probably are more appropriately considered taxonomies of adult romantic love rather than of general love varieties.

The Prototype Approach: Identifying Mental Models of Love

Like psychometric theorists, researchers who adopt the prototype approach also rely on empirical methods in their efforts to understand love. Unlike Sternberg, Lee, and other psychometric theorists, however, prototype researchers typically do not confine their investigations to romantic varieties of love. In addition, they focus more specifically on people's knowledge, beliefs,

and attitudes—their mental representations—of the concept of love. Researchers who follow this approach seek to determine what people think when they are asked about love, how people cognitively differentiate love from related concepts (e.g., liking), how mental representations of love are formed over time, and how these conceptualizations or mental representations influence people's behavior within their ongoing interpersonal relationships.

The Hierarchy of Love

Eleanor Rosch (1973, 1975, 1978) was an early pioneer in the use of prototype analysis for understanding natural language concepts. According to Rosch, natural language concepts (for example, *love*, *dog*, or *apple*) have both a vertical and a horizontal dimension. The vertical dimension has to do with the hierarchical organization of concepts; that is, with relations among different levels of concepts. Concepts at one level may be included within or subsumed by those at another, higher level. For example, the set of concepts *fruit*, *apple*, and *Red Delicious* illustrates an abstract-to-concrete hierarchy with superordinate, basic, and subordinate levels, as does the set of concepts *mammal*, *dog*, and *Golden Retriever*.

Using the methods originally developed by Rosch, some social scientists have investigated the hierarchical structure of the concept of love. Psychologist Phillip Shaver and his colleagues found evidence that *love* is a basic-level concept contained within the superordinate category of *emotion* and subsuming a variety of subordinate concepts that reflect types or varieties of love (e.g., *passion*, *infatuation*, *liking*) (Shaver, Schwartz, Kirson, & O'Connor, 1987). In other words, most people consider passion, infatuation, and liking to be types of love, which, in turn, is viewed as a type of positive emotion.

The Prototype of Love

Concepts also vary along a horizontal dimension. This dimension concerns the differentiation of concepts at the same level of inclusiveness (e.g., the dimension on which such subordinate level concepts as *Red Delicious*, *Fuji*, and *Granny Smith* apples vary, or along which the concepts of *Golden Retriever*, *Collie*, and *Poodle* dogs vary). According to Rosch, many natural language concepts have an internal structure whereby individual members of that category are ordered in terms of the degree to which they resemble the prototypic member of the category. A *prototype* is the best, clearest example of the concept—the most applelike apple (e.g., Red Delicious) or the "doggiest" dog (e.g., Golden Retriever).

People use prototypes to help them decide whether a new item or experience belongs or "fits" within a particular concept. For example, in trying to decide whether or not she is in love with her partner, a woman might compare the feelings ("I'm happy when he's here and sad when he's not"), thoughts ("I

think he's very attractive," "I wonder what our children would look like"), and behaviors ("I arrange my schedule so that we can spend time together," "We go everywhere together") that she has experienced during their relationship with her prototype—her mental model—of "being in love" ("People who are in love miss each other when they're apart, think about each other a lot, imagine a future life together, and spend a lot of time with each other"). If what she is experiencing matches her prototype, she will probably conclude that she is, in fact, in love with her partner.

The prototype approach has been used to explore the horizontal structure of a variety of relational concepts, including love. Beverley Fehr and James Russell (1991), for example, asked men and women to generate as many types of love as they could in a specified time and then asked another sample of individuals to rate these love varieties in terms of "prototypicality" or "goodness of example." Of the ninety-three subtypes of love that participants generated, *maternal love* was rated as the best or most prototypical example of love, followed by *parental love*, *friendship*, *sisterly love*, *romantic love*, *brotherly love*, and *familial love*. *Infatuation* and *puppy love* were considered two of the least prototypical examples of love.

Researchers also have identified the prototypic features (as opposed to types) of love. For example, Fehr (1988) asked one group of participants to list the characteristics of the concept love and a second group of participants to rate how central each feature was to the concept of love. Features that her participants believed were central or prototypical to love included the following:

- Trust
- Caring
- Honesty
- Respect
- Concern for the other's well-being
- Loyalty
- Commitment
- Acceptance

Features that were considered unimportant or peripheral to the concept of love included:

- Fear
- Uncertainty
- Dependency
- Seeing only the other's good qualities
- Euphoria

Researchers who use the prototype approach have provided a wealth of information about people's thoughts and beliefs about love, as well as the ways in which individuals differentiate love from related concepts like joy, anger, and liking. However, this approach has not yet been able to successfully identify how people actually form their conceptualizations of love, and how these mental representations guide and influence people's behavior in real-life relationships.

As can be seen from the foregoing discussion, scholars throughout history, and across disciplines, who have sought to understand love have not always come to the same conclusions. They disagree about the exact number of different kinds of love that exist. Capellanus and James, for example, contented themselves with a mere two varieties, whereas Krafft-Ebing and Lewis argued in favor of four distinct types, and Sternberg and Ellis each identified close to a dozen types. They also disagree about what to label the varieties of love that they believe to exist, and in many cases they have not been able to specify the unique causes, characteristics, and consequences of the various types of love.

These areas of disagreement notwithstanding, early and contemporary scholars have reached some consensus with respect to the topic of love. First, they all agree that the experience of love is intimately associated with the quality of individual human life and that, consequently, the study of love is a necessary and important scientific endeavor. Second, they agree that love exists in many different forms or varieties (a view that is supported by analyses of people's mental representations of love). Third, typologies of love and people's reports of their experiences in romantic relationships suggest that love (at least, adult romantic love) is composed at a minimum of two distinct varieties. The first type (generally called passionate or erotic love) is emotionally intense, fragile, and sexually charged, and the second type (known as companionate, friendship-based, or affectionate love) is durable, slow to develop, and infused with warmth and intimacy. These two varieties of love have received a great deal of attention from contemporary love researchers, in part because of their important association with personal and species survival—as noted by Lewis (1988), "Without Eros none of us would have been begotten and without Affection none of us would have been reared" (p. 58). We turn now to a consideration of these two kinds of love.

PASSIONATE LOVE

Out of all the many varieties of love that theorists and researchers have identified, *passionate love* has received the most sustained attention. This focus is justified by the fact that passionate love appears to be a universal human experience. Social scientists have found evidence for the existence of passionate love in virtually all known human societies (Jankowiak & Fischer, 1992; Sprecher et al., 1994). Additionally, many people place a high degree of value on this particular kind of love. For example, increasing numbers of men and

women around the world are basing their selection of marital and other long-term romantic partners on passionate love (Goodwin, 1999). Cross-cultural surveys reveal that most people say that they will not marry unless they are in love with their partner (Levine, Sato, Hashimoto, & Verma, 1995; Simpson, Campbell, & Berscheid, 1986). And finally, passionate love appears to be a unique experience. As we will discuss below, this particular variety of love possesses several features that clearly differentiate it from other kinds of love.

What Is Passionate Love? Classic and Contemporary Theories

Early theorists suggested that passionate love consists of a number of unique features, including the following:

- swift and sudden onset
- fairly brief life span
- idealization of the loved one
- mental preoccupation with the loved one or the love relationship
- intense and often fluctuating emotions
- physiological arousal and its bodily sensations
- sexual desire or lust
- exclusivity (a focus on one specific individual)

For example, Krafft-Ebing (1945) posited that sensual love (his label for passionate love) consisted largely of the romantic idealization of the loved one's qualities coupled with intense sexual desire, and he stated that this particular variety of love was "never true or lasting" and died quickly. In the 1940s, noted love theorist and psychotherapist Theodor Reik (1944, 1945) expressed a similar view of passionate love, arguing that it was a mixture of three unique characteristics—sexual desire or the "sex urge," a short life span, and idealization of the loved one—combined with affection (which he believed was present in many types of love). A decade later, Ellis (1954) also concluded that the distinguishing features of passionate love were the unrealistically positive evaluation and "fictionalization" of the loved one, intense and changeable emotions and feelings, fragility, exclusivity, and sexual desire. He believed that sexual desire, in particular, was the most powerful force behind the development of passionate love, and that this type of love would inevitably perish once desire was sated—"sexual and marital consummation indubitably, in the vast majority of instances, maims, bloodies, and finally kills romanticism" (p. 116).

Like their predecessors, contemporary love theorists have continued to emphasize the intense, idealistic, emotional, sexual, and short-lived nature of passionate love. As we have discussed earlier, Lee (1973, 1977) viewed erotic

(passionate) love as a combination of emotional intensity, sexual attraction, and mental preoccupation. Sternberg, too, considered emotional intimacy and passionate attraction to be important components of what he termed romantic love. He also was keenly aware of its fleeting and fragile nature. Drawing an analogy to substance addiction, Sternberg (1988) suggested that the rapid development of passion is inevitably followed by habituation, so that over time, the partner is no longer as physically and mentally "stimulating" as he or she once was.

Other theorists have reached similar conclusions. For example, psychologists Kenneth and Karen Dion (1973) suggested that passionate love is a mysterious and volatile experience characterized by such symptoms as daydreaming, sleep difficulties, impaired ability to concentrate, and fluctuating emotions. Similarly, in their analysis of the elements of passionate love relationships, Keith Davis and Michael Todd (1982) proposed that the exclusivity that characterizes this type of love can produce both intensely positive and negative emotional states (ranging from euphoria to jealousy, possessiveness, and dependency).

Among contemporary theorists, social psychologists Ellen Berscheid and Elaine Hatfield (formerly Walster) (1971, 1974) have devoted the most sustained attention to defining passionate love. In their original theoretical papers on the nature of passionate love, they proposed that this variety of love blossoms when a person is highly aroused physiologically and when situational cues (like the presence of another individual) indicate that "being in love" is the appropriate label for that arousal. These theorists suggested that emotions that are associated with strong physiological arousal (including fear, frustration, and excitement) can produce and enhance passionate attraction between two people. In addition, like Ellis, Lee, and Sternberg, Berscheid and Hatfield theorized that sexuality (in particular, sexual attraction or desire) is strongly linked with the experience of passionate love. More recent discourse provided by these authors and their colleagues continues to emphasize the transitory, emotional, and sexual nature of this kind of love (Berscheid, 1988; Berscheid & Regan, 2005; Hatfield & Rapson, 1993; Regan & Berscheid, 1999).

Dorothy Tennov (1979, 1998) characterized *limerence* (the state of being passionately in love) as a subjective experience that is marked by persistent, intrusive thoughts about the loved one, an acute longing for reciprocation of one's feelings, mood fluctuations, intense awareness of the loved one's actions, physical reactions, emotional peaks and valleys depending on the loved one's actions and perceived reciprocity, and idealization of the loved one's qualities. Exclusivity is one particularly important hallmark of limerence. Like many of the earlier theorists, Tennov (1998) suggested that there can be only one object of passionate love at a time, and that once someone is selected, "limerence cements the reaction and locks the emotional gates against competitors" (p. 86). She also believed that sexual attraction is a necessary component of limerence:

> Sexual attraction is not "enough," to be sure. Selection standards for limerence are, according to informants, not identical to those by which

> "mere" sexual partners are evaluated, and sex is seldom the main focus of limerence. Either the potential for sexual mating is felt to be there, however, or the state described is not limerence. (1979, p. 25)

In sum, passionate love is believed by most theorists to be a short-lived state that is characterized by idealization of the loved one, preoccupation and obsessive thinking, and intense emotions. In addition, passionate love is presumed to be an exclusive rather than an inclusive or generalized experience. That is, unlike affectionate love, agapic love, familial love, and so on, which can be felt for many other people at the same time, passionate love is assumed to be directed at one and only one particular individual. Finally, most theorists propose that sexuality (most notably, sexual desire or attraction) is a distinguishing feature of passionate love.

The Measurement of Passionate Love

There are two common methods researchers use to measure passionate love, both involving self-report. The first includes single-item measures in which respondents are asked to report the quantity or the intensity of passionate love they experience for their partner using a rating scale. Examples of such items include:

Q. How much passionate love do you currently feel for your partner?

1	2	3	4	5	6	7	8	9
None at all								A great deal

Q. Rate the intensity of your feelings of passionate love for your current partner.

1	2	3	4	5	6	7	8	9
Not at all intense								Extremely intense

Q. How deeply are you in love with_____?

1	2	3	4	5	6	7	8	9
Not at all in love								Very much in love

Q. How strong are your feelings of passionate love for_____?

1	2	3	4	5	6	7	8	9
Extremely weak								Extremely strong

Single-item measures such as these are easy to administer and appear to be relatively valid (that is, they seem to provide a general assessment of the extent

to which someone is experiencing feelings of passionate love). However, many researchers prefer to use larger, multi-item scales that have been developed specifically to measure the various elements of passionate love that theorists believe to be important. Although several different passionate love scales have been constructed over the years, the most commonly utilized and empirically sound measures are the erotic love subscale of the Love Attitudes Scale (discussed earlier in this chapter) and the Passionate Love Scale developed by Elaine Hatfield and Susan Sprecher (1986).

The Passionate Love Scale represents the most complete measure of passionate love currently available. Drawing on previous theory, existing measurement instruments, and in-depth personal interviews, Hatfield and Sprecher created a series of thirty items designed to assess the various components of the passionate love experience. For example:

- Sometimes my body trembles with excitement at the sight of____.
- Since I have been involved with___, my emotions have been on a roller coaster.
- Sometimes I cannot control my thoughts; they are obsessively on_____.
- For me,____is the perfect romantic partner.
- In the presence of____, I yearn to touch and be touched.

The items clearly reflect what theorists believe are the essential ingredients of passionate love: Intense physiological arousal, emotional turbulence and intensity, cognitive preoccupation, idealization of the loved one, and physical or sexual attraction.

Research on Passionate Love

Many of the suppositions that theorists have made about the nature of passionate love have received empirical support. For example, passionate love does appear to be more fragile and less durable than other kinds of love. Research conducted with married couples generally reveals that levels of passionate love decline over time (Hatfield, Traupmann, & Sprecher, 1984). Researchers who have surveyed dating couples find similar results. For example, with a sample of 197 dating couples, Susan Sprecher and Pamela Regan (1998) examined whether the number of months that each couple had been dating was related to the amount of passionate love they reportedly felt for each other. These researchers found evidence that passionate love was related to the age or duration of the relationship; specifically, the longer a couple had been together, the lower were their passionate love scores (although passionate love scores were high in all couples). It is important to keep in mind that these results do not imply that passionate love is completely lacking between partners involved in long-term relationships. Rather, these findings simply provide evidence that the intense feelings and sensations characteristic of the first stages of "falling in love" gradually stabilize over time.

Researchers also have found evidence in support of the notion that passionate love is a highly emotional state. Interestingly, whether a passionate lover's emotions and sentiments are positive or negative depends to some extent on whether his or her feelings are reciprocated by the loved one. *Requited* (reciprocated) love is an almost uniformly positive experience. In one study, men and women who were asked to identify the essential features of requited passionate love cited a panoply of positive emotions ranging in intensity from warmth and tenderness to joy, rapture, and giddiness (Regan, Kocan, & Whitlock, 1998). Similarly, couples who are in love with one another report experiencing many more positive than negative emotions (Sprecher & Regan, 1998). In fact, jealousy appears to be the only negative emotion that is consistently associated with the experience of requited passionate love; most partners report having felt jealous at some point during their relationship.

Unrequited passionate love has several of the same positive emotional features as requited passionate love, yet, at the same time, is a much more intensely negative experience. In one of the first studies to explore unrequited passionate love, Roy Baumeister, Sara Wotman, and Arlene Stillwell (1993) asked a group of people who had been in this situation to write autobiographical accounts of their experiences. Many (44 percent) would-be suitors reported that their unreciprocated passion caused them pain, suffering, and disappointment; jealousy and anger (which were usually directed at the loved one's chosen partner); and a sense of frustration. Similarly, 22 percent experienced worries and fears about rejection. In addition to these unpleasant experiences, however, the lovelorn suitors also reported many pleasant emotional outcomes; in fact, positive feelings far outweighed negative ones in the accounts they gave of their experience. For example, happiness, excitement, the blissful anticipation of seeing the beloved, sheer elation at the state of being in love, and other positive emotions were reported by the majority (98 percent) of would-be suitors. Over half (53 percent) also looked back upon their unrequited love with some degree of positive feeling. Thus, passionate love—whether it is requited or not—is clearly an emotional experience.

Passionate love is also a sexual experience. A number of studies demonstrate that both behavioral (e.g., intercourse and other sexual activities) and physiological (i.e., sexual excitement, sexual arousal) aspects of sexuality are associated with feelings of passionate love. For example, people who are more passionately in love report experiencing higher levels of sexual excitement when thinking about the partner, and engaging in more frequent sexual activities with that partner, than individuals who are less passionately in love (Aron & Henkemeyer, 1995; Hatfield & Sprecher, 1986; Sprecher & Regan, 1998). In addition, sexual activity is one of the primary ways in which couples express love to one another. Researchers Peter Marston, Michael Hecht, Melodee Manke, Susan McDaniel, and Heidi Reeder (1998) interviewed a sample of in-love couples about the ways in which they communicated

their feelings of passion to each other. The most common method of expressing passionate attraction was through sexual activities, including "making love."

As the majority of love theorists have speculated, one particular aspect of sexuality—sexual desire or sexual attraction (i.e., lust)—appears to have the strongest association with passionate love. Many men and women certainly seem to think so. For example, Robert Ridge and Ellen Berscheid (1989) asked a sample of college-aged men and women whether they believed that there was a difference between the experience of "being in love" with someone and the experience of "loving" someone. Fully 87 percent emphatically claimed that there was indeed a difference between the two experiences. In addition, when asked to specify the nature of that difference, participants uniformly cited sexual attraction as descriptive of the passionate, "being in love" experience and not of the "loving" experience. Similar results have been reported by Regan et al. (1998). These researchers asked a sample of men and women to list in a free response format all of the features that they considered to be characteristic or prototypical of the state of "being in love." Out of 119 spontaneously generated features, *sexual desire* received the second highest frequency rating (66 percent; *trust* was first, cited by 80 percent). In other words, when thinking about passionate love, two-thirds of the participants automatically thought of sexual desire.

Person perception experiments provide additional support for these prototype results. Person perception experiments are commonly used in social psychological research and essentially involve manipulating people's perceptions of a relationship and then measuring the impact of that manipulation on their subsequent evaluations and beliefs. In one such experiment, Regan (1998) provided a sample of forty-eight undergraduate men and women with two self-report questionnaires ostensibly completed by "Rob" and "Nancy," a student couple enrolled at their university. The members of this couple reported that they were passionately in love with each other, that they loved each other, or that they liked each other. Participants then estimated the likelihood that the members of the couple experience sexual desire for each other and the amount of desire that they feel for each other. Analyses revealed that participants perceived partners who are passionately in love as more likely to experience sexual desire than partners who love each other or who like each other. Similarly, partners who are passionately in love were believed to experience a greater amount of sexual desire for each other than partners who love each other or who like each other. Sexual desire is viewed, at least by young men and women, as an important feature or component of passionate love relationships—and not of relationships characterized by feelings of loving (i.e., companionate love) or liking (i.e., friendship).

Not only do people believe that passionate love is characterized by sexual desire, but most men and women report experiencing sexual desire for the people with whom they are passionately in love. For example, Ellen Berscheid and Sarah

Meyers (1996) asked a large sample of undergraduate men and women to list the initials of all the people they currently loved, the initials of all those with whom they were currently in love, and the initials of all those toward whom they currently felt sexual attraction/desire. Their results indicated that 85 percent of the persons listed in the "in love" category also were listed in the "sexually desire" category, whereas only 2 percent of those listed in the "love" category (and not cross-listed in the "in love" category) were listed in the "sexually desire" category. Thus, the objects of respondents' feelings of passionate love (but not their feelings of love) also tended to be the objects of their desire.

Research with actual dating couples yields similar results. Regan (2000) found that the self-reported amount of sexual desire experienced by men and women for their dating partners was significantly positively correlated with the level of passionate love they felt for those individuals. Their feelings of desire were unrelated, however, to the amount of companionate love and liking they experienced for their partners. In other words, the more sexual desire a person reported feeling for his or her partner, the more strongly he or she reported being in love with (but not liking or loving) that individual. In sum, research reveals that passionate love is a sexualized experience that is strongly associated with feelings of sexual desire for the partner, tends to result in the occurrence of sexual activity, and appears to be linked with sexual arousal and excitement.

COMPANIONATE LOVE

In addition to passionate love, most early and contemporary love theorists include a type of love known today as *companionate love* in their classification schemes. Variously described as affectionate love, friendship love, true love, attachment, storge, and conjugal love, companionate love reflects "the affection and tenderness we feel for those with whom our lives are deeply entwined" (Hatfield & Rapson, 1993).

What Is Companionate Love? Theory and Research

The majority of love theorists conceive of companionate love as containing several basic characteristics, including a relatively slow onset, durability, interdependence, and feelings of affection, intimacy, and commitment. Krafft-Ebing (1945) called this type of love "true love" and stated that it "is rooted in the recognition of the moral and mental qualities of the beloved person, and is equally ready to share pleasures and sorrows and even to make sacrifices" (p. 12). This conceptualization resembles Lewis's definition of "affection" and Ellis's description of conjugal love, as well as the definitions provided by contemporary love theorists. For example, relationship scholar Sharon Brehm (1985) describes this variety of love as built upon a solid foundation of respect, admiration, and

interpersonal trust and rewards. Sternberg (1988) similarly depicts companionate love as composed of feelings of emotional intimacy coupled with a firm commitment to the relationship and the partner. He suggests that companionate lovers possess mutual understanding, share themselves and their possessions with one another, give and receive emotional support, and demonstrate various other signs of intimate connection, affection, and mutuality.

Other contemporary theorists have speculated that, unlike passionate love, companionate love may grow stronger over time because it is grounded in intimacy processes (including caring, understanding, and attachment) that require time to develop fully (Hatfield & Rapson, 1993). Still others have proposed that romantic relationships may progress in a linear fashion from passionate love to companionate love. For example, love theorist Bernard Murstein (1988) wrote:

> With unimpeded access to each other and as a result of habituation, bit by bit generalized, overriding passion and longing evaporate and are replaced by liking or trust, although in good marriages, passion may return on specific occasions. . . . Out of the evolving network of shared experiences as a couple—children, family, married life—comes something less ephemeral and more permanent than romantic love.

Research on companionate love is less plentiful than that conducted on passionate love. Nonetheless, at least two general conclusions can be drawn. First, there is some evidence that companionate love is relatively impervious to the passage of time. Although the dating couples in Sprecher and Regan's (1998) study reported lower levels of passionate love over time, their companionate love scores did not change as a function of the length of their relationship. It made no difference how long a couple had been together—the partners continued to report feeling the same high level of affectionate, warm love for each other. Thus, time does not appear to have had any negative impact on companionate love.

Second, in accordance with theoretical supposition, companionate love is associated with uniformly positive emotional experiences—and these positive feelings and sentiments are much less extreme than those commonly produced by passionate love. Helmut Lamm and Ulrich Wiesmann (1997) asked university students to explain in writing how they could tell that they "loved" (as opposed to "liked" or were "in love with") another person. The most common indicator of companionate love generated by the participants was *positive mood* (listed by 53 percent). Distinctive indicators (elements that were listed significantly more frequently for companionate love [loving] than for passionate love [being in love] or friendship [liking]) included such positive emotional states as *trust* (41 percent), *tolerance* (21 percent), and *relaxedness or calmness* (12 percent). The participants in a study conducted by psychologist

Donna Castañeda (1993) provided almost identical answers when asked to indicate the qualities and characteristics they believed to be important in a companionate love relationship. Specifically, participants mentioned *trust*, *mutual respect*, *communication and sharing*, *honesty*, and *affection*, along with a number of other positive emotions and experiences.

Research with dating couples substantiates these survey results. Sprecher and Regan (1998) found that positive emotions (including joy, trust, liking, contentment, satisfaction, and respect) were positively associated with the amount of companionate love reported by a sample of romantically involved couples. In addition, not only did companionate lovers feel high degrees of emotional intimacy and warmth, but they also reported relatively more feelings of sexual intimacy than did passionate lovers. Specifically, the higher a couple's companionate love scores, the more the partners reported being able to communicate openly and honestly with each other about sexuality. Thus, feelings of intimacy—emotional and, perhaps, sexual—are a hallmark of the companionate love experience.

The Measurement of Companionate Love

Like passionate love, companionate love can be measured with single items that provide a general sense of how much a person loves his or her partner:

Q. How much caring, affectionate love do you feel for ___?

1	2	3	4	5	6	7	8	9
None at all								A great deal

Q. How deeply do you love ___?

1	2	3	4	5	6	7	8	9
Not at all								Very much

Companionate love can also be assessed with multi-item scales that are designed to reflect the features that theorists believe to be important elements of this particular variety of love. For example, the storge subscale on the Love Attitudes Scale (discussed earlier in this chapter) has been used as a measure of companionate love. Perhaps the most commonly utilized measure of companionate love, however, is the thirteen-item Love Scale created by psychologist Zick Rubin (1970). Sprecher and Regan (1998) subsequently modified this scale by adding an item that assesses interpersonal trust and removing several items that reflected a more passionate love experience. Sample items on the resulting Companionate Love Scale include:

- feel that I can confide in ___ about virtually everything.
- would forgive ___ for practically anything.
- care about ___.
- feel that I can trust ___ completely.

SUMMARY

In an effort to understand the nature of love, scholars from a variety of disciplines have proposed various typologies or classification schemes that specify types of love. Although there is disagreement about the number and the nature of the different love types, there are several points of rapprochement. Virtually all early and contemporary love theorists agree that love is intricately associated with the quality of human life, that different varieties of love exist, and that at a minimum, there are two commonly experienced types of adult romantic love—a passionate variety that is intense, emotional, fragile, and sexually charged, and a companionate variety that is durable, stable, and infused with warmth, intimacy, affection, and trust. These theoretical suppositions are largely supported by empirical research on people's implicit conceptions of love and self-reports of ongoing experiences in love relationships. Of course, it is important to recognize that other types of love also exist and are experienced by men and women over the course of their lifetimes, ranging from the vague liking felt for casual acquaintances to the intense devotion often experienced for family members, children, and beloved pets. An important task for future researchers is to determine the unique features and consequences of these other important varieties of love.

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6

Sexual Desire Issues and Problems

Anthony F. Bogaert and Catherine Fawcett

Have you ever met someone who just cannot get enough sex? Or someone who just is not interested in sex at all? Maybe you have noticed that your own sexual desire changes, sometimes clearly depending on your circumstances (e.g., just met a new and exciting partner) but sometimes for no apparent reason at all.

This variation in sexual desire (also called sex drive or libido) is what this chapter is about. We will review scientific knowledge related to sexual desire and interest—what might increase, or at least maintain, it and what might decrease it—along with addressing issues/problems related to sexual desire.

THE NATURE OF SEXUAL DESIRE (WHAT IS IT?)

For many people, sexual desire is the feeling of passion and lust (in everyday language, "horniness") that expresses itself within the context of heterosexual relationships. However, if we assume that this is the case for everyone, then we can have only a limited view of sexual desire issues and problems. For example, let us say you know a coworker—let us call him Fred—and you think you know him reasonably well, although you would not call him a good friend and you have never been over to his apartment. He does not talk much about himself, but you know that he lives alone and that he has never been married; he has never mentioned dating or ever having had a girlfriend. You also note that he never seems flirtatious with his female

coworkers; and although you do not follow him around at work (hopefully!), you have never noticed him to have a "wandering eye" for any of the new and attractive women who happen to come to your place of employment. What are you to conclude? A classic case of a person with lifelong low sexual desire; perhaps you might even consider him to be an "asexual?" But wait. A reasonable alternative to this conclusion (at least if you are not blind to human diversity) is that he is gay and effectively hides his interest in, and sexual activity with, men from his coworkers. Another alternative is that he does have sexual desires for women, but he is very shy and withdrawn; thus, he may have an active fantasy and masturbation life but does not express this desire within the context of his public life; still another alternative is that he has some level of desire for women, but that this sexual desire is secondary to a strong preference for some illegal activity (e.g., voyeurism) or a nonhuman object (e.g., a fetish), and he again expresses these desires in a very private manner.

How can we incorporate all of these alternatives, along with, of course, the expression of the sexual desires that often occur in standard heterosexual relationships? Kaplan (1995) argues that sexual desire is "an interest in sexual activity, leading the individual to seek out sexual activity or to be pleasurably receptive to it." Note that in this definition there is no assumption about the gender of the partner(s); in fact, there is no assumption that a partner is even necessary (it could be fantasy or even masturbation). Our own definition of sexual desire is similar to Kaplan's, and includes one or more of the following aspects: (1) the interest in (or being pleasurably receptive to) stimulation of one's own genitals and sexual release (e.g., orgasm); (2) the interest in (or being pleasurably receptive to) genital/sexual contact with another; and (3) interest in (or being pleasurably receptive to) thinking about, seeing, approaching, and touching one's preferred sexual partners and/or objects (e.g., a partner's genitals). Note that in our definition, we specify what is "sexual" in sexual desire (i.e., genital stimulation/contact); in Kaplan's definition, it is implied. Keep these definitions in mind when you read the remainder of the chapter.

Aside from these definitions, it is also important to draw a distinction at this point between desire and another aspect of sexual functioning, arousal. Sexual arousal has to do with the physical changes that occur during sexual activity, such as an erection and vaginal lubrication. Often, desire for sex (e.g., feelings of "horniness") comes before and leads to physical stimulation and arousal. For example, let's say Sally has been feeling sexual desire ("horny") all day, and when she goes home, she masturbates, arousing herself (e.g., vaginal lubrication) until she has an orgasm. However, one's subjective desire for sex can also occur (or at least intensify) once physical stimulation and arousal has occurred. For example, Marcia has been feeling tired and not very sexy all day. When she goes home after work, her boyfriend, Ted, starts to massage her body, including her breasts and labia, she becomes physically aroused and her desire for sex intensifies; soon they begin to engage in passionate lovemaking. Recent research indicates that it is common for people, particularly women, to

indicate that desire and arousal aspects of their sexuality overlap (Graham, Sanders, Mihausen, & McBride, 2004) and that—as the example with Marcia indicates—sexual desire sometimes occurs during or even after arousal. On the other hand, although very related and often reinforcing, it is important to note that one can feel desire without physical arousal, and one can feel arousal without desire. Furthermore, sexual desire disorders may not necessarily accompany sexual arousal problems (e.g., erectile problems) and vice versa. Sexual desire issues (and not arousal per se) will be the topic of this chapter.

WHAT AFFECTS SEXUAL DESIRE?

Before we review issues and problems of sexual desire, let us briefly review some of the factors that seem to affect it. One factor is hormones. One sex hormone in particular, testosterone, has been found to be important in stimulating sexual desire in both men and women. Testosterone, produced by the testes in men and the ovaries and adrenal glands in women, acts as a kind of fuel that helps stimulate the feelings of "horniness" that make us want to seek out and engage in sex. One of the reasons why children do not have an adultlike interest in sex is because the testes, ovaries, and adrenal glands are not mature and hence do not produce adult levels of hormones. For example, studies of adolescents (e.g., Udry, Billy, Morris, Groff, & Raj, 1985) show that those with high levels of testosterone, unlike those who are less mature and have low levels, show a high interest in sex, including masturbation experience and planning to have intercourse. Other studies show similar results for adults who are deprived of normal levels of testosterone. For example, studies of sex offenders who were physically castrated (i.e., had their testicles removed) and others who were chemically castrated (i.e., given a drug that inactivates the offenders' testosterone) showed that, although a few continued to be interested in sex, at least for a while, there was a dramatic decline in sexual interest within a few months (Heim, 1981). In addition, there is evidence that postmenopausal women, who have declining functioning of the ovaries (and thus lower levels of testosterone), sometimes have a lower sex desire, and these women's interest in sex can sometimes be increased by administering testosterone (Sherwin, 1991).

How does testosterone affect sexual desire? As mentioned, it likely acts as a kind of fuel to stimulate sexual feelings. It does so by acting on nerve cells (neurons) in the brain and body (typically the genitals) especially sensitive to testosterone. These cells are sensitive because they have special parts called receptors that are able to bind with or receive testosterone molecules. Cells with these receptors are particularly concentrated at the base of the brain. Specifically, areas at the base of the brain running from a section called the preoptic area back to a structure called the hypothalamus seem to be particularly important and sensitive to testosterone (Hull & Dominquez, 2003; Paredes & Baum, 1997). Note that there are several other areas, including the

midbrain and hippocampus, which contain hormone receptor sites, but most of the relevant areas seem to be concentrated at the base of the brain (e.g., hypothalamus; see Chapter 2 in this volume).

A minimal level of testosterone is important to sexual interest, but it is important to keep in mind that sexual desire in humans is also a function of numerous psychosocial factors, including learning (memories), fantasies, and the quality of one's relationships. Thus, higher brain areas and the social context, not just testosterone and basic areas of the brain, are important.

One psychosocial factor that may be important in affecting desire is one's learning or conditioning history with regard to sex (see Ågmo, Turi, Ellingsen, & Kaspersen, 2004). Some people have had a history of sexually positive experiences, and this would likely maintain, or even increase, one's sexual interest. On the other hand, some people may have had primarily neutral or even negative experiences, which may serve to decrease sexual interest. What are these "positive" or "negative" (or "neutral") experiences? The most relevant positive experience is sexual pleasure, including orgasm. The neutral experiences would be a lack of pleasure (e.g., no orgasm), and the negative experiences would include boredom, fear, anxiety, and perhaps even pain. From a learning perspective, whether we have positive, neutral, or negative experiences during sex has consequences. Specifically, the more we have positive experiences (e.g., orgasm), the stronger the association or conditioning between these positive, rewarding experiences and the stimuli/context that brings it about. It should also increase the incentive or motivation to seek out those stimuli or contexts in which the reward takes place. So, let us say that Wendy has been masturbating (and having orgasms) since age 15. During college, she was sexually active with a number of boyfriends, and then later, with her husband, Mark. She typically has had orgasms with all of her partners including Mark. Now, at 45, she is still strongly interested in sex, and desires it regularly. From a learning perspective, this may be because she has learned to have positive associations/memories to sex throughout her adolescence and adulthood, and these positive associations/memories maintain her incentive to engage in it regularly.

Is there any research support for this perspective? There is, although most of it is indirect. First, orgasm frequency has been found to be an important factor in sexual behavior and motivation (Bentler & Peeler, 1979; Arafat & Cotton, 1974). For example, those activities in women that most consistently induce an orgasm (e.g., cunnilingus) are rated as the most satisfying (Hurlbert, Apt, & Rabehl, 1993). Second, because women are less likely than men to have an orgasm consistently, one might expect that more women than men should be diagnosed with low sexual desire. This is in fact the case (also see "Gender Differences in Sexual Desire," below). Third, animal models of sexual desire have demonstrated that in rats injected with naloxone, which prevents a positive affective state (reward), sexual behavior takes on aversive properties (Ågmo et al., 2004). Fourth, there is some evidence that people

who have had sex early and more frequently in their lives (e.g., in adolescence and young adulthood) are the ones most likely to continue to engage in it later on in life (Laumann, Gagnon, Michael, & Michaels, 1994). Although alternative explanations may account for this (e.g., a person may have had a strong sex drive in the first place), one plausible explanation is that these people have built up a reward history with regard to sex and now the incentives and motivations for sex continue throughout their lives.

Sexual fantasies are another factor affecting sexual desire. Although they are difficult to define, sexual fantasies or daydreams are considered acts of the imagination; thoughts that are not simply orienting responses to external stimuli or immediately directed at solving a problem or working on a task (Leitenberg & Henning, 1995). They can be realistic or bizarre, elaborate or fleeting, and can result from memories or be entirely made up. Sexual fantasies can occur spontaneously or intentionally, and can be provoked by other thoughts, feelings, and sensory cues. They can take place during sexual activity, or outside of it, often during masturbation. In short, the term "sexual fantasy" refers to almost any mental imagery that is sexually arousing or erotic to the individual (Leitenberg & Henning).

Factor analysis has revealed that the majority of sexual fantasies fall into one of four basic categories:

1. conventional intimate heterosexual imagery with past, present, or imaginary lovers who are usually known to the person;
2. scenes suggesting sexual power and irresistibility (e.g., seduction scenes, multiple partners);
3. scenes involving varied or "forbidden" sexual imagery (e.g., different sex positions, questionable partners, etc); and
4. submission-dominance scenes in which some physical force or sadomasochistic imagery is involved or implied.

The first category is by far the most common. The content of sexual fantasies in gay men and lesbian women tends to be the same as in their heterosexual counterparts, except that homosexuals imagine same-sex partners rather than opposite-sex partners (Leitenberg & Henning, 1995).

Although some traditional approaches (e.g., classical psychoanalysis) have advocated negative views about sexual fantasies, it is now often considered a sign of pathology *not* to have sexual fantasies rather than to have them (Leitenberg & Henning, 1995). For instance, infrequent sexual fantasy is one of the defining criteria for hypoactive sexual desire disorder (HSDD), described in the *Diagnostic and Statistical Manual of Mental Disorders* (American Psychiatric Association, *DSM-IV*, 1995). In addition, a positive association has been found between sexual fantasy frequency and orgasmic frequency during intercourse, for both men and women (Arndt, Foehl, & Good, 1985; Epstein & Smith,

1957; Lentz & Zeiss, 1983). The experience of sexual fantasy is also positively associated with sexual arousability (Stock & Greer, 1982). Considering these findings, it is not surprising that individuals with sexual desire disorders are often encouraged by sex therapists to use sexual fantasies during masturbation, intercourse, and even nonsexual activities (Leitenberg & Henning, 1995). Research has also shown that frequency of sexual fantasy is either positively correlated with ratings of general satisfaction (particularly in women), or unrelated to sexual satisfaction. In addition, in contrast to the popular belief that sexual deprivation leads to more sexual thoughts, those with the most active sex lives seem to have the most sexual fantasies (Crepault, Abraham, Porton, & Couture, 1976). Thus, sexual fantasy is generally considered a normal and healthy part of one's sexuality.

Relationship factors are also likely important in sexual desire. For example, have you ever started a sexual relationship with someone and you just cannot get enough of them (at least, sexually speaking)? For some reason, those "horny" feelings just seem to stay with you, and all you want to do is stay in bed with them (the only interruption being room service). Of course, this intensity of sexual desire usually fades, despite the affection and love that may persist and begin to grow for a partner over time. Thus, on the other side of novelty is familiarity and boredom, and these may dampen one's sexual desires. Research supports this view: sexual activity typically decreases for couples over time. For example, data from a well-conducted American study indicates that married couples in their forties have intercourse, on average, about 1.3 times per week, whereas married couples in their twenties have intercourse, on average, 2.2 times per week (Laumann et al., 1994). Part of this decline may be an age factor (e.g., declining health), but a large part of it probably has to do with "habituation," the tendency to lose interest in one's partner with increasing familiarity. For example, this habituation explanation makes sense of recent findings suggesting that there is usually a sharp decline after the first year of a relationship and then a slow and fairly steady decline thereafter (Call, Sprecher, & Schwartz, 1995). This trend is probably best explained by habituation/boredom rather than age and declining health.

Aside from novelty factors in a relationship, there are other relationship issues that can increase or decrease desire. Physical attractiveness may be one of them. Those who perceive themselves and/or their partners to be physically attractive may have more interest in, and desire for, sex. The role of one's partner's attractiveness in increasing desire may be obvious because the more attractive the partner, the more desirable sex with that partner may be. However, the role of one's own (perceived) sexual attractiveness is also likely to be important, particularly for women (see Ackard, Kearney-Cooke, & Peterson, 2000). This is partly because women, relative to men, place a higher value on their ability to attract and turn on a partner with their own beauty/sexiness. Indeed, part of the "turn on" for a woman in sexual situations may be the knowledge that she is beautiful and sexy in her partner's eyes. Thus, if a

woman perceives (rightly or wrongly) that she does not possess this ability, her desire to put herself into sexual situations may be low. If, however, she believes that her body is very sexy and beautiful to her partner(s), then her desire for sexual situations may be high. For example, Holly likes it when men look at her body appreciatively, and when she has sexual fantasies, she often begins them by imagining herself wearing underwear (e.g., a teddy and a lace bra) that she believes will turn on her partners. When interacting with her boyfriend, Luke, her desire is similar: she likes it when he tells her how beautiful and sexy she is, and her interest for sex is usually increased by wearing underwear that she knows will turn him on. In contrast, Maria has a very negative image of her own body and does not believe that men like looking at her. She also believes that her body is unattractive to her husband, Jack, and that there is little that she can do to increase her attractiveness in his eyes. Consequently, she does not desire sex and tends to avoid sexual thoughts and situations.

Another relationship issue is satisfaction and conflict. The more a relationship is mutually satisfying with a high degree of intimacy, the more the couple may have desire for sex. Conversely, frequent arguments, anger, and resentment may lead to a lack of sexual interest in one's partner. After all, it is hard to have desire for someone who you currently disdain! Also, such conflict and distress may work to diminish sexual desire indirectly by causing anxiety and/or depression in a partner, which has been shown to be negatively related to sexual desire (van Minnen & Kampman, 2000; Trudel, 1991).

GENDER DIFFERENCES IN SEXUAL DESIRE

In North American culture, there is a commonly held belief that men generally have more frequent and intense sexual desires, and therefore higher sex drives, than women. Indeed, research has indicated that a gender difference does exist, and it is reflected in a variety of measures, such as self-reported desired frequency of sex, desired variety of sexual acts and partners, frequency of fantasy, frequency of masturbation, number of partners, frequency of thinking about sex, and willingness to make sacrifices in other spheres to obtain sex. For instance, in a U.S. sample, more than half of the men reported thinking about sex every day, whereas only one fifth of the women reported thinking about sex that often (Laumann et al., 1994). Men have also been shown to have more intrusive, unwanted, and even personally unacceptable thoughts about sex than women (Byers, Purdon, & Clark, 1998).

Sexual fantasies are also a good indicator of sexual desire because they are explicitly sexual and require conscious attention but are not constrained by opportunities, social pressures, or other external factors (Baumeister, Catanese, & Vohs, 2001). Gender differences in sexual fantasy have been examined in many studies, which have generally concluded that men have more frequent and more varied fantasies than women. That is, men's fantasies occur more often than women's, include increased variety in partners than women's, and

extend to a broader variety of sexual acts than women's (Baumeister et al., 2001). Such findings are consistent with a view that men have a higher sex drive than women. Other indicators of desire differences include preferences for number of sexual partners (see Baumeister et al., 2001, for a review) and masturbation frequency (Laumann et al., 1994), on which men score higher than women.

Gender differences in sexual desire are also highlighted by the study of sexual dysfunctions and their consequences. If the optimal strength of sex drive is intermediate, and women on average are toward the lower end of that range, then they should be more vulnerable than men to pathological or problematic patterns of very low (inadequate) sexual desire (Baumeister et al., 2001). In addition, cases in which one member of a partnership does not want to have sex should be more distressing to the partner who has a high sex drive (typically, men). Indeed, women have been found to suffer significantly more than men from low desire problems (e.g., HSDD). Female sexual reluctance has also been found to be a far more common source of disagreement than male reluctance (O'Sullivan & Byers, 1995). Some research has indicated that differences in sexual desire among females may be due to differential levels of free testosterone, which have, in some cases, been found to be significantly lower in people with low sex drive (Riley & Riley, 2000). Cultural/learning factors may also play a role in these gender differences in low desire. Regardless of the explanations, however, these findings are consistent with the view that women on average have less sexual desire than men to begin with, and so more women than men will fall into the spectrum of very low sex drive (Baumeister et al., 2001).

Of course, the gender difference in sex drive does not mean that women do not enjoy or desire sex. It also does not mean that men have a greater overall sexuality, as women may be just as capable of having and enjoying sex as men. In addition, the findings discussed here are based on averages. There are presumably many females who have greater sexual desire than their male partners, but the fact remains that, in general, men have, as indicated by a number of measures (e.g., sexual fantasies), higher sex drives than women. These differences can be partially explained by biological factors, such as differential levels of androgens (e.g., testosterone), which, as mentioned, have been implicated in determining sex drive. Cultural influences may also play a part in discouraging some aspects of female sexuality, although Baumeister et al. (2001) argue that gender differences exist even in spheres where culture has supported and encouraged female sexual desire, such as marital sex.

WHAT DESIRE LEVEL IS A PROBLEM?

Should little or no interest in sex be considered a health or psychological problem? Or should it be considered a harmless, even healthy, variation in human behavior? The answer depends on one's perspective and the social/

historical context. For example, most religions have strong prescriptions against liberal sexual practices, and some (e.g., Buddhism, Roman Catholicism) see complete abstinence as a virtue. In this view, sexual activity is sanctioned only within certain contexts (e.g., reproduction), and it is often considered a sin if this activity occurs outside of these contexts (e.g., for recreation). Thus, for many groups around the world the concept of a "disorder" for those having a low or nonexistent sexual desire would probably be perceived as nonsensical.

Until recently, influential Western institutions beyond religious ones would also not have deemed low sexual desire as a disorder, particularly in women. In fact, the situation was typically the opposite. For example, even until the 1950s, some segments of the medical community deemed low sexual activity to be healthy, and suggested that various maladies follow from high levels of nonreproductive sexual activity (e.g., masturbation). As Sigusch (1998) suggests, this started to change in the 1950s and 1960s when sexuality began to be viewed as separate from reproduction and thus could be performed for its own intrinsic values (e.g., physical pleasure, recreation).

In the wake of this decoupling of sex from reproduction, it is perhaps not surprising that low sexual desire emerged as a potential problem. Sexuality as a (healthy) recreational activity was becoming fully a part of the modern sensibility of many (although not all) Western people. However, it was not until 1980 that "inhibited sexual desire" appeared as a diagnostic category in the *Diagnostic and Statistical Manual of the Mental Disorders* (*DSM-III*, 1980). The name was changed in the next edition (*DSM-IV*, 1995) to "hypoactive sexual desire disorder (HSDD)." In 1989, the term "lack or loss of sexual desire" appeared in the *International Statistical Classification of Diseases and Related Health Problems* (*ICD-10*, World Health Organization, 1992).

The *DSM-IV* currently defines hypoactive sexual desire disorder (HSDD) as "persistently or recurrently deficient (or absent) sexual fantasies and desire for sexual activity. The judgement of deficiency or absence is made by the clinician." A diagnosis must also include that "the disturbance causes marked distress and interpersonal difficulty" (p. 510). Note that the *DSM* subdivides HSDD into certain subcategories, such as "generalized" versus "situational" and "lifelong" versus "acquired." The *DSM* also specifies related diagnoses. One is a "discrepancy of sexual desire" disorder. In this case there would have to be a significant difference in sexual desire between the two members of a couple. Another variation is sexual aversion disorder, where an aversion for genital contact occurs (e.g., extreme anxiety when a sexual encounter presents itself). Finally, a diagnosis of HSDD and related problems must exclude evidence of certain well-known medical conditions, such as depression or the use of certain drugs, known to lower sexual desire.

At the other end of the spectrum, excessive desire for sex or hyperactive sexual desire disorder is not a diagnosable condition from the perspective of the *DSM-IV*, although proposals have been made to include it in the *DSM-V*

and *ICD-II* (Vroege, Gijs, & Hengeveld, 1998). One of the reasons that it is not a diagnosable disorder is because hyperactive sexual desire disorder often accompanies paraphilias (e.g., fetishes, exhibitionism). However, this is not always the case. Thus, one argument in favor of including hyperactive sexual desire disorder as a diagnosable problem is that it may be associated with nonparaphilic activities (e.g., masturbation or sexual activity with a partner) and may be a source of significant distress for the individual. Given that hyperactive sexual desire is not yet a diagnosable phenomenon, this chapter will primarily address issues of low sexual desire.

HOW PREVALENT ARE SEXUAL DESIRE DISORDERS?

It is impossible to know for certain how prevalent such disorders are because representative samples of people have not been assessed for such disorders by clinicians. However, there have been a number of large-scale, representative studies that have included questions about problems with sexual desire. One of the most surprising findings in the last twenty years in sex research has emerged from these studies: a very high number of people indicate they have problems with low sexual desire! For example, 33 percent of women and 15 percent of men reported low desire in the past year in a representative sample of U.S. residents (Laumann et al., 1994; Laumann, Paik, & Rosen, 1999). In a representative sample of Swedish residents, 34 percent of women and 16 percent of men reported low sexual desire as a problem (Fugl-Meyer & Sjögren-Fugl-Meyer, 1999). In a representative sample of Danish residents, 11.2 percent of women and 3.2 percent of men indicated that they had low sexual desire (Ventegodt, 1998). In a representative sample of a region in Spain, 37 percent of women and 25 percent of men complained of low sexual desire (Arnal, Llario, & Gil, 1995). Some of the differences among these studies might reflect real differences in sexual desire problems across societies, but it might also reflect methodological differences between the studies (e.g., how the questions were posed or the answers classified). Another issue is that these figures do not address some of the subtleties of the diagnosis mentioned earlier (e.g., "generalized" versus "situational" or whether the issue reflects a discrepancy of sexual desire within a couple).

Despite the issues and differences in these studies, it is clear that low sexual desire is a common complaint. The figures in these studies also correspond well to data in twenty-two older studies, published over a fifty-year period, and reviewed by Nathan (1986). Note that many of these older studies predated the diagnostic category of hypoactive sexual disorder. Finally, these figures reinforce the observation from clinicians that low sexual desire issues may be the most common sexual dysfunction, particularly among women (Letourneau & O'Donohue, 1993).

On the other end of the spectrum, we do not know how prevalent hyperactive sexual desire disorders are because there is no comparable data (e.g., probability samples) on complaints about too much desire.

CAUSES OF ATYPICALLY LOW SEXUAL DESIRE

If one's learning history with regard to sex is important in sexual desire, then one might expect low sexual desire is (partly) the result of an inconsistent or complete lack of sexual rewards, which may act to dampen sexual desire through "conditioning" or learning processes (for a review, see Ågmo et al., 2004). As mentioned, from a learning perspective, repeated exposure to stimuli with a reward will enhance the strength of the association between a reward and the stimuli/context that brings it about. It should also increase the incentive or motivation to seek out those stimuli or contexts in which the reward takes place. Similarly, a weak reward will lead to a weak or decreased association or connection between that reward and the stimuli or context in which the (weak) reward occurs. In fact, the stimuli or context may eventually become associated with punishing outcomes (e.g., boredom, irritation). If so, it should lead to a decrease in the incentive or motivation to seek out those stimuli because a reward is absent and a punishment may be present. So, let us say that Sally was relatively sexually active in college but she rarely had an orgasm (a big reward). Now, married to Bob, this pattern has been similar: she has rarely had an orgasm. Without that reward, the stimuli or context (including Bob), becomes uninteresting and unappealing. Thus, she may develop a low desire for sex and very little interest in physical/genital contact with Bob.

There is some research in people with HSDD that directly supports the role of sexual rewards (e.g., orgasm) in sexual desire. For example, Trudel, Aubin, and Matte (1995) showed that sexual behavior, and the pleasure associated with these behaviors, was less extensive in couples with a partner diagnosed with HSDD than in "normal" couples. There is also evidence that the reduced pleasure preceded the onset of the diagnosis in the people with HSDD (Trudel, Fortin, & Matte, 1997), suggesting a possible causal role for a lack of sexual rewards in the onset of HSDD. Thus, some people with HSDD may "learn" that sex is an undesirable activity because their sexual behavior history contains few enduring memories of rewards.

There is also some suggestion that HSDD may result from abnormally low levels of hormones (e.g., testosterone). We have already reviewed evidence that testosterone plays an important role in men and women's sexual desire, so it is a reasonable suggestion that some cases of HSDD result from a deficiency of testosterone.

In women, there is some support for the idea that low testosterone plays a role in this condition, although the evidence is mixed. A couple of early studies did not find a difference in testosterone levels between hypoactive

women and appropriate controls (Schreiner-Engel, Schiari, White, & Ghizzani, 1989; Stuart, Hammond, & Pett, 1987). However, two more-recent studies did show a difference (Guay, 2001; Riley & Riley, 2000). One of the reasons for the difference is that at least one of the significant studies (Riley & Riley) used a sample with only lifelong HSDD, whereas the two earlier studies did not restrict their sample in this way. It is also of note that there is evidence that certain events (e.g., menopause) may relate to low testosterone, and this may be important in a small minority of cases of women with HSDD (Warnock, 2002). Thus, there is some evidence that low testosterone may affect this condition in women, particularly in the most extreme (i.e., lifelong) cases of HSDD.

There is also some evidence for the role of low testosterone in men with low sexual desire. First, in rare cases of men with very low sex drive, hypogonadism (reduced or absent secretion of hormones from the testes) is indicated; however, this condition would likely preclude a clinical diagnosis of HSDD because hypogonadism is an obvious medical condition. Second, one study found that men clinically diagnosed with HSDD had lower levels of testosterone than a control group of men (Schiavi, Schreiner-Engel, & White, 1988). Other studies have examined sexual desire and its relationship to testosterone in general samples of men. One study found a relationship between low sexual interest and lower testosterone concentration in a group of 51-year-old men (Nilsson, Moller, & Solstad, 1995). It should be kept in mind, however, that most studies examining men with a normal range of testosterone (3–12 ng/ml) do not find a strong relationship between testosterone and sexual behavior (Sherwin, 1988).

Very recent research has examined the role of brain functioning. Stoléru et al. (2003) found that the pattern of activation (or deactivation) of a number of areas of the brain differs between men with HSDD and controls when viewing sexual activity. One area of interest is the medial orbitofrontal cortex. This area is known to inhibit motivated behavior and was deactivated when normal men viewed sexual stimuli, but it remained activated in men with HSDD. In other words, this area of the brain probably allows one to become sexually disinhibited when deactivated (i.e., lose one's restraint and become active pursuers of sexual activity), and yet it remained (abnormally) activated in HSDD men. It is as if a person with HSDD is unable to let go of the normal restraints that need to be discarded when a (potentially) desirable sexual encounter is presented to him (or her). Not only does this suggest there may be an abnormality in brain function associated with the pursuit of sexual goals in men with HSDD, but it also suggests that the HSDD may be less a problem with low intrinsic motivation/desire and have more to do with the "inhibition" of (relatively normal) sexual desire. Interestingly, an early name for HSDD, inhibited sexual desire, may have been, then, a well-chosen description of the phenomenon. More research needs to be done in this area, particularly in

women diagnosed with HSDD. Perhaps a very different pattern of response (e.g., low intrinsic desire versus inhibition) occurs in women relative to men.

Kaplan (1995) argues that intrapsychic conflict, originating in childhood, along with neurotic interactions with one's partner, is the cause of desire problems. Note, however, that this explanation is largely based on her clinical experience, and additional supporting evidence is lacking. She also argues that a partner can take on negative attributes over time because of the failure to have satisfying sexual interactions. Thus, although she does not refer to this process as conditioning, a negative learning history, with, for example, a lack of pleasure and orgasms, seem to be implied.

As mentioned, relationship quality likely influences sexual desire, so it is not surprising that poor relationship/marital adjustment has been implicated in low sexual desire (Trudel, Boulos, & Matte, 1993). Thus, one might expect low desire for sex if partners actively dislike one another. Also, anxiety may accompany relationship difficulties, and such anxiety issues have been implicated in sexual desire disorders (Bozman & Beck, 1991; van Minnen & Kampman, 2000). However, research does not fully support this explanation. One study found that individuals with HSDD were not more likely than controls to have marital discord (Schiaivi, Karstaedt, Schreiner-Engel, Mandeli, 1992). Also, it is not clear whether marital discord is the cause of low sexual desire, or whether low desire can cause marital discord. After all, low sexual desire of one partner may cause stress and conflict in a relationship, particularly if the other partner desires greater sexual activity.

TREATMENT

Can low sexual desire be treated? Some degree of success has been reported in the literature. Examples of treatment strategies, along with the efficacy of these treatments, are presented below.

Hawton, Catalan, and Fagg (1991) used an intervention to treat low desire problems in women based on Masters and Johnson's (1970) classic approach to sex therapy. Masters and Johnson's approach to sex therapy was couple-oriented (i.e., must have a partner or a surrogate) and used an intensive two-week program with different techniques and homework assignments. One such technique was sensate focus, a technique still widely used today by many different therapists for a variety of sexual dysfunctions. While in the nude, partners take turns giving and receiving pleasurable stimulation to nongenital (e.g., face, back, belly) areas of the body. Because touching the genitals is off limits (at least initially), the sensate focus approach is meant to decrease the anxiety that may accompany sexual performance issues. Hawton et al. (1991) reported a high level of success in treating low desire in women using Masters and Johnson's approach, but their report should be viewed cautiously because they did not include an adequate control group.

LoPiccolo and Friedman's (1988) four-step intervention uses a number of traditional therapies (e.g., sensate focus) along with recent cognitive/behavioral techniques in an attempt to increase sexual desire. A cognitive/behavioral approach combines learning techniques and interventions designed to change negative thinking. The first step is *experiential/sensory awareness* training. This step is used because it is assumed that anxiety underlies many cases of low sexual desire. Here, sensate focus, body awareness (e.g., mirror exercises, monitoring of one's emotional responses), and fantasy training are used. The second step is *insight*. Here, the client is helped to try to understand factors that are contributing to his or her low sexual desire. For example, in this step, the client may come to understand that they have anxiety about sexual issues. The third step is *cognitive restructuring*. Here, the client's thoughts (or cognitions) are analyzed, and if irrational thoughts occur that prevent sexual desire, they are changed to more helpful, rational thoughts (e.g., "Just because I engage in sex doesn't mean I am a bad person"; p. 134). The fourth step is *behavioral interventions*. Here, certain practical interventions are used. They may expand on some elements of step one, experiential/sensory awareness (e.g., sensate focus), or use other novel interventions. These might include assertiveness, communication, along with other social-skills training. These skills may be useful not just in their current relationship (if they have one), but also in future social situations, where a possibility of dating and sex occurs. Another intervention is drive induction or "priming the pump." This makes sex more salient to the client or makes him/her more "ready" for a sexual state. According to the authors, this is particularly important for someone with low sexual desire because they tend to avoid all sexual situations. These "priming" exercises include fantasy breaks (e.g., taking a five-minute break at work to have a sex fantasy), showing physical affection to their spouse at regular points in time, looking at books with sexual content and renting an erotic video/DVD. LoPiccolo and Friedman's four-step intervention has been reported to be successful, but it is unclear whether an adequate control group of low sexual desire was included in their assessment of efficacy.

Recently, a number of drug treatments for low sexual desire disorders have been tried. Given that postmenopausal women can have reduced testosterone, it is not surprising that testosterone has been found to improve desire in some postmenopausal women. For example, research has shown that treatment with both testosterone and estrogens increased the sexual desire of postmenopausal women with low sexual desire (for a review, see Cameron & Braunstein, 2004). There is also a recent study suggesting that testosterone can increase sexual desire in premenopausal women with HSDD (van Anders, Chernick, Hampson, & Fisher, 2005). This study is suggestive, but it was not a double-blind study (i.e., both the experimenters and participants do not know what treatment is administered to the participant), nor did it include a placebo control condition. Thus, more research needs to be done in this area, including in men. However, if HSDD is more of an inhibition (versus an

intrinsic desire) problem (Stoléru et al., 2003), then one might expect that testosterone, which may be more associated with intrinsic desire issues, may only be modestly effective. Indeed, although administering higher-than-typical levels of this hormone did increase desire in the HSDD participants, they did not exhibit lower than typical levels of testosterone prior to treatment.

There is recent research on a drug known as buproprion in the treatment of low desire in women with HSDD. This drug is not a hormone but a chemical that affects neurotransmitters in the brain (dopamine, noradrenaline) thought to be important in sexual functioning. Evidence exists that this drug does indeed increase sexual desire in a substantial minority of women with HSDD (Segraves et al., 2001); although it is important to keep in mind that the majority did not respond. Interestingly, there is also evidence that buproprion also increases sexual desire in people with depression and other conditions that may relate to low sexual desire (Modell, Katholi, Modell, & Depalma, 1997). Some other chemicals may have an indirect effect on sexual desire through increasing physical arousal, including Viagra-like drugs and polyphenolics (Kang, Park, Hwang, Kim, Lee, & Shin, 2003). Polyphenolics are chemicals derived from plants and have a high concentration in certain foods (e.g., red wine). They seem to have positive (anti-oxidant) effects on the cardiovascular system and increase blood flow in certain areas of the body including the pelvic region. The use of polyphenolics has just begun within the context of sexual problems, and much more research, including with control groups, is necessary.

Another treatment is the use of certain behaviors that increase the likelihood of orgasm (i.e., orgasm consistency treatment). Note that this treatment is the only one recognized by the American Psychological Association as being efficacious (Chambless et al., 1998). This therapy is meant to build up a history of rewarding experiences (i.e., orgasm) with sex and thus to increase the incentives and interest in it. Usually, this begins by directed (or guided) masturbation and then later, by a coital alignment technique. This latter technique makes it more likely that an orgasm will occur because it entails adjustment of the position of the partners so that thrusting leads to more direct clitoral stimulation. There have been some reports of success with this treatment, at least in women (Hurlbert, 1993; Hurlbert, Apt, Rabehl, 1993; Hurlbert, White, Powell, & Apt, 1993; LoPiccolo & Stock, 1986; Pierce, 2000). However, although these results seem promising, it is unclear whether proper control groups were included in these studies as well.

In summary, a number of different approaches have been used to treat low sexual desire, with some degree of success, although more research is needed (e.g., more controlled studies). It is also important to note that low sexual desire issues have been considered difficult sexual dysfunctions to treat, and they will probably remain a challenge for therapists. Furthermore, not all people with low desire necessarily want treatment (e.g., are not distressed about it). Some of these individuals with low or absent desire, particularly if it is a lifelong

phenomenon, may in fact feel that they have a separate sexual identity, unique from the three traditional sexual orientations (heterosexuality, homosexuality, bisexuality) routinely discussed in the sexuality literature. This unique fourth identity is called "asexuality." Research on asexuality is just beginning (Bogaert, 2004). Thus, we clearly need more research on low desire issues, along with potentially related phenomena such as asexuality, in the future.

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7

Sexual Arousal Disorders

Greg A. R. Febbraro

This chapter will provide an overview of the sexual arousal disorders: female sexual arousal disorder (FSAD) and male erectile disorder (MED). The diagnostic features of FSAD and MED as well as their potential causes will be discussed. In addition, current available treatments for FSAD and MED will be briefly reviewed. Issues for future consideration will also be raised.

ESSENTIAL DIAGNOSTIC FEATURES OF SEXUAL AROUSAL DISORDERS

Occasional disturbances in sexual functioning are frequent. In the fairly recent National Health and Social Life Survey (NHSLS) conducted by Edward Laumann and colleagues, a little over 3,000 men and women were asked whether they had experienced various symptoms of sexual dysfunction (e.g., lacked interest in sex, were unable to achieve orgasm, had trouble maintaining/achieving erection) in the past twelve months. The overall prevalence rate of occasional disturbance was 43 percent for women and 31 percent for men (Laumann, Paik, & Rosen, 1999). Because these symptoms are fairly prevalent, people should not assume they need treatment if they occasionally experience sexual arousal problems. Symptoms have to be persistent or recurrent and should interfere with functioning in order for someone to be diagnosed with a psychological disorder.

Both FSAD and MED are classified under the "sexual dysfunctions" category in the *Diagnostic and Statistical Manual*, fourth edition, text revision (*DSM-IV-TR*). The *DSM-IV-TR* published by the American Psychiatric Association is the primary classification system used by mental health professionals in North America. Sexual dysfunctions are persistent and recurrent problems in the appetitive, excitement, and orgasm phases of the human sexual cycle. Dysfunctions are either psychological or psychophysiological in nature. Sexual arousal disorders are sexual problems that occur during the excitement phase and that relate to difficulties with feelings of sexual pleasure or with the physiological changes associated with sexual excitement (APA, 2000; Sue, Sue, & Sue, 2003). The diagnostic and associated features of FSAD and MED will now be discussed.

Female Sexual Arousal Disorder (FSAD)

FSAD is characterized by a lack of response to sexual stimulation, including lack of lubrication (APA, 2000). FSAD used to be referred to as "frigidity," a derogatory term that implies that the woman is emotionally cold, distant, unsympathetic, and unfeeling (Millner, 2005). Therefore, the current term, FSAD, is an improvement. The *DSM-IV-TR* criteria for FSAD include the following: (1) persistent inability to attain or maintain sexual excitement (e.g., lubrication and swelling of the genitalia, erection of the nipples) adequate for completion of sexual activity; (2) the sexual problem causes marked distress or interpersonal problems; and (3) the symptoms are not due to another psychological disorder (except another sexual dysfunction) or to the direct physiological effects of a drug or a general medical condition. The disorder involves both psychological and physiological components. As with other sexual dysfunctions, the problem can be: (1) lifelong or acquired, (2) generalized or situational, and (3) due to psychological or combined factors. A woman with lifelong FSAD has always had difficulty with sexual arousal. A woman with acquired FSAD, on the other hand, developed sexual arousal problems after a period of normal sexual arousal. As the terms imply, generalized FSAD refers to sexual arousal problems occurring in a variety of situations and not specific to certain types of stimulation or partners. Situational FSAD refers to sexual arousal problems limited to certain types of stimulation, situations, or partners. For example, a woman becoming aroused while masturbating but not when engaging in sexual intercourse may indicate that the arousal difficulties are due to relationship problems and not to a medical condition. Psychological-based FSAD means that psychological factors, such as anxiety, sadness, or anger, for example, fully account for the development of the disorder whereas FSAD that is determined to be due to combined factors involves psychological and biological factors (e.g., diseases, injuries). FSAD may result in painful intercourse, sexual avoidance, and marital or relationship difficulties (APA, 2000). Sexual avoidance may be exhibited in a variety of

ways. For example, someone with FSAD may engage in infrequent sexual activity or only certain types of sexual activity. The impact of sexual avoidance on relationships is discussed later in this chapter, when reviewing interpersonal causal factors for sexual arousal disorders.

Prevalence rates for FSAD have been highly variable. More recent research indicates that between 10 percent and 20 percent of women experience the disorder over the course of a lifetime. Difficulties with lubrication itself were reported among 19 percent of women in the NHSLS study (Laumann, Paik, & Rosen, 1999). There are a couple of potential reasons for the variability in the estimates of FSAD. First, FSAD often co-occurs with sexual desire disorders (e.g., hypoactive sexual desire disorder) and orgasmic disorders (e.g., female orgasmic disorder), making it difficult to differentiate from those disorders (APA, 2000; Laumann, Gagnon, Michael, & Michaels, 1994; LoPiccolo, 1997). Second, some women with FSAD may have little or no subjective sense of sexual arousal, making its diagnosis difficult.

Male Erectile Disorder (MED)

MED is characterized by the inability to have an erection or maintain one. MED has historically been referred to as "erectile dysfunction," "inhibited sexual excitement," and "impotence." *DSM-IV-TR* criteria for MED are as follows: (1) persistent inability to attain or maintain an erection adequate for completion of sexual activity; (2) the sexual problem causes marked distress or interpersonal problems; and (3) symptoms are not due to another Axis I disorder (except another sexual dysfunction) or the direct physiological effects of a drug or a general medical illness. Like FSAD, MED can be lifelong or acquired, generalized or situational in nature, and occur due to psychological and combined factors. In lifelong erectile disorder, also referred to as primary erectile disorder, males have never been able to experience an erection that is satisfactory for intercourse. It should be noted that lifelong erectile disorder is considered rare. In acquired erectile disorder, also referred to as secondary erectile disorder, males have difficulty achieving or maintaining an erection but have achieved or maintained erections for intercourse at other times. Generalized MED refers to erectile difficulties occurring in a variety of situations and not specific to certain types of stimulation or partners. Situational MED, on the other hand, refers to erectile limited to certain types of stimulation, situations, or partners. For example, a male may not have any difficulty achieving an erection while masturbating, but may have difficulty doing so when engaging in sexual intercourse. This may indicate that the erectile difficulties are due to relationship problems and not due to a medical condition or substance abuse. Psychological-based MED means that psychological factors, such as negative emotions (e.g., anxiety, sadness, anger), fully account for the development of the disorder whereas MED that is determined to be due to combined factors involves psychological and biological factors (e.g., diseases,

injuries) (APA, 2000; Hyde & DeLamater, 2006). MED often co-occurs with other sexual disorders, particularly hypoactive sexual desire and premature ejaculation disorders. Furthermore, individuals with mood disorders, such as depression, and substance-related disorders, like alcoholism, often report problems with sexual arousal (APA, 2000).

In the past, MED has been attributed primarily to psychological factors. For example, in their pioneering work on human sexuality, William Masters and Virginia Johnson estimated that only 5 percent of erectile dysfunctions were due to physical conditions (Masters & Johnson, 1970). However, more recent studies indicate that from 30 percent to 70 percent of erectile dysfunctions are caused by some form of vascular insufficiency, diabetes, atherosclerosis, traumatic groin injury, or other physiological factors (Hooper, 1998; Segraves, Schoenberg, & Ivanoff, 1983).

According to the NHSLS study, approximately 10 percent of men have experienced an erection problem within the past twelve months (Laumann, Paik, & Rosen, 1999). This statistic varies by age with only 7 percent of 18- to 29-year-olds experiencing erection problems, but 18 percent of 50 to 59-year-olds and 39 percent of men who were 60 years and older experiencing such problems. Similar rates for erection problems have been found in Germany and France (Hyde & DeLamater, 2006). Problems with erection are one of the most embarrassing ones many men can imagine or experience. In addition, depression may result from repeated experiences of erection problems. Furthermore, erection problems can also be a cause of concern for the male's partner.

CAUSES OF SEXUAL AROUSAL DISORDERS

A variety of causes for sexual arousal disorders have been offered. Biological, psychological (immediate and prior learning), and interpersonal causes have been the main ones examined in the literature. Therefore, these primary causes will now be briefly reviewed for FSAD and MED.

Biological Causes

As previously mentioned, Masters and Johnson (1970) had speculated that the large majority of sexual disorders were psychological in nature. However, the potential role of biological factors is increasingly being recognized (Rosen & Leiblum, 1995). Biological factors that explain the development of sexual disorders such as FSAD and MED include organic factors (e.g., diseases, injuries) and drugs. With regard to MED, approximately 50 percent or more of cases may result from organic factors or a combination of organic and other factors such as psychological factors (Buvat et al., 1990; Richardson, 1993).

Heart and circulatory diseases are often associated with MED as erections themselves depend on the circulatory system (Jackson, 1999). Troubles in the vascular system can create erection problems as the "production" of an

erection depends upon having a large amount of blood flowing into the penis by way of the arteries, with simultaneous constricting of the veins so that the blood cannot flow out as rapidly as it is coming in. Damage to these arteries or veins can result in MED (Hyde & DeLamater, 2006). In women, vascular disease associated with diabetes can lead to FSAD (Phillips, 2000).

MED is also associated with diseases like diabetes mellitus and kidney problems. Diabetes, for example, can cause circulation problems and peripheral nerve damage, both impacting the ability to produce erections. Some studies have found that 28 percent of men with diabetes have erectile disorders, making it one of the most common medical causes (de Tejada et al., 2005). Hypogonadism, a condition characterized by the underfunctioning of the testes resulting in low testosterone levels, is also associated with MED (Morales & Heaton, 2001). MED is also associated with hyperprolactinemia, a condition characterized by the excessive production of prolactin (Johri, Heaton, & Morales, 2001).

Any injury causing damage to the lower part of the spinal cord may cause MED, since that is where the erection reflex center is located. MED may also result from some types of prostate surgery, although this is not a common phenomenon (Hyde & DeLamater, 2006).

Prior pelvic trauma, such as injury sustained during childbirth, can result in FSAD. In addition, urogenital atrophy (shrinkage of genital and urinary tissues) in menopausal and postmenopausal women can lead to FSAD (Phillips, 2000; Goldstein, 2000).

Drugs can also cause arousal and erectile problems. Examples of such drugs decreasing sexual arousal and causing erection problems include certain antihypertensive medications, certain antidepressants, overuse of alcohol, and the use of illicit substances like heroin and marijuana. Furthermore, long-term use of nicotine can also cause erection problems (Hyde & DeLamater, 2006).

FSAD can also result from the intake of antihistamines and hypertensive medications. Furthermore, antidepressants, such as selective serotonin reuptake inhibitors (SSRIs) and tricyclics (TCAs), can result in FSAD (Millner, 2005).

Psychological Causes

Psychological causes of sexual disorders are often categorized into immediate causes and prior learning. Immediate causes refer to problems occurring during intimacy that inhibit the sexual response. Prior learning refers to any beliefs or responses that people have learned or experienced earlier in life, that now affect their sexual response. Therefore, anxiety/fear can result in a vicious cycle, impacting sexual responding.

Immediate Psychological Causes

Four primary factors have been identified as immediate psychological causes of sexual disorders. These include fear of performance, cognitive interference,

communication failure, and failure to engage in effective, sexually stimulating behavior.

Fear or anxiety about performance is often related to fear of failure during intercourse. Masters and Johnson theorized that such fear could cause sexual disorders. Such anxiety can create a self-fulfilling prophecy in which fear of failure produces a failure, which produces more fear, which produces another failure, and so on (Hyde & DeLamater, 2006).

Cognitive interference, a second immediate cause, refers to thoughts that distract the person from focusing on the erotic experience. This is a problem mainly of attention and of whether the person is focusing his or her attention on erotic thoughts or on distracting thoughts. Examples of distracting thoughts would include "Will my technique be good enough to please her?" or "Will my body be attractive enough to arouse him?" One type of cognitive interference is "spectatoring," a term coined by Masters and Johnson (1970), for an individual acting as an observer or judge of his or her own sexual performance (Hyde & DeLamater, 2006). People who engage in spectatoring are often asking themselves "I wonder how I'm doing?" types of questions.

In a series of experiments, David Barlow demonstrated how anxiety and cognitive interference combine to produce sexual disorders such as MED (Barlow, 1986). For example, when a male with MED is in a sexual situation, there is a performance demand causing him to experience negative emotions like anxiety. He then experiences cognitive interference and focuses his attention on nonerotic thoughts. This serves to increase the arousal of his autonomic nervous system, the part of the nervous system responsible for anxiety responses (e.g., flight or fight response). Someone with MED experiences this as anxiety whereas someone without MED, or any sexual disorder, experiences it as sexual arousal. The anxiety for someone with MED creates further cognitive interference, eventually causing problematic sexual performance, such as a failure to achieve an erection. This failure leads to an avoidance of sexual situations or to a tendency to experience anxiety when in a sexual situation. Like most cycles, it is repetitive, unless the person is able to recognize what is occurring and takes steps to unlearn it.

Steps to unlearn the above process often involve the use of cognitive restructuring. Cognitive restructuring is a technique in which a therapist helps someone recognize negative cognitions (i.e., thoughts) that are interfering with their sexual activity, and replace them with more positive cognitions. There are several ways to do this. Once negative thoughts that interfere with sexual performance are identified, the therapist can teach the client to challenge their negative thoughts. One strategy for challenging negative thoughts involves educating the person about the sexual process. A second strategy is to assist him or her in determining whether there is any factual evidence for the person's negative thoughts. A therapist would ask the person to describe what evidence he/she has that a negative belief is valid. During this process, the therapist can help identify any errors in the patient's thinking and challenge him/her to

identify evidence that would suggest an alternative to their current belief. Finally, individuals can learn to de-catastrophize negative outcomes (Back, Wincze, & Barlow, 2001). For example, if an attempt at sexual activity is unsuccessful, the therapist can help the person recognize that although it may be very disappointing, it is not the end of the world. This helps the person put the situation in perspective and, in turn, can help them to relax more, and subsequently increase their chance for sexual arousal and sexual enjoyment.

In female sexual dysfunction, similar findings have been obtained regarding cognitive factors (Laan, Everaerd, van Aanhold, & Rebel, 1993; Palace & Gorzalka, 1990, 1992). In these studies, however, women have been less prone to the distracting effects of anxiety or social performance demands (Rosen & Leiblum, 1995).

Failure to communicate, a third immediate cause of sexual dysfunction, is one of the most important immediate causes. Many people do not communicate their sexual desires to their partners thus creating problems with intimacy (Hyde & DeLamater, 2006). Couples' rating their ability to communicate effectively with one another has been found to be the single best predictor of treatment outcome for erectile disorder. Lack of assertiveness and not knowing how to communicate their needs to their partner is common in women with FSAD (Hyde & DeLamater, 2006; Rosen & Leiblum, 1995).

Finally, a fourth immediate cause of sexual disorders is a failure to engage in effective, sexually stimulating behavior. This can often be the result of ignorance on the part of one or both partners. For example, a couple may seek therapy because of unsatisfactory sexual intercourse. During the course of therapy, it may be discovered that the reason for the unsatisfactory intercourse is one or both individuals being unaware of the needs of the other person. Furthermore, they may not be aware of sexual physiology and thus not know how to best stimulate the other person. Therefore, increased communication during intercourse may be all that is needed (Hyde & DeLamater, 2006).

Prior Learning

Prior learning as a psychological cause of sexual disorders may be due to various things learned or experienced during childhood, adolescence, or even adulthood. In some cases of sexual disorders, the person's first sexual act was traumatic. Child sexual abuse is one of the most serious of the traumatic early experiences that lead to later sexual disorders such as FSAD. A history of sexual abuse is frequently reported by women seeking therapy for problems with sexual desire, arousal, or aversion (Leonard & Follette, 2002). Similar findings emerge for men with desire or arousal problems (Wyatt, Chin, & Asuan-O'Brien, 2002; McCarthy, 1990).

Cultural or societal factors may also contribute to the development of sexual problems. For example, growing up in a very strict religious family where sex is viewed as being dirty and sinful can play a factor in the development of

sexual disorders. In addition, parents punishing children severely for sexual activity such as masturbation can also play a factor (Hyde & DeLamater, 2006; Rosen & Leiblum, 1995).

Other Psychological Factors

As previously mentioned, negative emotions can affect sexual arousal and play a role in sexual disorders such as FSAD and MED. Specifically, emotions such as anxiety, sadness, and anger can interfere with sexual responding (Araujo et al., 1998). In regard to anxiety, for example, research has demonstrated that when people with sexual problems become anxious, their level of autonomic arousal (i.e., heart rate) increases and they tend to focus more on the negative consequences of not being able to perform. As a result, they do not become sexually aroused. In addition, research has demonstrated that when negative mood states are induced by the use of a musical mood-induction technique, there is an association with lower levels of physiological arousal. In regard to anger, research has found that suppression and expression of anger were associated with higher rates of erectile dysfunction (Back, Wincze, & Barlow, 2001).

Behavioral or lifestyle factors also play a role. For example, as previously mentioned, smoking, alcohol consumption, and obesity are all associated with higher rates of sexual disorders and are all behavioral problems (Hyde & DeLamater, 2006). Therefore, such behavior or lifestyle issues can be modified.

Interpersonal Causes

Problems in a couple's relationship are another leading cause of sexual disorders. Anger or resentment toward one's partner does not create an optimal environment for sexual satisfaction. Furthermore, in relationships in which there is anger or resentment, sex can be used as a weapon by one or both partners to psychologically hurt the other (e.g., by refusing to engage in any sexual behavior or in a particular sexual behavior the other desires). In addition, struggle for power in a relationship may add to sexual problems (Hyde & DeLamater, 2006).

Problems with intimacy are often an issue in relationships, which results in sexual disorders. Intimacy involves becoming emotionally close to one another. This may or may not involve physical contact. Intimacy problems typically represent a combination of individual psychological factors and relationship problems. Some individuals in relationships may enjoy the sex in the relationship but fear becoming intimate with their partner. Intimacy often involves allowing oneself to be emotionally vulnerable, and this is often very frightening to some individuals. Individuals with intimacy problems may be very good in the early stages of relationships but then lose interest or look for reasons to end relationships once it appears that things are becoming more

serious and further commitment is necessary. This type of pattern may be repeated in a number of relationships, thus making it an interpersonal issue. Some theorists have suggested that individuals with intimacy problems may have learned this pattern early in life, potentially as far back as childhood (Rosen & Leiblum, 1995).

TREATMENT OF SEXUAL AROUSAL DISORDERS

The four major categories of therapies often used in the treatment of sexual disorders, including sexual arousal disorders, are behavior therapy, cognitive-behavioral therapy, couples therapy, and biomedical therapies. In addition to the above treatments, the use of bibliotherapy-based treatments has been increasing. Bibliotherapy-based treatments have been predominantly behavioral and fairly recently cognitive-behavioral in nature. Therefore, their use along with behavior, cognitive-behavioral, couples, and biomedical therapies will be briefly reviewed in this section. It should be noted that multicomponent treatments are usually necessary for all sexual disorders as it is often very difficult to disentangle biological from psychological factors for a sexual disorder.

Behavior Therapy

The basic assumption of behavior therapy is that sexual problems are the result of prior learning and that they are maintained by ongoing reinforcements and punishment (immediate causes). Therefore, problematic behaviors can be unlearned and replaced by more adaptive ones (Hyde & DeLamater, 2006). This is consistent with the basic principles of behaviorism and learning theory, major influences in psychology.

A variety of different behavioral techniques have been used to treat sexual problems. Historically, one of the key behavior therapy techniques has been systematic desensitization. This behavioral technique involves first, teaching individuals an incompatible behavior to anxiety/fear, usually muscle relaxation. Individuals also construct a fear hierarchy consisting of a series of increasing fearful situations. Once the fear hierarchy has been constructed, and individuals have learned how to use muscle relaxation, they are then asked to imagine each step of the fear hierarchy. When feeling anxious, they are asked to use their relaxation skills. Individuals cannot progress to the next step of the fear hierarchy until they have significantly reduced their fear to the preceding step (Hyde & DeLamater, 2006).

Most behavior therapy programs are multidimensional in nature. They include education about sexual anatomy and functioning, use of anxiety reduction techniques (e.g., systematic desensitization), structured behavioral exercises, and communication training. Behavior therapy programs for erectile dysfunction have had fairly good success rates. However, most of them have

had fairly high relapse rates as well. Therefore, most behavior therapy programs should include what are called "relapse prevention procedures," should problems reoccur (Hyde & DeLamater, 2006). Relapse prevention procedures assist the individual in coping with setbacks.

Cognitive-Behavioral Therapy

Many sex therapists currently use a combination of behavioral strategies and exercises and cognitive therapy. This is referred to as cognitive-behavioral therapy (CBT). A key component of the cognitive approach to sex therapy is cognitive restructuring (Hyde & DeLamater, 2006). In cognitive restructuring, the therapist basically assists the client in restructuring his or her thought patterns, helping them to become more positive and realistic about sexual expectations. Often, negative attitudes are challenged, and individuals examine realistic alternatives to negative attitudes. Cognitive restructuring was previously described when reviewing psychological causes of sexual arousal disorders.

As for women with FSAD, they may have beliefs/attitudes about sexual activity that are associated with shame or guilt. Several myths have been identified that can create difficulties with sexual arousal in women. These include: (1) women must not be sexual, (2) women's responses to sex should be similar to men's responses, and (3) there are correct and incorrect ways to become aroused. Furthermore, a woman's negative beliefs or feelings about the partner can create negative sexual experiences (Charlton & Brigel, 1997). In CBT, the above myths would be challenged and modified.

Bibliotherapy

Bibliotherapy involves the use of written and other (e.g., use of videos) materials in the treatment of psychological and physical problems. Bibliotherapy materials typically describe how particular treatment methods are to be implemented by the individual. It can function as a stand-alone treatment or as a complement to ongoing therapy or medical care (van Lankveld, 1998).

To date, the vast majority of bibliotherapy approaches for sexual dysfunction have targeted orgasmic disorders. In addition, bibliotherapy approaches have predominantly used behavior therapy techniques pioneered by Masters and Johnson, or variations of them. A recent statistical review of bibliotherapy interventions targeting sexual dysfunctions conducted by Jacques van Lankveld found bibliotherapy to be moderately effective at the end of treatment. However, there was a relatively small effect at follow-up (van Lankveld, 1998). van Lankveld noted that 87 percent of the studies reviewed dealt with orgasmic disorders, thus limiting the generalizability of the findings.

More recently, bibliotherapy approaches have begun to use cognitive-behavioral techniques in the treatment of sexual dysfunction. In 2001, Jacques

van Lankveld, Walter Everaerd, and Yvonne Grotjohann published the only cognitive-behaviorally-based BT study to date. In a randomized clinical trial, couples were assigned to either the BT group or a waiting-list group. After the ten-week BT treatment, participants (N = 199 couples) reported fewer complaints of low frequency of sexual interaction and general improvement of sexual problems, and lower male posttreatment ratings of problem-associated distress. Unlike previous studies, the above study targeted a wider variety of sexual problems, including sexual arousal problems.

Couples Therapy

Due to the role that interpersonal factors may play in sexual disorders, couples therapy is often used as part of an overall treatment strategy when relevant. Couples therapy assumes that the relationship difficulties between two people can cause sexual problems. Therefore, couple/relationship issues need to be addressed in order for sexual problems to improve. Couples therapy has often been combined with cognitive-behavioral therapy in the treatment of MED. A multicomponent treatment for MED developed by Raymond Rosen et al. (1994) involves sexual and performance anxiety reduction; education and cognitive intervention; script assessment and modification; conflict resolution and relationship enhancement; and relapse prevention.

For women with FSAD, many experts recommend that couples therapy should explore the type and quality of intimacy within a relationship. This would include exploring the willingness of each partner to trust the other, the ability of each partner to share self with the other, and fears of negative evaluation by one or both partners (Gehring, 2003). This approach to couples therapy is consistent with research findings that marital discord is often associated with the four factors of criticism, stonewalling, nonverbal or verbal expression of contempt, and defensiveness (Gottman, 1994).

Biomedical Therapies

There are an increasing number of biomedical treatments available for individuals experiencing sexual arousal disorders. These include medication/drug and surgical treatments, which will now be briefly reviewed.

Medication/Drug Treatments

The best-known medication currently is Viagra (sildenafil) released in 1998 for the treatment of erectile disorder. Viagra is taken orally before engaging in sexual activity. Viagra does not directly produce an erection; however, when males are stimulated sexually after taking Viagra, the drug facilitates the physiological processes that produce erection. Viagra serves to relax the smooth muscles in the corpora cavernosa, allowing blood flow in and creating an

erection. In studies comparing Viagra to a placebo (i.e., an inert pill resembling the actual drug), approximately 57 percent of men responded successfully to the drug compared to 21 percent in the placebo group. Side effects appear to be minimal and include headaches, flushing, and vision disturbances. Overall, Viagra appears to be safe (Hyde & DeLamater, 2006).

Another drug that has been developed for MED is Cialis (tadalafil). The drug was developed as an alternative to Viagra. Like Viagra, Cialis relaxes the smooth muscle surrounding the arteries to the penis, thus facilitating engorgement (Brock et al., 2002; Montorsi & Althof, 2004; Padma-Nathan et al., 2001). Unlike Viagra, which lasts for only a few hours, Cialis is effective for as long as twenty-four to thirty-six hours. Levitra (vardenafil), another new drug, works much like Viagra. However, it appears to be somewhat more potent (Hyde & DeLamater, 2006).

Both Viagra and Cialis are peripherally acting drugs, meaning that they act on sites in the penis. An alternative to a peripherally acting drug is a centrally acting one, meaning that it acts on regions of the brain involved in arousal. One such drug is Uprima (apomorphine SL). It acts by increasing levels of dopamine, a neurotransmitter in the brain, particularly in the hypothalamus. Neurotransmitters help different nerve cells located in the brain and other parts of the body to communicate with one another. Uprima acts in twenty minutes and does not produce a spontaneous erection. Like Viagra, it has to be paired with sexual stimulation. Uprima has been demonstrated to be effective in 55 percent of cases (Heaton, 2001).

Currently, drug treatments for FSAD are limited. Typically, physicians have recommended the use of commercial lubricants, vitamin E, and mineral oils as potential treatments for sexual arousal in women (Phillips, 2000). In addition, estrogen replacement has been suggested for premenopausal women.

An equivalent of Viagra for women has been examined for the treatment of FSAD. However, clinical trials have not been successful. One possible reason for the failure of Viagra in women is that Viagra works by increasing vasocongestion, and inadequate vasocongestion is not likely what causes arousal and orgasmic difficulties in most women (Millner, 2005).

Women's sexual problems most often involve orgasm difficulties and low sexual desire. Low sexual desire becomes more of an issue as women age and their ovaries decline in the production of testosterone. At present, treatment for women often involves the administration of testosterone or any other androgen. One drug currently being tested in clinical trials is Instrinsa, a testosterone patch designed for postmenopausal women experiencing low sexual desire (Millner, 2005; Hyde & DeLamater, 2006).

The results of a preliminary study examining three strength levels of Femprox cream, produced by NexMed were announced at the Annual Meeting of the American Urological Association (AUA) in May 2005 ("Female sexual arousal," 2005). Femprox is applied topically and incorporates alprostadil, a vasodilator. Femprox cream was tested in 400 Chinese women

(pre- and postmenopausal women between the ages of twenty-one and sixty-five) diagnosed with FSAD. Participants were randomly assigned to either a Femprox group (groups differed by strength of Femprox) or a placebo group. Overall, participants in the Femprox group showed improvement in sexual arousal over the course of treatment, compared to the placebo group. The results of this preliminary study are promising for women with FSAD.

Surgical/Medical Device Treatments

A variety of surgical/medical device treatments are available for the sexual arousal disorders, particularly for MED. These include intracavernosal injections, suction devices, and surgical therapy.

Intracavernosal injection (ICI) is a treatment for MED that involves injecting a drug, for example, alprostadil, into the corpora cavernosa of the penis. The drugs used for ICI procedures are vasodilators. Vasodilators dilate the blood vessels in the penis so that much more blood can accumulate there, resulting in an erection (Hyde & DeLamater, 2006). In one study, the erections produced by the ICI procedure lasted an average of thirty-nine minutes (Levitt & Mulcahy, 1995). ICI is now primarily used in instances where men do not respond to Viagra or similar medications. ICI is also used in combination with cognitive-behavioral therapy in cases where the cause of MED is determined to be psychological and biological in nature. It should be noted that there are some drawbacks to ICI procedures. One drawback is that some men experience penile pain from the procedure. Second, some men who have normal erections may potentially abuse this treatment by using it to obtain "super erections" (Hyde & DeLamater).

Suction devices are also used in the treatment of MED. An external, plastic tube, with a rubber band around it, is placed over the lubricated penis. Suction applied to the tube produces an erection. The erection is maintained by the constricting action of the rubber band, once the external plastic tube has been removed. Suction devices have been used effectively with diabetic men. They are also used in combination with cognitive-behavioral couples therapy for cases of MED that are primarily psychological in nature.

In severe cases of erectile disorder, surgical therapy is possible. The surgery involves implanting a penile prosthesis (Hellstrom et al., 2003a, 2003b; Kabalin & Kuo, 1997). In this procedure, a sac or bladder of water is implanted in the lower abdomen, connected to two inflatable tubes running the course of the corpus spongiosum, with a pump in the scrotum. Therefore, once the procedure is completed, men can inflate the penis so that they have a full erection.

A penile prosthesis is typically implanted as a last resort after sex therapy and drug therapy have been unsuccessful. The surgery destroys some portions of the penis so that a natural erection will never again be possible. Approximately 25 percent of men who undergo this procedure are dissatisfied afterward. Some of the reasons for the dissatisfaction include the penis being

smaller when erect after the surgery and the experience of different sensations during both arousal and ejaculation (Steege, Stout, & Carson, 1986).

Another surgical therapy technique involves the implantation of a semi-rigid, silicone-like rod into the penis (Melman & Tiefer, 1992; Shandera & Thompson, 1994). This technique has fewer complications and is less costly than a penile prosthesis (Rosen & Leiblum, 1995).

With regard to FSAD, and female sexual dysfunction in general, a medical device available is the EROS-Clitoral Therapy Device. The device is designed to increase blood flow to the clitoris, and provides a vacuum suction to the clitoris in one of three levels of intensity. Several studies have provided preliminary evidence for the physiological effectiveness of the EROS device in women with FSAD (Billups et al., 2001; Munarriz, Maitland, Garcia, & Goldstein, 2003; Wilson, Delk, & Billups, 2001).

ISSUES FOR FUTURE CONSIDERATION

The sexual arousal disorders, FSAD and MED, are complex and multiply determined in nature. As a result of their complexity, their treatment is often multifaceted. With the above in mind, several suggestions are offered for future consideration. First, more research is necessary to accurately determine the prevalence of the sexual arousal disorders, as their prevalence has historically been highly variable. Second, more education is needed in helping people with sexual arousal problems better understand and recognize such problems. There has often been a stigma attached to sexual arousal problems, as with sexual problems in general, and improved education in terms of their prevalence and characteristics would be helpful to individuals experiencing them as well as to society in general. Third, professionals (e.g., physicians, psychologists, counselors) potentially working with individuals experiencing sexual arousal problems need to also be knowledgeable about such disorders. Professionals being better able to identify sexual arousal problems in patients/clients with whom they work can in turn help their patients confront such a problem sooner. In addition, proper identification of sexual arousal problems would lead to prompt treatment or referral to another professional who can appropriately assess and treat such problems. Finally, more research is needed in regard to the treatment of sexual arousal disorders, particularly in complex presentations of such problems. More studies examining the effectiveness of particular components in overall treatment packages need to be conducted. Therapies for sexual arousal disorders, particularly biomedical approaches, have come a long way, but more needs to be done.

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8

Orgasmic Problems and Disorders

Vaughn S. Millner

What could possibly go wrong with orgasm? Orgasm, considered by many to be one of the most basic physiological functions and one of life's greatest pleasures, is an activity that can result in ecstasy, a child, a warm glow, or, at the very least, a mild purr.

As a sex researcher, therapist, counselor, educator, and human sexuality course instructor, I have had the opportunity to observe and hear reports from clients, students, and colleagues about many misconceptions regarding the natural phenomenon of orgasm. Consider the following examples. During a gynecological exam, a physician asked his 22-year-old, recently married patient if she had orgasms. "I don't know," she replied. He quickly added, "Then you haven't." On another day, the physician asked his 19-year-old, college student patient if he had engaged in sex yet. His patient honestly responded that he had not yet "gotten involved." Instead, had the physician asked his male patient if he had experienced intercourse yet, he would have received a different answer. Some college students believe they have not had sex unless they have an orgasm; and some believe that if they had engaged in anal intercourse, but not vaginal intercourse, then they have not had sex (Randall & Byers, 2003). The bottom line is that there is much confusion in North America about accurate information about sex, and imbedded in this misinformation is uncertainty about orgasmic function.

In this chapter, I will describe orgasm as well as orgasmic problems and the more serious orgasmic disorders. I also will ask readers to consider the context

of the sexual experience and recognize how aging does and does not play a part in orgasmic satisfaction. In addition, readers will be provided a sampling of treatment options for orgasmic problems.

WHAT IS ORGASM?

Orgasm is considered to be the culminating event in what is termed the "sexual response cycle." Several versions of the sexual response cycle exist. Sex research pioneers Masters and Johnson (1966) described the male's and female's sexual response cycle in four parts: (1) the excitement phase, (2) the plateau phase, (3) the orgasmic phase, and (4) the resolution phase (also includes the refractory phase for males). This chapter focuses on the orgasmic phase; but it should be remembered that other phases are both directly and indirectly linked to the orgasmic phase. The first stage, excitement, refers to the body's physiological response to psychological and/or physical sexual stimulation. If the individual maintains the excitement phase, the second, or plateau, phase is entered. Sexual tension increases if the individual continues to find the sexual stimuli exciting. The ultimate release of continuing tension results in orgasm, contraction of the sex organs. During the orgasmic phase, involuntary climax is reached, with sensations occurring for females primarily in the clitoris, vagina, and uterus. For men, orgasm includes sensations mainly in the penis, prostate, and seminal vesicles. The final stage, resolution, is the inevitable loss of tension. Added to this cycle for men is the refractory period, the time during which the penis once again achieves tumescence. The refractory period varies considerably among men; and its description has been contradicted by some researchers, who rejoin that some men have multiple orgasms (Dunn & Trost, 1989).

The ejaculation process (i.e., the emission and expulsion of the whitish seminal fluid in men during the orgasm phase) is described by Masters and Johnson (1966) to occur within two stages. The first stage includes the expulsion of seminal fluid into the prostatic urethra via contractions. In this stage, the sphincter of the urinary bladder closes, or remains closed to prevent leakage into the bladder, as well as to contain the urine in the bladder, thereby effectively eliminating the possibility of the mixture of the urine and seminal fluid. In the second stage, the seminal fluid progresses from the prostatic urethra to the urethral opening. Subsequently, ejaculatory contractions project seminal fluid. Once males have begun ejaculatory contractions, the seminal fluid projections cannot be stopped, at least not in younger males. Not all older males have a clear differentiation of the two stages, that is, there may be a projection of the seminal fluid without the first stage's clear caution of irreversibility. Perry and Whipple (1981) studied female ejaculators and asserted that the two-phase ejaculatory process is as appropriate for women as it is for men.

In contrast to the Masters and Johnson (1966) model developed for both men and women, Walsh and Wilson (1987) developed a normal sexual response

cycle for men and suggested five interrelated occurrences during the sexual cycle: libido (desire), erection, ejaculation, orgasm, and detumescence. All of these are related, of course, to orgasmic function. Kandeel, Koussa, and Swerdloff (2001) describe the stages as follows: The first stage, desire, varies in intensity and is influenced by many factors, including pharmacological agents and erotica. Desire may also be influenced by elevated levels of testosterone in older men, but not in younger men. Erection, the second stage, is the result of multiple stimuli that impact neurological and vascular pathways that eventually produce tumescence in the penis rigid enough for penetration. Tumescence occurs as a result of increased blood flow to the penis. The third stage, ejaculation, is a reflex, and results from action taking place in the sympathetic nervous system. The next phase, orgasm, is influenced by both physical and psychological factors. Orgasm involves contraction of the sex organs as well as pressure release in the urethra, contractions of the pelvic floor muscles, ejaculation, and, ultimately, release of tension. Orgasms, however, do not always include ejaculation. Orgasm and ejaculation, although two interrelated events, are separate physiological functions. Orgasm may occur with or without emission or ejaculation, and conversely, ejaculation can occur with or without orgasm (Kandeel et al., 2001; Wylie & Ralph, 2005). Finally, during the detumescence stage, the penis relaxes to a flaccid condition. The blood is drained away from the penis until, over time, it returns to the pretumescent level.

Overall, it is to be noted that orgasms for both men and women can occur alone or with a partner of either sex. Therefore, they can occur through coitus, oral sex, masturbation, or other means. In addition, orgasmic feelings can occur within the genital and pelvic area or extend to other areas of the body (Mah & Binik, 2002).

SEXUAL HEALTH AND THE SEXUAL EXPERIENCE

Having recognized the process of the orgasmic phenomenon, let us stop to consider what constitutes a healthy sexual experience overall before we discuss the factors influencing the satisfactory orgasmic experience. Perhaps the best way to proceed is to identify a reasonable definition of sexual health. Of the various definitions of sexual health established over time (see Edwards & Coleman, 2004, for a review), the working definition offered by an international consulting group on sexual health and published by the World Health Organization (2005) is the most compelling and appropriate one for the reader to keep in mind as he or she reads this chapter.

> Sexual health is a state of physical, emotional, mental and social well-being in relation to sexuality; it is not merely the absence of disease, dysfunction or infirmity. Sexual health requires a positive and respectful approach to sexuality and sexual relationships, as well as the possibility of having pleasurable and safe sexual experiences, free of coercion,

> discrimination and violence. For sexual health to be attained and maintained, the sexual rights of all persons must be respected, protected and fulfilled. (p. 1)

I invite the reader to consider this inclusive understanding of sexual health as a helpful way to frame understanding of orgasmic function. The healthy orgasmic experience is more than "sexual activity" and reflects a positive approach to sexuality. Orgasms are part of the total sensual, sexual experience and can be influenced by many factors including emotions such as anger, guilt, and sadness, as well as negative thoughts, being in uncomfortable or fearful situations, feeling tired, not feeling attracted to the sexual partner, or not feeling attractive.

To what can orgasms be attributed—the mind or the body? Orgasmic satisfaction is related to the interpersonal, subjective experience as much as, if not more so than, the total sensory experience (Mah & Binik, 2005). Of course, much of the body is involved in the orgasmic experience of the sexual response cycle. The body's orgasmic response to sexual stimulation involves both widespread vasocongestion (accumulation of blood producing swelling) and an overall increase in muscle tension (Masters & Johnson, 1966). However, claims that the brain may be the body's biggest sex organ are not unfounded. The brain, with a complex relationship to the spinal cord, drives sexual behavior (Coolen, Allard, Truitt, & McKenna, 2004; Holstege et al., 2003; see also Chapter 2 in this volume).

Cognitive shifts are recognized in Basson's (2002) development of a woman's sexual arousal model. Basson (2002) contends that when a woman experiences genital congestion due to sexual stimuli, she may interpret that in one of several ways. A woman may decide to enjoy the experience or may reinterpret sexual stimuli through her thoughts and negate its influence. This is a reasonable view. Arousal can persist throughout a woman's sexual experience or can dwindle at some point during the sexual response cycle, thereby determining whether a woman will attain a fulfilling orgasmic experience or perhaps no orgasm at all (Millner, 2005). For instance, a woman may be engaged in a steamy sexual liaison with her male partner on the way to orgasm when she suddenly wonders if her 6-year-old child is still asleep. What if he gets up for a drink of water? What if he hears them? The cognitive shift from self to other can effectively reduce the possibilities of her achieving orgasmic release. Her male partner, on the other hand, may be more likely to be genitally focused and less distracted. The path to attaining orgasm is not always a straight or sure one.

NORMAL SEXUAL DEVELOPMENT

Humans develop sexually over time. By adolescence, one's sexual response is determined by a complex mix of messages determined by biology,

gender differences promoted by society, sexual messages provided by family and friends as well as personal experiences, and individual differences. Include emotions and hormonal influences in this mix and we have a multidetermined sexual experience.

Generally for young males, problems with orgasms are not associated with adolescence. Adolescent and young adult females, however, may have difficulties having orgasm because of factors such as time pressures, less knowledge about their bodies, and lack of intimacy in relationships. Middle-aged adults have the added burden of reduced hormone levels. Overall, as women age, they tend to have fewer sexual problems, with the exception of lubrication, whereas sexual problems for aging men are positively associated with erection problems and lack of desire for sex (Laumann, Paik, & Rosen, 1999).

During a male's development, he usually does not have to concern himself with whether he will be able to reach orgasm. As an adolescent, hormones are typically coursing through his system and he finds himself experiencing spontaneous erections often without any external stimulation. As men grow older, orgasmic difficulties increase (Araujo, Mohr, & McKinlay, 2004). More attention must be given to what constitutes desire and how it can be attained. All phases of the male sexual response cycle (Masters & Johnson, 1966) are impacted by aging. Worldwide, for men, the biggest problem is premature ejaculation, followed by erectile difficulties for men over 40 (Laumann et al., 2004; Wylie & Ralph, 2005). It takes longer to achieve a full erection, and direct genital stimulation is needed to maintain the erection. With age, men's orgasms feel less intense, detumescence is quicker and there is a longer refractory period. In addition, there is less ejaculation (Kandeel et al., 2001). Although these age-related sexual changes are consistent (Dunn, Croft, & Hackett, 1999; Laumann et al., 1999), hormonal involvement in such changes is not clear.

For women, age-related physical changes include vaginal dryness, loss of vaginal elasticity, clitoral shrinkage, and lessened lubrication (Kingsberg, 2002). These often are related to menopause (the cessation of menstruation) and the corresponding decline of hormones. Androgens, namely, male sex hormones such as testosterone, play a role in women's sexual functioning, but the extent of the impact remains unclear (Bachman et al., 2002; Berman, Berman, & Goldstein, 1999). Women approaching menopause have about half of the androgens they had in their thirties and forties (Braunstein, 2002). Reduced estrogen levels as well as lower testosterone levels are associated with increased complaints of decreased desire and pleasure.

A developmental milestone for many young and middle-aged adults is pregnancy. Much is written and discussed about care for the mother and baby during pregnancy. Not so commonly discussed is the impact of pregnancy on a woman's sexual functioning. As the pregnancy progresses, some women report less ability to reach orgasm and less frequent coitus (Bogren, 1991; Gökyildiz & Beji, 2005). Changes in sexual functioning are due in part to changes in how

women view their changing bodies and to the extent that they feel attractive to their partner. The greatest fear is that of harming the baby during sexual activity (von Sydow, 1999).

Another age-related factor that affects sexual functioning via impact to the uterus, hormones, and nerve endings is a hysterectomy. All women experience hormone fluctuation or hormone decline after a hysterectomy. In addition, as a result of the trauma on the body, both physically and psychologically, women can experience difficulties achieving orgasm postsurgery, although this is not an inevitable outcome (Sholty et al., 1984). Indeed, many women express increased sexual satisfaction after a hysterectomy (Goetsch, 2005). What is often missing from study analysis is the evaluation of women's subjective sexual experience, which may be the component that makes the difference between an orgasm or lack thereof.

PROBLEMS VERSUS DISORDERS

Apart from normal age-related orgasmic problems, many people have other types of orgasmic problems at least some of the time at some point during their lifetimes. Some have chronic, long-lasting conditions of difficulty achieving orgasmic satisfaction and never attain an orgasm. This is when a situational problem can turn into what clinicians call a "disorder."

Some are concerned about these circumstances whereas others are not worried. For example, some men ejaculate earlier than others. For those men, or their partners, who are concerned about this tendency, this is a problem. Others may decide to adapt in some way so that even though the condition still exists, they can create a pleasurable sexual experience for both partners. One of the distinguishing features of what constitutes a disorder is one's identification that the condition is problematic and impacts functioning. In other words, a sexual problem does not automatically translate into a sexual disorder. Individual perception can be key to identification of a sexual problem as a sexual disorder.

Therapists and other clinicians identify sexual disorders in their clients and patients based on the definitions used in the *Diagnostic and Statistical Manual of Mental Disorders—Fourth edition text revision* (American Psychiatric Association, 2000). This book is the "clinician's bible" as it provides a standardized definition of people's serious or persistent mental problems. The *DSM-IV-TR* bases its classification of sexual disorders largely on the previously described Masters and Johnson (1966) model of sexual response. The *DSM-IV-TR* sexual response cycle consists of the separate phases of desire, excitement, orgasm, and resolution. Problems may occur at one or more of these stages simultaneously.

To qualify as a *DSM-IV-TR* disorder, a person must experience considerable personal or interpersonal distress. Clinicians must specify as to whether the condition is (a) lifelong or acquired, (b) generalized or related to a particular situation or person, and (c) due to psychological or other factors.

Context is essential in the consideration of sexual problems (Bancroft, 2002; Kaschak & Tiefer, 2001). Masters and Johnson (1966) were careful to identify the importance of context in the sexual experience. They asked readers to limit the generalizability of their findings and called for more research, particularly as the research related to subjective feelings associated with physiological sexual reactions. Some subsequent clinicians did not heed their advice and proceeded to minimize the subjective component and emphasize only the physiological element.

The importance of context is illustrated in the following example: Sonya and José have been married for twenty years. In their first ten years of marriage, they had an active sexual relationship and Sonya experienced orgasm easily. In their eleventh year of marriage, José became distracted from their relationship and immersed himself in his work. Sonya also distanced herself from the relationship, concentrating instead on their children. Sonya began to fantasize frequently about other men. She became irritated when José initiated lovemaking because she sensed that he was merely seeking self-gratification rather than intimately reaching out to her. Mentally, she began to shut down and withdraw from José. When engaged in sexual activity with José, her thoughts of resentment continued unabated, and her body quickly responded by producing less lubrication and tensed muscles. She quit experiencing orgasms with José eleven years ago, although she could easily self-masturbate orgasmically. Does a woman have a sexual disorder if she is unable to have an orgasm with her husband of twenty years (one context), but can experience an orgasm by masturbation (a different context) or with a lover (another different context)? Should the woman be labeled with a disorder when it is possible that her husband does not stimulate her either psychologically or physically?

With these considerations in mind, the *DSM-IV-TR* still offers clarity and definition to what could be ambiguous sexual problems and recognizes three disorders involving problems with orgasms. The first is Female Orgasmic Disorder, also called Inorgasmia or Anorgasmia. According to the *DSM-IV-TR*, this condition is a "persistent or recurrent delay in, or absence of, orgasm in a female following a normal sexual excitement phase" (p. 547). Anorgasmia is distinguished by type. It includes women who have lifelong orgasmic problems versus acquired problems and women who have situational orgasmic problems versus more generalized problems. The clinician, in consultation with the woman, determines whether her orgasmic activity is adequate for age, sexual experience, and the satisfactoriness of the focus, intensity, and duration of sexual stimulation she is given.

About 50 percent of women attain orgasm through intercourse (Merck Manual, n.d.). Of the women who attain orgasms, they do so only about 40–80 percent of the time (Davidson & Darling, 1989). As recently as the 1970s and 1980s, these women would have been called "frigid" if they did not consistently experience orgasm during coitus. Such societal pressure has resulted in women "faking orgasms" out of embarrassment or shame that they

are not equivalent to men in their orgasmic performance (Butler, 1976). In contrast, many women today are seeking help from physicians or sex therapists for orgasmic problems.

Anorgasmia can result from multiple factors, including inadequate arousal time for the woman during foreplay, ignorance of the woman's anatomy, and premature ejaculation (*Merck Manual*, n.d.). Other contributing factors include sexual side effects from pharmaceutical drugs or a woman's inability to release her inhibitions. Some of the treatment options include sex education, Kegel exercises to improve the pubococcygeus muscle tone, and sensate focus exercises (see under Treatment Options).

The second orgasmic disorder recognized by the *DSM-IV-TR* is Male Orgasmic Disorder. Described as a "persistent or recurrent delay in, or absence of, orgasm following a normal sexual excitement phase during sexual activity" (American Psychiatric Association, 2000, p. 552), it occurs in about 2–8 percent of the general population (Rowland, Keeney, & Slob, 2004). With the most common form of this condition, a man can ejaculate with manual stimulation from a partner, but is unable to reach orgasm during intercourse. Others may require prolonged stimulation to achieve orgasm during intercourse. Some men can attain orgasm by masturbation, but others are either unwilling or cannot masturbate to orgasm. Some, but not all of these men, experience full erections and nighttime emissions (Perelman, 2001).

The preceding *DSM-IV-TR* description needs further clarification. Although the manual states that men can have orgasms without the emission of semen, this distinction is not evident in the description of the disorder. If the reader will recall, orgasm and ejaculation are interrelated, but separate, physiological processes (Waldinger & Schweitzer, 2005). Advances continue in the clarification of the complex physiological processes that occur before, during, and after orgasm (Jannini & Lenzi, 2005; Kandeel et al., 2001; Ralph & Wylie, 2005; Waldinger & Schweitzer, 2005).

Male orgasmic disorder can result due to early prohibitive messages from childhood, early traumatic events, or lack of attraction to a partner. Also, it can occur as a result from a biological predisposition (Perelman, 2001), diseases such as multiple sclerosis and diabetes (Penson et al., 2003) as well as pelvic-region surgery and certain medications (Kandeel et al., 2001; Raja, 1999; Rosenberg, 1999). Treatment for male orgasmic disorder has not yet been standardized, but when there is a psychological etiology, some treat the condition with the introduction of stronger sexual stimulation such as erotic videos and a vibrator (Geboes, Steeno, & DeMoor, 1975). Others have found that low sexual arousal can be a general characteristic for these men (Rowland et al., 2004). Therefore, one treatment option that may be explored in couples sex therapy involves anxiety-reducing techniques such as conflict resolution and trust building. Perelman (2001) found success using a combination of treatment strategies such as sex education, pharmaceutical options such as sildenafil citrate (marketed as Viagra), and cognitive-behavioral techniques. A comprehensive approach

utilizing the physiological, psychological, relational, and sexual education factors is usually the most effective one (McCarthy & Fucito, 2005).

The last orgasmic disorder listed by the *DSM-IV-TR* is rapid or premature ejaculation, the most common ejaculatory problem, affecting approximately 29 percent of men (Laumann et al., 1999). The opposite of male orgasmic disorder, premature ejaculation is "the persistent or recurrent onset of orgasm and ejaculation with minimal sexual stimulation before, on, or shortly after penetration and before the person wishes it" (American Psychiatric Association, *DSM IV-TR*, 2000, p. 552). This condition involves powerlessness to control ejaculation for a "satisfactory" amount of time prior to penetration. "Satisfactory" time typically means that a man ejaculates within one minute after he has penetrated the vagina, or he ejaculates too early for his partner to be satisfied in at least one half of his attempts at intercourse with that partner (Master & Turek, 2001; Waldinger, 2003). It can be caused by both physiological and psychological factors. Biologically determined factors include nervous system diseases, prostatitis, urinary tract infections, and physical injuries such as spinal cord injuries. Psychological factors include negative psychological states such as depression and anxiety in addition to a lack of psychosexual skills, relationship stress, and interpersonal problems (Metz & Pryor, 2000). Comprehensive assessment and treatment should consider both potential physiological and psychological causes and be targeted for the individual. Some treatment options include cognitive-behavioral therapy, couples communication training, pharmaceutical drugs such as selective serotonin reuptake inhibitors (SSRIs), or microsurgery.

In addition to the disorders listed in the *DSM-IV-TR*, Ralph and Wylie (2005), urologists in the United Kingdom, identified other ejaculatory problems. The following is a brief overview:

1. *Anejaculation*. There is no ejaculation. This condition can result from either psychological or physical causes. Psychological origins are usually involved when men are anorgasmic. This could occur either in one particular situation or in various settings. For example, a man may be able to masturbate and ejaculate, but is unable to ejaculate with a partner. Physical causes include diseases such as diabetes and neurological problems. Treatment depends on the origin of the problem, and can include sex therapy and pharmaceutical drugs such as ephedrine and imipromine. Another option is electroejaculation wherein an electrical current stimulates ejaculation.

2. *Aspermia*. This is the inability to ejaculate semen even with erection and orgasm (Papadimas et al., 1999). Aspermia may be the result of several factors such as obstruction, illness, or biological imperfections.

3. *Retrograde ejaculation*. Referring to the absence of ejaculation as a result of semen moving backward through the bladder neck into the bladder, retrograde ejaculation can be congenital, or can occur from diabetes, spinal cord lesions, or neurological or physical damage to the bladder neck. Retrograde ejaculation is considered to be the ejaculatory problem described as part of

male orgasmic disorder (Waldinger & Schweitzer, 2005). A physician can diagnose this condition by finding sperm and fructose in urine after a man experiences orgasm.

4. *Hematospermia*. With this condition, there is blood in the semen, generally a result of infection in the urogenital tract, especially in younger men (Feldmeier, Leutscher, Poggensee, & Harms, 1999). Other conditions associated with hematospermia could include cysts, polyps, or cancer of the prostate (Papp, Kopa, Szabó, & Erdei, 2003). An examination by a physician is necessary to determine the cause and type of treatment.

5. *Odynorgasmia*. Referring to painful ejaculation, this condition is rare. It is sometimes associated with cancer (Donnellan, Breathnach, & Crown, 2000) or occasionally radical prostatectomy (Koeman, van Driel, Schultz, & Mensick, 1996). In addition, antidepressant medication has been associated with painful ejaculation (Michael, 2000). A physician determines the diagnosis and treatment.

6. *Low volume of ejaculate*. This, too, is an unusual occurrence, and it can be biological in origin or related to lesions caused by surgery.

Overall, when considering if one has a disorder or a problem, it is important first to recognize that calling problems "disorders" can be problematic in itself in treatment. Labeling a woman "inorgasmic" can convince the woman that inorgasmia is something she "is" rather than a solvable condition she "has." This is an important distinction. A disorder is a condition that one possesses. With the exception of the limitations of some medical conditions, it is generally not an irreversible problem and does not define the person.

Medical Factors and Orgasmic Problems

There are a plethora of medical factors that impact orgasms. Some of these are diseases, injuries, physiological problems, and pharmaceutical options.

One of the most common causes of male sexual dysfunction is vascular insufficiency (Kandeel et al., 2001; Melman & Gingell, 1999). If blood cannot reach the cavernous tissue in the penis, then full erection is not possible. Men who experience vascular diseases, hypertension, diabetes, heart disease, high cholesterol, or a stroke tend to have increased likelihood of erectile problems (Laumann et al., 2004). Other organic components known to cause erectile dysfunction include liver disease, renal failure, blockage of small vessels in the penis of older men, chronic obstructive pulmonary disease, cancer (Kandeel et al., 2001), and neurological disorders such as Parkinson's or Alzheimer's disease (Lue, 2000). Some of the psychological origins include performance anxiety, depression, and a difficult relationship (Lue, 2000).

Diseases can impact sexual functioning in a variety of ways depending on the type of disease and treatment. A disease that can have both direct and indirect impact on sexual functioning is cancer, the second leading cause of death in the United States (Anderson & Smith, 2005). Cancer survivors, in an

ever-increasing population, are living longer, and those who have been cured of cancer often have residual long-lasting psychosocial and sexual needs that formed during cancer treatment (Reuben, 2004). For example, consider surgery for prostate cancer. Prostate cancer sometimes results in a radical prostatectomy, removal of the prostate. This can result in erectile dysfunction. In recent years, however, surgery has advanced to the extent that men often regain their ability to engage in sexual intercourse within two years (Walsh, Marschke, Ricker, & Burnett, 2000). Many men, nevertheless, maintain a sense of embarrassment or shame, which prevents them from seeking help. For those men who express concern and are open to assistance, relief is available in the form of medication, injections, or penile implants (Burnett, 2005). Recognition of sexual needs during and after cancer treatment is an essential quality of life issue.

Another medical factor sometimes leading to orgasmic problems is injury to the body. One of the most debilitating injuries as it relates to sexual activity is a spinal cord injury (Charlifue, Gerhart, Menter, Whiteneck, & Manley, 1992; Sipski, Rosen, Alexander, & Gomez-Marin, 2004). The sympathetic arousal mechanism impacted by spinal cord injuries has been shown to influence genital sensitivity (Sipski et al., 2004), and anxiety and negative body image are often added to the physiological impairment. Such injuries do not inevitably cause sexual dysfunction, however. For instance, reports indicate that about one-half of women with spinal cord injuries report the ability to achieve orgasm (Charlifue, Gerhart, Menter, Whiteneck, & Manley, 1992; Sipski & Alexander, 1993). In some cases, research shows that for women who have injuries at T6 and above, the ability to experience orgasm is not related to their injuries (Sipski, Alexander, & Rosen, 1995); whereas those with total disruption have a much more difficult experience. One expert in this area, Sipski (2002), states that women with various types of spinal cord injuries can experience the sensations associated with orgasm. Sipski urges women with injuries to become more sexually self-aware, masturbate, and use mechanical devices such as vibrators to help improve their sexual response.

Sexual functioning can also be hampered by substances such as alcohol. A study by Johnson, Phelps, and Cottler (2004) found an association between inhibited orgasm and marijuana and heavy alcohol use for both men and women. Heavy drinking in this study was defined as seven or more drinks every day for a period of two weeks or longer, or drinking heavily at least once a week for a period of two months or longer. Drinking also interferes with one's ability to make wise sexual choices. Some mistakenly make decisions to drink based on the intention that alcohol will reduce their inhibition and enhance their sexual satisfaction. Instead, excessive drinking minimizes selectivity of a partner and creates vulnerability to sexual aggression (Klassen & Wilsnack, 1986).

Another substance-related contribution to orgasmic problems is medication side effects. Medication serves multiple roles in its association with sexual functioning. Although in some cases, pharmaceutical options such as sildenafil can

positively enhance orgasmic functioning, medication can also wreak havoc on sexuality. Adverse reactions can be related to medications that alter physical processes that mediate sexual function or impact hormone levels, which could diminish sexual functioning. An example of the contradictory roles an antidepressant medication can play is when a man experiences enhanced sexual interest but cannot express it because of the medication's effect on erectile functioning.

Antidepressant medication is particularly well known for its relationship to lowered sexual functioning (Ashton & Rosen, 1998; Kennedy, Eisfeld, Dickens, Bacchiochi, & Bagby, 2000). However, one group of researchers, Rowland, Myers, Culver, and Davidson (1997) found that the oral antidepressant drug called bupropion (commonly known as Wellbutrin) had no such deleterious effect. Rowland and colleagues found that bupropion was not associated with erectile problems in either healthy men or men with diabetes. In addition, both groups of men generally reported that their sexual satisfaction remained intact or slightly improved with the use of bupropion. The researchers concluded that bupropion should be considered as a treatment for depression in diabetic men and others. Zimmerman et al. (2005), in a separate work, encouraged physicians to consider bupropion as a first treatment option for men with depression because of the lack of sexual side effects. Unfortunately, these findings have not consistently been demonstrated with women (Michelson, Bancroft, Targum, Kim, & Tepner, 2000).

Other Contributing Factors to Orgasm Problems

The body should be viewed holistically, that is, the sexual functioning of a human works optimally if the physical, mental, emotional, social, and spiritual aspects are balanced. Sexual problems and dysfunctions can occur at any point in the sexual response cycle with the occurrence of psychological conditions that influence satisfactory sexual experiences. Unfortunately, common negative mood states such as depression and anxiety can quickly and effectively eradicate the potential to encounter satisfactory orgasms. Psychological problems may stand alone or be directly related to a medical condition. Consider social phobia, that is, a relentless fear of social situations. For men, social phobia has been found to be associated with impaired arousal, orgasm, and sexual satisfaction. Women with social phobia also have problems with arousal and general sexual activity as well (Bodinger et al., 2002).

In a study by Laumann et al. (1999), factors that contributed to how likely one might experience sexual pleasure were identified. Some of the factors from the study include:

1. *Education*. Higher education generally meant more pleasurable sex. In addition, for women, higher education level was associated with fewer problems with orgasm.

2. *Attitudes*. Women who expected little from their relationships were also those women who reported an inability to reach orgasm. For men, erectile problems resulted from being in an uncommitted relationship.
3. *Health*. Poor health for women was associated with sexual pain whereas poor health for men was related to an increased risk of all sexual dysfunctions.
4. *Lifestyle factors*. For both women and men, low feelings of emotional satisfaction were associated with more sexual dysfunction, but especially so for women. In addition, infrequent sexual activity resulted in both lubrication and erectile problems.
5. *Sexual trauma*. Both men and women who experienced sexual victimization reported long-term problems in their sexual functioning. This is consistent with others' findings (Dennerstein, Guthrie, & Alford, 2004), wherein women who had been abused were found to have fewer sexual activities than women who had not experienced abuse.
6. *Stress*. For both men and women, all phases of the sexual response cycle are negatively impacted by emotional and stress-related problems.

Finally, the well-known factors of mood, timing, and environment are also influential in how most people experience sex and sexuality (Wells, Lucas, & Meyer, 1980). A discussion of other psychological and medical factors is imbedded in the subsequent dialogue regarding gender and orgasm.

GENDER AND ORGASM

It is difficult to know the number of people who experience sexual problems because many do not feel comfortable discussing their intimate life experiences with researchers or even family physicians. We do know that women report more sexual problems than men. This could mean that women are more open about reporting sexual problems than men, or it may mean that they do have more problems with sex than men. In the most recent analysis of a large, well-controlled survey involving about 13,600 men and 13,800 women from twenty-nine countries, Laumann et al. (1999) found that 43 percent of the women experienced sexual dysfunction as compared to 31 percent of the men. One overall conclusion was that sexual dysfunction is widespread, with sexual problems decreasing as women age, but increasing for aging men. Men aged 50 to 59 years were more than three times as likely to report problems with erection than men aged 18 to 29 years. Nonmarried women were one-and-a-half times more likely to report having orgasm problems than married women. Similarly, nonmarried men also reported higher rates of sexual problems than married men.

Sexual differences naturally involve physiology. A woman's clitoris is the only human organ with the sole purpose to initiate or elevate sexual tension.

A male has no such body part as his penis also serves other purposes. The range of physical differences is actually quite complex, and there is considerable ongoing study about the multiple interrelated physiological systems that distinguish men and women's sexual behavior.

Mentally and socially, there also appear to be differences in the ways men and women experience orgasm. Perhaps this is because right from birth women are socialized differently from men. Society impinges nonpermissive sexual messages upon women more so than with men. This could be one reason why men masturbate more often than women—a fact that leads to more frequent orgasms than women (Oliver & Hyde, 1993).

In examining sexual differences between men and women, Peplau (2003) found four other primary distinctions that I believe have implications for the orgasmic experience. The first difference was sexual desire. Men demonstrated greater sexual desire more consistently than women. Second, men were not as likely to stress committed relationship as a necessary ingredient for sexual behavior as women. Third, men were found to be more sexually aggressive than women. Aggression may be related to sexual self-concept, coercion in sexual relationships, and the decision as to who initiates sex. Fourth, men's sexual behavior did not change as much as women's sexual behavior over time. This fourth condition leaves one to ponder how willingness to change or adapt over a lifetime might very well influence orgasmic outcomes.

When considering differences, there is variability of orgasmic experiences within one's own gender, as well as between males and females. In the 1980s, a group of researchers (Sholty et al., 1984) studied a small group of women to determine how they experienced orgasm. Although the women differed considerably in their preferred methods, several factors positively influenced their orgasmic satisfaction, such as an improved attitude toward experimenting with sex with a long-term partner, improved sexual self-awareness, less fear of pregnancy due to better birth control measures, increased interest in sex and orgasm, and decreased level of shame and inhibition. In this study, women over the age of 40 were more likely to experience orgasm in several anatomic sites.

TREATMENT OPTIONS

Most sexual problems can be resolved with medical or psychological treatment. Generally, a combination of the two is the best approach, and both require education. In addressing treatment, there are several considerations.

First, treatment for orgasm problems must be designed to address the origin of the difficulty. Orgasmic problems and dysfunctions can result from interruption to normal sexual development, aging, medical conditions, restrictive social conditioning, relationship problems, and psychological challenges.

Successful treatment must begin with assessment of the problem. Generally, a physician should be consulted to rule out a physiological problem or

medical diagnosis. Physicians can also check for medication side effects that impact sexual functioning. Physicians should be chosen for their expertise as well as their ability to accept that a sexual problem could have psychological, social, or physical origins. Of course, if it is obvious that the problem is purely psychological in origin, then treatment would begin with a mental health professional with expertise in sex therapy. For example, for a man or woman who has been sexually abused as a child and has sexual issues related to the abuse, therapy may be the best place to begin.

Second, it is important to remember that change will be required, and people are sometimes resistant to change. To overcome a sexual problem, one must generally implement changes in one's behavior, thoughts, or relationship. This will require self-awareness, intention to change, actually doing something different, and assessing the effectiveness of that behavior change.

Third, sex therapy often proves to be a useful and effective solution for orgasm problems (D'Amicis, Goldberg, LoPiccolo, Friedman, & Davies, 1985; Pierce, 2000; see also chapter 9 in this volume), but it is important to realize that the interventions vary according to the clinician as well as to the problem. Some clinicians concentrate on behavioral techniques whereas others may focus on relational dynamics. Others, such as Bianchi-Demicheli and Zutter (2005) base their interventions on a holistic approach addressing the origin of the problem including biological, intrapsychic, relational, social factors, or a combination of all. Their holistic model offers interventions that attempt to bridge psychological and physical components of sexual problems.

In the following sections, I briefly list a few medical options followed by a short sampling of psychological and behavioral treatments. Medical treatment options include both mechanical devices (for the physical component of orgasm) and pharmaceutical choices (for physical and, sometimes, mental components of orgasm). Psychological interventions include a wide range of therapies, usually involving some type of communication training for partners. Behavioral interventions begin with sex education and debunking of inaccurate sexual myths. Clients are subsequently taught new techniques to assist them in becoming more self-aware and to help them learn how to better please themselves or their partners. Often, sex therapy is fashioned from a combination of medical, psychological, and behavioral options. Collaborative relationships among a client's health care providers would probably best serve the client's interests (Millner & Ullery, 2002).

Medical Interventions

Clitoral Therapy Device

A rather new medical treatment option for female sexual dysfunction, the clitoral therapy device (available from Eros Therapy, Urometrics, St. Paul, Minnesota) is a battery-powered vibratory device. It is designed to provide a

light vacuum over the clitoris with the expectation that the clitoral erectile chambers and labia would fill with blood (Bhugra, 2003). Approved by the U.S. Food and Drug Administration (FDA) for treatment of sexual arousal disorder and orgasm disorders in otherwise healthy women, the device also has shown to have promising results for women with sexual disorders resulting from cervical cancer radiation treatment (Schroder et al., 2005).

Pharmaceutical Options

The most popular treatment for men with orgasmic problems is sildenafil (McCarthy & Fucito, 2005). Not an "orgasm" pill, sildenafil (brand name is Viagra) helps men sustain erections by relaxing smooth muscles, expanding the arteries, and swelling the penis when they receive psychological or physical sexual stimulation (Lue, 2000; Rosenberg, 1999). If sildenafil fails as a treatment option, it may bring other issues into consideration, such as lack of desire. Sildenafil appears safe for most men, but there is a health risk for some, especially if they smoke or have underlying cardiovascular disease (Lue, 2000), diabetes, high blood pressure, high cholesterol, or certain eye problems (U.S. Food and Drug Administration, 2005). Sildenafil has not been approved by the FDA for women, although clinical trials are under way.

For women, pharmaceutical options such as estrogen creams and testosterone in combination with estrogen can offer a treatment option for vaginal irritation or dryness that occur with age-related changes (Kingsberg, 2002; "Overview: A Woman's Guide to Hormone Therapy," 2003; Sarrel, 1990). Estrogen, often combined with progestogen, helps to decrease cancer risk for women who have not had a hysterectomy. The risks and benefits are still being studied, however. Taking the hormones is not a simple decision-making process, and women should weigh the risks and the benefits of hormone replacement therapy with their physician.

There is a caveat when looking at a medication solution for sexual problems. Both men and women may choose a drug or medical device as a quick remedy to orgasmic problems that perhaps evolved from other factors such as social conditioning that created anxiety about sexuality (Tiefer, 2002). Although these rapid fixes work up to a point, medical interventions are most successful when partners are psychologically strong and solid in their relationships (McCarthy & Fucito, 2005). Partners may experience a great deal of relief and more satisfactory sexual performance if they focused additionally on the interpersonal aspects of the sexual experience. For example, as men age, arousal becomes increasingly important. Medication alone will not return the men to their adolescent sexual prowess. Additionally, older couples can benefit from learning how to redefine normal sexual activity (Kingsberg, 2002). Medication facilitates the sexual response, but ignoring the rest of the human sexual experience can result in an orgasmic experience that may not be psychologically stimulating (Mah & Binik, 2005).

Psychological and Behavioral Interventions

Intimacy

"What's love got to do with it?" asks a popular song title. This time-honored question as it relates to sexual satisfaction is important. Many people, especially women, require their own emotional investment before relaxing themselves enough to experience orgasm. Love, shown to be an emotion as well as a neurochemical reflection within the human brain, can be an integral component to intimacy, passion, and subsequently orgasm. For many, there is a relationship between intimacy and sexual function (McCabe, 1997), particularly orgasmic satisfaction (Mah & Binik, 2005). It has been shown that those who experience orgasm with a partner are reported to experience greater physiological satisfaction, more intimacy, and deeper pelvic feelings (Newcomb & Bentler, 1983).

One of the fundamental principles in intimacy-based sex therapy is that having an orgasm is not a requirement, but rather a part of an overall satisfactory, intimate sexual experience (Ellison, 2001). An orgasm may or may not happen and the outcome is irrelevant. What is relevant is having a mutually enjoyable sensual and sexual experience with a partner. With intimacy-based sex therapy, partners learn to express their feelings and thoughts truthfully.

Cognitive Restructuring

Cognitive restructuring techniques are interventions that facilitate changing internal, automatic thoughts that interfere with one's sexual functioning. Cognitive-behavioral techniques have been effective in treating several sexual problems such as female orgasm disorders and premature ejaculation (McCabe, 2001). For example, difficulty in attaining an orgasm may result from what thoughts are going through one's mind while engaged in sexual activity. For example, what might be the orgasmic outcome of a woman who says to herself, "I wonder if he's noticed my stomach is as big as a house" or "All men are creeps. This one's probably no different" or "He's just using me." In a second example, what would be the satisfactory sexual outcome of a man who bases his sexuality on performance, but who is not able to consistently achieve an erection? Thoughts may enter his mind such as "I'm a failure." Feelings of guilt, shame, self-rebuke, and embarrassment are negative feelings that often correspond with negative thoughts about self or partner. If these thoughts are going through one's mind, then it seems reasonable that thoughts of exultation and feelings of ecstasy are far away. It is important, therefore, for those experiencing orgasmic problems to examine cognitions, both before and during the sexual experience, for any pessimistic messages that could interfere with achieving sexual satisfaction. If thoughts are interfering with sexual functioning, then visits to a therapist or counselor would be advisable, particularly one who is trained in cognitive-behavioral therapy.

Sensate Focus Exercises

One common behavioral intervention developed by Masters and Johnson (1970) is sensate focus. Designed to help couples focus on sensations rather than performance, the goal is to decrease performance anxiety by focusing on an achievable task rather than to "have an orgasm." Couples are instructed to begin with nongenital touching while dressed in comfortable clothing. They eventually move to genital pleasuring with no focus on intercourse. The last step is a graduated movement to intercourse.

Orgasm Consistency Training

Orgasm consistency training, a structured cognitive-behavioral approach used by some therapists to help women improve their orgasmic functioning during intercourse (Hurlbert & Apt, 1994), has shown to be effective in the improvement of women's sexual desire and overall sexual functioning (Hurlbert, 1993). Prescriptions include masturbation, sensate focus exercises and male self-control techniques. Also incorporated in the program is the Coital Alignment Technique (CAT), namely, a coitus alignment position that requires a slight alteration from the male dominant missionary position (Pierce, 2000).

Sex Education and Sexual Sensitivity

Some basic sex education can increase partners' pleasure and add to intimacy. For example, while studying orgasm in a group of 868 female nurses, Darling, Davidson, and Cox (1991) found partner-related techniques that proved to enhance orgasm for women in the study, such as manual stimulation of the clitoral area with sexual intercourse, manual and oral stimulation of the clitoral area and the vaginal area, and manual and oral stimulation of the clitoral area and nipples without sexual intercourse. It could also be helpful for a woman's partner to know that a well-intended focus on direct clitoral stimulation may be uncomfortable for her and result in her eventual withdrawal from the sexual response cycle. This information is subject to considerable individual variation. Knowledge of sexual techniques and anatomy, while important, may not be enough to create ideal circumstances for partner orgasmic satisfaction. The best approach is to communicate one's personal preferences.

Communication Training

Partners who communicate about what is most pleasing for each are most likely to receive the most pleasurable experience. Usually, sex therapy involves some form of communication training ranging from assertiveness training to

conflict resolution (Cupach & Comstock, 1990; Delaehanty, 1983; Kelly, Strassberg, & Turner, 2004; McCabe, 1999). Communication is especially crucial to satisfactory sexual experiences for women. If women have difficulty in expressing to their partner what pleasures them, then the result may very well be an unsatisfactory experience. Certainly, the same may be said for men.

FOUR PRINCIPLES FOR HEALTHY ORGASM EXPERIENCES

Orgasm can be a pleasant addition to life. It is not a necessary component to being happy, however. Sexuality can be experienced without orgasm. Societal pressure to perform and be orgasmic can create stress and frustration for individuals and couples. Remember, the context of the sexual experience as well as the orgasm can contribute to one's quality of life experiences.

A satisfactory orgasmic experience is related to a positive, respectful view of sexuality and is associated with all aspects of one's being. This positive approach to sexuality is reflected in one's thoughts, feelings, and behavior (sexual and otherwise). The four principles underlying the discussion in this chapter are:

1. *Self-awareness*. Self-awareness provides one with the ability to accurately discern what is pleasant or not pleasant, and allows one to acknowledge any sexual difficulty that may be interfering with one's quality of life. It also provides impetus into recognizing whether one's relationships (sexual or lacking thereof) are satisfactory. Further, self-awareness can help one to recognize negative thought patterns and pessimistic emotions about self or one's partner.

2. *Self-respect*. Self-respect can aid in the ability to address negative thoughts and emotions about sex. Self-respect gives one permission to admit to a sexual problem without shame. For those with medical or mental problems impacting sexuality, self-respect paves the way to negotiations with one's partner about sexual needs as well as finding the ability to assert oneself enough to discuss these problems with a physician and/or mental health professional. Self-respect also allows one to pursue life conditions such as sexual satisfaction that enhance quality of life. Further, self-respect prevents one from being coerced into unwanted sexual activity. Self-respect can help individuals to eliminate self-blame or self-pity, and facilitate action for their own sexual well-being.

3. *Healthy body, mind, and spirit*. Paying attention to all aspects of one's optimal functioning in the interrelated areas of physical, mental, and spiritual health creates conditions for positive orgasmic experiences. For those who are physically unable to experience orgasm, a healthy outlook of the majority of these components can often provide avenues to alternative satisfactory sexual experiences.

4. *Sexual knowledge and communication techniques*. Obtaining information about the human body, how it works, what interferes with sexual functioning and what enhances orgasmic satisfaction are helpful ingredients to satisfactory orgasmic functioning. Knowledge about the body and familiarity with sexual techniques create conditions for optimal sexual experiences, especially when self-awareness and self-respect are in place. With regard to communication, partners' abilities to be honest about whether they are ready to engage in sex is essential to an overall satisfactory sexual experience. If one partner is not interested, but does not want to hurt the other partner's feelings, this can, over time, turn into a pattern of dishonest communication, resulting in resentment and withdrawal. It is important for partners to be honest with themselves and each other, express their needs, and discuss what they like and do not like during sexual activity.

In conclusion, I remind the reader that many sexual problems can be alleviated. A healthy view of self and enthusiastic commitment to change are effective ways to begin to create intimate, satisfying orgasms. As Ralph Waldo Emerson once said, "Make the most of yourself, for that is all there is of you."

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9

Sex Therapy: How Do Sex Therapists Think about and Deal with Sexual Problems?

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This chapter will give the reader an overview of the field of sex therapy. There will be a brief description of sex therapy and its beginnings. This will be followed by a discussion of the major factors that lead to sexual difficulties. How to tell whether a sexual difficulty counts as a "problem" and what kind of expert to consult will be considered next. Of course, individuals and couples deal with all sorts of sexual concerns that are not necessarily classified as "official" sexual dysfunctions. Sex therapists deal with these issues daily, and some of the more common ones will be enumerated here. Then, the major male and female sexual dysfunctions will be discussed, followed by the most common problem for couples, that is, differences in sexual desire. Recommended resources follow the conclusion.

WHAT IS SEX THERAPY?

Sexual problems arise in most people's lives sooner or later, and in the offices of psychotherapists, counselors, and physicians daily. There is no one right way to deal with sexual problems. There is much debate about how to even conceptualize sexual problems both among lay people and professionals. Most people who confront sexual difficulties try to solve them by themselves for as long as possible, with the help of books, articles, and, increasingly, through the use of information on the Internet. Eventually, they may seek out or be referred to a sex therapist. Sex therapists (or at least board-certified sex

therapists) are clinicians already trained in general psychotherapy and, usually, couples therapy. Some also have a background in medicine. They are then trained to deal with sexual problems in heterosexual/gay/lesbian individuals, couples, and, occasionally, groups. Traditionally, sex therapy has focused primarily on the treatment of the "sexual dysfunctions," though some professionals in the field deal with the whole realm of sexual problems and concerns including, for example, those related to unconventional sexual desires and practices. Sometimes this broader field is referred to as "clinical sexology."

Among professionals in the field, "sex therapy" has historically assumed brand-name proportions. It is the "Kleenex" of psychotherapy. It is often thought of as the home of one basic approach, first introduced and elaborated by its founders, William Masters and Virginia Johnson (see below). Their work provided brief, intensive, behaviorally oriented treatment which was very effective in reversing the obstacles to "natural" sexual functioning, especially in the short term. Whether it is wise to help couples return to "normal" sexuality in a sex-negative society is a continuing dilemma for experts in the field (Irvine, 1990; Reiss, 1990; Schnarch, 1991; Tiefer, 1996). Although Masters and Johnson's groundbreaking model continues to provide the cornerstone of much of the clinical work provided by sex therapists today, social and economic factors influence our perspective of what is seen as a problem; furthermore, clinical approaches are now more varied, with medical and particularly the pharmacological interventions receiving a great deal of attention (Rosen & Leiblum, 1995). At least in theory, sex therapists bring a biopsychosocial approach to working with sexual problems in therapy. In practice, with the increasing push toward medicalization of sexuality (Giami, 2000; Leiblum & Rosen, 2000; Schover & Leiblum, 1994; Tiefer, 1996, 2000, 2001; Winton, 2000, 2001), the services provided may be related directly to the particular professional one happens to be referred to or chooses to seek out.

HISTORY OF SEX THERAPY—AN OVERVIEW

Up until the 1960s, sexual problems typically were treated via psychoanalytically oriented psychotherapy. The focus was on unconscious causes of sexual disorders and on dealing with deeper personality processes in order to uncover and treat these difficulties. Although this approach was commendable for its orientation toward working with the whole person rather than merely a set of symptoms, it was very time consuming and cost intensive and was not known to be particularly effective.

The treatment of sexual problems was revolutionized in 1970. Gynecologist William Masters and his partner, social scientist Virginia Johnson, had established a laboratory in St. Louis, Missouri, for the study of sexuality in 1955. After studying the psychophysiology of sexual response in the laboratory

for eleven years, Masters and Johnson released their findings in 1966. They described the stages of sexual arousal and response they had observed as the Human Sexual Response Cycle: excitement, plateau, orgasm, and resolution (Masters & Johnson, 1966). This model became the basis for their designation—and later, the entire field's ideas—of what constitutes "normal" sexual functioning. Deviations from this model during the stages they had described were designated as sexual dysfunctions. For example, difficulties among men during the sexual excitement phase were referred to as "impotence" (and are more commonly known today as "erectile dysfunction"). In 1970, Masters and Johnson released their second book, *Human Sexual Inadequacy*, in which they described the sexual dysfunctions in men and women and the approach they had developed for treatment of them. This was the genesis of the field of sex therapy and this new book became its Bible.

The dysfunctions described by Masters and Johnson were later enshrined in the third edition of the *Diagnostic and Statistical Manual of Mental Disorders* (*DSM*) published by the American Psychiatric Association (1980). The desire disorders were described by pioneers Helen Singer Kaplan (1977, 1979) and Harold Lief (1977). These dysfunctions continue to comprise the bulk of the categories of sexual difficulties listed in the current edition of the *DSM* (APA, 2000). The remaining categories of the *DSM* are not listed as dysfunctions but as disorders. These are the paraphilias, that is, various forms of unconventional sexuality, including cross-dressing and sexual sadomasochism (known as SM or BDSM colloquially) and the gender identity problems. There is considerable controversy over whether these categories belong in the *DSM* or their World Health Organization counterpart, the *International Classification of Diseases* (ICD; see below).

Early treatment methods in sex therapy were notably successful, at least in the reversal of the symptoms of sexual dysfunctions (Kaplan, 1974; Masters & Johnson, 1970). In fact, they were so impressive that the field was able to ignore the difference between treatment of symptoms versus attention to the underlying problems, not to mention overlooking the individuals or couples who were suffering. Solving mechanical problems expediently was sex therapy's initial claim to fame, but this approach made it all too convenient to focus on the "easy" cases and be caught unawares when confronted with an avalanche of "harder" cases, some of which resulted from earlier "successes." That is, the fact that sex therapy was so effective at eliminating the target symptoms meant that the field did not have to spend a lot of time considering and debating whether the minimal goals aspired to were all that could or should be achieved. Practitioners were operating—and often still do—without a theory of human sexual experience to ground and orient clinical work (Kleinplatz, 2003; Wiederman, 1998). As such, sex therapy may be very effective at helping couples to ameliorate their dysfunctional sex lives while being conspicuously ill-equipped to attain intense erotic intimacy (Kleinplatz, 1996, 2001; Schnarch, 1991; Shaw, 2001). For example, helping a couple

learn to overcome a problem with early ejaculation does not guarantee that their sexual relationship will improve.

WHAT CAUSES SEXUAL PROBLEMS AND OBSTACLES TO SEXUAL FULFILLMENT?

It is important to have a good sense of what the problem is, what causes it, and even what purpose(s) it may serve for the individual and couple in order to determine how to deal with it in therapy. The field of sex therapy has often been accused of having a cookbook mentality, as in for problem X add remedy Y; one way of demonstrating that sex therapists are, indeed, attuned to the subtleties of sexual problems is by paying very close attention to their origins and meanings for the individuals in question.

Sexual problems do not usually originate from one cause or type of factor alone; rather, they are more often multidetermined or multifactorial (Kaplan, 1974). Theoretically, obstacles to sexual fulfillment can be divided into the four broad categories of biomedical, intrapsychic, interpersonal, and sociocultural/economic/political causes but there tends to be quite a bit of overlap in the actual origins of sexual difficulties in any given individual. For example, a young, married couple may complain of lack of sexual desire. When questioned as to when the problem began, they answer that six months prior, their son was born; it was a difficult childbirth that left her with pain during intercourse; her maternity leave has concluded and both parents now must work full time outside the home; they are so busy that they barely have time for their child, let alone each other; she continues to breast-feed and is therefore sleep deprived; she is frustrated that her husband cannot seem to pick up the slack around the house. Both come from homes where conflict was managed poorly and do not know how to resolve their problems with one another without feeling threatened emotionally. As such, it is not surprising that these many factors lead to lack of sexual desire. This case also illustrates how many individuals/couples who come to sex therapy have all manner of problems that are not necessarily "sexual" in nature. However, when these underlying problems are ignored or left unresolved, eventually, they are manifested in the bedroom. It is at that point that such a couple may seek sex therapy when what is really required is time, public policy allowing longer maternity leave, gynecological attention to her pain during intercourse, conflict resolution skills, the development of trust, and a more equitable division of labor around the house (Working Group for a New View of Women's Sexual Problems, 2001).

Although sexual problems generally cannot be broken down into one factor versus another, for purposes of this chapter only, the following section breaks these factors down artificially as if they were separate when, in fact, they are intertwined.

Intrapsychic Factors

Intrapsychic factors are those psychological elements within the individual that bear on his or her sexual expression. Many of these are related to early childhood experiences and the messages received in childhood about sexuality. For example, what was the nature of the parents' sexual relationship and how was it perceived within the family? Were the parents sexually open and expressive, affectionate and demonstrative, or more reserved? Did they seem loving to one another and to the children, or cool and distant? Were they happily married, miserable together, or divorced? What did the parents teach about sex? What did the children learn from what the parents said or, more commonly, from what was never spoken, about sexuality? How did the family deal with nudity, self-stimulation in childhood, privacy, questions about where babies come from, and about what to expect during puberty? The values learned about one's body, and in particular the genitalia, as well as about pleasure and sexuality, overall, have a tremendous impact on future sexual attitudes, comfort, or discomfort. Too many young people are still being told, albeit nonverbally, "Sex is dirty—save it for someone you love." No wonder sex therapists often have extensive waiting lists!

Clearly, childhood sexual abuse or incest can lead to feelings of shame, guilt, and fear around sexuality and generally diminished self-esteem (Herman, 1992; Maltz, 1998). Many survivors of sexual abuse do not feel entitled to consensual, mutually respectful, and loving sexual relations. Furthermore, they are often unable to imagine sex that is chosen freely and how that would look and feel, rather than sex occurring for someone else's sake—to fulfill another's needs. These are often contributing factors to the future development of sexual problems including low sexual desire, sexual aversion, and various sexual dysfunctions. Unfortunately, given that many people raised in "normal" homes contend with sex-negative environments, they too are subject to anxiety and discomfort regarding sexuality with similar consequences, even if their concerns are not as intense as among those who were sexually abused. In other words, the notion that all sexual abuse survivors will develop sexual problems is an overstatement; correspondingly, in a sex-negative culture, "normal" sexual development may breed sexual problems.

Another common contributor to sexual problems is the focus on sex as performance rather than as a source of mutual pleasure. To the extent that one is observing one's body while in bed, concerned about getting or keeping an erection, reaching orgasm, or, more likely, reaching orgasm "soon enough" or delaying orgasm "long enough," one is typically unable to connect fully and joyfully with one's partner(s). Masters and Johnson (1970) referred to this as "spectatoring" and indeed, it often feels as if one is off in the bleachers, watching and worrying from a distance, instead of being embodied within and present with one's partner(s). Thus, performance anxiety interferes with sexual satisfaction even if it does not always technically impede "functioning."

Interpersonal Factors

Interpersonal factors include all those elements that affect one's ability to be engaged in sexual relationships or for a couple to be mutually engaged. These factors include difficulties with trust, fears of rejection, power struggles, disappointment, the aftermath of affairs, and "goodness of fit" (i.e., the extent to which partners share compatible visions of sex, eroticism, pleasure, etc.). The most prominently reported interpersonal factor is communication difficulties. Typically, couples arrive in sex therapists' offices complaining of problems with "communicating about intimacy." Sometimes this phrase is a euphemism for fears of talking openly about sexual likes and dislikes, wishes, preferences, and fantasies. However, the difficulty is often with conflict resolution per se and its impact on the couple's willingness to risk emotional and sexual intimacy together. Couples who cannot imagine disagreements as leading to anything other than attacks, recriminations, hurt feelings, and implicit or explicit threats eventually learn to avoid conflict. In fact, such couples may announce early in therapy that they are one another's best friends and that they get along beautifully . . . except for this one glitch around "intimacy." In such cases, it is not "sex" per se that is the problem; rather, these couples discover in therapy that couples who cannot really afford to get angry with one another also cannot afford to feel much of anything, let alone to share passion.

Above and beyond these "communication difficulties" is the difficulty in literally talking about and defining sexual terms. Many people associate their Latinate sex vocabularies with physicians' offices, and perhaps biology classes, and thus claim such terms "sound clinical." In contrast, the slang terms for sexual parts and functions (in English) have derogatory connotations and make people uncomfortable, too. As such, people are often at a loss as to how to ask for what they want. The usual default, nonverbal communication, is an inadequate substitute for simple, clear requests. Furthermore, the seriousness of this seemingly trivial problem is exacerbated by the lack of consensus as to what constitutes "sex." The Clinton-Lewinsky scandal highlighted how different individuals disagree on the meanings of the same terms and even manipulate language to obscure understanding. As such, it is fairly common for sex therapists to ask couples about their sexual behaviors, only to be met with euphemisms such as "making love" or "down there." These terms often turn out to signify entirely different things to each partner. Partners who argue endlessly about wanting to "take more time making love" may unknowingly have mistaken his self-doubts surrounding rapid ejaculation with her desire to receive more oral stimulation or their concerns about how frequently sex occurs.

Sociocultural/Economic/Political Factors

Personal and sociocultural values have an enormous impact on sexuality. In North America, sexual values tend to be sex-negative and thus contribute to

the development of sexual difficulties. In fact, growing up with our culture's "sex script" (i.e., social blueprints for sexual norms, values, beliefs, attitudes, practices, and their justifications) tends to instill sexual shame and guilt in many, if not most, people to some extent (Gagnon & Simon, 1973). It has been said that the major developmental task of adolescence is overcoming the shame-engendering messages internalized during childhood.

Another major contributor to sexual dissatisfaction is ignorance. In American society, it is currently forbidden to offer comprehensive sexuality education in government-funded schools. By federal law, schools are to provide abstinence-only sex education, which teaches the basics of reproductive biology. Sex is equated with heterosexual intercourse. Conspicuously absent is any discussion of contraception or safer sex as ways of preventing unwanted pregnancies or sexually transmitted infections (STIs). Information about gay and lesbian sexuality is likely missing, too. By contrast, in Western countries where there are fewer restrictions on sex education, rates of unwanted pregnancies and STIs are significantly lower than they are in the United States (Advocates for Youth, 1999). More insidious perhaps is the exclusion of pleasure from sex education. As such, young people in abstinence-only sex education programs learn via silence that the ultimate taboo is not sex—it is discussion of sexual pleasure, not to mention wanting, seeking, and asking for pleasure.

Religion can provide its followers with a sense of their own value as sexual beings, with the belief that their bodies are sacred and that their accompanying desires are a divine gift. Alternately, religion can lead people to believe that they are inherently sinful, that their bodies are shameful, and that their desires must be overcome. It all depends on the religion, the parents, teachers, or clergy who teach it, and the perspective emphasized by them. Each of the major religions has sex-positive and sex-negative traditions, but many young people never learn of the breadth of spiritual streams available within their own backgrounds. Although many adult clients in sex therapy state that they have rejected the religious traditions in which they were raised, the gut-level impact of messages about sinfulness often remain, despite persuasive protests to the contrary.

The manifestations of ignorance and shame are pervasive when looking at sexual difficulties: both men and women suffer from body image problems which contribute to discomfort with nudity and with being touched. The sense of being inadequate or perhaps even defective is ubiquitous. Talk of sex is everywhere in the media, yet the capacity to express one's sexual wishes and preferences is limited by the taboo around asking for sexual pleasure. Many sexual problems could be prevented, or at least dealt with simply and expediently, if couples only felt free to show and tell what they find arousing. For many couples, however, even saying, "a little to the left, please" or "slower, gentler," is difficult enough; sharing one's deepest fantasies seems unimaginable.

Biomedical Factors

Any factor that affects the human body can affect sexuality. Although physicians may not specifically inquire as to the impact of medical conditions on one's sex life, the impact is there and should not be underestimated or ignored (Maurice, 1999). It is very useful for people to see their physicians and ask to be examined for any medical problems that might affect sexuality (Moser, 1999), particularly when embarking on sex therapy. A wide variety of diseases or their treatments can affect sexual desire, arousal, and response directly or indirectly. Particular categories of relevance here include any illness or injury that affects the neurological, endocrine (i.e., hormonal), or cardiovascular systems. For example, cardiovascular disease can create difficulties with sexual response, including difficulties with blood flow to the genitals in men and women. Actually having a heart attack often terrifies individuals and their partners into refraining from sexual relations, fearing that strenuous activity might trigger a subsequent heart attack. Unfortunately, providing the information that might help couples resume sexual relations safely in the presence of heart disease is often overlooked during a crisis and forgotten during the rehabilitation phase. Many health professionals are uncomfortable bringing up the subject of sexuality with their patients. Furthermore, medications for high blood pressure often create or exacerbate sexual dysfunctions. The fact that many patients are not warned about these potential side effects makes people feel all the more isolated and defective.

Chronic illness of any kind, disability and, ongoing pain, whatever the source, each has an impact on sexuality. These effects can be very subtle and barely noticeable at first, as might be the case with lower back pain, or sudden and dramatic, as in a spinal cord injury. Consideration of these effects should be included in the course of medical treatment or rehabilitation. Two medical problems that have a direct bearing on sexuality are sexually transmitted infections (STIs) and infertility. Diagnosis of these conditions often makes people feel defective immediately. People with STIs may describe feeling contaminated and untouchable. Infertility typically forces people to question their adequacy as sexual beings and their conceptions of "normalcy," while its treatment interferes with their previous sexual patterns.

A wide variety of commonly used drugs affect sexual functioning. For example, most psychotropic drugs, that is, medications used for psychiatric purposes, tend to affect sexual functioning adversely. A popular category of antidepressant medications, the selective serotonin reuptake inhibitors (SSRIs), which includes such drugs as Prozac and Paxil, can diminish or prevent sexual arousal, orgasm, or even sexual desire itself. On the other hand, this very side effect has been used to assist men who have been diagnosed with rapid ejaculation to slow their responses. In general, sexual side effects tend to be underreported, both because of the methodology used by pharmaceutical companies in their recording of adverse effects in the process of clinical trials,

and because many people are too embarrassed to volunteer information about sexual difficulties. They may not even make the connection between medication usage and sexual problems. Some commonly used drugs do not even "count" in patients' minds when giving a sexual/medical history. Over-the-counter drugs such as antihistamines and decongestants dry out mucous membranes in the nose and mouth; as such, they may well limit a woman's lubrication, though it typically does not even occur to her that her allergy pills are making sex uncomfortable. Similarly, women using hormonal contraception (that is, oral contraceptive pills, "the patch," or injections, as in Depo-Provera) may not be aware of their possibly adverse effects on sexual desire in some women and, unfortunately, are not typically warned of such possibilities in advance. Recreational drugs need to be considered as well. People often use alcohol to "loosen up" before sex. However, the same cautions that apply to drinking and driving are relevant for sex as well. Because alcohol depresses the central nervous system, it affects reflexes and judgment. Alcohol can impair the ability to make clear and consensual choices about sex, thereby contributing to unwanted sex or unsafe sex. Furthermore, excess alcohol will also impair the mechanisms involved in sexual excitement and orgasm. Long-term alcoholism inevitably creates sexual dysfunction.

HOW DO YOU KNOW IF IT'S "NORMAL" OR IF IT'S A PROBLEM?

If it is bothersome, it could be a problem for the person who feels bothered. As obvious as that may seem, there is a lack of consensus among sex therapists as to whether or not distress is necessary or sufficient to indicate a problem. Some sex therapists believe that even when one feels no distress, certain symptoms should automatically qualify for diagnosis of pathology (Althof, 2001). Althof argues that until symptoms of sexual problems (e.g., women's difficulties with orgasm) are regarded as "objective" indicators of pathology regardless of subjective distress or lack thereof, sexual disorders will not be given their due and taken seriously as obstacles to patients' quality of life. This argument is analogous to the reasoning that although high blood pressure generally causes no symptoms, it signifies pathology and requires treatment nonetheless. Althof would say that there is a parallel with sexual problems. Others argue that personal distress is the most important criterion in determining whether or not we are to conceptualize some difficulty as worthy of treatment (Nathan, 2003). If it does not bother the individual in question, how can anyone else determine that the "patient" has a dysfunction, disorder, or even a problem?

Furthermore, these issues become even murkier when considering "problems" that create no distress for the "identified patient" but do bother others. For example, low sexual desire is not necessarily deemed problematic yet qualifies for the diagnosis of hypoactive sexual desire disorder (HSDD)

when it creates "interpersonal difficulty" (APA, *DSM IV-TR* 2000, p. 539). In other words, as it stands currently, if a couple comprises of two people neither of whom want sex more than once a year and they are happy together, neither one receives a diagnosis. If, however, one wants sex twice a week while the other wants sex twice a year, the latter partner is diagnosed with HSDD. Some (e.g., Kafka & Hennen, 1999) would like to see an individual who wants sex twice a day receive a diagnosis, too, even if it creates no distress for anyone. There is much debate about the inclusion of such a diagnosis in future editions of the *DSM* and whether such high levels of sexual desire, without personal distress, should be conceptualized as "Compulsive Sexual Behavior" (Coleman, 1995), a "Sexual Impulse Control Disorder" (Barth & Kinder, 1987), "Sexual Addiction" (Carnes, 1991), or "Paraphilia-Related Disorder" (Kafka & Hennen, 1999), among other prospective designations.

There is, if anything, more controversy about whether or not sexual minorities should be thought of as having mental health problems. Does it count as a problem if it does not bother the individual in question but does create distress for others? For example, if a woman gets sexual arousal and pleasure from wearing women's lingerie, she would never be seen as mentally ill, regardless of others' reactions to her. If a man gets sexual arousal and pleasure from wearing women's lingerie, his wife's discovery of his proclivity sometimes creates distress for her. This situation often leads to treatment for him, even if he never considered it problematic until his wife felt threatened. Some consider it unreasonable, unfair, and without clinical justification to diagnose and treat people who do not feel distressed about their sexuality, even if their sexual inclinations are unusual and even if others are distressed by such interests (Moser & Kleinplatz, 2002, in press; Reiersøl & Skeid, in press). For individuals and couples who are seeking therapy but concerned about being judged for their unusual sexual desires, it may be helpful to choose a therapist more attuned to issues pertinent to unconventional sex practices. A good starting place may be at www.bannon.com/~race/kap/.

In addition, there are some aspects of sexuality that were once seen as problematic and in need of treatment which are now regarded quite differently. The most conspicuous example is homosexuality. At one time, it was regarded as a disorder but was declassified in 1973 by the American Psychiatric Association. Even though being gay or lesbian may cause distress to individuals or their families, particularly during the early "coming out" phase, ethical mental health professionals no longer "treat" homosexuality per se. They may, however, help people to adjust to being, or to loving, someone who is gay. This example illustrates how changes in sexual values over time affect the beliefs and practices of therapists. Similarly, in the 1950s, when simultaneous orgasms during intercourse were considered a marital ideal, women who were unable to attain orgasm during intercourse were often treated as "frigid" (see below). Today, it is recognized that the vast majority of women require direct clitoral stimulation in order to have orgasms. Thus, even though the client

may feel distress, most sex therapists will provide reassurance and help to normalize the concern, but will not "treat" the alleged "frigidity."

Other couples come into therapy not because they have any problem but because they want more joy, meaning, eroticism, and intimacy out of sex. They are dismayed, disillusioned, and disgruntled by the quality of their sex lives. Although it would be hard to classify these couples as having dysfunctions or disorders, something seems to be missing. Such individuals often speak in terms of lack of connection or the absence of passion, or they state that the "mystery is gone." The excitement of the honeymoon phase of any relationship cannot be recaptured and must evolve into something deeper and ultimately more fulfilling (McCarthy & McCarthy, 2003). Nonetheless, erotic intimacy can be heightened in sex therapy by helping the people involved to grow as individuals and partners (Kleinplatz, 1996, 2001; Schnarch, 1991). The work of sex therapy in such cases may entail helping make the relationship safe enough to enable the individuals involved to be emotionally naked and to take the risks involved in being vulnerable.

Furthermore, some therapists consider using whatever concerns clients bring into therapy as openings toward personal growth and integration, regardless of whether or not their problems qualify for diagnosis (Mahrer & Boulet, 2001).

WHEN TO CHOOSE A SEX THERAPIST

Most people with sexual concerns start out by consulting a psychotherapist, a couple/marital therapist, or their family physicians. These individuals are generally able to assess the situation and refer the individual or couple to a specialist in sex therapy when appropriate. Sex therapy may be limited to the treatment of "official" sexual dysfunctions alone or may be more diverse and encompass the whole range of problems related to sexuality. The sex therapist's practice is often replete with concerns not necessarily listed in the usual nomenclatures. These include the impact of sexual assault and abuse, affairs and jealousy, aging, drug and alcohol abuse, eating disorders (which often accompany or exacerbate sexual problems), the ubiquitous "stress," communication problems, unconventional sexuality, sexual orientation issues, "sex addiction," sexual "malaise," and concerns about pornography and use of the Internet. Increasingly, sex therapists are called upon to deal with the sexual consequences of various medical problems and their treatment, including infertility, STIs, and myriad forms of chronic illness and disability including arthritis, heart disease, diabetes, cancer, and patients in/after rehab from traumatic injury. Many people are on medications that affect sexuality. Sex therapists frequently consult with family physicians and with specialists ranging from gynecologists and urologists to psychiatrists, endocrinologists, oncologists, internists, neurologists, and so on. Some sex therapists also have specialized training to deal with the needs of the transgendered (i.e., individuals who feel a disjunction between their biological sex and their sense of being male/female).

The most common presenting problems are related to sexual desire. These problems encompass low sexual desire, very high sexuality (often referred to as "sexual addiction"), sexual/erotic desire discrepancies, and unusual sexual desires (typically classified as the "paraphilias").

SEXUAL PROBLEMS IN INDIVIDUALS AND COUPLES AND HOW TO DEAL WITH THEM

Sexual problems tend to be classified into male versus female sexual dysfunctions and treated accordingly. Unfortunately, that division makes it too easy to overlook the extent to which sexual problems exist in interpersonal context. For example, when Masters and Johnson (1970) first attempted to define "premature ejaculation," now referred to as rapid ejaculation, they spoke in terms of the man being able to maintain his erection during intercourse to the point where the woman was able to achieve orgasm at least 50 percent of the time. The definition faltered and required revision on several grounds: Many, if not most, women will never achieve orgasm via vaginal stimulation alone; clitoral stimulation is required for most women to have orgasms. As such, a man could thrust for hours and yet have been diagnosed as dysfunctional. Second, the definition presupposed that men's partners are necessarily women and that whoever those partners might be, the focus of their sex lives is sexual intercourse. Finally, the definition presupposed that the criterion for sexual function versus dysfunction was a matter of performance, rather than his or their sexual pleasure. As such, most definitions of rapid ejaculation today focus on the man being able to keep his erection for as long as he and his partner would like, rather than in terms of some predetermined number of minutes or thrusts.

Classifications of male and female sexual dysfunctions do not capture the complexities of who has the problem, what makes it seem problematic—and to whom—and the context in which it creates problems. Nonetheless, for purposes of this section, the artificial division of men and women's sexual problems will follow.

Men's Sexual Problems and How to Deal with Them

Erectile Dysfunction

Of all male sexual dysfunctions, the one that has received the greatest attention in recent years has been erectile dysfunction, largely because of the marketing of pharmacological treatments for this condition since the late 1990s. Many people will have greater familiarity with erectile dysfunction than with other sexual problems. It will serve as the prototype here for sexual dysfunctions and their treatment, and will be discussed at greater length to introduce the basic principles of sexual problems and sex therapy.

Erections are triggered when men receive sexual stimulation, whether in the form of sexual thoughts and feelings or direct tactile contact. When men are young, mental stimulation is often sufficient to elicit an erection; typically, as men age, more direct physical stimulation is required to produce an erection. Sexual stimulation leads to an increase in blood flow into the arteries of the penis (more specifically, into highly vascular tissue in the chambers of the penis, especially the corpora cavernosa) faster than the veins can drain the blood back away. In fact, the now expanding arteries compress the veins, making it difficult for the blood flow to return until either the erection subsides or the man reaches orgasm.

Many things can interfere with erections. The factors are so numerous, from nervousness with a new partner, fear of pregnancy, job stress, to cardiovascular disease that virtually all men will have difficulties getting or maintaining erections from time to time. This is normal and does not require treatment. On the contrary, the problem sometimes occurs as a direct result of men worrying about what is normal. Men often believe that their masculinity is tied directly to their abilities to get erections automatically, whenever even a prospective opportunity arises, and to keep them endlessly (Zilbergeld, 1999). As such, occasional difficulties with getting or keeping erections can itself create the performance anxiety, which then generates the self-fulfilling prophecy of erectile dysfunction. It is noteworthy that although many people think of erectile dysfunction strictly as a problem of getting erections, the more common difficulty is with maintaining a hard penis during sexual contact rather than simply getting the initial erection.

In cultures where sexuality is defined in terms of intercourse, the prospect of erectile dysfunction can be so anxiety provoking that men have tried all manner of "treatments" to "cure" themselves of such an "affliction" from herbal potions through surgery. In sex therapy, the tradition has been to help the man and his partner to focus on pleasure rather than upon performance. To the extent that sex therapists can help the couple to broaden their sexual repertoire, they may be able to lift the pressure off the poor penis (not to mention the man attached to it!). As such, Masters and Johnson (1970) created a series of homework exercises, beginning with "sensate focus," to help couples circumvent performance anxiety. These short-term, behaviorally oriented exercises formed the cornerstone of all their treatments for sexual dysfunctions and remain fundamental to most sex therapy treatment paradigms to this day. Sensate focus exercises encourage the couple to caress one another with no expectation of engaging in intercourse. Indeed, in the initial stages of sex therapy, couples are typically forbidden from all genital contact, not to mention engaging in coitus. The idea is to reclaim pleasure for its own sake and for the couple to rediscover how to communicate through touch rather than to have to "perform." In the second stage, the couple is permitted to engage in "nondemand genital pleasuring," that is, genital stimulation but without intercourse. There were variations in homework depending on the

nature of sexual problems and depending on how a given couple might respond to the initial sensate focus exercises in the course of therapy. For example, in the case of erectile dysfunction, the man was encouraged to allow himself to become sexually aroused and erect through penile stimulation by his partner, but to allow his erection to subside repeatedly. Eventually, his comfort level with, and enjoyment from, sexual contact would supersede his performance anxiety and thus enable him to return to engaging in intercourse without concern.

Although Masters and Johnson's approach was quite successful at alleviating the symptom of erectile dysfunction, at least in the short term, their method has been eclipsed by more recent medical interventions. Interestingly, as medically based treatments have become increasingly available, so has the popularity of the belief that sexual problems are caused by underlying medical disorders. Some have argued that this shift from the notion that sexual problems are primarily psychosocial to the current emphasis on the biomedical has been brought about by the pharmaceutical industry, which profits, quite literally, from the latter way of thinking (Tiefer, 2000, 2001). Others would say that men are only too eager to believe that their problems are organic because it relieves them of having to confront themselves in therapy. In any case, the notion that problems are either medical or psychosocial does a disservice to men. As discussed above, sexual problems are generally caused by a combination of factors but inevitably, have an impact on the whole person, mind, and body alike. Furthermore, regardless of who is identified as the patient, sexual difficulties typically affect all parties in a relationship. Therefore, attempts to deal with sexual problems should ideally include the "whole" person and the couple.

During the 1980s, urologist Giles Brindley discovered that injecting the penis with papaverine, an enzyme from a papaya extract, would cause automatic, hard, long-lasting erections. This breakthrough allowed men to ensure strong erections without having to engage in conventional sex therapy. In fact, they could do so without informing their partners and, for that matter, in the absence of any stimulation. These injections into the side of the penis, more specifically, into the corpora cavernosa, would create erections within about twenty minutes, regardless of what the man was feeling or doing. Whether that is a good or bad outcome is a value judgment. Nonetheless, it at least allowed men dealing with erectile dysfunction a new treatment option. (These intracavernosal injections would later be filled most commonly with a combination of papaverine, phentolamine and prostaglandin E1.) However, many men were understandably queasy at the thought of having to stick a syringe into their penises every time they wanted to produce an erection.

This obstacle was overcome with the introduction of sildenafil citrate, better known as Viagra, in 1998 (Goldstein et al., 1998). Viagra is ingested orally and, like the intracavernosal injections, works by dilating the arteries of the penis to permit an erection. Unlike the injection method, Viagra requires

sexual stimulation to work effectively. If the man is not in the mood, it will not work. There is also a relatively high placebo rate. The same holds true for the other drugs in this class, vardenafil (i.e., Levitra) and tadalafil (i.e., Cialis), all known as PDE5 inhibitors. These relatively safe drugs have grown enormously popular, enough so to encourage the pharmaceutical industry to invest heavily in the development of products for the treatment of other sexual problems. Unfortunately, while these drugs may be effective at treating the symptom of sexual dysfunction, they often leave the problems within the man untouched, not to mention circumventing the couple entirely. For example, these drugs may allow the couple to temporarily ignore his feelings of worthlessness as a man unless he performs to an arbitrary and unrealistic standard; thus, his unspoken problems of self-doubt and resentment remain. Perhaps for this reason, or perhaps for other reasons (including embarrassment), articles have appeared on the problem of "patient compliance" (Althof, 1998; Perelman, 2000; Wise, 1999).

It is noteworthy that Masters and Johnson treated only couples—never individuals alone—but that practical considerations have led most sex therapists today to see people individually. Certainly, the increasing use of medical interventions and the lack of reimbursement in many American insurance plans mean that couples therapy is unlikely to occur as often as desired (Stock & Moser, 2001). Many experts still believe that ideally the relationship should be the target of sex therapy and continue to provide therapy to heterosexual or same-sex couples. Furthermore, in some instances, what appear to be mechanical difficulties in functioning can only be identified correctly as appropriate bodily responses to unsatisfactory sex or relationship issues when both partners are present (Kleinplatz, 2004; Schnarch, 1991). For example, it is only when both are in the same room that one detects the simmering conflict between them—or even their outright dislike for one another—such that his "dysfunction" is more likely a solution than a problem. Perhaps rather than being problematic, the man's soft penis provides evidence of good judgment demonstrated via his body.

Rapid Ejaculation

Notwithstanding the greater public attention to erectile dysfunction, rapid ejaculation is probably the most common male sexual dysfunction (Polonsky, 2000). As stated above, there has been considerable controversy in defining rapid ejaculation. How do you know how soon is too soon? All sorts of definitions have been proffered over the years with attempts at scientific objectivity. Some have focused on the number of minutes prior to ejaculation and others on the number of thrusts. There are several problems with such definitions: First, people who are enjoying sex rarely employ a stopwatch (fortunately!), so it is hard to ascertain what is "normal" and what is not. Second, much as scientist-clinicians seek objective criteria, how long sex lasts

is only a problem when it creates distress. Surely, we can imagine the movie scene of lovers working feverishly to meet surreptitiously, ripping each other's clothes off in an empty corridor and enjoying a "quickie" before they can even catch their breath. In such instances, the sex seems torrid—not problematic. Thus, more recent approaches have focused on the man or the couple's subjective experience. For example, Metz and McCarthy (2003) feel that the best professional description of this problem is that "*the man does not have voluntary, conscious control, or the ability to choose in most encounters when to ejaculate*" (p. 1; emphasis in the original).

Typically, by the time men seek sex therapy for rapid ejaculation, they have already tried numerous delaying tactics regardless of the cost they may be paying. Common examples of "home remedies" include numbing creams, doubling up on condoms, and trying to think about disgusting things to turn themselves off. To the extent that these strategies "work," they deprive the man of pleasure, deprive the partners from feeling present with one another, and reinforce the notion that sex equals performing during intercourse.

Fortunately, rapid ejaculation generally responds quite readily to sex therapy. Most therapists deal with rapid ejaculation using a combination of sensate focus exercises, other cognitive-behavioral exercises and bibliotherapy. The tone set in therapy and in the exercises/readings is particularly important in counteracting the mindset common among men concerned about rapid ejaculation. The client's beliefs are explored and myths challenged both during therapy sessions and in assigned readings (e.g., Metz & McCarthy, 2003; Zilbergeld, 1999). For example, many men feel pressured to "last" as long as possible in the assumption that extensive thrusting is what it takes to satisfy female partners. Such men often feel quite relieved when they learn that most women prefer external, clitoral stimulation when seeking orgasm. As such, "lasting longer" becomes a choice for prolonging lovemaking, when he or they desire it, rather than an obligation. Therapists may have couples use sensate focus exercises in order to demonstrate that pleasure may abound regardless of the duration of intercourse. Other exercises are typically assigned to help the man gain more of a sense of voluntary control over his ejaculation. Ideally, the emphasis is on increasing his tolerance for high levels of pleasure rather than reducing his sensitivity to partner stimulation (Zilbergeld, 1999). The man or couple is then usually instructed in the use of the "squeeze" or "stop-start" techniques. Both techniques are used when the man is feeling very aroused and close to orgasm. The squeeze technique involves having the man or his partner apply pressure with the thumb and forefinger to the front and back of his penis—never the sides—either just under the penile glans or at the base of the penis to delay ejaculation. The stop-start technique is exactly what the name conveys: when the man feels that any further stimulation will lead to orgasm, he or they stop their activities until his level of excitement subsides. Then, stimulation is resumed. These exercises are intended to help him learn how it feels to be highly aroused without "going over the edge."

More recently, pharmacological treatment for rapid ejaculation has been available. The introduction of a popular class of antidepressants during the 1980s, the SSRIs, led to a wide range of adverse effects on sexual desire and response. In fact, the effects of drugs such as Paxil on orgasmic response were so dramatic, diminishing or even preventing orgasm in many patients, that the drug was later prescribed for men concerned about rapid ejaculation (Assalian, 1994). The SSRIs succeeded in slowing down men's ejaculations and have been used as an adjunct to, or instead of, conventional sex therapy for treatment of rapid ejaculation (Waldinger, 2003).

Delayed Ejaculation

On the other end of the spectrum are men who are unable to reach orgasm with a partner. (Men who have never had an orgasm in their lives under any circumstances, including via masturbation, probably have underlying medical problems requiring evaluation.) This problem had been known as "ejaculatory incompetence" and then later as "retarded ejaculation," but both these pejorative terms have been replaced by the term "delayed ejaculation." Most people do not think of men capable of thrusting away endlessly during intercourse as having a problem. On the contrary, many would be envious of such a capacity. As such, it has been estimated that delayed ejaculation is the most underreported of male sexual problems just as correspondingly, rapid orgasm in women is probably the most underreported of women's sexual difficulties. Many people would just scratch their heads at hearing of such conditions and ask, "So what's the problem?" The assumption in our sex scripts is that no man can stay hard for too long and that no woman can reach orgasm too soon. However, Apfelbaum (2000) would respond that men who cannot ejaculate with a partner are the misunderstood "workhorses" of the sex world. Apfelbaum has argued that although such men have often been treated as if they were withholding during sex, on the contrary, they are giving too much. These are individuals who are trying so hard to please their partners that they continue to perform while subjectively feeling minimal arousal, numb, or even turned off. It seems that their desires are out of sync with their penises, which continue to remain erect despite lack of excitement (Apfelbaum). Why this should be the case is not clear. During the 1970s and 1980s, sex therapy techniques involved attempting to stimulate such individuals ever more aggressively to the point of orgasm. Apfelbaum suggests instead that sex therapists help them to acknowledge their feelings. In other words, whereas previous treatment models had suggested that these men just keep on moving, even if this meant ignoring their own reluctance (a strategy associated with the work of Kaplan [1974] and referred to as "bypassing"), Apfelbaum recommends "counterbypassing." Here, the men are encouraged to pay more attention to their reluctance and lack of desire for intercourse—not to override them—and to be true to themselves by acknowledging these

feelings. It is only via authenticity that enduring change can come about (Apfelbaum).

Pain Associated with Sex in Men—Dyspareunia

Most of the literature on pain associated with sex, known as dyspareunia, concentrates on female pain during intercourse. Unfortunately, there is insufficient attention to men's pain during or following various sexual acts. It is hard even to estimate just how prevalent such pain may be. Pain may occur anywhere in men's external or internal sexual and reproductive organs, that is, not only in the penis but also in the epididymis, vas deferens, prostate, and other parts. It may begin in the course of sexual arousal, orgasm, or thereafter. It can be related to anything from skin sensitivities and allergies to sexually transmitted or other infections and injury. These problems are usually assessed and treated by a physician.

There are only two articles in the literature on pain during anal penetration, known as anodyspareunia (Damon & Rosser, 2005; Rosser, Short, Thurmes, & Coleman, 1998). Both these articles focus on pain among men who have sex with men. This is striking given that most anal penetration of men and women occurs in heterosexual couples. This silence says more about the taboo surrounding anal sex than its actual popularity. (The best-selling "adult video" in recent years has been "Bend Over Boyfriend" [Rednour, 1998], notwithstanding or perhaps because of this silence.)

Women's Sexual Problems and How to Deal with Them

Difficulties with Orgasm

Women's difficulties with arousal and orgasm have been the subject of much speculation and far too many myths. These tend to go in and out of fashion along with the politics surrounding female sexuality. During the Victorian era, the very notion that women were capable of orgasms was scorned and scandalous. Freud argued that although little girls would naturally focus on the clitoris as their primary erogenous zone, "mature" women would and should be capable of orgasms via intercourse. This idea predominated through most of the twentieth century. During the 1950s, "marriage manuals" stated that the ideal was for husband and wife to achieve "simultaneous orgasm" during intercourse. Women who had problems with arousal or orgasm in the context of intercourse-oriented sex were deemed "frigid." During the 1960s, Masters and Johnson distinguished between arousal and orgasm and pointed out that it was normative for women to have orgasms via clitoral stimulation, whether during self-stimulation, manual stimulation by a partner, oral sex, or "somehow" during sexual intercourse.

The latter remains the goal for many couples, notwithstanding our expanding knowledge of female genitalia and sexuality. The number and intensity of nerve endings in the clitoris far exceed those in the vagina, and even those found in the vagina are located primarily near the entrance. (Any woman who has ever used tampons can remember her surprise upon first reading the package instructions; these indicated that once the tampon is inserted correctly, the woman will be unable to feel it in the course of normal activities.) It can be difficult for women to get enough direct clitoral stimulation during intercourse to bring about orgasm. Indeed, for some women the trick is to arrange enough external pressure and friction to trigger orgasm (almost) despite intercourse! Although this information is increasingly widespread, given a society that defines "sex" as intercourse—nothing else quite counts as "going all the way"—the objective of "climaxing during sex" endures. Even the obvious solution, for the woman or her partner to stimulate her clitoris manually during intercourse, strikes many people as "cheating," at least initially. It is as though the "hands-free orgasm" remains the cultural gold standard.

The pressure on women to perform corresponds to the pressure on men discussed earlier. If this theme is becoming repetitive, that is because its impact is ubiquitous. To the extent that sex must be heterosexual and that the ultimate end of sex is penis in vagina, we are creating obstacles to, and "dysfunctions" in the way of, sexual pleasure. Furthermore, we thereby limit what we can hope to attain during sex. For example, in 1982, sexologists Ladas, Whipple, and Perry wrote a best-selling book about the "G-spot" (i.e., the Grafenberg spot), which described a sensitive area that could be accessed via stimulation of the anterior wall, (the roof or front wall) of the vagina. (This area is now referred to as the "female prostate" [Zaviacic, 1999].) Rather than being welcomed as a new possibility for further sexual exploration, this important contribution was misinterpreted in some quarters as setting a new imperative, or perhaps reasserting the notion that there is one right way to reach orgasm after all (Tavris, 1992).

For the sex therapist, that leaves the problem of figuring out what constitutes a problem and precisely what requires "treatment." Increasingly, sex therapists have come to believe that couples who insist upon the woman achieving orgasm via sexual intercourse are in need of psychoeducational counseling rather than "treatment" as such. That is, they may need to learn enough about women's bodies to readjust their expectations and to expand their criteria for valid orgasm pathways (e.g., manual or oral sex). Alternately, they may be encouraged to use their hands or sex toys to provide direct clitoral stimulation during intercourse (Dodson, 2002).

But what of the woman who has never had an orgasm by any means and wants to do so? This problem is sometimes called inhibited female orgasm or anorgasmia. Some would say that the term really should be "preorgasmic" rather than "anorgasmic" because all women are capable of orgasm, whether it has

happened yet or not (Barbach, 2000). In Masters and Johnson's (1970) approach, the couple began, as always, with sensate focus exercises. For many women, the taboo against exploring their bodies was strong enough to have prevented them from ever really discovering what gave them pleasure. Sensate focus exercises gave them permission to enjoy touching and being touched for their own sake. This theme has been emphasized in other programs for women who have difficulty with orgasm, such as those of Barbach (2000) and Heiman and LoPiccolo (1988). These popular cognitive-behavioral treatment plans involve teaching women about the anatomy of their genitalia and the physiology of sexual response, generally through readings and exercises, and via discussion during therapy sessions. Women also review their sexual histories, current beliefs, and especially myths to uncover the obstacles to pleasure. Individual or relationship problems, which make it hard to feel desirable, to feel worthy of sexual attention, to trust a partner, or to let go, are discussed and dealt with as necessary.

Bodily awareness and self-stimulation are emphasized, as most women who have never had an orgasm with a partner will probably find it easiest to experience it alone at first. There are often fewer inhibitions when one is alone, and the focused concentration on oneself makes it easier to discover one's own sensitivities and triggers to orgasm. It also seems safer to take all the time one needs alone; this is a serious consideration for many women (and their partners) who worry, "It's taking too much time. . . . I'm afraid [he/she] will get bored and give up on me." The implication that the couple should be able to rush through sex betrays their beliefs about sex and often the underlying fear of wanting more pleasure than entitled. It also suggests that the couple's existing sexual activities may not be particularly erotic, at least for her. As such, she will be encouraged to explore her own wishes and fantasies, too, on her way to orgasm and beyond.

Once she has found out how to have orgasms alone, she will need to show and tell her partner what pleases her. Here, it is often literally a matter of teaching her partner about her desires and her body, and demonstrating what kinds of stimulation she finds exciting. To the extent that they are able to communicate effectively and get over the initial awkwardness, this approach usually allows her to begin having orgasms with a partner in relatively short-term therapy.

Female Sexual Arousal Problems

Traditionally, there has been little attention focused directly on women's sexual arousal difficulties, at least in part because of the confounding of arousal per se with orgasm. However, it is possible for a woman to feel aroused and to lubricate without reaching orgasm and, less commonly, for women to reach orgasm while lubricating and feeling minimal levels of sexual arousal. Also,

lack of arousal has been subsumed under treatment for difficulties with orgasm or desire.

Another reason for the lack of clinical or research attention to women's arousal difficulties is the conventional North American sexual script that emphasizes functioning over subjective experience. To the extent that men's difficulties with arousal are evident in erectile dysfunction, intercourse is impeded and, therefore, male arousal difficulties command the spotlight. Women's sexual arousal difficulties are manifest in terms of lack of vaginal lubrication and absent, minimal, or diminished subjective feelings of excitement. Neither of these difficulties necessarily obstructs intercourse per se and, therefore, they have been ignored by researchers. There has been a great deal of research on factors that might reduce or increase the blood flow to male genitalia. We need more data on factors affecting the psychology and physiology of female sexual response.

Women who see their gynecologists for lack of lubrication are sometimes assessed for underlying physical, psychological, or interpersonal causes and offered appropriate treatment; however, it is not unusual for them simply to receive instructions on the use of lubricants or hormonal creams. This treatment enables them to engage in intercourse whether or not they feel aroused. Lubricants are an important adjunct in helping women to engage in pain-free intercourse when their own, natural lubrication has been diminished by disease, by various prescription (e.g., antihypertensives, diuretics) or over-the-counter medications (e.g., antihistamines, decongestants), or by aging. However, such measures, when applied whenever women are slow to lubricate, are treating a symptom rather than what may be the underlying cause of the problem. It may simply be that she is not lubricating because the sex or her partner is not arousing to her. In such cases, the "treatment" may actually mask the problem—or the fact that there is no problem: it is healthy and normal *not* to be aroused if the sex or the relationship are not to one's liking or are actually a turn-off. The reasons that she is not lubricating or subjectively aroused warrant attention.

Given the paucity of literature on female sexual arousal problems, little is discussed in the way of treatment outside the use of lubricants and hormone creams. There are some valuable exceptions, including the integrated mind-body-relationship program of Foley, Kope, and Sugrue (2002). Their self-help program involves assessment and bodily awareness exercises for the woman, with emphasis on the pelvic floor muscles, sensate focus exercises for the couple, the use of fantasy, and designing the ideal sexual encounter.

It is worth remembering that some of the so-called inevitable changes associated with aging and decreasing hormone levels may be subject to prevention. Masters and Johnson, among others, would say "use it or lose it." Women who remain sexually active, whether alone or with partners, are less likely to have problems with vaginal dryness or lack of lubrication than women who undergo prolonged periods of abstinence.

Vaginismus

Perhaps the ultimate obstacle to intercourse is vaginismus. Vaginismus has been described as an involuntary, reflexive spasm of the muscles of the outer third of the vagina and perineum, preventing vaginal penetration. It varies in severity from women who cannot tolerate vaginal penetration in any form to women who can insert tampons and perhaps a finger during sexual stimulation. Some can even weather a gynecological exam (albeit, with hesitation and discomfort) but still tighten up at the prospect of intercourse. Men who attempt penile penetration with women diagnosed with vaginismus report that as they try to get past the vaginal entrance, "It feels like I'm hitting a brick wall." If they endeavor to push further, it will hurt the woman as well as the man's penile glans.

It is common for women with vaginismus to have orgasms via self-stimulation as well as manual and oral stimulation with a partner. What, then, brings them to therapy? Sometimes they seek treatment because they or their partners would like to be able to engage in intercourse. Sometimes they are referred for treatment by physicians unable to perform a pelvic exam. In many cases, the partners have developed a broad enough sexual repertoire such that they are able to satisfy one another (Hawton & Catalan, 1990; Kaplan, 1987; Pridal & LoPiccolo, 1993; Valins, 1992) with no particular desire for intercourse. In these instances, there is no need for therapy unless and until the couple wants to conceive a baby. Indeed, therapists note that the timing of couples seeking sex therapy for treatment of vaginismus is often linked to increased pressure from in-laws for grandchildren. It is striking that there is not a single case of vaginismus in lesbian couples reported in the literature.

There is extensive speculation about the origins of vaginismus. Certainly, any time a person feels tension or fear, the body responds accordingly: the muscles contract. Women diagnosed with vaginismus tend to have considerable anxiety about intercourse. More specifically, many are afraid of pain during intercourse, which results in the muscles at the vaginal opening tightening, making intercourse very difficult, if not impossible. Some, still virgins, are afraid based on horror stories they have heard about pain and bleeding on the wedding night. Others have already attempted intercourse but the pain they have dreaded leads to a self-fulfilling prophecy; sure enough, attempting intercourse when terrified leads the body to shut down, the vaginal muscles to shut tightly, and then inevitably to pain. Sometimes, vaginismus results from a history of pain during intercourse, in which case it is important to evaluate the cause of this pain. Others are afraid because of a prior history of sexual abuse and assault. (There is debate about the prevalence of trauma history among women with this condition.) Almost inevitably, women diagnosed with vaginismus come from sex-negative backgrounds with little to no sex education. One cue mentioned in gynecological textbooks for diagnosing vaginismus is that the vaginal muscles are positioned just as the lips might be in saying "no." Perhaps

her body is sending a message about her reservations, which should be taken seriously rather than just trying, literally, to push past it. It may be advisable to conceive of the vaginal spasm as a symptom, related to her underlying fear(s) and feelings about intercourse rather than a disorder per se. However, all the speculation about causes, meaning, or even the purpose of vaginismus is generally considered irrelevant (at least in the literature) for treatment.

To the extent that the goal in treating vaginismus is for women to gain control over their vaginal muscles, thereby enabling intercourse, most of the time this objective is attained regardless. In fact, of all the sexual dysfunctions in women, vaginismus was long considered the easiest to treat, with the highest success rate (i.e., virtually 100 percent in the short term [Kaplan, 1974; Masters & Johnson, 1970]). The major treatment method involves the use of graduated, plastic, vaginal dilators. Women are trained in the insertion and "containment" of the dilators, progressing in size from the narrowest to the widest over the course of the treatment program. Women are encouraged also to learn and practice relaxation techniques and Kegel (i.e., vaginal muscle) exercises. Biofeedback is increasingly employed as an adjunct to therapy. Eventually, women are to make the transition from plastic dilators to penises, preferably with the man encouraged to lie motionless on his back until the woman feels comfortably in control.

Notwithstanding the effectiveness of these "desensitization" techniques in eliminating the symptom of vaginismus, this treatment approach has been criticized as dehumanizing to the woman and her partner (Kleinplatz, 1998; Nicolson, 1993; Shaw, 1994; Ushher, 1993). It may "work," but the therapy process may "succeed" at overcoming a vaginal spasm by ignoring the rest of the person. Overriding her anxieties and fears in order to achieve mastery over her body may leave her feeling disconnected and alienated from her partner. It also ignores the possibility that she may simply not be willing to engage in sexual intercourse. Suggested alternatives help the woman to become centered and integrated enough to deal with her feelings openly and directly rather than through the symptom of the vaginal spasm (Kleinplatz, 1998; Shaw, 1994).

Pain Associated with Sex in Women—Dyspareunia

Whereas there is minimal attention to pain associated with sex in men, there is quite an extensive literature on dyspareunia in women. Pain during sex, and during sexual intercourse in particular, is fairly common. Continuing and persistent pain associated with sex is less so.

There are an enormous number of possible causes for genital pain. It is hard to determine the precise origin of the pain without a careful clinical assessment, including a pelvic examination. Sometimes women come to sex therapy seeking help with genital pain after already having seen their physicians for their annual examination and having been pronounced healthy. However, unless the physician has been told specifically to investigate her

genital pain, it is very unlikely that it will be detected. The "clean bill of health" does not mean much if the physician did not ask the right questions. It is important and helpful for the woman to tell her physician in as much detail as possible what is bothering her. Correspondingly, the physician will not be able to learn much without asking specific questions about where exactly it hurts, during which sexual (or other) acts, what triggers it and makes it stop, how intense the pain is and what is the nature of the pain. Given that many women and their physicians are uncomfortable discussing these subjects with one another, the sex therapist often plays the role of detective and facilitator.

The questions suggested above help to track the source of the pain. For example, burning pain on the external genitalia during oral sex or manual stimulation would likely lead to rather different investigations and diagnoses than sharp pain at the vaginal opening at the beginning of intercourse versus an aching thud on deep penetration. Pain can be caused by anything from STIs to yeast infections, endometriosis, allergies, hormonal changes, and vaginismus to episiotomy scars that have healed poorly. (An episiotomy is the incision often made into a woman's perineum during childbirth to prevent tearing. It is more routine in the United States than anywhere else. Research and experience in other countries have demonstrated clearly that most women usually do not need an episiotomy and that the risks outweigh the benefits.) Much of the recent focus has been on the pain of vulvar vestibulitis (i.e., generalized, chronic pain of the external genitalia [see Bergeron et al., 2002]) and vulvadynia (i.e., chronic pain at the vaginal opening).

There is quite a bit of controversy as to whether or not dyspareunia should be classified as a sexual dysfunction or as a pain disorder (Binik, Meana, Berkley, & Khalifé, 1999; Binik, 2005). As Binik et al. asked in the title of one of their articles, "Is the pain sexual or is the sex painful?" They argue that the current classification of dyspareunia as a psychologically based disorder manifested as a physical "sexual" symptom is erroneous and conspicuous. All other pain disorders (e.g., back pain, headaches) are classified and treated together using the same rationale; it is only dyspareunia that seems to have been singled out as different, with the focus on the sex rather than the pain. Binik (2005) states that our understanding of women's genital pain and its treatment must be revised. It should be reconceptualized as a pain disorder that interferes with a woman's quality of life, including but not limited to her sexual expression.

The treatment of dyspareunia must, of course, be related to the underlying cause of the pain. The ideal goal is to cure the source of the pain. When that is not possible, and even when it is, considering that she is now suffering from chronic pain, treatment should be multifaceted. Experts trained in sex therapy, biofeedback, pain management techniques, and physiotherapy will be required to work together with gynecologists and other physicians to diagnose and treat women or couples whose lives have been limited by pain.

COUPLES' PROBLEMS: DIFFICULTIES WITH SEXUAL DESIRE AND INTIMACY

The most common problem bringing individuals, and couples in particular, into sex therapy is low desire (known more formally as hypoactive sexual desire disorder). Actually, it is sexual desire discrepancy between the partners that brings couples into therapy more so than low (or high) levels of desire in the abstract. How low is too low? For that matter, how much is too much? And who is to make that determination? If two people want to have sex with each other three times per year and both are happy at that rate, these questions are moot—this couple will not be seeking sex therapy. The same is likely true for couples who want to have sex together three times per day. The context in which the problem arises is when one person wants more sex in that relationship than the other. Whom should the therapist treat, if anyone? These questions are more than merely academic. They are important both clinically and ethically. It is commonplace for two people to arrive for therapy wherein each feels strongly that the other has the problem and requires help. If one says, "If I never had sex again, I wouldn't miss it," is it feasible or right for the partner or a therapist to try to change someone who does not seek to change? Correspondingly, if one claims that the other is "oversexed" but the partner feels self-contentment, what is the therapist to do? It is a truism in couples therapy that people never change for others—at least not in the long term—but only for themselves. As such, in cases of sexual desire discrepancy the couple assuredly has a problem, which may or may not be amenable to change, but whether or not the individuals in question require "treatment" is a complex matter.

In order to ascertain how to proceed, the sex therapist needs to understand and appreciate the meaning of the problem in context. Is the low desire lifelong or recent? In either event, when and how did it come to be perceived as problematic, and by whom? What precipitated the diminishing of desire? Is there low desire in all situations and in all relationships or only with the current partner? Is there desire for others? (In the course of such an assessment, many individuals who are sure that their partners are utterly lacking in desire are stunned to hear that their partners self-stimulate to orgasm three times per week. Here the problem is not lack of desire—it is a lack of desire for sex or for the partner in that relationship.) Is the quality of the sex satisfactory to each partner? Is the type of sex they engage in mutually fulfilling? Sometimes people make assumptions based on the frequency of sex without considering the quality of the sex or the sexual relationship. To put it another way, is it any wonder if people who have different visions of ideal sexual relations ultimately appear to have a sexual desire discrepancy? How is the rest of the relationship? Sometimes, the problems lie elsewhere but are manifest in the bedroom. Often, when one is complaining of the other's low sexual desire, the other is dissatisfied with the relationship.

Key phrases for therapists to note include "The passion is gone" and "I don't feel any connection." Such statements may indicate that although nothing is wrong with either of them, there may not be anything right going on, either. The couple may be technically proficient and there may be no mechanical failures. However, the sex may be lackluster enough that it is not really worth wanting (Kleinplatz, 1996; Schnarch, 1991). Many people are justifiably disillusioned by their sex lives. One or both may be having their required quota of orgasms yet disappointed at the absence of eroticism during sex. In such cases, the question is: "What would make it worth your while to get excited?" It is all too common for people to be perceived as having low sexual desire when, actually, they refuse to settle for mediocre sex and are geared toward ecstasy (Ogden, 1999). Sometimes, sex therapists can be most helpful by going beyond the purely "clinical" to deal with all the dimensions of desire including the emotional, intellectual, erotic, and even spiritual (Ogden, 1999, 2001).

Given the complexity of sexual desire complaints, therapies must be individualized to deal with the particular problems of each unique individual or couple. There are few standardized therapy methods. This is greatly disappointing to many of those who come to therapy expecting quick-fix solutions. The popular discourse in the media suggests that desire is just a matter of hormones. Although hormone levels are relevant, simply increasing them is rarely sufficient to solve desire problems. Sometimes, the cause of the desire problems is primarily biochemical, as when a person's desire drops dramatically after starting to use certain drugs (e.g., SSRIs, sedatives, alcohol, cocaine). Even in these relatively straightforward instances, depending on how long it has been since the individual last experienced desire, it may be awkward getting back into having sex and may often require some coaching during sex therapy. Bibliotherapy may offer useful suggestions and exercises for couples who are struggling with uncomplicated desire problems or may be used as an adjunct to sex therapy (e.g., McCarthy & McCarthy, 2003). Couples must do their own work between sessions, arranging time to be both intimate and sexual (Ellison, 2001).

Most of the time, sexual desire problems require high levels of honesty in therapy in order to tease out the interplay of contributing factors and to deal with each of them. These may be as diverse as history of incest, treatment for cancer, arguments about child-rearing practices, reluctance to engage in oral sex, and distrust following an affair. Thus, a one-size-fits-all solution to these problems, all appearing as "low sexual desire," is unlikely to help.

CONCLUSION

Sex therapy is still in its infancy. For a field not yet fifty years old, a great deal has been accomplished. The complexity of sexual difficulties and the many reasons, meanings, and purposes underlying them remain a challenge.

Sexual difficulties—and whether or not a "symptom" even constitutes a "problem"—will never be understood in isolation but only in the context of lived human experience. In some respects, sex therapy has much to offer individuals and couples seeking to overcome the symptoms of the major sexual problems. Although the field does offer some remarkably rapid treatment options, the depths and heights to which many people aspire will require broader visions and innovative approaches. There remains plenty of room to grow, particularly with regard to sexual desire issues, whether dealing with "low" desire, "high" desire, unconventional desires, or desire discrepancies. Beyond helping couples overcome barriers to sex, much remains to be discovered about how to help couples attain the farther reaches of erotic intimacy.

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To Locate a Certified Sex Therapist

The Board of Examiners in Sex Therapy and Counseling of Ontario, www.BESTCO.info

American Association of Sex Educators, Counselors, and Therapists, www.AASECT.org

Major Sexology Associations and Opportunities for Continuing Education

Sex Information and Education Council of Canada, www.sieccan.org/
The Society for the Scientific Study of Sexuality (SSSS), www.sexscience.org/
Society for Sex Therapy and Research, www.sstarnet.org
American Association of Sex Educators, Counselors, and Therapists, www.AASECT.org

Distributors of Sex Toys and Educational—Sexually Explicit—Videos

Come As You Are (An especially useful resource for sex toys and aids for the disabled as well as the able-bodied.), www.comeasyouare.com
Good Vibrations, www.goodvibes.com

10

Sexual Compulsivity: Issues and Challenges

Michael Reece, Brian M. Dodge, and Kimberly McBride

For the most part, the world seems to operate under the assumption that sexual decision making occurs as a result of some logical and rational process. However, these logical and rational foundations become questioned when individuals participate in sexual activities that appear to be inconsistent with others' perceptions of their professional or societal roles or their personal perceptions of themselves. Perhaps one of the most famous public cases to be considered in recent times was the notion, widely circulated in the popular press, that President Bill Clinton was a "sex addict" due to the inconsistency between his role in society and his apparent inability to control his sexual urges. Mostly this was related to his affair with a White House intern and the ensuing public debate and attempts to remove him from office. This controversy launched the notion of "sexual addiction" into the national spotlight, with numerous television shows, magazines, newspapers, and Internet sites discussing the concept of sex addiction and using the behavior of the president of the United States as an example for debate and discussion.

While public discussion over this particular episode has subsided, one remaining artifact is that individuals throughout society continue to attempt to understand the sexual behaviors of others and themselves that they perceive to be "out of control" or "compulsive." These sexual behaviors and their characteristics have been called by many different names, with the most common being nymphomania, hypersexuality, sexual compulsivity, sexual addiction, and sexual impulsivity. These terms are used interchangeably by

some professionals who work in the sexuality field, and often one's choice of a term reflects his or her personal beliefs and professional training. These terms are also used in different ways, depending on whether one is describing a psychological characteristic of an individual (i.e., someone is a "sex addict" or a "sexually compulsive person") or describing a particular behavior (i.e., some believe that excessive use of the Internet for sexual purposes is an example of a "sexually compulsive behavior"). That different terms are used to describe the phenomenon of a person being sexually "out of control" or that a behavior is "sexually compulsive" is also the result of the fact that there remains a great deal of debate as to whether the phenomenon of sexual compulsivity truly exists, and if it does, how it is measured. For consistency throughout this chapter, we will use the label "sexual compulsivity" to refer to behaviors and their characteristics that some people perceive to be problematic.

A range of sexual behaviors have been considered to be indicative of sexual compulsivity, such as excessive masturbation, having high numbers of sexual partners, excessive use of the Internet for sexual purposes (sexual chatting online, viewing sexually explicit videos, etc.), and looking for sex or having sexual interactions in public spaces (often called "cruising" or "dogging"), among others. However, the problem with any of these behaviors, either alone or in combination, being indicative of sexual compulsivity is that there are no established criteria for distinguishing among behaviors that are a normal part of one's sexual repertoire and when these behaviors have become excessive. How much masturbation is too much masturbation? How many sexual partners are too many? How many hours can one spend chatting with others about sex on the Internet before it is considered problematic? The lack of a solid answer to any of these questions makes reaching consensus on the phenomenon of sexual compulsivity very challenging for both professionals and members of the general population.

HISTORY AND MEANING OF SEXUAL COMPULSIVITY

The notion of excessive sexual behavior as a disorder or condition has been in existence since ancient times. Early descriptions date back to Greek myths, included in stories of the sexual activities of the god Dionysius. Over the past twenty-five years, there has been an increasing interest in the notion of "out-of-control" sexual behavior among therapists and scientists. Today, there is no single, dominant view of what sexual compulsivity is, how it should be assessed, and how it should be treated. Given below is a brief review of some of the dominant models that currently influence research and treatment in this area.

The issue of sexual compulsivity was brought to the forefront of people's attention in 1983 when Patrick Carnes published his book *Out of the Shadows: Understanding Sexual Addiction*. Carnes believed that out-of-control sexual behaviors represented a form of addiction, much like alcoholism, and advocated

a twelve-step approach to treatment, similar to that used by Alcoholics Anonymous. Carnes was also among the first mental health practitioners to develop screening tests in an attempt to tap into and measure sexual addiction and compulsivity among diverse groups of individuals (see also Society for the Advancement of Sexual Health, 2005).

Shortly after Carnes published his book, researcher Eli Coleman wrote articles challenging Carnes's addiction model (Coleman, 1990). Coleman, instead, used the term "compulsive sexual behavior" and believed that the disorder was a form of obsessive-compulsive disorder (OCD). Further, Coleman conceptualized two types of compulsive sexual behavior (CSB), paraphilic and nonparaphilic. Paraphilic CSB, according to Coleman, involves the unconventional sexual behaviors, such as fetishes or pedophilia. Nonparaphilic CSB involves conventional or normative sexual behaviors, such as masturbation or sex with consenting adult partners.

By the mid-1990s, a number of ideas about the underlying causes of sexual compulsivity had been generated. One of the major contributors to research during this time was Seth Kalichman. Kalichman and his colleagues used the term "sexual compulsivity" and believed that poor impulse control was the driving factor behind the behavior. Kalichman's primary concern was not with the behavior itself, but more with the extent to which one's sexual behaviors were increasing the risk for human immunodeficiency virus (HIV) and the acquired immune deficiency syndrome (AIDS) and other sexually transmitted infections (STIs). Kalichman and his colleagues published a scale that has been widely used in research related to sexual compulsivity (cited in Kalichman & Rompa, 1995; Kalichman et al., 1994). Table 10.1 lists the items included in this scale, known as the Sexual Compulsivity Scale, which is also referred to later in this chapter.

In 2004, John Bancroft and his colleague Zoran Vukadinovic published a highly critical paper examining the concepts of sex addiction, sexual compulsivity, and sexual impulsivity. Their paper challenged the existing conceptualizations of sexual compulsivity and proposed that they may be of little scientific value. Bancroft and Vukadinovic questioned whether out-of-control sexual behavior existed at the extreme end of the range of normal sexual behavior, or whether it was qualitatively different in ways that make it problematic. Further, they advocated withholding labels such as sex addiction and sexual compulsivity in favor of the term out-of-control sexual behavior until the field had a better understanding of the underlying causes whereby appropriate treatments could be identified for such behavior.

Clearly, there is a great deal of interest and debate among scientists and practitioners when it comes to the notion of sexual compulsivity. While there has been a great deal of research in this area, to date, there is no consensus as to what the underlying causes are or what constitutes the most appropriate treatment. In fact, some people believe that sexual compulsivity does not exist at all. Because there is a lack of agreement, more research is needed to clarify

Table 10.1. Sexual Compulsivity Scale

Scale Items
My sexual appetite has gotten in the way of my relationships.
My sexual thoughts and behaviors are causing problems in my life.
My desires to have sex have disrupted my daily life.
I sometimes fail to meet my commitments and responsibilities because of my sexual behaviors.
I sometimes get so horny I could lose control.
I find myself thinking about sex while at work.
I feel that my sexual thoughts and feelings are stronger than I am.
I have to struggle to control my sexual thoughts and behavior.
I think about sex more than I would like to.
It has been difficult for me to find sex partners who desire having sex as much as I want to.

Key: Item responses range from 1 (Not at all like me) to 4 (Very much like me).

Source: Kalichman & Rompa, 1995.

these issues. In the meantime, it is important that we acknowledge what is unknown and proceed with caution.

A range of screening and assessment tools for sexual compulsivity are available to the general public, many of them from the Web site of the Society for the Advancement of Sexual Health (SASH), a leading professional association in the United States, addressing this issue (www.ncsac.org). Usually, such assessments tend to take one of the following three forms: assessments for men who identify as gay, assessments for men who identify as heterosexual, and assessments for women. No assessment tools have been developed for persons who identify as bisexual (those who have sex with both men and women or do not identify as exclusively heterosexual or gay). This may be due to existing biases that underlie previous research on sexual compulsivity, namely: (1) that sexual compulsivity is primarily a "male" problem (particularly for "gay men," who somehow face separate and distinct issues from "heterosexual men"), (2) that sexual compulsivity in women is not related to sexual orientation, and (3) that sexuality is dichotomous (not recognizing that many individuals who deal with compulsivity-related issues may not be confined to the polarized societal identity labels of "heterosexual" and "gay").

Rather than focus on whether sexual compulsivity is a psychological characteristic, a pathological condition, or simply a characteristic of one's sexual behaviors, SASH has offered a list of outcomes that could suggest that a person or their behaviors are sexually compulsive. An outcomes-based understanding of sexual compulsivity would suggest that individuals and their behaviors could be considered sexually compulsive if they find that their sexual behaviors (including those that they do alone, such as masturbation, and those that they do with other people, such as having intercourse) are leading to problems in

various areas of their lives. For example, a person spending a great deal of time viewing sexually explicit materials on the Internet may not necessarily be indicative of sexual compulsivity, but if that behavior results in the individual's inability to relate to a romantic or relational partner or if it creates financial challenges, then it might indicate that their Internet-based sexual activities have become problematic. Table 10.2 provides a list of the impacts that could be indicative of sexually compulsive behavior.

Regardless of the lack of consensus on the meaning of sexual compulsivity, and on how to assess it and treat it, researchers have devoted a significant amount of energy into studying it and trying to understand how it is related to sexual health issues. In the following section of this chapter, we will present three examples of this work from our own research.[1] Three specific lines of research are presented, including work that has focused on sexual compulsivity and its associations with continued high-risk sexual behaviors among those

Table 10.2. Anticipated Impact of Sexually Compulsive (addictive) Behavior

Impact	*Description*
Social	Addicts become lost in sexual preoccupation, which results in emotional distance from loved ones. Loss of friendship and family relationships may result.
Emotional	Anxiety or extreme stress are common in sex addicts who live with constant fear of discovery. Shame and guilt increase, as the addict's lifestyle is often inconsistent with the personal values, beliefs, and spirituality. Boredom, pronounced fatigue, despair are inevitable as addiction progresses. The ultimate consequence may be suicide.
Physical	Some of the diseases which may occur due to sexual addiction are genital injury, cervical cancer, HIV/AIDS, herpes, genital warts, and other sexually transmitted diseases. Sex addicts may place themselves in situations of potential harm, resulting in serious physical wounding or even death.
Legal	Many types of sexual addiction result in violation of the law, such as sexual harassment, obscene phone calls, exhibitionism, voyeurism, prostitution, rape, incest and child molestation, and other illegal activities. Loss of professional status and professional licensure may result from sexual addiction.
Financial/ Occupational	Indebtedness may arise directly from the cost of prostitutes, cybersex, phone sex and multiple affairs. Indirectly, indebtedness can occur from legal fees, the cost of divorce or separation, decreased productivity, or job loss.
Spiritual	Loneliness, resentment, self-pity, and self-blame.

Source: NCSAC, 2005.

living with HIV, work exploring the extent to which sexual compulsivity is an issue among young adults, and research that looked into sexual compulsivity among individuals who seek sexual interactions in public places, known as cruising (which is perhaps one of the issues that is often cited as being a clear example of out-of-control sexual behavior).

SEXUAL COMPULSIVITY AND THE HIV/AIDS EPIDEMIC

The AIDS epidemic, and the continuing incidence of infections with the virus that causes it, HIV, provide a solid backdrop for considering the issue of sexual compulsivity. Given the devastating impact of this epidemic on society, sexuality and health professionals remain focused on the need to reduce the spread of this devastating infection and to promote the well-being of those already infected.

Recently, researchers in this area have focused much of their work on understanding the factors associated with the likelihood that an individual living with HIV will transmit the virus to another individual or expose themselves to other infections that can further compromise their health (Kalichman & Fisher, 1998). Numerous studies have documented that a significant proportion of individuals living with HIV will continue to participate in behaviors that present the potential for such outcomes (Heckman, Kelly, & Somlai, 1998; Kalichman, Kelly, & Rompa, 1997; Kalichman, Roffman, Picciano, & Bolan, 1997; Kalichman & Rompa, 2001; Marks, Burris, & Peterman, 1999; Reece, 2003; Reece, Plate, & Daughtry, 2001).

Researchers have been interested in the extent to which sexual compulsivity might have a role to play in the continuing high-risk sexual behaviors of individuals who know that they are infected with HIV. Studies have consistently documented an association between sexual compulsivity and one's participation in high-risk sexual behaviors following an HIV diagnosis (Benotsch, Kalichman, & Kelly, 1999; Gold & Heffner, 1998; Kalichman, Greenberg, & Abel, 1997; Kalichman & Rompa, 2001; Quadland & Shattls, 1987).

We have recently been examining the extent to which sexual compulsivity is associated with continued participation in unprotected sexual intercourse among individuals living with HIV (Reece et al., 2001; Reece, 2003). Several protracted findings have emerged. Among men living with HIV who identify as gay or bisexual, we find that those who report having been either the insertive or receptive partner in unprotected intercourse during the sixty days preceding the study also are those who have higher scores on a measure of sexual compulsivity. We find similar patterns among men who identify as heterosexual; those men with higher levels of sexual compulsivity also are the ones who were more likely to report being the insertive partner in unprotected sexual intercourse.

In a separate work, we also found some other trends that suggest we need to understand more about sexual compulsivity as we continue to respond to the challenges of the HIV/AIDS epidemic. Gay and bisexual men who scored highly on a measure of sexual compulsivity and who reported that they had been participating in unprotected intercourse indicated that they were most likely to participate in these behaviors with individuals they met in anonymous settings (sex clubs, bathhouses, etc.) and with men whose HIV status was unknown (Reese & Dodge, 2003, 2004).

These studies are highly consistent with the work of other researchers in the field of HIV/AIDS and, while certainly not conclusive, indicate a continuing need for us to understand whether knowledge of a phenomenon like sexual compulsivity may help public health professionals better target their efforts to reduce the incidence of HIV infections. It may be that those who are struggling to control their sexual behaviors are among those most appropriate for specialized interventions if we were able to more appropriately assess them and deliver programs to them in a way that does not further stigmatize them or label their sexual behaviors as pathological. (See HIV Case Scenario.)

HIV Case Scenario

Individual: Alfred, 31 years old, single bisexual man recently diagnosed with HIV

Issues: Presents for care at mental health clinic with concerns that his sexual behaviors are "out of control." His major concern is that he finds himself spending the vast majority of his evenings spending hours looking for men in Internet chat rooms who are interested in "no strings sex" because he does not want a relationship with another man and does not want to go to gay bars to meet them. Alfred tells his therapist that when he meets these men he "can't bring himself to tell them that he is living with HIV" and reports that "they almost never ask about it." He believes that he has probably transmitted HIV to some of his sexual partners given that he is strictly the insertive partner in sexual intercourse and almost never uses a condom. He is convinced that he is a "sex addict" and just does not know how to bring his sexual behaviors under control.

Considerations: Which aspects of Alfred's behaviors are "out of control?" Is it that he spends hours on the Internet seeking sex or that he is not telling his partners that he is living with HIV and has likely transmitted HIV to some? Is this truly an example of sexual compulsivity or is his Internet-based behavior related to his discomfort with his sexual interest in both men and women and that he does not know how to

meet men other than on the Internet? Does he lack the skills to introduce condoms into his sexual interactions?

Linkages to Research: Alfred is obviously struggling to control his constant need to seek sexual partners on the Internet and this is something that he is wanting to better control. His Internet-based behavior seems compulsive on the surface, and his lack of HIV disclosure to his partners and his high rates of unprotected insertive intercourse is consistent with our research among men who score highly on measures of sexual compulsivity. It is certain that the potential for him to have transmitted HIV to other men is a problem that needs to be addressed immediately. However, rather than assume his claim that he is a "sex addict" is correct, his therapist may want to work with him to increase his knowledge of the non–bar-oriented venues for meeting men in his city, teach him skills for using condoms and ask him to make a commitment to use condoms in all sexual interactions, regardless of the extent to which his partners ask about HIV. While some aspects of his behaviors may be compulsive, Alfred is an example of those who are labeled (or who self-labeled) sexually compulsive, but perhaps his concerns over the inability to control his behavior can be resolved with strategic methods introduced by his therapist that increase his comfort with his bisexuality and his ability to use condoms consistently in all interactions.

SEXUAL COMPULSIVITY AND YOUNG ADULTS

A growing body of literature suggests that an association exists between sexual compulsivity and participation in sexual behaviors that are high risk in terms of HIV and other STIs. In most of these studies, sexual compulsivity has been measured using the Sexual Compulsivity Scale (SCS) mentioned earlier (Kalichman & Rompa, 1995). Across the studies mentioned previously, the SCS has demonstrated reliability and construct validity in several samples of individuals who can be classified as "high risk" for HIV, including men who have sex with men (MSM), substance abusers, and inner city, low-income men and women. The studies also demonstrated that compulsivity was significantly related to sexual risk behaviors in these samples. However, the relevance of sexual compulsivity among more general populations, such as college students, has rarely been explored.

To fill this gap in the literature, we designed and conducted a study, along with other colleagues, to assess sexual compulsivity among heterosexual college students (Dodge, Reece, Cole, & Sandfort, 2004). In this study, we examined whether sexual compulsivity was related to higher frequencies of sexual behaviors and higher numbers of sexual partners, and explored

associations between sexual compulsivity and select demographic variables (gender, age, and race/ethnicity). Lastly, we ascertained whether sexual compulsivity was predictive of sexual behaviors considered risky in terms of HIV/STI in this population.

As in studies of "high-risk" individuals and those living with HIV, sexual compulsivity appeared to be a relevant construct for describing elevated levels of sexual practices with multiple partners in our sample of 899 heterosexual college students. We found higher levels of sexual compulsivity among individuals who reported higher frequencies of partner sex, solo sex, and public sex activities. Additionally, participants who reported involvement in nonmonogamous sexual situations (i.e., multiple sexual partners) were more likely to have higher sexual compulsivity scores than those who reported involvement in monogamous sexual relationships and those who were not currently sexually active. Also consistent with other studies, men and younger participants were found to have higher compulsivity scores than women and older participants. Lastly, in relation to HIV/STI risk, men and women who had higher sexual compulsivity scores were more likely to report higher frequencies of unprotected oral, vaginal, and anal sex in the preceding three months.

That stated, in more practical terms, it is still not understood how sexual compulsivity functions in relation to sexual risk after the concept has been identified and measured. Considering this, we concluded that future studies are needed to determine the practical significance of sexual compulsivity in heterosexual college students and various other populations. (See Young Adult Case Scenario.)

Young Adult Case Scenario

Individual: Jason, 20 years old, single heterosexual college student

Issues: Presents for care at a university counseling center with concerns that his sexual behaviors are "out of control." His primary concern is that he spends a great deal of his time masturbating when he feels that he should be studying. He is also concerned because he has "hooked up" with a "large number" of young women at parties and did not use condoms on any of the occasions. Jason tells his therapist that he is worried that he is a "sex addict" and feels "guilty" about "leading girls on just to get sex." He believes that if he continues this pattern of behavior he will fail his courses and possibly get someone pregnant.

Considerations: Which aspects of Jason's behaviors are problematic? Is it that he spends time masturbating when he feels that he should be studying or is it that he does not use condom when he is "hooking up"? Is it his feeling of guilt? Is this an example of sexual compulsivity or is

this an example of normal sexual behavior given Jason's age and the social norms of the college environment?

Linkages to Research: Jason is clearly uncomfortable with his sexual behaviors. However, research has yet to establish what sexual compulsivity truly looks like among young adults. Late adolescence and early adulthood are often a time of sexual exploration. Research conducted with college students has shown that having multiple sexual partners is not uncommon. Further, among young men, masturbation frequencies have been found to be higher than among older men or women. On the surface, it is difficult to assess whether or not Jason's behaviors truly are "out of control" or if they are relatively "normal." Certainly, his lack of condom use is an issue in terms of both pregnancy and HIV/STI transmission. If his masturbation is causing him to miss classes or perform poorly on homework assignments, then it may be indicative of sexual compulsivity. In this case, the therapist would need to assess to what extent Jason's behaviors are impacting his life. Often times young adults need education about what is normal sexual behavior and what is excessive. The therapist would definitely need to provide education about HIV and STI transmission and encourage condom use. The therapist should also determine how many women Jason has "hooked up" with and explore his feelings of guilt related to these encounters. Until a proper assessment is performed, it would be premature to make any assumptions about Jason's behavior.

SEXUAL COMPULSIVITY AND MEN WHO CRUISE FOR SEX WITH OTHER MEN

One sexual behavior that has received considerable attention in the literature, particularly as a potential threat to sexual health, is "cruising." Cruising, in a sexual context, has been defined and explored by a variety of researchers over the years. Cruising can be described as "referring to the ritual of seeking and interacting with potential sexual partners, usually those who were previously unknown to the participant" (Reece & Dodge, 2003). Among the general population, sexual compulsivity is often cited as one reason that an individual would seek sex with another person in public places.

Given that studies on sexual cruising and sexual compulsivity have generally existed as separate entities, they present a unique challenge to health and social service providers. There are studies that have documented associations between sexual compulsivity and high-risk behaviors, and there are some studies that have documented associations between the public nature of a venue and the likelihood that behavior in those venues will be high-risk. Further, there are a limited number of studies that have suggested associations among all three factors: sexual compulsivity, public venues, and high-risk

behaviors. Based on this literature, it may be easy to understand why some have accepted the notion that sexual compulsivity is an important factor in the high-risk behaviors in cruising environments. However, this assumption may be inappropriate due to the lack of research specifically investigating cruising and sexual compulsivity.

To explore these issues, we conducted a primarily qualitative study to determine whether men who cruise for sex on college campuses have characteristics consistent with contemporary conceptualizations of sexual compulsivity (Reece & Dodge, 2004). We assessed the extent to which cruisers have elevated scores on a measure of sexual compulsivity, whether those scores have associations with their sexual behaviors, the health-related implications of those behaviors, whether men who cruise experience negative consequences commonly associated with sexually compulsive behaviors, and the potential for such negative consequences.

During in-depth interviews, men were asked to describe whether they had heard of sexual compulsivity, whether they had considered themselves to be sexually compulsive, or whether they ever thought of their cruising behaviors as being "out of control." All of the cruisers acknowledged that they had heard of the notion of an individual being "sexually compulsive." If participants had made the determination that their behaviors were compulsive, they typically reacted in two ways, by either (1) ending their cruising behaviors on their own, temporarily or permanently, or (2) seeking professional counseling or some type of social support or therapy group. Additionally, we conceptualized sexual compulsivity as having two primary components: (1) the drive to participate in behaviors in a compulsive manner, and (2) the existence of or potential for negative consequences to self or others. Participants reported a broad range of negative events that were associated with their cruising activities including social, emotional, physical, legal, financial/occupational, and spiritual.

This study provided insights into an issue that has been relatively unexplored in the literature. The findings suggest the need for additional consideration, debate, and research in order to better understand relationships between sexual compulsivity and cruising. Given the extent to which sexual compulsivity is openly discussed in the media, whether accurately or inaccurately, mental health and public health providers will continue to become engaged in interactions with clients and program participants, who are likely to introduce concerns related to sexual compulsivity. It is also likely, particularly among clients and program participants who are bisexual and gay men, that some of their sexual interactions will occur through cruising in public spaces, regardless of whether they are discussed openly. Therefore, it is important that we continue this dialogue and be open to exploring the nature and meanings of sexual interactions among men, in addition to the associations between their sexual behaviors and indicators of sexual compulsivity, in order to develop programs and interventions that are appropriate and effective. The Cruising

Case Scenario provides an example of some of the issues presented by participants in this study and the complexities associated with their behaviors and their perceptions of the impact of these behaviors on their lives.

Cruising Case Scenario

Individual: Bill, 35 years old, married self-identified bisexual man

Issues: Took part in research study on cruising for sex on a college campus. While he does not openly identify as "sexually compulsive," he often wonders if he is spending too much of his time seeking out anonymous sex.

> *I have definitely wondered whether or not I am a sex addict. Sometimes I get an uncontrollable urge to go out and seek out sex . . . the trigger happens when there is this conscious switch—this psychological switch and it feels like everything just drops down, blood . . . I don't know what physically . . . like it's a dropping sensation and an adrenaline rush . . . usually I'll end up breaking out into a cold sweat . . . for me the trigger is the opportunity.*

At times, he has spent hours upon end in the local parks and recreation areas waiting for sexual partners. This has often interfered with his ability to conduct his job (as a local government employee) effectively. It has also limited the time he spends at home with his family.

> *The cruising was almost second nature for a while. Sometimes I'd go* just *to be in the milieu. I'd go into the cruising areas and just sit for hours. I'd go daily. Three times a day sometimes.*

Bill has reported experiencing consistent and troubling rejection while cruising due to his weight and appearance. He has internalized these experiences to the point of almost becoming numb.

> *I've been turned down a lot . . . you learn quickly how to be rejected. You don't ask. You don't turn back. I know why they're doing it, because they are not physically attracted to me. I'm fat and . . . just not one of those suave guys. I learned not to question it.*

Last, Bill also worries about the social repercussions of his cruising behaviors, specifically needing to juggle his "multiple lives" in a small community. In addition, he recognizes that his behaviors are potentially "complicated" given that they are kept relatively secret in his everyday life.

> *I'm like a duck. I look good floating on the water but underneath it I'm paddling like hell just to stay afloat. . . . I have two different sex lives. With my wife, it's fine. . . . we don't have a wild sex life or anything because we*

are totally committed to our kids, and our nights are pretty full taking care of them. My other sex life . . . my cruising sex life is very intense. And those guys, I meet them all in public sex environments. I feel so "complicated" sometimes.

Considerations: Is Michael experiencing sexual compulsivity in his life or is he merely enjoying the "sexual freedom" that many individuals report as a reason for engaging in sex with multiple partners? At what point can the line be drawn? How are Michael's body image issues related to his cruising behaviors? Do his self-esteem issues act to reinforce, or hinder, the cruising? What are the implications of Michael's behaviors in terms of his job and home life, in terms of health, legal repercussions, etc.?

Linkages to Research: Although he does not explicitly identify "sexual compulsivity" as a problem in his life, Michael has presented concerns in terms of his sexual behaviors being out of control and causing problems in his life, particularly in terms of mental and social health. He has described problems in several key areas of the SASH (see Table 10.2) framework for understanding sexual compulsivity. Bill may benefit from consulting with a health care provider who is trained to diagnose and treat compulsive sexual behavior, if he is deemed to be dealing with such issues.

While these three areas of research indicate support for the notion that sexual compulsivity exists in some form among a diverse range of individuals and that it is associated with certain sexual behaviors, there is a need for much more research in these areas before any solid conclusions can be drawn. Additionally, there is a need to continue identifying ways of responding to sexual compulsivity among those who appear to be struggling with it by making available effective forms of treatment.

TREATMENT ISSUES

One of the most obvious challenges to providing treatment for clients presenting with sexual compulsivity is the lack of a clear set of diagnostic and treatment criteria. Without a clear set of criteria to serve as a guide, diagnosis and treatment can become an arbitrary endeavor. The *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition* (American Psychiatric Association, 1994) contains three general categories under which a diagnosis can be made: Paraphilia (either specific or not otherwise specified [NOS]); Impulse Control Disorder NOS; or Sexual Disorder NOS.

For mental health practitioners who may have little or no specialized training in the treatment of sexuality related issues, this ambiguity is problematic. Selecting the most effective treatment for a given disorder presumes a clear

understanding of the underlying causes and knowledge of the appropriate treatment strategies. When there is no clear definition of the problem, and a number of competing approaches to treatment, the burden of deciding what sexual compulsivity is, and whether a given client suffers from it, rests on the mental health practitioner. While there is a great deal of debate among experts about issues related to the diagnosis and treatment of sexual compulsivity, a few approaches to treatment have been both widely used and empirically investigated. These are summarized briefly in the section that follows.

Twelve-Step Groups

The earliest approach to treatment, and one that is still common today, was adapted from the twelve-step model of Alcoholics Anonymous. The underlying premise of this approach is that sexual compulsivity represents a form of addiction much like alcoholism, drug addiction, or compulsive gambling. In this treatment paradigm, individuals are believed to be powerless over the amount or kind of sexual activity in which they engage (Carnes, 1989; Myers, 1995). One of the key components in this approach is the belief that the sexually addicted individual is overwhelmed by shame. In order for sex addicts to recover, they must progress through the twelve steps by admitting they have a problem, relinquishing control to God, admitting the nature of their wrongs, making amends when possible, and sharing the message with other addicts (Sex and Love Addicts Anonymous, 1985).

The twelve-step approach relies on groups of self-identified addicts coming together to share their stories and support one another through the recovery process. Typically, the groups do not include a trained facilitator or therapist. Instead, the groups are facilitated solely by members who encourage one another to abstain from problematic sexual behaviors and carry the message to other sex addicts. The only requirement for membership in such groups is the desire to stop acting out a pattern of sex addiction.

Cognitive-Behavioral Therapy

Cognitive-behavioral therapies refer to a set of techniques that are based on the assumption that behavior can be altered by changing cognitive processes (thoughts, beliefs, attitudes, assumptions). In this approach, maladaptive cognitive processes are assumed to be the underlying cause of maladaptive behaviors, and these negative thoughts are believed to be modifiable, both directly and indirectly, through therapeutic techniques (Montesinos, 2003).

Within the cognitive-behavioral approach, there are two different groups of strategies that are assumed to influence behavioral change. The first group of strategies is referred to as cognitive restructuring. Cognitive restructuring focuses specifically on changing maladaptive thought processes (internal dialogue or self-talk) in a clear and direct manner. The second group of strategies is

called cognitive-behavioral coping skills. These strategies assume that there is a deficit of adaptive cognitions that maintain the problematic behavior. The goal of this strategy is to help the client acquire the skills that they lack.

Cognitive-behavioral approaches have been widely applied by mental health practitioners treating a variety of mental health issues. For example, cognitive-behavioral treatments have been used for treating anxiety, depression, phobias, eating disorders, and addictions.

Cognitive-behavioral approaches to treating sexual compulsivity include components of both cognitive restructuring and skills training. A therapist will usually guide a client through the cognitive restructuring process where they learn to modify distorted thoughts by identifying maladaptive thoughts as they occur and replacing them with more appropriate thoughts. The skills-training component of therapy may include social skills training and risk recognition (Myers, 1995). Usually techniques addressing relapse prevention are considered a key component to this type of treatment. Relapse prevention strategies focus on learning to identify risky situations and learning skills to cope with urges to relapse by focusing on individual, behavioral, and environmental factors that may precipitate a relapse.

Pharmacotherapy

The appropriateness of using psychotropic medications in the treatment of sexual compulsivity is still controversial in the scientific community. Certain scientists and therapists believe that medications called selective serotonin reuptake inhibitors (SSRIs, such as Prozac and Paxil), which are commonly used to treat depression, are highly effective for treating sexual compulsivity (Kafka, 1991; Ragan & Martin, 2000). Their argument is that these medications both decrease sexual urges and alleviate the depression that results from feeling out of control. Opponents to this approach argue that a common side effect of antidepressant medication is a diminished libido, therefore these medications may be temporarily masking the issues rather than treating it. So, unless an individual wants to commit to a lifetime of daily use, antidepressants should only be used in combination with other treatment approaches.

Antianxiety medications are another type of psychotropic drugs that have been used to treat sexual compulsivity. These medications are thought to reduce anxieties that either drive compulsive behaviors or result from them. Again, critics argue that these treatments may be useful in reducing the negative thoughts and feelings associated with sexual compulsivity but should not be used as a primary means of treatment.

Psychodynamic Psychotherapy

Psychodynamic therapy evolved from Sigmund Freud's psychoanalytic theory, which assumes that sexual and aggressive impulses are the primary

determinants of behavior. The psychodynamic approach focuses on an individual's personality dynamics and seeks to draw out repressed feelings from childhood by discovering the kind of defense mechanism a client is using. The psychodynamic approach assumes that defense mechanisms help an individual guard against painful emotional experiences. Identifying the mechanisms that are being used allows the therapist to understand the client's internal motivations, ultimately directing the client's personality toward a more productive or functional state.

Psychodynamic therapeutic approaches to treating sexual compulsivity focus on uncovering childhood repressed feelings that may be driving the problematic sexual behaviors (Myers, 1995). This process often focuses on the idea the client has suffered parental deprivation early in life, most often maternal deprivation, and is filled with rage. The lack of parental love or closeness, combined with feelings of anger, is thought to be the root of the current problems. The relationship between the client and therapist, often called the therapeutic relationship, theoretically serves to repair the early deprivation and allows the client to develop appropriate behaviors. Change is also achieved by teaching the client to provide maternal nurturing for himself/herself.

Obviously, there are a wide variety of treatment methods being used by professionals to assist individuals who feel that their sexual behaviors have become compulsive. Individuals seeking assistance should take the time to explore the available options and choose one based on their particular situation, the experience of the provider, and after careful consideration of the philosophies and principles that underlie the specific treatment program. Table 10.3 provides an overview of some of the most popular and diverse treatment and information resources available on the Internet.

While there have been a variety of treatment approaches discussed in professional literature, few studies have systematically assessed treatment outcomes, particularly in large samples. Further, there has been virtually no effort to study the outcomes of treatment longitudinally by following individuals over time and assessing their changes in behavior after a range of different interventions. Therefore, we do not know if any of the available treatments are successful in altering problematic behaviors, especially over the long term. A limited number of case studies and small sample investigations have provided evidence for the use of pharmacotherapy, cognitive-behavioral therapy, psychodynamic treatment, and the twelve-step approach. However, these studies have been conducted among small groups of patients and have reported inconsistent findings, making the evidence that they provide weak at best. In order to establish the efficacy of the current approaches to treatment, or develop new approaches that may yield better results, further scientific investigation is needed.

Table 10.3. Selected Sexual Compulsivity Resources on the Internet

Organization	*Web Address*
Twelve-Step Program	
Sex Addicts Anonymous—SAA	www.sexaa.org
Sexual Compulsives Anonymous—SCA	www.sca-recovery.org
Sex and Love Addicts Anonymous—SLAA	www.slaafws.org
Sexaholics Anonymous—SA	www.sa.org
Sexual Recovery Anonymous—SRA	sexualrecovery.org
For Family and Friends	
Recovering Couples Anonymous (for couples when one member of the couple goes to another twelve-step group)	www.recovering-couples.org
Codependents of Sex Addicts (related to SAA)	www.cosa-recovery.org
S-Anon (related to SA)	www.sanon.org
Professional Association	
Society for the Advancement of Sexual Health	www.ncsac.org

SUMMARY

Clearly, there is a great deal of professional and public interest in the notion of sexual compulsivity. While much attention has been given to probable consequences of such behavior, particularly in terms of HIV/STI risk, little is actually known about the underlying causes or the actual outcomes of such behavior. As often is the case with any type of science, answering questions related to sexual compulsivity is an arduous process. Unfortunately, the pace at which research is being conducted is not keeping up with the demand of those who want or need answers. HIV and STDs continue to be transmitted, and a growing number of individuals are self-identifying, or are being identified by others, as "sex addicts." Further complicating the matter, a growing number of mental health practitioners are seeing clients with issues related to out-of-control sexual behavior without knowing if these treatments actually work. There are currently a number of efforts underway to answer these pressing questions; however, until the results are in, we cannot make assumptions about the behaviors or the individuals who present with them. It is highly likely that for some individuals certain sexual behaviors are, indeed, problematic. For others, applying the sexually compulsive label may be inappropriate and damaging. Until we know what sexual compulsivity really is and how it is manifested behaviorally, we need to acknowledge what we do not know and avoid unwarranted speculation and moral judgments.

NOTE

1. The studies were conducted by Reese, Dodge, and colleagues.

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11

Chronic Disease, Disability, and Sexuality

Betty J. Fisher, Kelly E. Graham, and Jennifer Duffecy

The brain, it has been said, is the most important sex organ—the implication being that thoughts and feelings about sex may provide sufficient motivation to overcome some physical limitations and allow for a sexually satisfying experience despite physical disability or other obstacles. And the truth of this statement becomes quite clear when considering the sexual functioning of individuals living with spinal cord injuries, individuals recovering from heart attacks or strokes, and individuals living with other chronic health conditions that impede physical activity or functioning and interfere with the performance of sexual activities—especially in the manner presented by filmmakers and advertisers in mainstream media. In fact, many individuals living with disabilities (and especially disabilities associated with physical limitations) are seen as asexual. But sexuality is central to our being, regardless of physical appearance or health status (Kroll & Klein, 1995).

Sexuality, while fundamental, is a delicate area of life, and often the first area to suffer a major disruption in the face of stress or illness. For individuals in relationships with difficulties prior to the onset of illness or disability, these difficulties are likely to be magnified when health issues arise (Kievman, 1989; McGonigle, 1999; McInnes, 2003; Wallerstein & Blakeslee, 1996). This is especially true when such conditions result from accidents or when the disability comes about in an otherwise unexpected manner.

There can be considerable variation in the manner and degree to which an illness or disability affects sexuality. Conditions may be congenital or present

from birth (e.g., cerebral palsy), acquired (e.g., spinal cord injuries or acute illness), or developed slowly over time (e.g., osteoarthritis or heart disease). Some conditions may have signs that are easily seen by even casual observers (e.g., paraplegia or paralysis) while others may not carry any outwardly visible signs (e.g., chronic pain or diabetes—the "invisible disabilities"). Many health problems significantly limit physical mobility due to functional impairments (e.g., muscular or nerve disorders) while others limit the functioning of specific body systems (e.g., cardiovascular or pulmonary disease). And finally, some conditions may directly affect sexual functioning (e.g., vascular or neurological disease resulting in erectile dysfunction) while others may have only indirect effects (e.g., chronic low back pain). Regardless of the distinctions that can be made and the various methods for categorizing chronic illness and disability, the impact on sexuality and sexual functioning can be significant, and, in nearly all cases, involves multiple factors.

Sexuality, likewise, involves multiple factors, and vital to any discussion of sexuality and disability is the reminder that sexuality is not just about activities culminating in sexual intercourse—it is about intimacy. Communication, trust, confidence, and pleasurable touching are all critical components of sexuality. Psychologist Jackson Rainer, who provides therapy to individuals with arthritis and other chronic health conditions, suggests redefining sexuality as "an energy that is healing, warming, and operates more outside of the genitals than in one specific place on the body" (Arthritis Foundation, 2004). When viewed in those terms, sex becomes less daunting—and becomes more about possibilities.

In the face of illness or disability, individuals and relationships may be redefined. And while the adverse effects on a relationship are the most obvious, some suggest that dramatic changes brought about by illness or disability disrupt the routine and create an opportunity for a new beginning—a chance to re-discover one's body and what feels good, or a chance to rebuild a relationship and improve sexual relations with a partner (Carlson, 1996; Kroll & Klein, 1995; Maurer & Strausberg, 1989; Wallerstein & Blakeslee, 1996).

In order to emerge from a health crisis with a "new, improved" sexual relationship, couples must overcome numerous obstacles. In addition to any direct disease/disability effects on sexuality, there are often undesirable side effects from interventions or medications used to treat the condition. The individual's psychological response to having a given disease or disability and the partner's response to changing roles are also key factors in determining the level of disruption to a couple's sexual life. While the focus of this chapter is a discussion of how various chronic diseases and disabilities impact sexuality, an underlying goal is to inform readers of the benefits that result when individuals with chronic health problems or disabilities can find ways to express sexuality and experience sexually satisfying activities.

The disabilities and chronic conditions included in this chapter are far from exhaustive but are believed to be representative of a wide range of conditions that can adversely affect sexual functioning. While there is necessarily some overlap in

descriptions of conditions and treatment impact on sexuality, as well as the psychological impact on individuals with disabilities and their partners, we have attempted to minimize redundancy by beginning with an overview of some general concerns and factors that are shared by many chronic health problems and discussing the distinctive aspects in greater detail under the sections addressing specific disabilities, illnesses, or conditions.

CONCERNS COMMON TO VARIOUS DISABILITIES

For each of the disabilities and limitations discussed in this chapter, the challenge is twofold: not only is a person confronted with exploring and identifying changes in physical capacity and sexual response, but this may also occur in the context of psychological adjustment to a newly acquired or diagnosed disability. The role of both physical and psychological factors must be considered because both of these domains are essential to healthy sexual expression (Merritt, 2004). And because sexuality is affected by multiple factors, any difficulties that are present may require various forms of intervention. Therefore, assistance from a physician, psychologist, occupational or physical therapist, or personal attendant (or other health care provider) may be necessary to address issues adequately. If the assistance of a health care specialist is necessary, there is one caveat: the healthcare professional must have expertise in treating the disability and must be open and comfortable with frank discussions about sexuality.

Being comfortable with oneself and a partner is required when exploring or rediscovering sexual functioning and sexuality. Whether this exploration is through masturbation by oneself, or through mutual pleasuring, feeling comfortable with the process is key—if it does not feel safe, do not do it. For partners and individuals with disabilities alike, it is important to remember that communication about the experience is paramount. In order to break down stereotypes that the only "real" sex is genital intercourse, open and honest communication must play a central role. Individuals with disabilities must feel free to investigate what is arousing and pleasurable, and determine what physical capacity is available to meet these needs sexually, or how sex toys, a partner, or an attendant may be able to help meet these needs and desires. Limitations may force individuals to become creative in thinking about ways to give and receive pleasure. Being flexible in thinking about sex and having fun with it is essential. After all, "sex" is a broadly defined act, and encompasses anything and everything an individual and her/his partner(s) find satisfying.

While sexuality encompasses a broad range of activities that do not always involve genital contact, such activity may be part of intimate encounters. Disabilities, whether acquired or developmental, do not prevent sexually transmitted infections, nor do they always impact fertility (Hammond & Burns, 2000). Therefore, if sex involves intercourse or other contact with genitals, all

individuals are encouraged to follow "safe sex" practices (i.e., use condoms to prevent transmission of sexually transmitted diseases and birth control methods to prevent unwanted pregnancies).

Communication and Intimacy

Many people with disabilities find the most difficult barrier to achieving a gratifying sex life is allowing oneself to feel sexy or to be sexual (Kaufman, Silverberg, & Odette, 2003). The capacity to be sexual with another person requires a degree of intimacy and trust that takes time to develop. Individuals with disabilities can feel sidelined in the dating scene by others' preconceived notions about disabilities and misconceptions about the physical or cognitive status of those with disabilities. Body-image issues and low self-esteem can hamper efforts at partnership and achieving sexual satisfaction with another person (Kaufman et al., 2003). Communication barriers can also hinder attempts to explore and process thoughts about sexuality, and addressing these can promote sexual satisfaction for individuals and partners.

Overcoming communication barriers in order to talk openly about sexual wants, needs, and fantasies greatly enhances the experience (Kaufman et al., 2003). When an individual can express these thoughts and feelings, this will serve to individualize and heighten the intimacy experience for those involved. And factors that can enhance intimacy are likely to enhance the sexual experience as well.

Sensation Changes

Changes in sensation occur with many different disabilities. To be sure, sensation is an important part of sexual arousal and response. After an injury or diagnosis, it is important to discover how different areas of the body are functioning with regard to sensation (Merritt, 2004). Sensation can be reduced or heightened, or hypersensitivity may even result. Changes in sensation can be explored alone or with a partner. While changes in genital sensation are the focus of most discussions, the whole body should be explored for erogenous zones and areas of sexual response. Individuals can be pleasantly surprised at the sexual responsiveness when an earlobe or inner arm is properly stimulated. Doing a "body mapping" exercise as described in Kaufman et al. (2003) can provide a wealth of information concerning sensate pleasure. For some partners, this may seem too "clinical," and can rob the spontaneity of exploring each other sexually. Clearly, each couple must decide on the best process for this or similar exercises. However, some partners begin such an exercise with "good intentions" and never complete the task because they become distracted by the pleasure they are giving and receiving along the way (Kaufman et al., 2003).

In addition to seeking pleasure through sensation, safety and skin integrity must be a focus as well. With loss in sensation comes the need to protect these areas

with pressure management, appropriate repositioning, and a watchful eye toward possible areas of skin breakdown (Hammond & Burns, 2000).

Impaired Mobility

For individuals facing mobility challenges, exploring these with a partner or an attendant can be very helpful in promoting a quality sex life. As with reduced sensation, those with mobility limitations are at risk for skin breakdown and other injuries if care is not taken with positioning. Exploration of different sexual positions will enable partners to determine how to maximize pleasure and comfort. Additionally, employing pillows, furniture (and cushions), and sex toys can enhance the sexual experience for both partners. Other couples may choose to use specially designed foam positioning pieces, or slings to enable different positions (Hammond & Burns, 2000; Kaufman et al., 2003).

Spasticity

One challenge facing individuals with a variety of disabilities is spasticity (exaggerated, deep tendon reflexes and muscle cramps that are involuntary, and often, painful contractions of the muscles). Because sexual arousal can bring on spasms, it is important for people to understand how and when spasms occur, and take steps to prevent or minimize the effects of spasticity. Bathing in warm water is one technique for reducing spasticity, and the bath can be incorporated into the sex play (Kaufman et al., 2003). Taking medication for spasticity prior to engaging in sexual activity can also help reduce the disruptive effects of spasticity on the sexual experience. As an individual becomes more comfortable and accepting of spasticity experiences, it can be utilized to the their advantage to enhance the sexual experience. Some people report that tongue spasticity is wonderful for nipple stimulation, and others suggest that a hand tremor can be a convenient tool for genital or body stimulation. Learning to channel physical reactions into sex play can provide unusual but highly enjoyable enticement, which further enhances the sexual experience (Kaufman et al., 2003).

Psychological Effects

Persons who suffer a traumatic injury or who are diagnosed with a disabling condition can experience a variety of reactions, which can vary widely in nature and severity. Not all individuals become clinically depressed or anxious following such a life-altering event, and the person, treatment team, and support persons should not "expect" psychopathology to arise in the wake of an injury or diagnosis. However, adjustment to the disability and the resulting life changes can take time. For some, sexual activity can take a back seat to other life tasks during this process. Therefore, information regarding sex

should be provided and processed at various points during the treatment and rehabilitation process, so that this important issue is not overlooked (Merritt, 2004).

NEUROLOGICAL/NEUROVASCULAR CONDITIONS

In the following section, sexuality issues associated with neurological and neurovascular disabilities will be addressed. Sections covering traumatic brain injury (TBI), spinal cord injury (SCI), and cerebrovascular accident ("stroke" or CVA) will provide more specialized information. Slightly less detailed sections will address issues specific to multiple sclerosis (MS), epilepsy, and cerebral palsy (CP). While this is clearly not an exhaustive review of sexuality and neurological conditions, it is hoped that the following sections will provide a jumping-off point for persons with disabilities and their partners to begin exploring sexuality in a healthy and fulfilling manner. At the end of the chapter, resources to promote further exploration and support are provided.

Traumatic Brain Injury

Physiological Impact

Physical changes following TBI are variable, depending on the nature of the injury. Very often, spinal cord injuries (SCI) occur concomitantly with the TBI (Merritt, 2004). Hemiplegia or hemiparesis (weakness or paralysis of one side of body) may also occur in varying degrees of severity and sensation may be impaired as well. Additionally, spasticity can be an issue depending on the nature of the injury. Cognitive deficits can often accompany a TBI, and like physical changes, these deficits can vary according to the location and severity of the injury to the brain. Issues that impact sexual functioning directly may be problems with social or interpersonal relationships, problems with accurately perceiving and expressing emotions, and limited insight into these concerns (Rosenthal & Ricker, 2000).

Psychological Impact

Given the complex nature of traumatic brain injury (TBI), those who suffer such injury and those who care for them can face a variety of issues postinjury. In particular, an individual with TBI may experience cognitive dysfunction, physical limitations, and personality changes, which can be distressing for both the individual and those in the individual's social support network. At times, personality changes can be more disturbing than any physical or cognitive difficulties, simply because friends and family may experience the person quite differently than before the injury. Anger, irritability,

and disinhibition (leading to socially inappropriate behavior) may or may not be recognized by the individual but can be upsetting for support persons (Merritt, 2004). This can lead to divorce and isolation for many individuals with TBI. Psychotherapy, particularly family and couples therapy, along with education about how to cope with the effects of TBI, can improve the quality of relationships between the individual and her/his support persons. Additionally, support groups can offer both assistance in coping with these changes as well as social outlets and information dissemination. Resources will be provided at the end of the chapter for more information about these issues.

Spinal Cord Injury

Physiological Impact

Spinal cord injury (SCI) affects men and women in different ways. However, both genders will likely be concerned with mobility, sensation, and performance. As with other injuries, in SCI the level (cervical through sacral) and completeness of the injury (as measured by the ASIA scale) to the cord will have varying effects on physiological response. Men may experience changes in their ability to achieve or maintain an erection, whereas women may have reduced lubrication and ability to tighten vaginal muscles (Merritt, 2004). Both will experience varying levels of muscle control and sensation below the level of the injury, depending on the nature of the SCI.

For individuals with SCI, one negative side effect that can crop up during sexual activity is autonomic dysreflexia. Signs and symptoms include pounding headache, flushed skin, high blood pressure, slow pulse, and blurry or spotty vision. Prompt medical treatment is a must, as the person is at high risk for stroke, convulsions, or other medical complications if this is left untreated (Hammond & Burns, 2000).

For women, there are often no physiological changes after injury that prevent them from engaging in sexual activity (Jackson & Lindsey, 1998; Kaufman et al., 2003). Some women experience a diminished ability to produce vaginal lubrication owing to an interruption in the nerve signals from the brain to the genital area (Merritt, 2004). This is remedied by using a water-based lubricant; readily available at pharmacies or drugstores. Additional varieties of lubricants may be found online or at specialty sex shops. With the loss of muscle control that follows, some women may not be able to tighten vaginal muscles, resulting in reduced friction during intercourse. In order to improve friction, some women contract their urinary muscles to increase vaginal tightness. Different sexual positions may improve this as well (Kaufman et al., 2003).

The ability to achieve orgasm after SCI is another prominent concern for women. One study indicated that 54 percent of women were able to achieve orgasm after sexual activity, and another 30 percent reported extragenital

pleasure. Some women report achieving orgasm after breast and upper body stimulation.

For men, the ability to achieve and maintain an erection is a primary concern. Men have two types of erections, psychogenic and reflex. In a psychogenic erection, sexual thoughts or feelings prompt signals from the brain to the penis that exit at the T-10 to L2 levels, resulting in an erection. Reflex erections, on the other hand, result from direct physical contact to the penis or stimulation of other erogenous zones such as the neck or nipples. A reflex erection is involuntary and can occur without sexual thoughts. The nerves that control impulses which stimulate a reflex erection are located in the sacral area (S2–S4) of the spinal cord. If the S2–S4 pathway is not damaged, men can generally have a reflex erection with proper stimulation (Merritt, 2004).

There are a variety of treatment options available to men who are unable to achieve an erection sufficient for sexual activity. Medications such as Viagra and Cialis are available with a prescription from a physician. Another option is penile injection therapy, in which medications are injected into the shaft of the penis, producing an erection for one to two hours following administration (Lindsey & Klebine, 2000; Merritt, 2004). Medicated Urethral System Erection or MUSE is another treatment option that involves placing a small, medicated pellet into the urethra. Once absorbed into the surrounding tissue, an erection can result (Lindsey & Klebine, 2000). Vacuum pumps enable the production of erections through mechanical means. Erections are maintained by placing a constriction ring (also termed "cock ring") around the base of the penis to prevent the blood from draining out prior to completion of sexual activity (Merritt, 2004). Use of the ring also prevents urinary leakage that can often occur during sex. Permanent penile prostheses are also available, but often are a last resort given the risk of infection or injury to the penis due to low levels of sensation (Lindsey & Klebine, 2000).

For both men and women, SCI can impact fertility levels. Following SCI, women may experience a disruption in their menstrual cycle, but as the body adjusts to the injury, normal cycles often resume with no effects on fertility (Jackson & Lindsey, 1998). Therefore, birth control should be employed accordingly, under the supervision of a physician. For women who wish to conceive, pregnancy can present some challenges physically and psychologically, making close prenatal monitoring essential. For men, ejaculation can be disrupted in upwards of 90 percent of men with SCI (Lindsey & Klebine, 2000). Retrograde ejaculation (where the semen travels up the urethra and is deposited in the bladder) can also occur. Sperm count does not change; however, the motility of sperm cells may decrease significantly. Treatment options such as penile vibratory stimulation and rectal probe electroejaculation are available to assist in the conception process (Kaufman et al., 2003; Lindsey & Klebine, 2000). Both of these treatment options are performed under the supervision of a physician.

Psychological Impact

Psychological adjustment to disability following a spinal cord injury is complex and can present significant challenges for individuals and their families. It can, of course, greatly affect sexual activities as well. After surviving the trauma of a serious injury, individuals often ask themselves and others if they are different, aside from the obvious changes in mobility. Basic personality features, styles of relating to others, or level of intelligence are unlikely to change. However, persons with SCI and their support persons may feel a variety of emotions including shock, sadness, and anger in response to the injury. This is very common following a traumatic event and part of the grieving process and part of psychological adjustment to the effects of the injury. While this is a natural part of recovering from an injury, professional assistance may be necessary if the emotional response becomes unmanageable and impedes progress in rehabilitation or life in general.

There are many ways to navigate the emotional recovery process, which can be as individualized as the rehabilitation process itself. Individuals with SCI and their partners/family members may begin examining their feelings and attitudes toward one another in addition to their feelings toward others with disabilities. Working on communication skills can promote healthy discussion between those with SCI and family members and can prepare a person with SCI to negotiate social situations following the injury. Issues such as maintaining friendships, dating, and engaging in sexual relationships are frequent concerns in promoting quality of life. Improving coping strategies, assertiveness training, and social skills during the adjustment phase can assist individuals with SCI and families in "getting back to life." When individuals with SCI and their significant others are given adequate support in regaining psychological intimacy, discussions concerning physical intimacy and experimentation with sexual expression are likely to follow. As alluded to in the previous section, psychological factors may play a more important role than the physiological factors in all aspects of sexual functioning following SCI (Kaufman et al., 2003; Merritt, 2004).

Multiple Sclerosis

Physiological Impact

Sexual dysfunction is commonly reported in MS. The areas of neurological involvement and the type of MS typically coincide with the type of sexual problems experienced by people living with MS. At times, sexual dysfunction itself may be the initial symptom prior to diagnosis. Men frequently experience erectile dysfunction (either an erection insufficient for intercourse, or an adequate erection for an insufficient duration), difficulties with sensation (either diminished or hypersensitivity), slowed ejaculation,

diminished orgasm, and reduced libido/sex drive (Leonard, 2005). Women commonly experience reduced sensation, decreased vaginal lubrication, difficulty reaching orgasm, and reduced sex drive. Both genders can also have difficulty with spasticity in lower extremities (Leonard, 2005).

Psychological Impact

As with other disabilities, those who live with MS often experience persistent fatigue or low energy that can curtail sexual activity and diminish sexual drive (Devins & Schnek, 2000). Although incontinence does not typically interfere with sexual activity, the potential for it or the presence of catheters can be a source of anxiety or shame, which can detract from the sexual experience (Leonard, 2005). Depression, a common emotional correlate of MS, can also reduce libido and make it more difficult to become aroused.

Open communication, understanding and being flexible about sexual experiences can promote enjoyment for those involved. Varying the timing of sex play, positioning, and having a good understanding of sensation and mobility issues can enhance sexual encounters considerably (Merritt, 2004). Additionally, emptying bowel and bladder prior to engaging in sex and using adequate lubrication can engender additional comfort and pleasure (Leonard, 2005).

Epilepsy

Physiological Impact

As with MS, sexual problems associated with epilepsy are multifaceted, and can involve different areas of the brain, hormone levels, physical and psychological difficulties, along with sexual dysfunction associated with medications taken to control seizures (Morrell, 1997). Both genders may encounter low levels of sexual desire, and difficulties with arousal. Women report experiencing pain during intercourse (dyspareunia) and painful vaginal spasms during intercourse (vaginismus) (Epilepsy Foundation, 2005). Both of these issues are generally unrelated to diminished sexual desire or arousal, but can often lead to avoidance of sexual intercourse due to intense discomfort. Men with epilepsy can experience erectile problems, most often with achieving or sustaining erections. Ejaculation can be slowed as well. Individuals living with epilepsy can experience sexual arousal and sensations, physical exertion, and faster breathing similar to a preseizure aura (Morrell, 1997). Because the physiological symptoms of sexual arousal and climax are similar to preseizure auras, sexual activity can be an especially distressing phenomenon and can have profound effects on psychological and sexual functioning (Epilepsy and Sexuality, 2005).

Treatment Impact

Individuals living with epilepsy often take a variety of medications to control their seizure activity. Common side effects of these medications may interfere with both sexual desire and the ability to become aroused. Sedation is the most common side effect of antiepileptic medications and can be so severe as to interfere with sex play (Morrell, 1997). Because medications often affect individuals somewhat differently, a frank discussion with a health care provider can assist in finding a medication regimen that is effective in controlling seizure activity with fewer sexual side effects. For women experiencing pain during intercourse, there are gynecological treatments available to assist with this (Epilepsy and Sexuality, 2005).

Cerebral Palsy

Impact

For those coping with the effects of cerebral palsy (CP), addressing issues of sexual functioning can take many paths. To be sure, CP itself does not typically bring about any changes in arousal or erectile function (Disability and Illness, 2004). However, issues such as social stigma, communication, spasticity, pain, and positioning can affect sexual activity significantly. Research indicates that when compared to a sample of unmarried, able-bodied men, single men with CP demonstrated less facility with sexual information, experience, libido, and satisfaction, and experienced more psychological symptoms. Unmarried women with CP, conversely, demonstrated less satisfaction with body image as compared to single, able-bodied women (Cho, Park, Park, & Na, 2004). This highlights the idea that social stigma and psychological factors can significantly hamper efforts aimed at achieving satisfying sexual experiences (Disability and Illness, 2004). Partners may express concerns about spasticity and limited range of motion as new positions are explored. And as with other disabilities that limit mobility, this requires some patience, creativity, and openness to trying new positions, but this may lead to greater satisfaction and excitement with partners (Disability and Illness, 2004). Experimentation should be undertaken with consideration of the safety and comfort needs of those involved.

Cerebrovascular Accident

Physiological Impact

Much like TBI and SCI, stroke can affect a person's sexual functioning in a variety of ways. Physical difficulties caused by stroke include weakness, paralysis, diminished sensation, and pain (Westcott, 2002). Reduced sensation

and pain are symptoms associated with other conditions, and the reader is referred to the later sections of this chapter for more detailed discussion regarding those symptoms.

Weakness and paralysis following a stroke may make coping with the physical changes a special challenge: activities of daily living such as bathing, dressing, grooming, and household chores take longer and are more energy consuming than before the stroke. Therefore, fatigue can interfere with intimacy (Westcott, 2002). Since sex does not always have to occur just prior to retiring for the evening, a couple should explore alternate times to engage in sexual activity, most notably, times when energy is higher (Merritt, 2004). Making time for sex when energy levels are higher can result in more satisfying sex (and potentially a cheerier attitude when tackling those other, less exciting activities of daily living). Trying different positions that compensate for limited mobility or low energy can also be of help. A "spooning" position with both partners lying on their sides (whatever side is more comfortable) and facing the same direction can allow for penetration, stroking of erogenous zones, and cuddling. Both partners lying on their sides facing one another can provide a similar result (Kaufman et al., 2003).

Treatment Impact

Some medications for high blood pressure are known to produce side effects that may have a negative effect on sexual desire and functioning (Caplan & Moelter, 2000). Sexual arousal and ability to achieve orgasm can also be affected by these medications. Discussing these side effects with a physician may allow him/her to prescribe different medications that may produce fewer side effects and promote effective blood pressure control. Individuals should not, under any circumstance, alter a dosage or stop taking these medications without discussing it with a health care provider first, as this may pose serious health risks.

Psychological Impact

One of the most common fears following a stroke is having another one, and many individuals fear engaging in sexual activities because of concern about increasing blood pressure to a level that might cause another stroke (Westcott, 2002). Because many underlying illnesses (such as diabetes) can increase a person's risk for stroke, it is important for individuals to have frank discussions with their physicians prior to resuming sexual activity. If fears of sexual activity causing a stroke cannot be put to rest by such a discussion, a referral for psychotherapy can assist with exploring underlying fears and issues that may be complicating the resumption of sexual activity.

Many individuals report other emotional changes following stroke, including depression, diminished self-esteem, and body image issues (Merritt,

2004; Caplan & Moelter, 2000). Sexual problems and emotional difficulties often coincide, especially following the traumatic experience of stroke. Emotional problems such as depression can result from the enormous adjustment process of recovery and coping with changes in physical and cognitive ability. However, some emotional issues can also be linked to damage in specific areas of the brain following the stroke. People may notice mood swings, inappropriate sadness or tearfulness, anger, depression, or anxiety, among other things. These changes should be discussed with a physician and a psychologist or neuropsychologist in order to receive the proper treatment to avoid prolonging or furthering the issues.

Lastly, communication difficulties can also hamper efforts to engage in fulfilling sexual activity. Frustration and anger are common reactions to problems with verbal expression or comprehension of what others are saying. Receptive and expressive aphasia are frequently associated with stroke and can present problems for those with a stroke and support persons alike. Patience is required for both the individual and partners or support persons. Individuals who experience communication difficulties often report that frustration and anger can further impede successful communication efforts and diminish affectionate or sexual feelings along the way. If communication issues are identified as a problem, a physician, speech therapist (preferably one specializing in assistive technology devices that can produce words or phrases), or psychologist may be able to assist in evaluating and treating this problem.

CARDIOVASCULAR DISEASE

Cardiovascular disease (CVD, or coronary heart disease; CHD) is the number one cause of death in men and women in the United States (National Heart, Lung and Blood Institute, n.d.). While the previous section on CVA, which included some of the factors affecting sexual activity following a stroke, is applicable here as well, CVD and sexuality requires further discussion. Approximately 25 percent of people with CVD report a discontinuation of sexual activity after a heart attack, and another 50 percent report a decrease in sexual activity. The percentages are smaller, but similar, for patients with cardiac chest pain, also called angina pectoris (Taylor, 1999). While this decline in sexual activity occurs primarily due to psychological factors, other factors include the effects of the disease on blood vessels and other body systems important to sexual functioning, the effects of medication on physical functioning, and the psychological effects on the individual's sexual partner.

Physiological Impact

Sexual dysfunction in men is frequently associated with cardiovascular disease because any condition that inhibits blood flow to the genital region can lead to erectile dysfunction (ED) in men and, some believe, to similar arousal

problems in women (Buvat & Lemaire, 2001). While other common causes of the disruption of blood flow, including atherosclerosis (hardening of the arteries) and hypertension (high blood pressure), are frequently present before an individual suffers from a heart attack they may not be detected until afterward. Despite the well-known connection between cardiovascular disease and sexual dysfunction, many individuals are nervous about bringing up these concerns with physicians. Additionally, because some changes in sexual functioning are expected to occur as one ages, it is common for an individual to fail to mention such changes to her/his physician because these changes are mistakenly attributed solely to the aging process. And while some decline in sexual activity is normal as we age, current medical technology allows people to remain safely sexually active well into their eighties and nineties (Thorson, 2003). The first step to resuming sexual activity after a cardiac event is for the patient to discuss any worries with her/his physician or with another qualified health care provider. Physicians, too, may be hesitant to raise the topic of sexual functioning for fear of offending a patient or because of the physician's perceived lack of expertise, lack of time, or discomfort in discussing the topic (Haboubi & Lincoln, 2003; Stead, Brown, Fallowfield, & Selby, 2003; Sundquist & Yee, 2003).

After a cardiac event, many patients report being much more aware of heart activity (such as how fast it is beating) and other physical symptoms (such as rate of or difficulty breathing). Such a common response to a life-threatening event, such as a heart attack, can also change the focus of, and interfere with, engaging in sexual activity. Because of fears of recurrence of CHD symptoms, changes in the body during sex are to be expected and should not cause worry. However, the energy and effort required for sexual intercourse is the equivalent of mild to moderate physical activity and requires about the same amount of effort required to climb up two flights of stairs, meaning that for most people recovering from a heart attack, sexual activity is safe (Douglas & Wilkes, 1975; Hellerstein & Friedman, 1970; Stein, 1977).

More specifically, as one becomes sexually aroused, the body goes through many changes. The skin may become flushed, blood pressure rises, and heart beat increases to 90–130 beats per minute during orgasm. Increases in blood pressure and heart rate are considered safe even for those who have recently experienced a myocardial infarction.

Additional reassurance regarding the safety of sex is provided by guidelines developed to help determine the safety of sexual activity for individual cardiac patients. The Princeton Consensus Panel, a group of experts on sex and cardiac patients, determined that patients can be put into one of three risk categories: low, intermediate, or high. The majority of patients are in the low risk category, which includes patients with controlled hypertension (high blood pressure); mild, stable angina (chest pain); successful cardiac bypass surgery or stent placement; a history of an uncomplicated heart attack; mild

heart valve disease; and no symptoms and less than three cardiac risk factors (Debusk et al., 2000). For individuals in this category, resuming sexual activity is generally safe within three to six weeks after a cardiac event.

Individuals in the other risk groups or those with lingering concerns should discuss the safety of resuming sexual activity with his/her physician. For such individuals a graded exercise tolerance test, or cardiac stress test, might be recommended. During a stress test, the patient is hooked up to monitors that measure heart and body functions. The patient is asked to walk on a treadmill or ride a stationary cycle at different speeds and levels of difficulty while the body's response is monitored. The physician can then determine how much physical activity the heart can safely handle and will be able to inform the patient whether sexual activity is safe.

As long as the physician has determined that it is safe, engaging in regular physical activity can be extremely helpful in returning to normal sexual routines. All individuals recovering from heart attack are encouraged to participate in exercise to strengthen the heart muscle, but physical activity has additional benefits as well. It can increase coordination and muscle tone as well as improve self-assurance, self-worth, and "staying power." Exercise not only leaves one in better health but also allows for better sexual performance.

Despite the popular belief that many people have heart attacks during sexual activity, it is simply not true. While having sex in an unfamiliar place or with a new partner can cause additional stress on the heart, even these kinds of activities do not lead to heart attacks very frequently. For healthy people with no previous history of cardiac disease, the chance of having a heart attack during sex is one to two in a million. For individuals with a previous heart attack, the risk increases to ten or twenty in a million (Kloner, 2000).

To further lower the risks of suffering a heart attack and increase the enjoyment of sexual activity, people are advised to be well rested before sex. This might mean having sex in the morning or soon after a nap. Food and drink (especially alcohol) should be avoided for one to three hours before having sex, as digestion diverts blood flow from the heart to the stomach. Very hot or cold showers or sitting in a sauna or whirlpool should also be avoided, as this can cause an additional increase in blood pressure.

Treatment Impact

Cardiovascular disease is frequently managed with a variety of medications. Most of the common classes of drugs used in the treatment of cardiovascular disease will not affect sexual functioning. These include ACE inhibitors (used to treat high blood pressure), calcium channel blockers (used to treat angina and high blood pressure), and statins (used to treat high cholesterol).

However, beta-blockers such as Toprol XL, Lopressor, and Tenormin (atenolol and metoprolol), which are used to treat high blood pressure, have

been frequently associated with decreased sexual ability and erectile dysfunction. Beta-blockers can also be used to relieve angina (chest pain) and can help prevent additional heart attacks.

Despite the commonly made assumptions, a recent review of published articles and medical texts revealed that there are no scientific studies supporting the belief that the use of beta-blockers is highly associated with sexual dysfunction (Lama, 2002). This review failed to find any connection between erectile dysfunction or decreased libido and the use of beta-blockers. However, there has been difficulty separating out the effects of hypertension on sexual functioning from the contribution of age combined with the use of multiple medications. While there have been a number of well-reported, isolated cases linking beta-blockers and sexual dysfunction, reexamining the existing data suggests that the link is not strong.

While medications used to treat heart disease are of primary concern, medications used to treat other conditions may also raise special concerns for cardiac patients. Viagra (sildenafil) and other drugs of the same class including Levitra (vardenafil) and Cialis (tadalafil) have revolutionized the treatment of erectile dysfunction or ED. Along with that, it has also increased the awareness of risks of sexual activity in patients being treated for cardiovascular disease. According to current research, the only contraindication to Viagra use is the use of organic nitrates (such as nitroglycerin or isosorbide dinitrate, sold under the trade names of Isordil, Nitrogard, Nitrostat, Sorbitrate). Viagra causes a mild decrease in blood pressure, and when combined with nitrates, it can lead to a major decrease in blood pressure. How safe it is for people with recent (within six months) heart attack, unstable angina, stroke, or life threatening arrhythmias to use ED medication has not been adequately studied. It has been found that caution should be used by patients with unstable cardiac conditions when taking Viagra (Kloner, 2000). However, in patients with heart disease, placebo-controlled drug trials did not show an increase in heart attacks or serious cardiac events with the use of Viagra.

Psychological Impact

Any life-threatening event (such as a heart attack or stroke) can have an adverse psychological impact on an individual and on the individual's loved ones, making it difficult for life to return to normal. Patients often report a fear of death and anxiety about any activity that puts stress on the heart. Feelings of sadness following a cardiac event are also common and may be associated with changes in eating and sleeping habits. Some individuals may experience irritability and withdraw from those around them. Changes like those may be a sign of depression and should not be ignored. While about 85 percent of cases of depression following a heart attack resolve in about three months (American Heart Association, 1990), even moderate levels of depression can interfere with recovery from a heart attack (Carney, Freedland,

Rich, & Jaffe, 1995; Frasure-Smith, Lesperance, & Talajic, 1996). Depression can affect sexual desire, resulting in greatly reduced interest in sexual activity. Because there are so many effective treatments available for depression, it is important that health care providers be consulted when symptoms of depression persist.

Partners of individuals who have had a cardiac event also may experience depression or other psychological symptoms. Partners may become afraid or anxious (especially regarding sexual activities) and the negative impact of these fears on individuals recovering from heart attacks has been well documented (Ben-Sira & Eliezer, 1990; Levin, 1987; Thompson & Meddis, 1990). Often, partners have difficulties expressing their concerns directly, instead doing so by being patronizing and over-protective. Therefore, it is important for couples to make a special effort to communicate openly with each other about any fears or concerns in order to manage the new challenges following such an event.

When it comes to resuming sexual activity, couples can start out by just enjoying the sensations of being together. Cuddling and caressing are good ways to enjoy each other's bodies and affection without the performance-driven demands of sexual intercourse. Lowering one's expectations of a sexual encounter can help ease the stress as well. While orgasms are often seen as the goal of sex, feelings of tenderness and sensuality should also be appreciated. Physical affection can serve not only as a path back to sexual intercourse but also as a reward in its own right.

Once sexual intercourse has been resumed, one should be aware that research has suggested that no one sexual position is better than any other for cardiac patients, but there are a few guidelines to keep in mind (Taylor, 1999). In sexual positions where one partner is on top, this partner typically reaches a higher heart rate and engages in more strenuous physical exertion. Therefore, it may be better, particularly when first returning to sexual intercourse, for the person with cardiac disease to be on the bottom during sex.

Moreover, care should be taken when engaging in any positions that require the individual who has had a heart attack to put pressure on her/his arms for an extended amount of time, particularly for individuals who have had open-heart surgery, as this puts more stress on the incision. Some suggestions for less strenuous positions include both partners lying on their sides or sitting face to face in a chair. Oral sex is also an excellent way for couples to enjoy each other. Couples are encouraged to consult a physician prior to engaging in anal sex because it can lead to irregular heart rhythms (Cambre, 1990). When returning to sexual activity, the most important thing for couples to remember is to go slowly and not to do anything that makes either partner anxious. Still, some early research suggested that resuming sexual activity sooner, rather than later, after a heart attack could result in a faster recovery (Scalzi & Dracup, 1978), and a subsequent study showed similar benefits, with recovery being quicker when spousal fear is alleviated and sexual activities resumed (Beach et al., 1992).

DIABETES

Many individuals with cardiovascular disease also have other chronic health problems such as Type II diabetes mellitus, an endocrine disorder that results in poorly regulated blood glucose (sugar) levels due to reduced production of insulin (a hormone that helps turn sugar into stored energy) and insulin resistance (body's decreased sensitivity to insulin). Type II diabetes mellitus is frequently associated with ED in men (Wandell & Brorsson, 2000). Obesity is also commonly associated with Type II diabetes and makes it more likely that those who develop diabetes will also have heart disease and hypertension (high blood pressure). The previous sections have described the impact of cardiovascular and neurovascular conditions on sexuality and these apply to individuals who have Type II diabetes in addition to heart disease. And while cardiovascular disease may account for much of the sexual dysfunction observed in diabetes, there are several other ways in which Type II diabetes can impact sexual functioning.

Physiological Impact

In addition to the cardiovascular effects on sexual functioning, some research also suggests that obesity may negatively affect sexual functioning through hormonal changes that decrease sexual desire (Stahl, 2001; Trischitta, 2003). Individuals with poorly regulated Type II diabetes often report symptoms of fatigue, blurred vision, headache, and irritability—all symptoms that may interfere with an individual's desire for sexual activity. While those symptoms tend to be transient and associated with extremes in glucose levels, the complications that develop over years of poorly controlled blood glucose levels can be enduring and debilitating.

The complications of Type II diabetes affect multiple systems that directly and indirectly affect sexual functioning. These complications may include neuropathies (nerve damage) that reduce sensitivity to touch, especially in the feet and hands; retinopathy (damage to the blood vessels in the eye) that can lead to blindness; and nephropathy (kidney disease) that may lead to kidney failure and the need for hemodialysis (pumping blood through a machine that cleans the blood). Neuropathies and nephropathy have been associated, both directly and indirectly, with sexual dysfunction.

Nephropathy or kidney disease may progress to the point that the kidneys can no longer effectively clean the waste products out of the blood. When this happens, the individual may undergo hemodialysis. This generally requires visits to a dialysis center three times a week for three to five hours each visit. Studies of both men and women undergoing dialysis show that sexual dysfunction is common and related to changes in hormonal, nerve, and blood vessel conditions as well as psychological response to kidney disease and treatments (Gipson, Katz, & Stehman-Breen, 1999; Peng et al., 2005; Rosas et al., 2003).

Neuropathies may be associated with numbness, tingling, and decreased sensation but can also cause sharp, shooting and burning pains that can be quite distressing and disruptive. Decreased sensation due to nerve damage is thought to contribute to sexual problems in women with diabetes (Muniyappa, Norton, Dunn, & Banerji, 2005). Because neuropathies cause problems with feelings (especially in the feet), individuals may develop sores or have injuries without knowing it. If the individual does not get treatment soon enough, the damage may spread and become so severe that the foot or leg may have to be amputated (removed). Having a foot or leg amputated may create some difficulty with mobility, but a bigger concern is the psychological impact of losing a body part. Body image and confidence may be severely damaged so the individual believes she/he is less attractive as a result of amputation (Bodenheimer, Kerrigan, Garber, & Monga, 2000; Ide, 2004).

Treatment Impact

As discussed in the section on the treatment impact of cardiovascular disease, the beta-adrenergic blocking agents used to treat hypertension may be associated with ED. And because many individuals with Type II diabetes have high blood pressure and hyperlipidemia (too much fat in the blood), the information on medications from the section on treatment impact of cardiovascular disease also applies to those who have diabetes and cardiovascular disease.

In addition to medications taken to treat hypertension and elevated cholesterol, individuals with Type II diabetes may take oral medications (pills) to lower blood glucose or they may inject insulin. Medications to treat diabetes help lower blood glucose in different ways. Medications such as Glucotrol, Glucotrol XL, Mycronase, and Glynase help to reduce blood sugar levels by causing the pancreas to produce more insulin. Because there is more insulin present with these medications, it is possible for individuals to experience a low blood sugar reaction. A low blood sugar reaction can make one behave as if intoxicated (drunk) and can lead to death if not treated immediately.

Some diabetes medications lower blood glucose by making the body more sensitive to insulin and by reducing the amount of glucose produced in the body, while others slow the breakdown of starches into sugar. Some diabetes medications may cause serious liver damage. Other less serious, but sometimes intolerable side effects of these medications include: nausea, diarrhea, and other gastrointestinal distress. While these symptoms are generally not life threatening, they can be quite distressing and therefore interfere with sexual activity, particularly if they occur frequently.

Psychological Impact

As with other life-threatening conditions, a diagnosis of diabetes can lead to heightened anxiety and fear in both the individual with diabetes and his/her

partner. In addition to any anxieties about the serious side effects of medicines, many individuals with diabetes report a depressed mood and extreme fatigue resulting from the rather burdensome regimen involved in diabetes care. In fact, some suggest that individuals with diabetes are twice as likely to develop depressive symptoms as those without the disease (Ciechanowski, Katon, Russo, & Hirsch, 2003; Lustman et al., 2000).

Depression, as stated previously, is associated with a significant decline in sexual desire. Other symptoms of depression include: decreased energy, appetite extremes, and difficulty with concentration and attention, all of which impact diabetes management. So in the context of depression, diabetes care declines and may lead to a cycle of worsening depression and increasing physical symptoms. Psychological interventions and/or antidepressants should be sought if symptoms persist beyond several weeks, bearing in mind that the SSRI (serotonin selective reuptake inhibitors) antidepressants are linked with disruption of sexual functioning at all stages of sexual response: desire, arousal, and climax (Stahl, 2001). Discussing any sexual side effects of the medication with a qualified health care provider is critical as there are medications available that may not interfere with sexual functioning.

When a partner's anxieties about an individual's health status persist despite reassurances by health care providers, marital or individual therapy may be indicated. Various kinds of professionals are available to address these concerns including psychologists, social workers, nurses, and counselors. A referral from a trusted health care provider is the first step to resolving any psychological factors disrupting sexual activity.

AUTOIMMUNE DISORDERS

While diabetes is most frequently thought of as an endocrine disorder, Type I diabetes is also classified as an autoimmune disorder because the individual's immune system has destroyed the cells in the pancreas responsible for producing insulin. Individuals with Type I diabetes share similar symptoms (e.g., fatigue, frequent urination, irritability) and complications (e.g., neuropathies, cardiovascular disease) as those with Type II diabetes. Many of the other more common autoimmune diseases also may be classified under the other categories, and they also may occur with, be accompanied by, or increase the risk for conditions from the other categories discussed in this chapter. Because the primary presenting symptoms of these conditions overlap considerably with those discussed in the other sections of this chapter, the reader is referred to the neurological, cardiovascular, endocrine, and chronic pain sections for information regarding the disease and treatment impact on sexual functioning. Some of the more common disorders include: (1) systemic lupus erythematosus (SLE), which can affect a wide range of body tissues (e.g., joints, skin, kidneys, heart, lungs, and blood vessels); (2) scleroderma ("hard skin"), which results in thickening and tightness of the skin of the fingers or

toes but can affect other organs; and (3) rheumatoid arthritis (RA) in which the synovium or lining of joints becomes inflamed.

CHRONIC PAIN DISORDERS

Many of the disabilities and conditions discussed to this point have pain as a prominent symptom, and the pains described are caused by multiple factors. While cancer pain and pain associated with terminal illness are not addressed in any detail in this chapter, it is worth noting that these are considered acute pain because they are due to tissue damage. This tissue damage is secondary either to the disease itself or to the treatments provided (Swanson, 1999). Much of the information provided here can apply to cancer and other acute pains. But as with any health concern, a frank discussion with a physician or other qualified health care provider is suggested.

Chronic pain is defined as any pain that is present for longer than six months—beyond when all tissue healing should be completed. In many cases, physicians may not find evidence of tissue damage that could account for continuing pain. Chronic pain conditions are estimated to be one of the most common medical complaints and can result from a wide range of injuries or disease processes (Swanson, 1999).

Chronic low back pain (CLB) is one of the most common pain complaints and may be caused by muscle spasms, overexertion, or muscle strain. Herniated discs (the rupture of the fluid sac between the vertebrae in the spine) may cause pressure on nerves exiting the spinal cord and branching off to other areas of the body. CLB may also be caused by arthritis or degenerative joint disease. As discussed in the section on diabetes, neuropathic pain occurs when there is damage to nerves—and this can occur as a result of conditions such as alcoholism or MS (see section on neurological conditions).

Rheumatoid arthritis (RA) and osteoarthritis (OA) are two of more than 100 forms of arthritis—a set of conditions that cause painful inflammation of the joints and can result in restricted movement (American Pain Society, 2002). Fibromyalgia (FM) is a disorder in which "whole body" pain is the prominent symptom, but fatigue (feeling tired and having low energy) and intestinal distress are also common. There are, of course, many other types of chronic pain, including headache, facial pain, neck pain, abdominal, genital, and pelvic pain. But chronic pain conditions, regardless of location and type, can be equally debilitating.

Physiological Impact

Individuals living with pain often report decreased sexual activity with some estimates as high as 46 percent (Maigne & Chatellier, 2001). While the main reasons for decreased sexual activity in chronic pain are psychological in nature, sexuality can be affected by changes in sensation and mobility with

some chronic pain conditions. As stated in the introductory section, chronic illness or neurological damage may cause reduced or heightened sensitivity to touch. Allodynia is a condition in which even a light touch is perceived as painful and may interfere with even the most basic physical forms of intimacy. Other, less severe pain sensations can also interfere with an individual's desire for physical contact. When these conditions are present, it is important for couples to experiment with, and gently explore, the individual's body in order to determine what types of stimulation on what areas of the body can be experienced as pleasure.

Reduced mobility is also a factor for individuals living with chronic pain—and especially those who have arthritis or muscle spasms. Experimenting with various positions and learning which activities are likely to trigger a spasm will increase the likelihood of satisfying sexual encounters. Taking pain and antispasmodic medications before any planned activities can help, as can a warm shower or bath timed appropriately. Individuals with RA often have decreased range of motion due to stiffness in the joints. One study found that women with high levels of stiffness in the morning reported more concerns about sexual functioning (Gutweniger, Kopp, Mur, & Gunther, 1999).

Fatigue is a common symptom of conditions such as Fibromyalgia and can interfere with sexual activities. In fact, many individuals living with chronic pain report fatigue and experience severe sleep disturbance, which can contribute to low energy and interfere with any desire for sex. Timing sexual encounters for periods when fatigue is less likely to interfere and employing positions that require less energy may promote satisfying sexual encounters.

Treatment Impact

Many of the medications used to treat chronic pain conditions can interfere with sexual functioning at all stages. Antiepileptics or anticonvulsant medications (e.g., gabapentin, carbamazepine, or lamotrigine) are often used to treat neuropathic or nerve pains. As described earlier, a common side effect of these medications is extreme sedation.

Sedation is also associated with the use of opioid analgesics, muscle relaxants, and benzodiazepines—especially at the initial stages of treatment. Tricyclic antidepressants (e.g., amitriptyline and nortriptyline) are often used in the treatment of neuropathies as well. These medications are well known for their sedating side effect; however, dry mouth, dizziness, and feeling as if one has a "hangover" (especially upon first awakening) are frequently reported and distressing side effects of amitriptyline and the other tricyclics. These side effects can interfere with one's ability to feel attractive and may reduce desire to engage in sexual activity. Having a frank discussion of these concerns with a physician or other members of the pain treatment team can lead to the appropriate medication changes.

Psychological Impact

Chronic pain conditions often lead to dramatic changes in lifestyle, and adapting to life with pain can be a lengthy process. Many chronic pain treatment centers have multidisciplinary teams comprised of physicians, nurses, behavioral health psychologists, occupational and physical therapists, and social workers because of the many factors that contribute to the chronic pain experience and the impact chronic pain has on various areas of life.

Individuals living with chronic pain frequently develop psychological symptoms as a result, and these can interfere with sexual activities in varying degrees. Some individuals may experience mild anxieties and fears about increased pain associated with sex while others develop major depressive disorders resulting in decreased libido. Furthermore, depression has been linked to increased pain severity—a vicious cycle that produces greater emotional distress followed by increasing pain severity (Swanson, 1999). If depression is implicated in the decreased desire for sex in a person with chronic pain, the first step to resolving this problem is discussing these concerns with a qualified health care professional. There are many effective treatments for depression, and treating depression may, as stated previously, result in decreased pain as well as improved mood.

SUMMARY

Many of the disabilities and chronic health conditions covered in this chapter directly impact sexual functioning because of damage to nerves or blood vessels, decreased hormone production, and chronic pain. The treatments for each of these conditions may also interfere with the satisfying expression of sexuality. Furthermore, there are often psychological factors such as depression or anxiety that individuals with chronic health problems experience. These psychological factors may also affect an individual's partner.

Despite the multiple factors that can adversely affect sexuality and intimacy, there remain a wide variety of means for achieving satisfying physical intimacy and enjoying the pleasures of sexual activity whether by oneself or with a partner. Sexuality is, as repeated throughout this chapter, an important aspect of life and critical to the quality of life and overall health and well-being of individuals living with disabilities and recovering from health crises.

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ADDITIONAL RESOURCES FOR INFORMATION ON SEX AND DISABILITY

Video

Alexander, C. J., & Sipski, M. L. (Coproducers). (1993). *Sexuality reborn: Sexuality following spinal cord injury* [Videotape]. West Orange, NJ: Kessler Institute for Rehabilitation.

Books

Griffith, E., & Lemberg, S. (1993). *Sexuality and the person with traumatic brain injury: A guide for families*. Philadelphia: F. A. Davis.

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Web Sites

www.americanheart.org/presenter.jhtml?identifier=1200000

American Heart Association Web site that answers questions about heart disease and provides information about community supports, activities, and treatments.

www.arthritis.org/default.asp

A Web site about arthritis, community supports, healthcare providers, medications, and treatments.

www.nlm.nih.gov/medlineplus/healthtopics.html

A Web site designed to provide answers about health problems, medications, and organizations that offer support and services to individuals with specific health concerns.

www.sexualhealth.com

A Web site with a wealth of information about sexuality, education, counseling, therapy, medical attention, and other resources for persons with disabilities and their partners.

www.spinalcord.uab.edu/show.asp?durki=24434
A Web site by the University of Alabama at Birmingham. In addition to copious information about sexuality following spinal cord injury, there is abundant information about a variety of issues related to spinal cord injury.

www.newmobility.com
A Web site and magazine for persons with disabilities that addresses a variety of issues concerning living with disabilities.

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SEX AND SEXUALITY

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Volume 3
SEXUAL DEVIATION AND SEXUAL OFFENSES

Edited by Richard D. McAnulty and M. Michele Burnette

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Preface

We have had many opportunities to teach and interact with both college students and professional audiences about some very important topics and issues in human sexuality in our roles as authors and college professors. When we were approached to write this three-volume set on sex and sexuality, we were intrigued with the idea of having a forum in which to reach a broader audience. That is our goal for this work. With that in mind, we encouraged our contributors to "talk to" a general audience when writing about the topics that were most important to them. The authors we selected to write these chapters represent both established authorities and budding scholars on the various topics in human sexuality. We are confident that they have all helped us accomplish our goal.

To us, few, if any, other topics in the realm of human behavior are more interesting, exciting, or controversial than sex. And we hope that you will agree after reading the chapters from this set. Each chapter stands alone, and you can choose to read as many or as few as you would like—pick the ones that interest you. We hope that you will find this work to be of significant value to you, whether you are in pursuit of a better general understanding of sexuality or are looking for answers to specific questions.

One theme you will find throughout these texts is that human sexual function is affected by a whole host of factors. These factors are biological, sociocultural, and psychological in nature. The scientific study of sexuality is for all practical purposes a "young" field, and we have only touched the

surface in an attempt to fully understand how these factors interact and impact sexuality.

Another theme or concern you will find throughout this work is the question whether "scientific" views of sex are biased by social judgments about normal versus abnormal and/or functional versus dysfunctional sexual behavior. U.S. culture, in particular, holds many strong values and prohibitions about sex. In this context, studying and interpreting research on sexuality in an unbiased manner can be a challenge. Many of our authors caution the reader about this concern.

We wish to thank all the researchers and clinicians, past and present, who have contributed to the science of sex. Many of them have contributed chapters to this set, and for that we are grateful. We also thank our colleagues, families, and friends who supported us during the writing and editing process. Finally, we thank "the team" at Praeger Publishers.

Introduction

Few topics inspire more curiosity than sexual practices deemed unusual, deviant, or deplorable. It is, however, very challenging to define deviance with respect to sexual preferences. Norms regarding sexual behavior vary over time and across cultures. Consider, for example, the changing perspective on homosexuality. Although we currently view homosexuality as a normal variation or alternative lifestyle, it was officially classified as a sexual deviation until fairly recently. It was not until 1973 that the American Psychiatric Association elected to drop homosexuality from its official list of mental disorders.

Modern culture has brought many previously taboo and forbidden topics out of the bedroom into the living room. Many sexual practices that were previously considered obscure and uncommon are discussed openly on the Internet. Bondage, domination, and fetishism, for example, are terms that are familiar to many people. The extent to which these represent deviant sexual practices is the subject of debate. There is little disagreement, however, that they qualify as atypical; these sexual practices are not considered mainstream in any culture.

Some sexual practices are unquestionably maladaptive and deviant, often even criminal. Sexual activity that involves force and coercion is deviant in every sense of the word. Rape is a legal term that can be applied to any form of sexual assault. Sexual activity with persons below the age of consent, such as children, is illicit and criminal. Child molestation therefore is another form of sexual coercion since children are incapable of providing consent. This volume

offers an overview of research on the various forms of nonconsenting sexual practices, including findings of the causes, characteristics of perpetrators and victims, and interventions for addressing these problems. There is also discussion of some sexual practices that are deemed atypical although not necessarily maladaptive, such as sadomasochism.

In Chapter 1, Murphy and Page offer an overview of exhibitionism, better known as indecent exposure. They address the prevalence of this problem and such questions as whether these men are dangerous and if there are effective treatments. In Chapter 2, Santtila, Sandnabba, and Nordling explore the phenomenon of consensual sadomasochism. Flagellation and bondage are preferred activities in the sexual scripts of practitioners. However, their sexual practices are so diverse as to defy any simple description. In Chapter 3, Vandiver examines a problem that was ignored until recently: female sexual offending. The typical offender is a young adult who has psychological problems and was herself the victim of childhood sexual abuse. The sexual offense often involves an adult male co-offender. The recent disclosure of pedophilia in the clergy has drawn much attention to the problem. In Chapter 4, McAnulty offers an overview of the characteristics of pedophile, challenging popular stereotypes about the perpetrators. For example, not all pedophiles were themselves the victims of childhood sexual abuse. In Chapter 5, Calhoun, McCauley, and Crawfold explore the scope of the problem of sexual assault and the effects on victims. Sexual assault is an enormous problem that drastically impacts the lives of countless individuals. The consequences include emotional distress, short and long-term disruption in functioning, psychological and physical health problems, increase in suicide risk, increased vulnerability to additional forms of sexual and physical violence, and more. Not only are survivors affected, but others in their lives also suffer serious consequences. Kenyon-Jump's chapter (Chapter 6) on incest victims and offenders covers the effects of incest on male and female survivors at various developmental stages and in different victim-perpetrator relationships, such as mother-son incest. Incest is often unreported; early interventions have been shown to reduce the likelihood of long-term problems in victims.

In Chapter 7, Wright and Hatcher review the state of the art therapies for sex offenders. Contrary to popular belief, they find that treatment actually reduces rates of recidivism in this challenging population. In Chapter 8, Collie, Ward, and Gannon offer an innovative perspective on the treatment needs of sex offenders. They argue that the traditional approach to risk management is missing an important component: teaching offenders "to lead a better kind of life." Their *Good Lives* model intends to help an individual meet his needs in socially acceptable and personally satisfying ways. In Chapter 9, Alison and Ogan conclude that traditional approaches to offender profiling, in which offender attributes are directly inferred from crime scene evidence, are flawed. The media, however, perpetuate the public's fascination with the notion that behavioral experts or "profilers" have special insights into the minds of killers,

allowing them to draw conclusions from the crime scene alone. A more sensible approach to profiling involves spelling out which claims are purely speculation and intuition and which are based on sound research. This approach discourages investigators from relying too heavily on information that may not be very accurate; it also recognizes that not all information generated by profilers is equally useful.

In Chapter 10, Marshall and Hucker address the various definitions of severe sexual sadism. Their review concludes that some features that are considered classic signs, such as torture, cruelty, and humiliation of victims, are not seen in every case. In Chapter 11, on sexual homicide, Wright, Hatcher, and Willerick explore this disturbing phenomenon. Sensational depictions in the media have fueled the public's fascination with murders that occur in the context of lust, power, and brutality. Interestingly, the authors conclude that there may be as many as 200 serial killers at large at any point in time.

1

Exhibitionism

William D. Murphy and I. Jacqueline Page

INTRODUCTION

The term "exhibitionism" is attributed to the French physician Lasègue (cited in MacDonald, 1973), who in 1877 described a number of cases he had seen. Also during the late 1800s, Krafft-Ebing published his classic book, *Psychopathia Sexualis* (1965), describing a variety of deviant sexual behaviors including exhibitionism. These early scientists and clinicians described exhibitionism as exposure of one's genitals by males, generally to females, for sexual pleasure without any attempt at further sexual contact (MacDonald, 1973). They proposed that exhibitionism is related to some type of pathology, either some type of brain disease that interferes with behavioral control, or a mental disorder.

Over 125 years later, the clinical description of exhibitionism has changed little. Exhibitionism is considered a psychiatric disorder by the mental health field and is one of the paraphilias described in the *Diagnostic and Statistical Manual of Mental Disorders* of the American Psychiatric Association (1994). In this psychiatric nomenclature, exhibitionism is described as meeting the following two criteria: (1) recurrent, intense sexually arousing fantasies, sexual urges, or behaviors involving exposing one's genitals to an unsuspecting stranger, over a period of at least six months; (2) the fantasies, sexual urges, or behaviors caused clinically significant distress or impairment in social, occupational, or other important areas of functioning.

Mental health professionals and researchers may view exhibitionism as a disorder; others see it differently. For the criminal justice systems, exhibitionism is a crime, and in almost all jurisdictions it is considered a misdemeanor, with maximum sentencing being eleven months and twenty-nine days. Although those in the criminal justice system may feel that exhibitionists need treatment, they also view the behavior as requiring punishment.

When the lay public thinks of exhibitionism, they many times picture the frequent cartoons of an individual in a raincoat or a trench coat "flashing" an unsuspecting woman. Rather than using the somewhat sanitized term "paraphilia," many in the general public are likely to see the individual engaging in such behavior as a "pervert," who at the very least is a nuisance.

Regardless of view, clinicians, scientists, law enforcement personnel, and the public many times have the same questions:

1. Who are the victims and how often does this behavior occur?
2. Does exhibitionistic behavior cause harm to the victim?
3. Are exhibitionists dangerous?
4. Do exhibitionists share certain mental disorders or psychological problems that cause exhibitionism?
5. Can exhibitionists be "cured" or treated?

This chapter will provide some information on these questions, but as the reader will see, for many, we do not have a definitive answer.

HOW OFTEN DOES EXHIBITIONISM OCCUR?

Trying to determine how often any sexual behavior occurs is very difficult given the private nature of such behavior. This is compounded when trying to determine how frequently criminal sexual behavior, such as exhibitionism, occurs. Individuals who engage in such behavior are generally not forthcoming in admitting such behavior, and many victims never report the behavior to the police. For example, Cox and Maletsky (1980), in reviewing early studies, point out that only about 17 percent of women surveyed who had been exposed to exhibitionism report it to the police. A more recent study in the United Kingdom (Riordan, 1999) found that approximately 29 percent reported their offenses to the police.

There are a number of methods researchers use to try to determine the incidence or prevalence of sexual crimes. One way is to look at official criminal justice records; a second is to attempt to sample the general population to determine how many report exposing themselves or being exposed to. A third method is to ask identified exhibitionists how often they engage in the behavior, which is limited by their willingness to admit criminal behavior. Relying on criminal justice records will always underestimate the true frequency

since there is significant underreporting. Interviewing individuals in the general population can also be problematic in that it is sometimes difficult to find a random sample and therefore one is never sure of whether the sample is representative of the population. Also, when surveying the general population, there will be people who refuse to participate, or are reluctant to admit being victimized or engaging in criminal behavior. Given these limitations, we will attempt to provide an overview of what we know.

One study by Abel and Rouleau (1990) interviewed 142 exhibitionists who were promised confidentiality. This group reported on the average that they had exposed themselves to 513 victims. Exhibitionists reported more victims per offender than any other paraphilia.

In terms of criminal justice records, Murphy (1990) reviewed a number of early studies which indicated that approximately one-third of sexual offenders coming into contact with the legal system were exhibitionists. Frenken, Gijs, and Van Beek (1999) found that between 1980 and 1994, one-third to one-half of all sex crimes registered by the Dutch police were for indecent exposure. This represents a rate of 24 per 100,000 to 37 per 100,000 in the population aged 12 to 79. This means that in a year, from 0.02 percent to approximately 0.04 percent of the population between the ages of 12 and 79 are arrested for exhibitionism. In Germany, Pfäfflin (1999) found that between 1981 and 1994 there were between 8,000 and 12,000 cases of exhibitionism reported to the police every year, and about 16 percent of all those who were sentenced for a sex offense were exhibitionists. Unfortunately, we do not have similar data for the United States. Although there are numerous sources from which to determine the number of rapes reported to the police or the number of official reports of children sexually abused, such data are usually not kept nationally for exhibitionism, which, as noted, is considered a misdemeanor.

There are two studies known to us that have attempted to look at the frequency with which individuals in the community report engaging in exhibitionistic behavior. The first of these sampled college students (Templeman & Stinnett, 1991) and found that one of sixty of the males sampled admitted to exhibitionistic behavior, which represents about 2 percent of the sample group. A much more extensive study has recently been conducted in Sweden by Långström and Seto (in press). This study was a random selection from 6.2 million 17- to 18-year-olds in the general Swedish population. Approximately 4,800 people were approached for participation and actual data was obtained from 2,800. This survey was a more general study on sexuality and health sponsored by the Swedish Public Health Institute. Subjects in this study were specifically asked, "Have you ever exposed your genitals to a stranger and become sexually aroused by this?" Overall, 3.1 percent of the sample admitted to exhibitionism. The rate for males was 4.3 percent and the rate for females was surprisingly 2.1 percent.

There have also been a number of surveys of women, questioning whether they have been exposed to exhibitionism. Most of these have not been

random samples of the population, but they show surprising consistency across time and countries. Cox and MacMahon (1978) found that 32 percent of 405 female college students from four universities across the United States reported being victims of exhibitionism, while Cox, Tsang, and Lee (1982) found almost the same percentage in a sample of undergraduate students in Hong Kong. Gittelson, Eacott, and Mehta (1978) found that 44 percent of a sample of 100 British nurses with a mean age of 37 had been exposed to outside the work situation. Over twenty years later, a study by Riordan (1999) that involved both college students and women in the community in the United Kingdom found that 48.6 percent reported being exposed to, and a 2004 study in Germany of 309 female college students indicated that 39.5 percent reported being exposed to (Kury, Chouaf, Obergfell-Fuchs, & Woessner, 2004). A study conducted in the United States (Finkelhor, Ormrod, Turner, & Hamby, 2005) surveyed a national sample of children and youth between the ages of 2 and 17. Either the child or the parent was interviewed, depending on the child's age, regarding the child's exposure to a variety of victimization experiences. Of this group of children and youth, 2.8 percent indicated that they had been exposed to in the last year. This percentage would indicate that approximately 1.6 million children between the ages of 2 and 17 are exposed to each year.

Although none of the above studies are perfect, there is a very clear pattern across time, and a good deal of consistency across countries. Surveys are very consistent that 30 percent to over 40 percent of women have an experience of being exposed to, and so have a significant number of children and adolescents. This is a rather alarming number of individuals being subjected to an unwanted and intrusive sexual behavior.

WHAT IS THE IMPACT ON THE VICTIM?

There have been multiple studies of the impact of child sexual abuse and rape on the psychological functioning, interpersonal functioning, and health status of victims. There is, however, a tendency to view exhibitionistic behavior as a nuisance but not a behavior that causes harm. In reality, we have few studies that address this issue.

The first thing to consider is the high percentage of victims that are children and adolescents. Gittelson et al. (1978) found that 57 percent of their sample reported being exposed to before age 16, and twenty years later, the study by Riordan again found that 50 percent reported being exposed to by age 16. As we saw in the previous section, the national survey by Finkelhor et al. (2005) found that over one million children and youth were exposed to in any given year. A few early studies conducted before 1980 assessed the impact of exhibitionism on victims (see Cox & Maletsky, 1980, for a summary). Overall, 50–80 percent of victims describe the experience in negative terms. For example, Gittelson et al. (1978) indicated that 50 percent of their sample

reported fear, 30 percent disgust, and 9 percent anger. Cox and MacMahon (1978) found that 14 percent of their sample indicated that the experience seriously or very seriously affected their attitude toward men. Riordan (1999) is the only study that could be located since the 1970s, and its findings were very similar, with about 49 percent reporting shock and about 26 percent fear, and 68 percent considering the exhibitionist dangerous.

It should be noted that in most cases, the negative reactions were not long lasting and tended to resolve within a month. However, another factor that was found across studies was that many women avoided places where the act occurred.

Although for most women exhibitionism does not lead to long-term negative sequelae, a small percentage experience more long-term negative effects, and a high percentage report initial negative reactions. In addition, being a victim does seem to impact a woman's (as most reported cases are female) feeling of safety in her own community. The fact that being exposed to does not lead to long-term trauma for most victims should not lead to seeing the behavior as only a nuisance. It is not appropriate to create short-term fear in women and to impact their feelings of safety in their own community. Nor is exhibitionism an appropriate way to introduce children to sexual behavior.

ARE EXHIBITIONISTS DANGEROUS?

As noted by Riordan (1999), 68 percent of women who have been exposed to perceive the exhibitionist as dangerous. In addition, as we also reviewed, over 50 percent of exhibitionists expose to children and youth. The question of dangerousness is usually framed as whether the exhibitionist is likely to reoffend and, probably more important to most people, whether they progress from hands-off offending to hands-on offending such as rape or child molestation.

Recidivism

Determining the true reoffense rate or recidivism rate for sex offenders is difficult. What is considered recidivism is usually based on individuals who have at least been charged for a new offense or who have been reconvicted for a new offense. However, as we have seen, many victims of exhibitionists never report the offense, and when the offense is reported, the police may not be able to arrest the suspect, or may not be able to charge the offender, or prosecutors may elect not to prosecute. Therefore, official recidivism rates generally underestimate true rates of reoffending.

Given these limitations, the research suggests that exhibitionists tend to have high recidivism rates as compared to other sex offenders. For example, in an early study, Frisbee and Dondis (1965), found that 40.7 percent of treated exhibitionists reoffended after five years as compared to 18.2 percent of pedophiles who targeted female children and 34.5 percent of pedophiles who targeted male

children. It should be noted that although they were labeled treated offenders, the treatment program at that time would not meet current standards for effective treatment. It should also be noted that this was a population of individuals sentenced to a secure residential treatment program under what were at that time termed sexual psychopath laws. Today, exhibitionists would not be sent to such secure facilities.

More recent data also suggest fairly high rates of recidivism. Marshall, Barbaree, and Eccles (1991), in a small study of forty-four exhibitionists, found a 39 percent recidivism rate for treated offenders and a 57 percent rate for untreated offenders. Because of these high rates, Marshall et al. (1991) described a second study where they modified their treatment program to address a broader range of treatment issues. Their previous program had focused more on strategies directed toward the urges in exhibitionists to expose themselves, but the new program focused on factors such as the exhibitionists' perceived need to be perfect and assisted them in developing more intimate relationships. In this study, although there was no control group, the recidivism rate was down to 24 percent. These results, although still somewhat high for reoffending, are promising. Firestone, Kingston, Wexler, and Bradford (2005) followed over 200 exhibitionists for an average of thirteen years and found that 23.6 percent reoffended sexually.

It should also be noted that those who expose to children have higher recidivism rates than those who expose to adults (Frisbee & Dondis, 1965). In addition, those who have antisocial personalities, have higher scores on an alcohol measure, and are less educated (Firestone et al., 2005; Greenberg, Firestone, Bradford, Greenberg, 2002) have higher rates of reoffending.

Progression to More Serious Offending

One method researchers have used to answer this question is to study known exhibitionists to determine whether in the past they have had other sexual offenses. The most extensive data is provided by Freund (1990) and Abel and Osborn (1992). Freund found that among the 240 exhibitionists studied, 15 percent had histories of rape. Abel and Osborn's 1992 study is unique in that data was collected from outpatients who were promised confidentiality under a federal certificate of confidentiality. This federal certificate is provided to research programs to protect research subjects' confidentiality. They found that of 118 individuals whose primary diagnosis was exhibitionism, 39 percent self-reported previous molestation of children and 14 percent reported that they had previously raped. Rooth (1973) suggests that exhibitionists who exposed preferentially to children may be at increased risk for becoming hands-on sex offenders against children. Rooth's own data on a sample of thirty fairly chronic exhibitionists indicated that few had engaged in rape but that 25 percent had been involved in pedophilic activity and 40 percent in frottage

(touching or rubbing up against another person). Firestone et al. (2005) found that 31.3 percent of their subjects had a violent and/or sexual reoffense. Of the 23.6 percent who reoffended sexually, about 38 percent reoffended with a hands-on sexual offense.

A second method is to study known rapists and child molesters and to determine how many had a past history of exhibitionism. A relatively large study (Longo & Groth, 1983) found that 28 percent of the child molesters and 15 percent of the rapists they studied had engaged in exhibitionistic behavior as juveniles. Abel et al. (2004) found that among 1,170 adolescents who molested children, 13 percent also reported histories of exhibitionism.

English, Jones, Pasini-Hill, Patrick, and Cooley-Towell (2000) studied a group of offenders on parole and probation who were presumably hands-on offenders. They were required to take a polygraph (lie detector) test as part of their parole and probation monitoring. Prior to their polygraph, 22 percent reported hands-on offenses, and after the polygraph, 67 percent indicated hands-off offenses. In this study, hands-off offenses were defined as exhibitionism, voyeurism, and stalking, so it is not possible to determine exactly the number of people who only exposed themselves.

Not all studies have found such high percentages. Marshall et al. (1991) found only a very small number of child molesters who had also engaged in exhibitionistic behavior. Rooth (1973) reviewed a number of early studies that suggested that 10–12 percent of exhibitionists had either raped in the past or were convicted of rape in the future. Sjöstedt, Långström, Sturidsson, and Grann (2004) present a prospective study where they followed a group of 1,303 offenders released from prison in Sweden between the years 1993 and 1997. They looked at offenses that occurred after release for an average follow-up of six years. Their finding was that those subjects whose index offense was a noncontact offense showed relatively stable recidivism histories and their most frequent reoffense was another noncontact offense. In this study, noncontact offenses were not broken down into subtypes such as exhibitionism or voyeurism, so it cannot be determined how many subjects were exhibitionists and how many were other noncontact offenders such as voyeurs.

A problem with the above studies is that they involve subjects primarily identified by the legal system. As we have reviewed, most exhibitionists are never reported and of those reported, many are never arrested or processed through the criminal justice system. Those who are arrested may represent the most chronic offenders and may differ from the majority of exhibitionists in a number of ways. The most extensive data by Sjöstedt et al. (2004) did not suggest that noncontact offenders were at high risk for progression to more serious offenses. However, there does seem to be a small group of exhibitionists, maybe between 10 percent and 30 percent, who are at risk to engage in hands-on offenses, and there is evidence that exhibitionists who expose to children may be at risk for molesting children.

CHARACTERISTICS OF THE OFFENDER AND THE OFFENSE

Exhibitionism, like many sex offenses, has an early onset. Abel and Rouleau (1990) report that 50 percent of the exhibitionists in their clinic reported that they had the onset of their interest in exhibitionism by age 18. In a small sample, Mohr, Turner, and Jerry (1964) found a bimodal distribution of onset. There seemed to be two peak times, one in the mid-teens and one in the mid-twenties, for onset of exhibitionism. Onset then tends to decrease over time, and a number of early studies with clinical and forensic populations found that between 6 percent and 27 percent of the exhibitionists began their behavior after age 40 (see Murphy, 1997).

In clinical and forensic situations, exhibitionists are almost exclusively males, with only a few cases of female exhibitionists reported in the literature. Most victims are female. However, it is of interest to note that in the Långström and Seto (in press) study a little over 2 percent of women in their national sample answered yes to the question, "Have you ever exposed your genitals to a stranger and became sexually aroused by this?" But it is always difficult to determine how the respondent has interpreted this question, and the overall data would suggest that few females engage in chronic exhibitionistic behavior. The national survey by Finkelhor et al. (2005) also suggests that among children, males and females appear to be equally at risk of being victims of an exhibitionist.

Exhibitionists are similar to the general population in factors such as socioeconomic status, education, intelligence, and marital status (Blair & Lanyon, 1981). For example, Mohr et al. (1964) found that the mean IQ for their sample was 104, which is fairly similar to the mean IQ of the general population. Blair and Lanyon (1981) report that across studies about 62 percent of their subjects were married or had been married, which, given that exhibitionists tend to be younger, would not differ significantly from the general population.

WHAT CAUSES EXHIBITIONISM?

Criminality

Before answering the question, "What is the cause of exhibitionism?" we need to ask, "Do exhibitionists differ from other criminals?" There has been a tendency when looking at the causes of sex offending to assume that somehow sex offenders are different in some ways from other criminal populations. As one will see in later parts of this chapter, there have been a number of attempts to explain the behavior of sex offenders in general and exhibitionists in particular as being related to specific psychiatric disorders or psychological problems.

However, in the general field of criminology, there is support for a general theory of crime (Gottfredson & Hirschi, 1990). Criminals tend to be diverse, rather than specialist, in their criminal behavior, and Gottfredson and Hirschi proposed that the underlying factor is low self-control which impairs the individual's ability to delay gratification and control impulses. They feel that poor parenting is the primary cause of this low self-control, although other factors such as birth complications, which impact brain functioning, may also contribute (Beaver & Wright, 2005).

Research on sex offenders has generally proceeded as if sex offenders are different from the general criminal population and as if their offenses are more specialized; but this has been recently questioned (Smallbone & Wortley, 2004). These authors suggest that sex offenders engage in a variety of criminal behaviors that might be best understood from a general criminal perspective rather than searching for specific sexual pathology.

For example, Berah and Myers (1983) found that of the forty subjects they studied, 69 percent had been convicted for crimes other than exhibitionism. Blair and Lanyon (1981), in their review, found that across studies, 17–30 percent of exhibitionistic subjects had committed nonsexual offenses. More recently, Greenberg et al. (2002) also found high rates of general criminal behavior in their sample of exhibitionists.

The issue of general criminal behavior is important because the extent to which an exhibitionist does or does not engage in other criminal behavior is related to their risk for continued offending and to the type of personality disturbance.

Childhood and Familial Factors

In research with sex offenders in general and exhibitionists in particular, there has been an attempt to identify childhood experiences or family factors that lead to sex offending. Histories of childhood abuse, specifically sexual abuse, have been posited as a cause of sex offending. However, exhibitionists tend to have fairly low rates of sexual abuse as compared to other types of sex offenders, specifically child molesters. Saunders and Awad (1991) found that 13 percent of their sample had been physically abused and 17 percent had been sexually abused. Fehrenbach, Smith, Monastersky, and Deisher (1986) found that 7.5 percent of their subjects had a history of sexual abuse while 9.4 percent had histories of being physically abused. Lee, Jackson, Pattison, and Ward (2002) found that exhibitionists in their sample did not differ significantly from a comparison group in terms of histories of sexual abuse or physical abuse. However, they did differ in terms of their history of childhood emotional abuse and general family dysfunction.

It should be recognized, however, that high rates of childhood abuse are also related to general criminal behavior, and that none of the above studies separated out those exhibitionists whose offenses were only exhibitionism

versus those who had exhibitionistic and nonexhibitionistic offenses. In addition, histories of abuse and family dysfunction are found in the background of many individuals with psychological and psychiatric disturbances, and it does not appear that this is specific to sex offenders alone.

Personality Characteristics and Psychological Disturbance

In searching for a cause of exhibitionism, there have been many attempts to look at whether a certain type of psychopathology or certain types of personality characteristics place individuals at risk for sexual offending. If one asks the general population what they feel the personality characteristics of exhibitionists are, they would generally assume that the exhibitionist is someone who has poor skills relating to women, may feel sexually inadequate, and may be shy and inhibited. Early descriptive studies of exhibitionists tended to support this view (Blair & Lanyon, 1981).

However, when studies used more standardized psychological instruments, the results were much more mixed. For example, in a study with a large number of exhibitionists (Langevin et al., 1979), using a variety of standardized tests, researchers found few to no differences between exhibitionists and control subjects on measures of heterosocial skills or assertiveness. Other investigators have found that disturbances on psychological tests, such as the Minnesota Multiphasic Personality Inventory (Dahlstrom, Welsh, & Dahlstrom, 1972), correlated with previous convictions. That is, subjects with one or two convictions showed little psychological disturbance, while those with six arrests tended to have a number of psychological problems (McCreary, 1975). Later studies, however, indicated that this disturbance was more related to those who showed repeat nonexhibitionist criminal behavior than to those with exhibitionistic behavior (Forgac, Cassel, & Michaels, 1984; Forgac & Michaels, 1982), which is consistent with the findings of Firestone et al. (2005), who found those with antisocial personality traits to have the highest recidivism.

A more recent study by Lee et al. (2002) sheds further light on some of the above observations. This study compared exhibitionists not only to a comparison group but also to other sex offender groups, such as pedophiles and rapists. They studied two broad concepts labeled "anger and hostility" and "sexual maladjustment and heterosocial skills deficits" using multiple measures of each of these concepts. The results suggested that all of the paraphilias shared certain characteristics and that both anger and hostility and sexual maladjustment and heterosocial skills deficits separated sex offenders as a group from controls. Exhibitionists were somewhat lower on heterosocial skills as compared to the control group. It was found that both pedophiles and exhibitionists tended to suppress their anger and direct it toward themselves, while rapists tended to direct their anger outwardly. However, of the different paraphilic groups, exhibitionists seemed to show the least psychopathology and

sexual maladjustment. The authors' conclusions were that exhibitionism in terms of psychopathology was the "least severe disorder among the group of paraphilias studied."

In summary, research has failed to find specific personality characteristics or types of psychological disturbances that would explain the onset of exhibitionism. What the literature does suggest is that exhibitionists vary on a number of factors such as degree of social competence, sexual adjustment, and their ability to manage emotions, such as anger. Some of this variation is probably due to the sample studied. Those who are more chronic may have more psychological disturbances as do those who engage in both exhibitionistic behavior and nonexhibitionistic criminal behavior.

Neurological Impairment

Krafft-Ebing (1965), in explaining exhibitionism, stated that there was a group that suffered from "acquired states of mental weakness," which were caused by "cerebral (or spinal) disease." He went on to describe a number of cases where there appeared to be some brain impairment. There has been a continued interest in this area, although there are limited studies with exhibitionists. Although case studies have appeared that describe exhibitionists having certain types of brain pathology (see Murphy, 1997, for review), there have been very few controlled studies. The most extensive data comes from Flor-Henry and Lang (1988) and Flor-Henry, Koles, Reddon, and Baker (1986). In studies that use both neuropsychological test data and EEGs (measures of brain electrical activity), they found deficits in the left hemisphere of the brain. The neuropsychological data suggested left frontal temporal lobe dysfunction. The temporal lobe is important because early animal studies have shown that temporal lobe injury in primates can lead to hypersexuality (Kluver & Bucy, 1939). However, as pointed out by O'Carroll (1989), subjects used in Flor-Henry's studies were recidivist, incarcerated offenders who averaged five to six convictions.

At this time, data is too limited to indicate whether there is any specific neurological impairment in exhibitionists. It is likely, based on the case reports that have appeared in the literature, that there are some individuals who expose themselves as a result of some type of brain pathology, although it is unlikely that this applies to the vast majority of people who expose themselves.

Deviant Sexual Interest

As we noted earlier, many studies of sex offenders and exhibitionists have examined early childhood experiences, sexual or psychological pathology, personality deficits, and, to a lesser extent, neurological problems as possible causes or factors that place individuals at risk for exhibitionistic behavior. As we have seen above, these studies have generally had mixed results, and we

have been unable to identify any one specific factor. Beginning in the late 1960s and continuing from then, researchers in the field of sex offense began questioning whether such behavior occurred not because of psychopathology but because the individual had a specific interest in different forms of deviant sexual behavior. A technology was developed called penile plethysmography (also called phallometry) that used a gauge that directly measured changes in penis size while subjects were exposed to specific sexual stimuli. The stimuli could include slides depicting people of different ages, videotaped depictions of sexual behavior, or audiotaped descriptions of sexual behavior. Subjects' responses to deviant stimuli were compared to responses to nondeviant stimuli, and studies have compared a variety of sex offenders to non-sex offenders. The history of this research and the data related to it have been reviewed by Murphy and Barbaree (1994) and Marshall and Fernandez (2003).

There have been numerous studies investigating this assessment methodology with child molesters and rapists. Results have suggested that certain subtypes of child molesters, those who molest nonrelatives, have a tendency to respond more to child-type stimuli than normal.

Marshall and Fernandez (2003) reviewed approximately ten studies that have attempted to determine whether exhibitionists have specific sexual attraction to exhibitionistic behavior. None of the studies indicated that exhibitionists responded more to exhibitionistic stimuli than nonexhibitionistic stimuli; nor did any study indicate that exhibitionists differed in any meaningful way from nonexhibitionistic controls. These findings are fairly clear that exhibitionists' arousal patterns do not differ from what would be expected of men in the general population.

However, Firestone et al. (2005) and Greenberg et al. (2002) found that exhibitionists who reoffended showed more arousal to child stimuli than those who did not reoffend. This suggests that, although exhibitionists may not show arousal to exhibitionist stimuli, their arousal to other deviant stimuli may have value in predicting those more likely to reoffend.

EVALUATION AND TREATMENT

Does Treatment Work?

The reader of this chapter by now should recognize that exhibitionism impacts a large number of women and children (both male and female) in our society. Exhibitionists have victims, and a fairly high percentage of women report that they have been exposed to, many of them in childhood. It also should be clear that when apprehended exhibitionists have fairly high rates of reoffending, both sexually and nonsexually, and a small percentage of them progress to more serious sex offenses. The reader may, however, note that our review of the research and the characteristics of exhibitionists suggests that they are very diverse and heterogeneous in their functioning. They vary on

criminality, social skills, psychological dysfunction, and deviant sexual interest. One may question how a treatment program should be designed for such a diverse population.

There is also the general public perception that treatment for sex offenders does not work. The question whether any treatment program works is rather complex. The most accepted scientific method for proving the effectiveness of treatment is termed the randomized clinical trial. In this type of study, subjects are randomized to receive the treatment of interest while the control group is randomized to receive either placebo treatment or some alternative treatment. These are common designs used in drug studies where the experimental group receives the investigative drug and the control group receives a placebo. The advantage of randomization is that there is an expectation that groups will be equal, because they are randomly assigned, on other variables that might impact treatment outcome such as severity of the disorder. Unfortunately, there are very few randomized clinical trials in the study of sex offenders in general and to our knowledge none in the study of exhibitionism.

A second type of study, which also provides some evidence for effectiveness of treatment, although not as strong as the randomized clinical trial, is where assignment to groups is incidental or where subjects are matched (Hanson et al., 2002). An example of these types of studies would be a prison system that establishes a treatment program for sex offenders. Individuals who completed this program are compared to people who were released from the prison prior to the onset of the program.

Another approach is to compare treated offenders to a comparison group of untreated men who match them on such important variables as history of previous offenses, type of sexual offense, and the like. As noted, these studies provide some evidence, but one can never be sure that the groups do not vary on some important variable unrelated to the treatment. There have been a number of these studies for sex offenders in general but fewer for exhibitionists.

Another research issue in determining whether treatment is effective is that no one study can provide a definitive answer. That is, to determine whether treatment is effective, one would like to see multiple studies. Because no one study in itself can be considered definitive, researchers use a method called meta-analysis to combine studies to look at the overall effects of treatment. In the general area of treatment of sexual offenders, there have been a number of these meta-analyses, with the two most recent and largest being reported by Hanson et al. (2002) and Lösel and Schmucker (2005). The Hanson et al. meta-analysis does not look specifically at exhibitionists, but some of the studies included did have exhibitionistic subjects. The data they reported summarized forty-three different studies. When the studies were combined, there were a total of 5,078 treated sex offenders and 4,376 untreated sex offenders. When the authors looked at only studies that were random or had incidental assignment (the most acceptable studies), they found a sexual

recidivism rate of 9.9 percent for treated offenders and a 17.4 percent rate for untreated offenders, which is highly significant. The most recent Lösel study included many topics of the Hanson study, as well as those from studies published since that time, including a number of European studies. They were able to locate eighty independent comparisons between treated and untreated offenders that included over 22,000 offenders. Their findings were very similar to those of Hanson et al., with a recidivism rate of 12 percent for the treated groups and 24 percent for the comparison groups. Again, most of the studies reviewed in the Lösel and Schmucker meta-analysis were not on exhibitionists. However, these authors did separate out four studies that focused specifically on exhibitionists. Although this is only a small number of treatment studies, results did indicate that treated exhibitionists did significantly better than untreated exhibitionists, although they did not provide specific recidivism rates.

Although the area of sex offender treatment lacks studies that have used the strongest research designs, there have been multiple studies using relatively appropriate control groups. When such studies are combined, there seems to be an indication that sex offender treatment can be effective. Although we do not have the definitive answer to the effectiveness of treatment, the general public's view that sex offenders cannot be treated does not appear to be warranted, and the evidence does suggest that recidivism can be reduced by appropriate treatment. This also appears to apply to exhibitionists. However, it is also clear that although treatment may reduce recidivism, exhibitionists still have higher rates of reoffense as compared to other offenders.

What to Treat?

The above review suggests that sex offender treatment can be effective. However, the second question is what does one actually treat to reduce recidivism? This is another area where there have been significant advances in our research understanding of what kind of factors need to be targeted in treatment to actually reduce recidivism. Some of the public's skepticism of sex offender treatment is probably due to many early studies that provided treatment that was not highly effective. These studies provided treatment from a psychoanalytic model focusing on early childhood experiences and relationship with mother. There is little evidence that focusing on these types of factors will reduce recidivism.

What research has shown is that to reduce the recidivism of sex offenders in general, and we feel this applies to exhibitionists too, we must focus on what are termed dynamic risk factors. Research has identified approximately four broad areas related to recidivism (Beech, Fisher, & Thornton, 2003; Hanson & Harris, 2000; Hanson & Morton-Bourgon, 2004). Although different researchers use different terminology for each of the broad areas, we will try to summarize each below.

Sexual Self-Regulation or Sexual Interest

Research has indicated that sex offenders in general, and to some extent exhibitionists in theory, vary in their ability to regulate their sexual interest. Some offenders have specific deviant sexual interest, that is, they are sexually aroused by the act of exhibitionism. Also, offenders vary in the degree of sexual preoccupation, with some offenders being highly compulsive, not only in their exhibitionistic behavior but also in other aspects of their sexual behavior. They may frequently masturbate and view pornography. In addition, there is evidence that offenders use sex as a coping strategy. That is, when experiencing negative emotional states, rather than using coping strategies that would resolve stress, they turn to sex. As we noted earlier, most exhibitionists do not show deviant sexual interest at least as measured phallometrically, although some do. Many exhibitionists, however, are somewhat compulsive in their sexual behavior and may use sex as a coping strategy. There are a number of behavioral treatments available that assist individuals in controlling their deviant sexual interests. For example, one such technique is called covert sensitization, where the individual would be asked to imagine the act of exposing and then told to switch to imagining negative consequences such as being arrested, going to jail, or losing their family. There are also more aversive techniques where the thoughts of exhibitionism can be paired with an aversive odor such as sniffing ammonia. Also, there are medications such as antiandrogens, which reduce male testosterone and drive, and selective serotonin reuptake inhibitors, which are used for depression and obsessive compulsive disorders but also may reduce the sexual preoccupation (Hill, Briken, Kraus, Strohm, & Berner, 2003).

Attitudes Supportive of Offending

The second factor that contributes to sex offender recidivism is attitudes the offenders hold that they use to justify their behavior. These include feelings of sexual entitlement, perceiving women as deceitful, viewing relationships as adversarial, perceiving that women enjoy being exposed to, or that they are "asking for it" because of the way they dress. This may also include general hostility toward women. Exhibitionists, like other offenders, can vary on which of these types of attitudes they hold and the strength of the attitudes. The goal of treatment of this area is to help the offenders identify their attitudes and help them through what is termed cognitive restructuring, to examine these attitudes and learn to challenge the reality of their thinking.

Social-Emotional Functioning

Another broad area that relates to reoffending can be deficits in establishing relationships and in handling negative emotional states. These include

such factors as inability to establish intimate relationships, feeling lonely and isolated, being underassertive, and feeling inadequate. As we noted before, many early studies pointed out a number of these traits for exhibitionists. However, literature also indicates that this is not true for all exhibitionists. Again, the purpose of an evaluation of an offender is to identify if the individual who exposes himself has deficits in these areas and to provide appropriate psychological intervention. Treatments for these areas are similar to treatment for a number of general psychological problems. They can involve assertiveness training, training to teach appropriate relationship skills, and again modifying beliefs that lead to feelings of inadequacy.

This area can also include a general lack of concern for other people and callous and unemotional traits. It should be noted that these types of attitudes are much more difficult to change and tend to be associated with offenders who engage in not only sex offending but general criminal behavior as well.

General Self-Regulation or Self-Management

A fourth general area related to recidivism is what we term general self-management. This includes issues such as general impulsivity, poor problem-solving skills, and poor emotional control with a tendency to explosive and angry outbursts. Exhibitionists, as in the other areas, vary considerably on this dimension. Some exhibitionists maintain steady employment, are married, and show no indications of difficulties in regulating their behavior outside the area of exhibitionism. However, there are a few who engage in general criminal behavior and who show instability in numerous aspects of their lives. There are a number of treatments, such as anger management training or what are termed cognitive skills programs. These types of programs focus on offenders learning skills to reduce their impulsivity, to problem solve more effectively, and to manage emotions more effectively.

Treatment Style

Another advance in the treatment of sex offenders, which also applies to exhibitionists, is the way in which treatment is delivered. Early treatment of sex offenders tended to be very confrontive in nature. It was felt that offenders were always lying, and that they had to be constantly challenged. Current treatment styles recognize that such an approach is probably not effective, and are very different compared to some of the early treatments. People specializing in sex offender treatment still believe offenders need to accept responsibility for their behavior but have begun to recognize that if one expects change, then one must collaboratively work with offenders. In addition to focusing on negative aspects of the offenders' behavior and functioning, therapists must help establish more positive goals to replace the inappropriate behavior and assist the offender to lead a more prosocial life (Marshall et al., 2005).

In summary, there has been an evolution in treatment for sex offenders in general, which also applies to exhibitionists. Even though we do not have the final answer, there appears to be accumulating evidence that treatment of sex offenders can be effective. The literature clearly indicates that treatments that are cognitive-behavioral in nature, that focus on learning skills, that directly address issues related to recidivism rather than general psychological deficits, and that are delivered in a style that allows the offender to change, can be effective.

CONCLUSIONS

Compared to other paraphilias, we have much less knowledge of this population. We do know that the behavior occurs frequently and impacts upward of 40 percent of women and up to 1.6 million children each year. We have learned that there is no one type of exhibitionist and that they vary across a number of characteristics. It is also clear that not all exhibitionists are "harmless" and that a significant minority goes on to commit more serious sex offenses and other violent offenses. We also have some limited evidence that treatment can be effective, although exhibitionists still seem to reoffend at higher rates than other paraphiliacs.

A prime area for the future is to focus on adolescents who expose. We know that up to 50 percent of exhibitionists begin in adolescence. It is also this population that authorities may not take seriously. We need to be able to identify those who are more at risk to continue the behavior or to escalate into more serious offenses, and to provide interventions earlier.

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2

Sadomasochism

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The perspectives on sadomasochistic sexual behavior range from seeing it as a crime or a psychiatric disorder to seeing it as "a sophisticated erotic activity with several layers of meaning and significance" (Henkin, 1992). Modern popular culture and fashion contain stylized representations of fetishistic and sadomasochistic activity in, for example, mainstream music videos (chains and leather clothes have been popular features). You can also find an advertisement on the Internet for "a practical 4-day course to explore SM sex" that promises a practical and hands-on workshop with lots of demonstrations and useful tips about SM equipment, etiquette, and negotiation of safer sex in SM scenes (MetroM8, n.d.), and a description of the diagnostic criteria for sexual masochism (diagnosis number 302.83) and sexual sadism (diagnosis number 302.84), which include clinically significant distress or impairment in social, occupational, or other important areas of functioning in the *Diagnostic and Statistical Manual of Mental Disorders* (American Psychiatric Association, 2000). The question becomes, is sadomasochistic sexuality a more or less voluntary variant of human sexuality that does not necessarily imply psychiatric illness and need for treatment, or is it a deviant behavior with serious consequences (psychological distress and physical injury) both for the individual and the society? Also, it is open to question whether sadomasochistic sexuality can be viewed as a single, homogenous phenomenon or whether the different perspectives might be describing relatively independent phenomena that have been loosely labeled as sadomasochistic.

Regarding the prevalence of sadomasochistic sexual practices, Långström and Seto (in press) found that 2.2 percent of the respondents in a representative national sample of 18- to 60-year-old Swedish men and women reported having deliberately used physical pain and become sexually aroused by its use. In a nationally representative survey of the Finnish population with 2,188 participants, Kontula and Haavio-Mannila (1993) found that 0.5 percent reported using a whip, handcuffs, or chains in association with sexual interaction or masturbation, a clearly more restrictive definition of sadomasochistic sexuality. In a cross-sectional national American survey (Janus & Janus, 1993) with a total of 2,765 SM respondents, 16 percent of the males and 12 percent of the females agreed or strongly agreed with a statement claiming that pain and pleasure really go together in sex.

During the last two decades, a number of researchers (i.e., Baumeister, 1988; Falk & Weinberg, T. S., 1983; Moser & Levitt, 1987; Spengler, 1977) representing various areas of social science have started to examine sadomasochism as a social phenomenon dependent on the subcultural context and the developmental history of the people involved. For example, social well-being appears to be associated with levels of integration in sadomasochistic subcultures.

According to Moser (1988), there is no commonly accepted definition of what constitutes sadomasochistic sexual behavior (SM sex). A non-clinical definition of consensual SM sex by Townsend (1983) identifies six characteristic features in a sadomasochistic scene: a relation of dominance and submission, infliction of pain that is experienced as pleasurable by both partners, using fantasy or role-playing by one or both partners, deliberate humiliation of the other partner, fetishistic elements (clothes, devices, scenery), and one or more ritualistic activities (e.g., bondage, whipping). Other definitions have been offered by M. S. Weinberg, Williams, & Moser (1984) and by Kamel (1983).

Previous studies have not taken account of the potential preferences that may exist for individuals in engaging in a set of SM-sex behaviors (i.e., the administration or receiving of pain) over another set of behaviors (i.e., humiliation). One possibility is that individuals would only engage in a limited set of behaviors, and not in others, suggesting that sadomasochism is in fact a label for a variety of relatively independent phenomena. Another possibility is that individuals emphasize a particular set of behaviors but also engage in other activities to a more limited extent. Also, there have been no investigations exploring whether a preference for one facet over another is related to the gender and the sexual orientation of the SM practitioners, and whether there is a preference for the "sadistic" or the "masochistic" partner to engage in one facet more than any other. This is clearly an interesting set of research questions that can clarify the nature of SM sex.

Several studies exploring sexual behavior and social adaptation of SM-sex practitioners have shown them to be generally well adjusted (e.g., Moser & Levitt, 1987; Sandnabba, Santtila, & Nordling, 1999; Spengler, 1977; Weinberg, T. S., 1987). This suggests that childhood experiences of SM practitioners will

not, in the large majority of cases, reveal pathological patterns of family interaction, although a number of clinical case reports have suggested this to be the case (Blos, 1991; Blum, 1991; Coen, 1988; Rothstein, 1991). These reports have two flaws. On one hand, they are lacking in systematic empirical support, and on the other, they are exclusively based on people who have sought psychological help. So far, no studies have focused on exploring associations between childhood experiences and the way in which a nonclinical sample of SM practitioners express their sexuality. For example, attachment theorists (e.g., Shaver, Hazan, & Bradshaw, 1988) have shown that attachment style affects the expression of sexuality in a number of areas including trust, desire for reciprocation, and fear of closeness. They also suggest that for every feature of adult love relationships, there is either a documented or a plausible infant parallel.

Likewise, the question of whether childhood abuse experiences have etiological significance for sadomasochistic behavior has largely been ignored. Due to the complexity of sadomasochistic sexual behavior (SM sex) and the significance of social influences on it, it is unlikely that any simple associations between childhood abuse experiences and later SM sex could be found. Nevertheless, it is important to ascertain empirically what the role of sexual abuse—if any—is for the development of sadomasochistic sexual interests and for the choice of either sadistic or masochistic position.

The empirical results reported in this chapter to clarify some of these questions mainly derive from a series of seven empirical articles describing different aspects of sadomasochistic sexual behavior based on a large number of SM practitioners (Alison, Santtila, Sandnabba, & Nordling, 2001; Nordling, Sandnabba, & Santtila, 2000; Nordling, Sandnabba, Santtila, & Alison, 2005; Sandnabba et al., 1999; Sandnabba, Santtila, Beetz, Nordling, & Alison, 2002; Santtila et al., 2000; Santtila, Sandnabba, Alison, & Nordling, 2002).

WHO ARE THE SADOMASOCHISTS?

Overall, many studies suggest that practitioners of SM sex are not psychologically disturbed or dysfunctional but are rather better educated and are in a generally higher-earning bracket than the general population (Baumeister, 1988; Spengler, 1977; T. S. Weinberg, 1987). This is also what was found in our series of empirical reports. Whereas one out of five men in the general population is single, almost half of the SM practitioners are. The SM practitioners also had on average fewer children than the general population, which is partly explained by the fact that many more of the study participants were gay male or lesbians. The SM practitioners that participated in our study were all older than 21 years, with less than 10 percent being over 50 years old.

Of the SM practitioners, 43 percent reported being mainly heterosexual, 5 percent bisexual, and 52 percent mainly homosexual in their sexual orientation. It should be noted that no conclusions can be drawn from these results concerning the proportion of SM practitioners who are gay male or lesbian as

our study was aimed at getting about equal numbers of straight and gay SM practitioners by targeting different kinds of clubs. Of all the SM practitioners 27 percent identified themselves as mainly sadistic, 23 percent as both sadistic and masochistic, and 50 percent as mainly masochistic in their behavior.

On average, first awareness of sadomasochistic interest had taken place when the male SM practitioners had been between 18 to 20 years of age. Also, first experience with SM sex and onset of regular sadomasochistic behavior took place mostly between the ages of 21 and 25 years. The relatively late awareness of sadomasochistic interests and late start of behavior is noteworthy.

Most of the SM practitioners (88 percent) had practiced ordinary sex, that is, consensual heterosexual or gay male sexual activity without sadomasochistic elements, before engaging in sadomasochism. Some 5 percent of the SM practitioners no longer practiced ordinary sex. On average, they stopped having ordinary sex at 25 years of age. On the other hand, approximately a fourth (27 percent) of the male SM practitioners endorsed a statement suggesting that only sadomasochistic sex could satisfy them. These results suggest that the development of sadomasochistic sexual behavior starts after experience with more ordinary sexual behavior and the establishment of a sexual orientation.

These results relate to the relationship between sadomasochistic sexual practices and other sexual activities. The cue-response model of sexual arousal (Suppe, 1985) is a suitable model for analyzing this question, since it stresses inflexibility as a primary criterion for paraphilia. The model presents a classification of how specific cues stimulate or inhibit an individual's arousal. Cues interfering with sexual arousal are classified as inhibitory, while cues that neither inhibit nor intensify sexual arousal are seen as nonfacilitative. Facilitative cues, on their part, enhance but are not necessary for sexual arousal. Finally, cues that are necessary for sexual arousal are named paraphiliac. This differs from the definition of paraphilia in *DSM-IV*, where a clinically important distress or impairment of work, social, or personal functioning is required for diagnosis. According to Suppe's model, sadomasochism is paraphiliac if it is the *only* way for an individual to get sexually aroused and satisfied. This also means that if a person also engages in sex without sadomasochistic elements, sadomasochism should not be viewed as a paraphiliac cue for him or her. These results are also relevant for viewing sadomasochism as a sexual minority. This would not seem to be the case; instead, sadomasochistic sexuality is, for the most part, an additional feature of the sexuality of the SM practitioners who also engage in more ordinary sexual behavior.

It has been suggested that it would be a development from taking mostly the masochistic role in an SM scene toward taking mostly the sadistic position (Baumeister, 1988). This hypothesis of development has not been unequivocally supported, however. When exploring the changes in sadomasochistic preference, it was found that almost half of the male SM practitioners had not changed their preference at all. About a fifth had changed their behavior toward sadistic and another fifth toward masochistic preferences. Changes toward

Table 2.1. Feelings after the First Sadomasochistic Experience

Statements	*Percent of SM Practitioners Who Completely or Partly Agreed*
I wanted to do it again	97
I felt happy	86
I was glad	86
I felt safe	79
I was proud	59
I felt guilty	24
I was troubled	22
I was afraid about the future	20
I thought it was immoral	12
I was disgusted with myself	9

sadistic behavior were, therefore, no more prevalent than changes toward masochistic behavior. The hypothesis of development was also contradicted by the fact that many of the younger SM practitioners in the sample were sadists.

Central to the discussion of whether sadomasochistic sexual activity is a psychiatric disorder is its relationship to psychological distress, which is one of the diagnostic criteria for paraphilia. Although the majority of the SM practitioners had a positive emotional reaction after their first experience with SM sex (see Table 2.1), about one-fourth had at least some negative feelings. From the percentages of the statements "I wanted to do it again," which 97 percent were in agreement with, and "I was disgusted with myself," which 9 percent were in agreement with, it can be deduced that at least a majority of those feeling disgust, nevertheless, wanted to repeat the experience. This could be interpreted as a sign of compulsivity or nonvoluntary nature of the sexual interests. However, many individuals may experience negative feelings after their first experience of ordinary sexual interaction and still want to repeat the experience, which is not interpreted as compulsive.

WHAT DO SADOMASOCHISTS DO (IN BED AND ELSEWHERE)?

Most people have some kind of an image of what sadomasochistic sex involves. Still, there are no generally accepted definitions of what constitutes sadomasochistic sex, and such popular images may be more reflective of cultural and media influences than of the reality of sadomasochistic sex. Therefore, a good way of looking at the question is to ask individuals who consider themselves to be sadomasochists to report what they actually do. Table 2.2 presents the proportions of male participants who have engaged in different

Table 2.2. Frequencies with which Male SM Practitioners Participated in Different Sexual Behaviors and Role-Plays

Sexual Practice or Behavior/Role-Play	*Proportion of All-Male SM Practitioners*	*Prevalence*
1. Oral sex	95.2	E
2. Bondage	88.7	E
3. Flagellation	82.8	S
4. Anal intercourse	80.6	G
5. Handcuffs	74.7	E
6. Rimming	73.1	G
7. Dildos	72.6	G
8. Leather outfits	72.6	G
9. Chains	71.0	E
10. Verbal humiliation	69.9	S
11. Clothespins, clamps	66.6	E
12. Mask, blindfold	66.2	S
13. Spanking	65.5	E
14. Cockbinding	64.5	G
15. Gag	53.8	S
16. Biting	53.3	E
17. Rubber outfits	52.1	S
18. Cane whipping	50.6	S
19. Vaginal intercourse	47.3	S
20. Water sports	47.3	E
21. Wrestling	45.7	G
22. Body odors	42.5	E
23. Face slapping	40.3	E
24. Use of weights	39.3	E
25. Enema	39.3	E
26. Special equipment, e.g. slings, crosses, cages	38.1	G
27. Hot wax	35.0	E
28. Ice	33.9	E
29. Fist fucking	33.3	E
30. Cross-dressing	28.5	S
31. Piercing	21.0	E
32. Skin branding	17.3	E
33. Scat (coprophilia)	17.3	E
34. Hypoxyphilia	16.7	E
35. Straitjacket	15.6	S
36. Electric shocks	15.0	S
37. Knives, razor blades	13.4	E
38. Mummifying	12.9	E
39. Catheter	9.2	E
40. Zoophilia	6.4	E
Role-Plays		E
1. Master/Madame-slave	55.9	S
2. Uniform scenes	38.8	G
3. Teacher-student	29.1	S
4. Execution scenes	23.6	E
5. Hospital scenes	15.7	S
6. Rape scenes	13.5	E

E=equally prevalent among gay and straight males; G=more prevalent among gay males; S=more prevalent among straight males.

kinds of sexual behaviors and role-plays during the twelve months preceding our survey.

This information indicates that, in accordance with the results of the studies of Moser and Levitt (1987), flagellation and bondage were among the most popular activities. Additionally, some activities not specific to sadomasochism, for example, oral sex and anal intercourse, that these authors did not investigate, were also quite popular. The similarities between the percentages of some behaviors (bondage, verbal humiliation, gag, biting, cane-whipping, water sports, enema, face-slapping, hot wax, cross-dressing, piercing, skin branding, and zoophilia) in our study and that of Moser and Levitt were noteworthy.

Most SM practitioners had engaged in sadomasochistic sex during the preceding twelve months from two to five times overall. The analysis of the effect of sadomasochistic preference on the frequency of sadomasochistic sessions gave some indication of the sadistic males being more often engaged in sadomasochistic sex than the masochistic males. The average number of sadomasochistic sessions during a month that the SM practitioners would have liked to have was six. Sadomasochistic preference had no effect on this variable. It seems that sadomasochists are not able to have SM sex as often as they would have wanted. However, as pointed out above, most of them also engaged in ordinary sexual activity.

The discrepancy between how often the SM practitioners engaged in sessions, and how often they would have liked to, may depend on difficulties in finding a partner who would share the same sexual interests, because this in most cases requires involvement in the sadomasochistic subculture. Also, the high number of masochistic heterosexual men and the relative lack of women create difficulties, a result established earlier by researchers in the field (e.g., Moser & Levitt, 1987) and confirmed again. The difficulties experienced by the masochistic SM practitioners may also have been reflected in their expressed desire for having steady relationships.

ARE GAY AND STRAIGHT SM PRACTITIONERS DIFFERENT?

The relationship between sadomasochistic preferences and sexual orientation has not been thoroughly explored, although it has been suggested that sexual orientation issues are usually clarified prior to engagement in sadomasochistic sex (Falk & T. S. Weinberg, 1983; Moser & Levitt, 1987). Here we present some informative data on the relationship between sadomasochistic interests and sexual orientation issues, and review some of the earlier literature on the matter.

T. S. Weinberg (1987) emphasizes the importance of sadomasochistic clubs in developing attitudes supportive of the practice. These attitudes enable individuals who are integrated in the subculture to justify their sexual desires

more easily. Previous studies (Kamel, 1983; Spengler, 1977) have shown gay men to be more integrated in the sadomasochistic subculture. However, during the last two decades, sadomasochism has become more visible and it may be that such differences no longer exist. To the extent that gay male sadomasochistic subculture still offers more role models and possibilities of engaging in sexual behavior than the straight sadomasochistic subculture (Kamel, 1983), it may be that gay male sadomasochists are more satisfied with their sex lives than straight male sadomasochists.

There was some indication that the gay male SM practitioners are better educated (43 percent had college education) compared to straight men (29 percent had college education). The gay male SM practitioners also had a higher income than the population in general. To the extent that educational attainment is viewed as a measure of social and psychological well-being, it seems that the gay male SM practitioners had succeeded well in this respect (Sandnabba et al., 1999).

Exclusively straight males became aware of their sadomasochistic preferences at a younger age than other groups of SM practitioners. Further, they also had their first experience at a younger age. In a similar manner, there was a tendency for them to differ from the other groups in terms of the onset of regular sadomasochistic activity (Sandnabba et al., 1999). This means that the gay male SM practitioners became aware and started practicing their sadomasochistic interests later.

One reason might be that the gay male SM practitioners only become interested in sadomasochistic activities after they have resolved issues related to sexual interest. This would agree with findings showing that gay male individuals establish their sexual orientation and start sexual activity later than heterosexual males (Coleman, 1982; Kontula & Haavio-Mannila, 1993). This is also consistent with Kamel's idea of sadomasochism as a reaction to dissatisfaction with the ordinary gay male scene (1983). These results also suggest that the development of sadomasochistic sexual behavior starts after experience with sexual behavior without sadomasochistic elements and the establishment of a sexual orientation.

Correlations between sexual orientation (rated on a five-point scale with anchors exclusively homosexual and exclusively heterosexual with the middle point being bisexual) and sadomasochistic preference (also rated on a five-point scale with anchors exclusively sadistic and exclusively masochistic with the middle point being equally sadistic and masochistic) were computed separately for male and female SM practitioners. Both male and female SM practitioners with a more heterosexual orientation were more likely to have a more masochistic preference while the more gay SM practitioners were more likely to be sadistically oriented. This association was stronger in females when compared to male SM practitioners.

As already reported above, 27 percent of all male SM practitioners endorsed a statement suggesting that only sadomasochistic sex could satisfy them.

The straight males were somewhat more likely to endorse this statement than the gay males (Sandnabba et al., 1999).

WHAT DO GAY AS OPPOSED TO STRAIGHT SADOMASOCHISTS DO IN TERMS OF SEX?

As evident from Table 2.2, clear differences in the frequencies of sexual and sadomasochistic behaviors and role-plays between the straight and gay male SM practitioners were found; for example, the gay male SM practitioners were more fond of leather outfits, anal intercourse, rimming, dildos, wrestling, special equipment, and uniform scenes, while the straight SM practitioners more often enjoyed verbal humiliation, mask and blindfold, gags, rubber outfits, cane whipping, vaginal intercourse, cross-dressing, and straitjackets. Different role plays, except for uniform scenes, were involved more often in the sexual repertoires of the straight male SM practitioners. In terms of the number of SM sessions, the straight male SM practitioners had fewer sessions than the gay male and bisexual SM practitioners.

Also, sadomasochistic activity did not seem to be associated with extensive substance abuse during or before sadomasochistic sex. However, the use of poppers and alcohol by the gay male SM practitioners was an exception to this pattern and could perhaps be understood as a distinctive pattern of the gay male subculture (Sandnabba et al., 1999).

Lesbian and straight female SM practitioners had engaged in different sexual behavior and role-plays. Most frequently reported behaviors among the lesbian SM practitioners were the use of leather outfits, flagellations, use of dildos, bondage, oral sex, as well as blindfolds, whereas, in contrast to the straight female participants, the lesbian SM practitioners did not participate in scenes including rubber outfits, use of weights, hypoxyphilia (sexual arousal produced while reducing the oxygen supply to the brain), mummifying (wrapping the body with tape or bandage), and straitjackets. Straitjackets and rubber outfits were especially preferred by the straight male participants, which could explain some of the differences.

Sadomasochism is a label of convenience for a set of related sexual activities of particular subcultures (Haeberle, 1978; Katchadourian & Lunde, 1975). Facets include physical restriction and bondage (Baumeister, 1988) and humiliation (Baumeister, 1988; Moser & Levitt, 1987; Weinberg, T. S., 1987), among others. M. S. Weinberg, et al. (1984), Lee (1979) and Kamel (1983) refer to a subset of behaviors commonly associated with the gay male "leather" scene that, to observers, appears to be sadomasochistic in origin. These behaviors include enemas, catheters, anal fisting, and scatological practices and are sometimes described by the subjects as displays of "masculinity and toughness" (Weinberg, M. S., et al., 1984, p. 387). Using a statistical analysis, we identified groups of behaviors that co-occurred in the sexual behavior of the SM practitioners. Four such groups were identified (Alison et al., 2001)

and labeled: hypermasculinity; administration and receiving of pain; physical restriction and psychological humiliation. The behaviors making up the different groups are listed in Table 2.3.

There were significant differences between the gay and straight male SM practitioners in terms of their involvement in the hypermasculinity (involving rimming, water sports, cockbinding, fisting [inserting a hand and part of an arm into the anal cavity], scatologia, and the use of dildos, enemas, and catheters) and humiliation (involving faceslapping, flagellation, the use of a gag, the use of knives and razors, and verbal humiliation) regions. The gay male subjects were more likely to engage in a larger number of the behaviors of the hypermasculinity region compared to the straight male subjects, whereas the latter were more likely to engage in a larger number of humiliation behaviors.

One of the most striking differences between the gay male and straight male sadomasochists is the fact that more gay male sadomasochists are sadistically oriented and have a preference for masculinization of their sexual behavior. The gay male sadomasochistic subculture exaggerates the male aspects of sexual behavior while the straight men seem to play down these aspects and adopt more submissive roles with emphasis on pain and humiliation. However, it is important to remember that these differences were group differences: Many gay men preferred primarily the behaviors in the humiliation group and some straight men engaged in behaviors in the hypermasculinity group.

When drawing conclusions regarding the differences between gay and straight sadomasochists, it should be remembered that it cannot be totally excluded that these are just differences between gay and straight individuals in general or if the sadomasochism plays a specific part. Indeed, a single behavior

Table 2.3. Groups of Sadomasochistic Behaviors Formed on the Basis of Their Co-occurrence

Hypermasculinity		*Administration of pain*		*Humiliation*		*Physical restriction*	
Activity	*%*	*Activity*	*%*	*Activity*	*%*	*Activity*	*%*
Rimming	77.5	Clothespin tortures	67.6	Flagellation	81.8	Bondage	88.4
Dildo	70.2			Verbal humiliation	70.1	Handcuffs	73.2
Cockbinding	68.3	Spanking	64.0			Chains	70.8
Water sports	50.6	Caning	50.7	Gag	53.0	Wrestle	45.1
Enema	42.7	Use of weights	41.5	Face slapping	37.2	Slings	39.0
Fisting	32.9	Hot wax	34.8			Ice	31.7
Scat	18.2	Electricity	16.4	Knives	10.9	Straitjacket	17.0
Catheter	10.4	Skin branding	15.8			Hypoxyphilia	16.5
						Mummifying	13.4

Source: Santilla et al., 2002.

can seldom be classified unambiguously as sadomasochistic or not without knowing the context of the behavior and the interpretation assigned by the individuals engaging in the behavior. Certainly, nonsadomasochistic gay men also can be interested in and engage in behaviors classified into the hypermasculinity group of sadomasochistic behavior.

The finding related to hypermasculinity is interesting as a major aspect of the stereotypes linked to gay and lesbian individuals has been that they do not fit the accepted stereotypes for their own gender (Lips, 2001, p. 27). Also, a common stereotype of gay men is that they are effeminate (Deaux & Lewis, 1984). However, the gay male SM participants accentuate their masculinity, contradicting the stereotype. This does not mean that the gay males engaged in SM are necessarily more masculine than other gay men. Also, previous research has indicated that a lot of gay men have antieffeminacy prejudice (Taywaditep, 2001). In light of these findings, the hypermasculinity of gay men within the sadomasochistic subculture could be understood as a reaction to these stereotypes and a coping strategy to handle the conflict between internalized aspects of such stereotypes and antieffeminacy attitudes held at the same time. Likewise, some gay men adopt an exaggerated feminine pose, probably in an attempt to handle the same conflict by internalizing the stereotype completely and denying any antieffeminacy attitudes. In the same way, the straight men who have sadomasochistic sexual interests may be escaping from the pressures of their narrow gender role demanding that they be strong, masculine, active, dominant, and successful. The masochistic role in a sadomasochistic sexual encounter is to some extent the exact opposite of such a role, and it is therefore interesting that many of the straight men in our sample were, in fact, masochistically oriented. Further, it can be speculated that the small numbers of women engaging in sadomasochistic sex could be related to the female gender role being broader in these respects.

HOW ARE SM SESSIONS SCRIPTED?

Interpersonal sexual scripts refer to social interactions of a sexual nature between individuals. The way in which people behave and act out their sexuality is influenced by their perceptions of what others expect of them. Script theory suggests that sexual interaction is hardly ever spontaneous, but rather, conforms to a premeditated sequence of intentional actions. Script theory has mainly been used for describing conventional heterosexual activities (DeLamater & MacCorquodale, 1979; Laumann, Gagnon, Michael, Michaels, 1994). However, little is known about the "scripting" of more unusual sexual activities, including sadomasochistic sexual behavior. Because sadomasochism tends to involve ritualistic patterns of behavior in which partners are often assigned roles (Sandnabba et al., 1999) and are expected to enact particular sequences of behavior, these patterns could be viewed as highly scripted. Thus, it could be hypothesized that members of the sadomasochistic subculture learn patterns

that facilitate the enactment of complicated sadomasochistic sexual scenarios. No studies have so far empirically scrutinized the idea of sexual scripts in SM sex.

We wanted to discern whether particular SM behaviors are always preceded by others, thereby creating sequences of various SM scenes. The intention was, in other words, to examine the relationship that individual actions may have in the context of learned and developing sequences of behaviors in much the same way that studies of conventional heterosexual activity have examined the progression of kissing to intercourse. It could, for example, be hypothesized that people who use straitjackets (which have to be specially acquired, suggesting a more advanced type of restraint) in their SM scenarios would previously have engaged in bondage (for which it is not necessary to acquire specialized equipment, suggesting that it is a less extreme form of restraining a person).

Hypermasculinity

Among the 184 SM practitioners studied (see Table 2.3), only 57 of the 256 possible combinations of the 7 hypermasculinity behaviors (i.e., profiles) occurred, which suggests the existence of an underlying structure in how the behaviors are combined, that is, sexual scripts (Santtila et al., 2002). This means that the behaviors in this group combine in certain predictable ways and not randomly. Therefore, from knowing whether a subject has engaged in a particular behavior, for example fisting, it is possible to tell something about other behaviors he or she is likely to have engaged in as well.

SM practitioners who engaged in water sports were also engaged in rimming. Cockbinding, however, was a qualitatively different aspect of hypermasculinity. SM practitioners who engaged in fisting most certainly also had experienced scat, and those with experience of scat in turn had also experienced enema. Thus, the presence of these behaviors combined with either the rimming/water sports behaviors or the cockbinding behavior identify SM practitioners with the most experience. However, all of these behaviors seem more related to the rimming/water sports dimension, pointing to a script within the hypermasculinity theme starting with rimming and ending at fisting. Use of dildo together with catheter had no clear relationship with either sequence. This may have something to do with them being pieces of technical equipment. In conclusion, the use of dildos does not give information on the level of an SM practitioner's experience with respect to other hypermasculinity behaviors. The use of catheter was quite rare, which may explain why it was not a structured part of the hypermasculinity scripts.

Pain

Forty out of the 128 possible combinations of the presence of the behaviors in this group were observed, again suggesting the existence of a clear

underlying structure in the combination of the different behaviors. SM practitioners who had practiced spanking had also practiced caning. Both of these behaviors are classical SM behaviors and appear to be similar with regard to their psychological meaning and physical sensation. The ordering of the structure where caning precedes spanking (without any aid) most likely represents differences in the psychological and physical distance between the sadist and the masochist, where this distance is shorter when they are practicing spanking. In the other major distinction revealed by the analysis of behaviors, electric stimulation, use of weights, and clothespin torture formed a sequence, with clothespin torture being the most common behavior and electric stimulation the rarest. This is an understandable structure as the rarer behaviors require the purchase of special equipment whereas the clothespins are to be found in every household. It can be suggested that these two sequences reflect potential differences in the intensity of the pain the behaviors cause as well as in the narrowness of their focus on erogenous zones with spanking and caning being less intense and less focused on erogenous zones than electric stimulation, use of weights, and clothespin torture. The rarely occurring skin branding could be a behavior emphasizing either one of these sequences. This may be explained by it being on the one hand intense but on the other hand less focused on erogenous zones, thereby sharing characteristics of both of these sequences. The use of hot wax did not belong clearly to either of these two major distinctions.

Humiliation

Of the thirty-two possible profiles, eighteen were identified, again suggesting the existence of a clear underlying structure. The major distinction could be drawn between flagellation and knives on one hand and face slapping on the other. SM practitioners who had used knives in their SM sessions had most certainly also been involved in sessions where flagellation had been enjoyed. The remaining two behaviors, verbal humiliation and gag did not clearly belong to any of these two major distinctions. However, when examining the results of the analysis further, it was noticed that gag was more associated with the flagellation/knives script. In contrast, there was some indication that verbal humiliation was more associated with a script involving face slapping. Verbal humiliation, which was a relatively common behavior, may, therefore, be seen to express similar intentions as face slapping, albeit in a milder form.

Restraint

Results concerning the nine restraint behaviors were somewhat less clear when compared to the above results. However, an interesting sequence was revealed. Six of the behaviors were ordered in a sequence of restraint behaviors

starting from the less extreme bondage, and going through chains, handcuffs, slings, and straitjacket, and finally ending with the most extreme variation of hypoxyphilia. This is understandable since all of them (with the possible exception of hypoxyphilia) involve the use of some kind of equipment. Also, the roles of the sadist and the masochist are clearly defined in scripts involving these behaviors.

One of the behaviors, wrestling, represented a qualitatively different kind of restraint behavior. It differs from the above behaviors in that it does not require clearly defined dominant and submissive positions and also in that no equipment is necessary in order to engage in this behavior. The use of ice could not be associated to the other behaviors in a structured way. This can be explained because ice is not a restraint behavior per se, rather it is used for additional fun in an SM script involving restraint. Finally, mummifying represented an extreme form of both the group of six behaviors described above as well as an extreme form following wrestling. The association between mummifying and wrestling could be understood as two different ways to limit the freedom of movement.

Clearly, the sadomasochistic behaviors are not haphazardly combined with each other. Rather, evidence for structured patterns of co-occurrences was found. Further, the combining of the behaviors was also theoretically meaningful, indicating the existence of progressions of sadomasochistic behaviors which can be likened to sexual scripts for ordinary heterosexual sexual behavior (Gagnon, 1990; Gagnon & Simon, 1987).

These results have important implications for the understanding and conceptualization of sadomasochism as a sexual phenomenon. Some of the behaviors are observed in almost all participants, such as bondage, flagellation, rimming, and clothespin torture (Alison et al., 2001). However, in addition to these "core" behaviors, there are a number of less-common activities expressed in sadomasochistic sex that form specific and distinct scripts. Different persons, creating subgroups of individuals, differentially engage in these scripts. The existence of such emphases suggests that individual careers within the sadomasochistic subcultures are determined in an interplay between the individual's own developmental history, psychological characteristics (see Santtila, Sandnabba, & Nordling, 2000), and the subcultural context within which the individual faces information concerning possible pathways of expression and conformist group processes that make the development of certain scripts more likely than others (cf. social constructionist approaches to sexuality, e.g., Hart, 1985). This process may be more transparent in sadomasochism due to its highly ritualized nature, but the process itself is probably shared in most expressions of human sexuality.

Further, the SM practitioners' involvement in the subculture through sexual contacts and porn was positively associated with greater variability in their sexual behavior. Although the design of the study does not warrant any causal conclusions, the results nevertheless imply that sadomasochistic behavior

is at least partly a product of adult socialization processes where real or imagined sexual contact leads the SM practitioners to adopt new behaviors and sexual scripts. This finding accords well with social constructionist explanations of sexual behavior (Weinberg, T. S., 1987; Weinberg, M. S., et al., 1984).

CAN SADOMASOCHISM BE PART OF SEXUAL EXPERIMENTATION? THE ASSOCIATION BETWEEN SADOMASOCHISM AND ZOOPHILIA

Though sexual contact with animals has occurred throughout history (Miletski, 1999) there is a paucity of research on this issue and, in particular, the ways in which individuals use animals for sexual gratification in the context of other forms of sexual behavior. We focused specifically on the ways in which male SM practitioners have incorporated the use of animals into their sexual, sadomasochistically oriented practices. There are some studies that suggest a connection between sadomasochism and bestiality (Karpman, 1962; Rosenberger, 1968).

Since none of the twenty-two female SM practitioners reported bestiality interests, the proportion of the participants who had engaged in sexual contact with an animal during the preceding twelve months was based on the 164 males only. This resulted in 7.3 percent ($n = 12$). Of the bestiality group, 50 percent ($n = 6$) had taken an active role in the sexual interaction with the animal, whereas 25 percent ($n = 3$) had taken a passive role and 25 percent ($n = 3$) had taken both roles. We compared these twelve participants with another twelve participants who had not engaged in sexual behavior with animals but were otherwise similar to them.

The participants with interest in bestiality were likely to have become aware of their sadomasochistic interests relatively late and to have started practicing sadomasochism late as well. The same pattern was also observed regarding starting practicing sadomasochistic sex. Also, in comparison with more general findings on bestiality, these individuals used animals for sexual pleasure at a later stage of their sexual development. Existing research on bestiality suggests that most of the experimental sexual contacts with animals occurs in adolescence (Kinsey, Pomeroy, & Martin, 1948; Miletski, 1999). Further, the majority of our sample ($n = 11$ out of 12) had their experience with bestiality after they started sadomasochistic sexual practices. Therefore, this group appears to have come to use animals at a much later stage than is usually the case. Similarly, they also experimented with SM practices relatively late and therefore appear to be "late developers" in acquiring their sadomasochistic preferences.

From Table 2.4 it can be seen that the SM practitioners with bestiality interests showed more experience with sexual practices that were rare in the total sadomasochistic population compared to the comparison group.

Table 2.4. Differences in Various Sexual and Sadomasochistic Behaviors and Role-Plays between SM Practitioners with Experience in Bestiality and Comparison Group Ordered According to the Magnitude of the Differences

Behavior/Role-Play	*SM Practitioners with Experience in Bestiality*	*Comparison Group*
Knives, razor blades	54.5	–
Skin branding	45.5	–
Scat (coprophilia)	54.5	8.3
Biting	81.8	33.3
Face slapping	72.7	25.0
Water sports	83.3	41.7
Use of weights	66.7	25.0
Ice	54.5	16.7
Spanking	90.9	58.3
Straitjacket	50.0	16.7
Cross-dressing	58.3	25.0
Piercing	58.3	25.0
Fist fucking	66.7	33.3
Catheter	36.4	8.3
Hospital scenes	45.5	8.3
Rape scenes	60.0	0.0

The SM practitioners with experience in bestiality were more prepared to employ a range of sexual and sadomasochistic behaviors in their repertoire as reported in Table 2.4. Indeed, on all but one behavior (special equipment), they were more inclined to try different sexual practices. Also, the behaviors they engaged in were not limited to one of the specific sadomasochistic scripts (hypermasculinity, psychological humiliation, administration and receiving of pain, and physical restriction) earlier identified (Alison et al., 2001). Therefore, they were more experimental than the control group as well as the whole sample.

Similarly, in contrast to other bestiality studies, the majority in this sample had a steady partner (with whom they had more often practiced SM) and over half had children. This suggests that this group represents a particular subset of individuals who use animals for sexual gratification, distinct from individuals who are more exclusively focused on animals. It appears that this group is generally more sexually experimental and that the use of animals, rather than being a specific preference, is part of a more general desire for sexual experimentation. The fact that they tried other, more unusual sex practices than the control group and also often involved the partner in the sadomasochistic activities also suggests that they may have partners with similar interests with whom they feel comfortable in a variety of experimental sexual practices. Overall, the behavior of the individuals here resembles an earlier described

"sex-dominated personality" constellation where the individual is actively obsessed with the need for erotic release (Masters, 1966). It is also interesting that the SM practitioners were highly educated in accordance with Miletski's (1999) findings and the whole sample (Sandnabba et al., 1999).

WHAT HAS THE CHILDHOOD OF SADOMASOCHISTS BEEN LIKE?

We also wanted to explore the question of how, in a group of sadomasochistic males, different patterns of family interaction produce different attachment styles, and if these in their turn affect the SM practitioners' satisfaction with their sexuality and sadomasochistic preferences (Santtila et al., 2000). According to attachment theory (Ainsworth, Blehar, Waters, & Wall, 1978; Bowlby, 1969, 1973; Scharff, 1988), individuals construct mental models of themselves and their major social-interaction partners during childhood. These models regulate a person's social behaviors and feelings throughout life, also affecting their sexual behavior. Sensitive responsiveness by primary caretakers is the factor that produces secure attachment, which in turn enables a person to establish enduring, close relationships to significant others during adult years (Grossman & Grossman, 1995). Insecure attachments involve avoidant, ambivalent, and disorganized strategies of interaction (Matas, Arend & Sroufe, 1978; Waters, Wippman & Sroufe, 1979). Some evidence suggests that demanding, disrespectful, and critical maternal behavior, as well as unfair and threatening paternal behavior, lead to these kinds of attachment styles (Ainsworth et al., 1978; Shaver et al., 1988). Insecure attachment may lead to contradictory internal models of relating to others and to difficulties in identifying with the attachment figure. Earlier research has shown that the relationship between the maternal behavior and children's attachment is clearer and stronger than the relationship between the paternal behavior and children's attachment (Crowell & Feldman, 1988; Lamb, Pleck, Charnov, & Levine, 1985; Main, Kaplan, & Cassidy, 1985).

The classification of the male SM practitioners into different attachment groups in relation to the father was: 47 percent were securely attached, 28 percent had an avoidant attachment, and 10 percent an ambivalent attachment. The rest were nonclassifiable, or else the question was left unanswered. Corresponding results concerning attachment to the mother showed that 54 percent were securely attached, 13 percent had an avoidant attachment, and 19 percent an ambivalent attachment. The rest (14.6 percent) were, again, nonclassifiable or the question was left unanswered. The distribution of different attachment styles among the male SM practitioners was almost identical to distributions obtained in previous studies with general adult samples using similar methods of measurement (Shaver et al., 1988). This again suggests that conclusions drawn from clinical case reports based on people who have sought psychological help cannot be generalized to the majority of men practicing SM

sex. Also, there was considerable agreement in the participants' attachment to both their fathers and mothers across all attachment categories. This suggests that internal representations regarding mother and father in adult age may not be differentiated but rather describe parental behavior in general. This finding is in line with observations made by Kalmuss (1984) in a study of family violence.

The male SM practitioners' attachment to their fathers was related to paternal use of physical punishment and alcohol consumption. Their attachment to their mothers was related to her use of physical punishment and emotional closeness, but not to maternal alcohol consumption. The style of attachment to the mother was also found to be related to the sexual adjustment of the male SM practitioners, in that those with avoidant attachment to their mothers had higher levels of sexual neuroticism (a conflict between strong sex drives and conscience or some other factor holding back the person from indulgence) and lower levels of sexual satisfaction than the SM practitioners with secure or ambivalent attachment to their mothers. Securely and ambivalently attached SM practitioners were sexually better adjusted than avoidantly attached SM practitioners. But this was only true of the attachment to the mother. This finding is in accordance with earlier research that has shown that mothers' behavior is a more significant predictor of children's attachment style than fathers' behavior (Crowell & Feldman, 1988; Lamb et al., 1985; Main et al., 1985). The sadistic males were more likely to have an ambivalent attachment and less likely to have a secure attachment to their mothers. In an opposite manner, the masochistic males were less likely to have an ambivalent attachment and more likely to have a secure attachment to their mothers.

The sexual adjustment of the participants was correlated with different aspects of interaction in their primary families. The strongest connection was a positive correlation between participants' recollection of expression of opinion in the primary family and their current sexual satisfaction. Perception of the extent of family support was positively correlated with current sexual satisfaction. Also, the less the participants thought that they had had influence on decision making in their primary families, the more they reported current sexual neuroticism.

Interestingly, the family background of the more sadistically inclined participants could be described as a situation where the children expressed their opinions but were not listened to. Thus, it can be speculated that they are compensating for the lack of influence on decision making in their childhood by wanting to be controlling in the sexual arena.

It was also apparent that the overwhelming majority of the SM practitioners had grown up in traditional two-parent households. Further, structural aspects of the primary family did not predict later sadomasochistic preferences, a finding expected on the basis of earlier research.

A risk factor that has specifically been suggested to be associated with sadomasochism is childhood sexual abuse. It has been suggested that sexually

abused girls are vulnerable to revictimization in adulthood (Messman & Hirschman, 1981). Messman and Long (1996) found that several studies on this topic indicate that these girls are at an elevated risk for reexperiencing sexual abuse as adults compared to nonabused children. One possible mechanism for this effect is that abused women may see violence and domination by their partners as a part of sexuality and this may lead them to seek out punitive relationships. On the other hand, in boys sexual abuse seems to be associated with sexual aggression in adulthood (Ferrenbach, Smith, Monastersky, & Deisher, 1986; Friedrich & Luecke, 1988). Thus, the coping mechanisms of boys and girls seem to differ. Consequently, it could be assumed that some sexually abused individuals would be drawn to sadomasochistic sexual relationships, with females being more likely to take masochistic and males, sadistic roles.

Sexual abuse had occurred for 8 percent of the male and 23 percent of the female SM practitioners (Nordling et al., 2000). The abuse had occurred once for two SM practitioners, from two to ten times for ten SM practitioners, and more than ten times for five SM practitioners. The rate of occurrence did not differ between male and female SM practitioners. Further, the perpetrator was a family member in 61 percent of the cases.

The abused SM practitioners experienced more psychological distress. Of the sexually abused SM practitioners, 39 percent had attempted suicide, compared to 4 percent of the nonabused. Similarly, 33 percent of the abused SM practitioners had been inpatients in a psychiatric hospital, compared to 5 percent of the nonabused. Visits to a physician due to injuries obtained during SM sex were significantly more common among the abused SM practitioners (11 percent) than among the nonabused (2 percent). This may suggest that they had difficulties in setting appropriate limits to their SM activities. It was also found that the sexually abused SM practitioners had a higher level of sexual neuroticism compared to the nonabused.

As expected, the sexually abused female SM practitioners were significantly more likely to engage in masochistic sexual behavior than the nonabused. However, the abused male SM practitioners did not engage in sadistic sexual behavior more often than the nonabused. This finding supports the notion of abused women seeking out punitive relationships involving violence and domination (Messman & Long, 1996). The findings suggest that sexual abuse does not play a major role in determining whether the male SM practitioners take the sadistic or masochistic role in their sexual behavior.

The results also showed that the sexually abused SM practitioners were more often single (61 percent) compared to their nonabused counterparts (38 percent). This relative isolation may have been reflected in that the sexually abused SM practitioners were more prone to participate in SM-club activities. Sexual abuse was associated with poorer social adjustment as measured by income level and ability to establish steady relationships.

In conclusion, childhood sexual abuse had clearly adverse consequences in some SM practitioners. Therefore, one should be aware that a small subgroup of SM practitioners seems to be both psychologically and socially maladjusted.

WHAT DO THESE RESULTS TELL US?

The results presented in this chapter indicate that for the majority of the (male) SM practitioners, their level of social functioning is not impaired on characteristics like income and education when compared to the general population. On the contrary, they have a high income level and are highly educated (Moser & Levitt, 1987; Spengler, 1977; Weinberg, T. S., 1987). In contrast, the SM practitioners seemed to have difficulties in finding partners. The high number of masochistic heterosexual men and the relative lack of women create difficulties, a result that was previously documented (e.g., Moser & Levitt, 1987). The difficulties experienced by the masochistic males were also reflected in their expressed desire for steady relationships. In spite of this, the males seemed to have a positive and ego-syntonic view of their sexual behavior; that is, they viewed it as acceptable and consistent with their total personality.

The development of sadomasochistic sexual behavior starts after experience with more ordinary sexual behavior and the establishment of a sexual orientation. Specifically, the exclusively gay male SM practitioners became aware and started practicing their sadomasochistic interests later, which accords well with findings showing that gay male individuals establish their sexual orientation later than heterosexual individuals (Coleman, 1982; Kontula & Haavio-Mannila, 1993). Further, about one-third indicated that only sadomasochistic sex could satisfy them, which can be interpreted as sadomasochistic sex involving paraphiliac cues for these SM practitioners (Suppe, 1985). Many masochists (who were more likely to be heterosexual) had not engaged in ordinary sex, that is, either heterosexual or gay consensual sexual activity without sadomasochistic elements, before starting to practice sadomasochism. In contrast, many SM practitioners seem to be flexible in their sadomasochistic preference in that the persons who described themselves as exclusively sadistic or masochistic could occasionally take the other position. This indicates that sadomasochistic behavior involved facilitative as opposed to necessary cues for most SM practitioners (Suppe, 1985).

The results also indicate clearly that the sadomasochistic behaviors in which the SM practitioners were engaged were not haphazardly combined with each other. Rather, there is evidence for structured patterns of co-occurrences. Further, the combining of the behaviors indicates the existence of sadomasochistic sexual scripts similar to the existence of sexual scripts for ordinary heterosexual sexual behavior (Gagnon, 1990; Gagnon & Simon, 1987). The existence of such sexual scripts suggests that individual solutions within the

sadomasochistic subcultures are determined in an interplay between the individual's own developmental history, psychological characteristics (see Santtila et al., 2000), and the subcultural context within which the individual faces information concerning possible pathways of expression and conformist group processes that make the development of certain scripts more likely than others (cf. social constructionist approaches to sexuality, e.g., Hart, 1985). This process may be more transparent in sadomasochism due to its highly ritualized nature, but the process itself is probably shared in most expressions of human sexuality.

Although the results discussed here are informative, some concerns may be raised about the reliability of the results concerning reports about childhood experiences due to the retrospective nature of these data. However, the childhood background of sexual behavior in general and unusual sexuality in particular is almost impossible to study using longitudinal designs. On the other hand, Brewin, Andrews, and Gottlib (1993) have provided evidence suggesting that retrospective reports of childhood experiences are not as unreliable and invalid as previously assumed. If anything, research by Widom and Shepard (1996) indicates that individuals tend to understate rather than exaggerate when retrospectively recalling childhood experiences. Therefore, it can be assumed that despite methodological problems, the use of retrospective reports from people with unusual sexual interests can give important information concerning their development and family background.

While we should note that sexual sadism and masochism should be separated from sadistic and masochistic personality disorders (American Psychiatric Association, 2000), this does not exclude the possibility that some individuals suffering from these personality disorders may occasionally engage in sexual behavior with sadistic and masochistic elements. These persons should not automatically be equated with individuals engaging in consensual sadomasochistic activities.

The variability in the phenomenon of sadomasochism makes it easy to understand that no one description—let alone explanation—can do it justice. Our results suggest that a person's sadomasochistic interest may be influenced by a number of factors. Individual sadomasochistic behavioral repertoire is also most certainly influenced by social and cultural features, which may be one of the reasons why gay and straight SM practitioners show such different repertoires. It can be speculated that sadomasochism can be both a creative part of an individual's sexual life (as suggested by Foucault, 1999) or have a protective function as a neosexual (i.e., nonnormative hetero- or homosexual consensual activities) creation in order to prevent severe psychological disturbances from appearing (as suggested by McDougall, 2000). The conflicting perspectives on sadomasochism until now may, to a great extent, be dependent on different researchers looking at different aspects and various subgroups of a phenomenon that is multifaceted and not easily amenable to general descriptions or conclusions.

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3

Female Sex Offenders

Donna M. Vandiver

Recently, media attention has been drawn to females who have sexually assaulted young boys. One of the most highly publicized cases was a teacher from Seattle, Mary Kay LeTourneau, who had an affair with her sixth grade student, Vili Fualaau ("Le Tourneau says," 2004). She spent six months in jail for the offense. Despite being arrested on two occasions, she continued to see her former student. She had two children with him and later married him in March 2005 after he had turned 21 years of age. Despite extensive media coverage of Mary Kay LeTourneau's love affair with her student, few equated this type of behavior with a bona fide "sex offender." The majority of people had not even heard of females sexually offending; sex offenders are typically thought to be male.

Researchers have identified relationships such as the one Mary Kay LeTourneau established with her student as a specific category of female sex offense, *teacher/lover.* In fact, this is only one of the many types of female sex offenses. A high percentage of females who sexually offend do not offend alone; they often sexually abuse a child with a male, possibly their husband. High rates of incest have also been found among this population of offenders, with mothers often abusing a son or daughter. For some females who sexually offend, the stereotypical rapist is turned on its head—an adult woman rapes an adult man. Other females start out on the wrong side of the law; the women are criminals, committing nonsexual offenses and the sexual offense is just another offense. Usually this is for the purpose of economic gain; it includes

offenses such as forcing young girls to prostitute or forcing children to pose nude for pornographic material. Many female sex offenders are psychologically impaired or act out on latent homosexual feelings.

Some sex offenders begin offending at an early age; it is not simply an adult crime. Even though the majority of juvenile sex offenders are male, a few are female. There is a paucity of information regarding juvenile female sex offenders; the studies that have been conducted, though, are reviewed in this chapter.

PREVALENCE OF FEMALE SEX OFFENDERS

Several sources are available to answer the question of how many sex offenders are female. The Uniform Crime Reports (UCR) includes arrest data compiled by the Federal Bureau of Investigation; the data are released on an annual basis. In 2003, female offenders were arrested for 1.3 percent (n = 247) of the 18,446 forcible rapes (U.S. Department of Justice, 2005b). For sex offenses other than rape and prostitution, females accounted for 8.5 percent of the 63,759 arrests. While this information does not fully capture the extent of female sexual abuse, it does provide an indicator; females make up only a small portion of sex offenders. Whether they make up approximately 8 percent of sex offenders is questionable; official arrest data are limited because many victims do not report sexual offenses.

Another source for the number of females who have sexually offended is the National Crime Victimization Survey (NCVS). Rather than relying on arrests data, the information is based on an annual household survey that asks participants who are over the age of 12 about their victimization experiences; thus, information not reported to law enforcement is captured. It should be noted, however, that not every person in the United States is surveyed. Instead, it relies on samples, and subsequently estimates the population rates.

The NCVS includes an estimate of how many people were sexually abused but failed to report the incident to law enforcement. Interestingly, only 39 percent of sexual assault incidents were reported to law enforcement in 2003 (U.S. Department of Justice, 2005a). Sexual assaults, therefore, are often not fully captured by official arrest reports.

Data from the NCVS indicate that 3.5 percent of the sexual assaults with a single offender involved a female offender. For sexual assault incidents involving multiple offenders, females and males acting together accounted for 8 percent of the sexual assaults. Thus, reports from the UCR and NCVS indicate females account for a small proportion of sexual offenses, and males make up the majority of sex offenders. Despite the low numbers of females who sexually offend, law enforcement and social service agencies need to be knowledgeable about the characteristics of female sex offenders. More information is needed for the detection and treatment of this group of offenders.

Table 3.1. Summary of the Number of Female Sex Offenders

Researchers	*Percentage of Offenders Who Are Female*	*Sample Size and Source*
Travin et al., 1990	1	515 sex offenders in a specialized sex offender treatment program
Finkelhor et al., 1990 (female respondents)	1	Telephone survey of 1,481 women about their sexual victimization experiences
Rowan et al., 1990	1.5	600 sex offenders from the New Hampshire judicial system and Vermont social service agencies and courts
Vandiver & Kercher, 2004	1.6	29,376 registered sex offenders in Texas
Vandiver & Walker, 2002	2.4	1,644 registered sex offenders in Arkansas
Vandiver, in press	3.1	7,385 adults arrested for a sex offense; All adults arrested for a sex offense in 2001 (NIBRS data, including 21 states)
Faller, 1987	14	Child Abuse and Neglect Treatment Center in Michigan
Finkelhor et al., 1990 (male respondents)	17	Telephone survey of 1,145 men about their sexual victimization experiences
Finkelhor et al., 1988	40	271 child sexual abuse cases occurring in a daycare, nationwide
Petrovich & Templer, 1984	59	83 incarcerated rapists report of their childhood sexual victimization

Additional data for determining the extent to which females sexually offend can be drawn from individual sexual abuse studies. The number of females who sexually offended ranged from 1 percent to 59 percent (see Table 3.1). The studies listed in the table include self-report information from studies relying on known sex offenders, official data of known sex offenders, and surveys of the general population.

Table 3.1 illustrates how few studies include female sex offenders and of those, the majority of the studies indicate that female sex offenders make up less than 20 percent of sex offenders. While two studies included rates of more than 20 percent, one study (Finkelhor, Williams, & Burns, 1988) included a daycare sample, which is made up of primarily female employees. The other study (Petrovich & Templer, 1984) relied upon self-report from incarcerated rapists who reported they were sexually abused as children by women. The validity of their reports may not be accurate.

PROBLEMS IN RECOGNIZING FEMALE SEX OFFENDERS

Many researchers have speculated that sex offenses in general are largely underreported (Finkelhor, Hotaling, Lewis, & Smith, 1990), and data from the NCVS support this notion. Measurement problems are inherent in reporting sexual abuse. While the majority of people are willing to call the police if someone steals their wallet or purse or their car, not everyone is willing to report a sexual offense. Many times the offender is a friend, relative, or even a caretaker (Johnson, R., & Shrier, 1987), and in these cases the victim is even less likely to report the offense. When the victim is a young child, he or she may not recognize the behavior as something that is wrong (Groth & Birnbaum, 1979). Victims may feel the abuse is their fault (Johnson, R., & Shrier, 1987) or may fear additional abuse if they tell someone. Detection and prosecution of sexual abuse is also problematic. Sexual abuse is more difficult to detect than physical abuse (Farrell, 1988). Physical abuse results in bruises and broken bones whereas sexual abuse does not result in such obvious physical markings. The victim is not always encouraged to tell his/her story because of the difficulty associated with criminal prosecution. Some believe sexual abuse is a mental health problem rather than a criminal justice problem; thus, it is better handled by social service agencies rather than criminal courts (Berliner & Barbieri, 1984).

The problems associated with reporting sexual abuse are compounded when the offender is female. The thought of a woman sexually offending is a perplexing concept to most; in our society we are not geared toward thinking that a female is physically capable of "rape" or any other type of sexual assault (Denov, 2004). This obstacle in our thinking is conveyed well by the title of a book chapter, "What harm can be done without a penis?" (Hislop, 2001).[1] Males are typically associated with violent crimes, and there is often an inability to associate a "submissive and passive" woman with a violent offense (Scavo, 1989). The problem is perpetuated by organizational structures within agencies such as law enforcement departments and treatment centers that rely on traditional constructs of who can and cannot sexually offend (Denov, 2004).

Researchers have identified many reasons why females are underrepresented in official data. Sexual abuse by a woman is often considered harmless despite research findings indicating the effects are prominent for victims of female sexual abuse (Hetherton, 1999). Women sex offenders often go unnoticed because women are able to disguise sexual offenses when engaging in routine child-rearing activities such as bathing and dressing (Groth & Birnbaum, 1979). Females who act with a male co-offender may be seen as less culpable than their male partner (Mayer, 1992).

RESEARCH ON FEMALE SEX OFFENDERS

Only recently has research begun to emerge on female sex offenders. The majority of the empirical evidence is derived from four sources:

1. clinical sources (see Faller, 1987, 1995; Johnson, R., & Shrier, 1987; Peluso & Putnam, 1996; Rosencrans, 1997; Rudin, Zalewski, & Bodmer-Turner, 1995; Travin, Cullen, & Protter, 1990);
2. incarcerated samples (see Kaplan & Green, 1995; O'Connor, 1987; Syed & Williams, 1996);
3. medical samples (i.e., hospital) (see Duncan & Williams, 1998; Marvasti, 1986); and
4. sex offender registries (see Vandiver & Kercher, 2004; Vandiver & Walker, 2002).

Each of the above sources includes information from the female sex offender herself (or her records) and from victims of female sex abuse (Denov, 2004; Johnson, R., & Shrier, 1987; Krug, 1989; Peluso & Putnam, 1996; Rudin et al., 1995; Sarrel & Masters, 1982). Most of these sources are limited in that they include offenses known only to social service agencies, medical personnel, or law enforcement; thus, they provide only the narrowest view into the world of female sex offenders, given that many do not come to the attention of such agencies.

While the number of studies specifically focused on female sex offenders is growing and includes approximately thirty empirical studies, many are limited by small sample sizes. Only about ten studies include more than thirty female sex offenders (see Duncan & Williams, 1998; Faller, 1987, 1995; O'Connor, 1987; Pothast & Allen, 1994; Rosencrans, 1997; Rudin et al., 1995; Vandiver & Kercher, 2004; Vandiver & Walker, 2002). With the exception of Vandiver and Kercher's (2004; $n = 471$), no study included more than 100 subjects. Many studies included fewer than fifteen female sex offenders (see Chasnoff et al., 1986; Chow & Choy, 2002; Denov, 2003; Johnson, R., & Shrier, 1987; Kaplan & Green, 1995; Krug, 1989; Marvasti, 1986; Nathan & Ward, 2002; Peluso & Putnam, 1996; Rowan, Rowan, & Langelier, 1990; Sarrel & Masters, 1982; Travin et al., 1990; Wolfe, 1985).

Description of Female Sex Offenders

The typical female sex offender is young, usually in her twenties or thirties. Researchers have found the average age of female sex offenders in their studies to be 26 (Faller, 1987, 1988), 28 (Lewis & Stanley, 2000), 30 (Nathan & Ward, 2002; Vandiver & Walker, 2002), 32 (Vandiver & Kercher, 2004), 33 (Rowan et al., 1990), and 36 (Kaplan & Green, 1995). Most studies indicate that approximately 80–90 percent of the women are Caucasian

(Faller, 1987, 1995; Lewis & Stanley, 2000; Vandiver & Kercher, 2004; Vandiver & Walker, 2002).

High rates of mental illness are reported by various studies. For example, Lewis and Stanley (2000) found in a study of fifteen women, 66 percent had a psychotic disorder (n = 2), schizophrenia (n = 1), or depressive symptoms (n = 7). Nathan and Ward (2002) also found 66 percent of the twelve female sex offenders had either depression (n = 4), an eating disorder (n = 3), or experienced self-mutilation with suicidal ideations. In an assessment of eleven female sex offenders, Kaplan and Green (1995) found 72 percent experienced posttraumatic stress syndrome, 63 percent had experienced major depression, 63 percent had avoidant personality disorder, and 45 percent had dependent personality disorder. In O'Connor's (1987) study, 48 percent of eighty-one incarcerated female sex offenders had a history of some type of psychiatric disorder. Additionally, 40 percent of the eighty-one women had psychotic features. In a study of seventy-two female sex offenders, 32 percent had some type of mental illness (Faller, 1995). A study of sixteen female sex offenders included 31 percent who had either borderline personality disorder or psychotic features. In a study of forty female sex offenders, 18 percent had psychotic features (Faller, 1987).

Even though the rate of mental illness has been found to be high, caution is suggested in interpreting these findings. Many of the sources relied upon are clinical sources (Faller, 1995; Lewis & Stanley, 2000; Matthews, Hunter, & Vuz, 1997); thus, many of the women were likely being treated primarily for a mental illness and the sexual offending was then discovered. Relying on clinical sources is likely to yield high percentages of persons with a mental illness.

A moderate number of cases with mental retardation and borderline intellectual functioning have also been found among this population of offenders. Thirty-three percent of forty cases in one study were mentally retarded or had brain damage (Faller, 1987). Twenty-seven percent of the fifteen cases in Lewis and Stanley's (2000) research had mild mental retardation. Twenty-two percent of seventy-two cases in another study were mentally retarded (Faller, 1995). Rowan et al. (1990) reported one of nine cases had mental retardation.

A few studies reported many female sex offenders had a history of drug and/or alcohol abuse. Slightly more than half of the forty cases in Faller's 1987 study and seventy-two cases in Faller's 1995 study had a substance-abuse history. In Rosencrans's (1997) study of ninety-three female sex offenders, 32 percent had abused alcohol and 19 percent had a substance-abuse history. The drug or alcohol abuse for many women may be evidence of poor coping strategies in general.

Experiencing sexual abuse as a child is also a common characteristic of female sex offenders. Eighty percent of the fifteen cases in Lewis and Stanley's (2000) study were sexually abused by either someone they knew or a family member. Approximately three-quarters (76 percent) of the thirty-eight female sex offenders in one study (Pothast & Allen, 1994) were sexually abused as a

child. Fifty-eight percent of the twelve female sex offenders in Wolfe's (1985) study had a history of sexual abuse. In Miccio-Fonseca's (2000) study, 56 percent of the eighteen female sex offenders were sexually abused as a child. Almost half of the forty female sex offenders in Faller's (1987) study reported experiencing sexual abuse. In another study, the victims of female sex offenders believed 20 percent of their abusers had been abused by their father and 20 percent were abused by their mother (Rosencrans, 1997). Many of the reports of sexual abuse, however, were self-reported.

Behaviors of Female Sex Offenders

Despite the misconception that a woman could not physically assault another person, women who have sexually offended have engaged in a broad range of sexual offenses. This behavior includes physical fondling, oral stimulation, putting fingers inside the body, putting objects inside the body, forcing victims to watch others engage in sexual activity, and forcing victims to touch/fondle the perpetrator. Objects such as enema equipment, sticks, candles, vibrators, and other objects were inserted into victims' bodily orifices also. Some of the "other" objects included scissors, knives, hair rollers, needles, religious medals, vacuum cleaner parts, and even a goldfish. The victims were also forced to touch or fondle the perpetrator's genitals. Other sexualized touching included oral sex and lying on top of or under the perpetrator (Rosencrans, 1997).

Some of the abusive behaviors included hands-off offenses such as simply watching victims inappropriately. This included watching the victim bathing, dressing/undressing, using the bathroom, masturbating, and having sex with her father. The victims were also forced to watch their perpetrators dress/undress, masturbate, have sex with their spouse, and change their feminine hygiene products (Rosencrans, 1997).

From these reports, it is evident that female perpetrated sexual abuse covers a wide range of behavior including both hands-on and hands-off offenses. When considering female sexual abuse, it is important to recognize that while female perpetrators do not always physically rape their victim(s) as a man is known to rape a woman, they are still capable of committing a range of assaults on their victims.

Victims of Female Sex Offenders

The most common characteristic of the victims of female sex offenders is that they knew their offender. In fact, many of them were related to their abuser. The percentage of intrafamilial abuse ranged from 37 percent to 94 percent (see Table 3.2). Additionally, a high percentage of those who engaged in intrafamilial abuse included mothers abusing their own children. For example, in Syed and Williams's (1996) study, it was reported that of those who were related to their abuser, 80 percent of the victims were the children of their abuser.

Table 3.2. Summary of Relationship of Victim to Offender

Researchers	Number of Victims	Relationship to Offender: Related (%)	Acquaintances (%)	Stranger (%)	Other (%)
Faller, 1987	63	90	10		
Faller, 1995	72	75			Nonfamilial: 25
Lewis & Stanley, 2000	22*	76	24		
Peluso & Putnam, 1996	2	50	50		
Rudin et al., 1995	87	56	22	3	Caretaker: 19
Vandiver & Kercher, 2004	471	37	46	7	Missing or not applicable: 10**
Vandiver & Walker, 2002	16*	94			Nonfamilial: 6
Syed & Williams, 1996	18*	76			Nonfamilial: 24

* The original data did not include information on all victims; the number reported here includes the number of victims with available information.

** Several offenders did not have a specific victim (i.e., possession of pornography).

The victims are typically young, with an average age of less than 12 years (Faller, 1987, 1995; Lewis & Stanley, 2000; Nathan & Ward, 2002; Vandiver & Kercher, 2004). With regard to the sex of the victim, the studies vary. Many researchers report a slightly higher number of female victims as compared to male victims (Faller, 1987, 1995; Rowan et al., 1990; Rudin et al., 1995). One study, however, included reports that all of the victims, or a majority, were male (Lewis & Stanley, 2000). Vandiver and Kercher (2004), relying on 471 subjects, found half of the victims were male and half were female. Subsequent research by Vandiver (in press) indicated that the sex of the victim varies depending on whether the woman was acting by herself or with a co-offender. Those acting alone are more likely to have male victims while co-offenders are more likely to have a combination of male and female victims.

TYPOLOGIES OF FEMALE SEX OFFENDERS

While the typologies for male sex offenders are well developed, the typologies created for female sex offenders have only recently emerged. Unfortunately, most of the typologies of female sex offenders are based on small sample sizes; thus, the information yielded from these data are not likely to be exhaustive. With the exception of one study, the typologies were based on samples of less than thirty (see Table 3.3).

Table 3.3. Description and Source of Female Sex Offender Typologies

Author	*Classifications*	*Data Source; Sample Size*
Sarrel & Masters, 1982	• Forced assault • Babysitter abuse • Incestuous abuse • Dominant woman abuse	Male victims of female sexual abuse; n = 11.
McCarty, 1981; 1986	• Independent offenders of males (1986) • Independent offenders of females (1986) • Co-offenders and accomplices (1986) • Severely psychologically disturbed abuser (1981)	Female sex offenders identified by child protective services who engaged in mother-child incest; n = 26.
Mathews, 1987; Mathews et al., 1989	• Teacher/lover • Predisposed • Male-coerced molester • Exploration/exploitation • Psychologically disturbed (McCarty, 1986)	Female sex offenders sentenced to community correctional center; n = 16.
Mayer, 1992	• Female rapist • Female sexual harassment • Mother molester • Triads • Homosexual molestation	Prior empirical reports of female sex offenders.
Syed & Williams, 1996 (building on Mathews et al.'s [1989] categories)	• Teacher/lover (Mathews et al., 1989) • Male-coerced (Mathews et al., 1989) • Angry-impulsive • Male-accompanied, familial • Male-accompanied, nonfamilial	Female sex offenders incarcerated in Canada; n = 19.

(*continued*)

Table 3.3. continued

Author	*Classifications*	*Data Source; Sample Size*
Nathan & Ward, 2002 (building on Mathews et al.'s [1989] categories)	• Male-accompanied, the rejected/revengeful	Female sex offenders incarcerated in Australia; n = 12.
Vandiver & Kercher, 2004	• Heterosexual nurturers • Noncriminal homosexual offenders • Female sexual predators • Young adult child exploiters • Homosexual criminals • Aggressive homosexual offenders	Registered adult female sex offenders in Texas; n = 471.

Many of the researchers who have proposed classification systems of female sex offenders included overlapping categories. The majority of the proposed typologies can be classified into seven categories: nurturer, co-offender, incestuous, adult on adult, criminal offenders, psychologically impaired, and homosexual molester (see Table 3.4).

Nurturer

Nurturing abuse typically involves an inappropriate relationship between a woman and someone she knows. Several researchers have described different types of female sex offenders who fit into this category; they are summarized as *heterosexual nurturer, teacher/lover,* and *babysitter abuse*. Each involves a woman in a position of authority who engages in a sexual relationship with (usually) a young boy, often a teenager, whom she is responsible for in some way. This type of sex offender is not "predatory" in terms of the woman specifically going to certain locations (i.e., school, parks, etc.), yet there does appear to be a grooming process where the woman becomes "friends" with the youth. Thus, there may be a grooming process where boundaries are slowly redefined over the period the relationship exists.

Heterosexual Nurturer

Vandiver and Kercher (2004) reported a broad category of inappropriate relationships, including any woman in a caretaking or nurturing role. For example, Vandiver (2003) described a woman who worked at a youth facility and "fell in love" with a young teenage boy; thus a mentor-mentee relationship existed. The woman had no history of sexual abuse. She was divorced with two children. She indicated the victim was a 14-year-old male whom she met through her work. She described the sexual act between her and the teenager as consensual, but followed up by stating that she knew it was wrong and did not want to make an excuse for what she had done. She indicated that the teenager came from a "bad family." He did not know his father and had been sexually abused by his grandfather.

The relationship began at the youth facility and the boy began to come over to her residence to talk and get something to eat. The relationship progressed into a sexual one after he kissed her once. She had sex with him approximately seven times over a six-month period. She stated, "When it happened it seemed natural—but I shouldn't say natural because it's not natural to have sex with a teenage boy. He kissed me and I didn't stop it."

The woman was with the boy when she had a car accident, which led to her arrest when law enforcement suspected the abuse. After she was arrested, she still tried to contact the young boy and was "taken in [by law enforcement] several times." At the time of the interview she had not seen the boy in several years.

Table 3.4. Summary of Female Sex Offender Typologies

Classification	*Identified Categories of Female Sex Offenders and Researcher(s) Who Identified*	*Description*
Nurturer	Heterosexual nurturer (Vandiver & Kercher, 2004)	Adult female molests young male (approximately 12 years old). Female has a mentorship role (i.e., teacher, caretaker, etc.) to the young male.
	Teacher/lover (Mathews et al., 1989)	A teacher who has a sexual relationship with a young boy, usually her student.
	Babysitter abuse (Sarrel & Masters, 1982)	Older woman or girl seducing a young boy whom she is not related to; abuse occurring while she is babysitting.
	Exploration/exploitation (Mathews et al., 1987)	Often abuse in a babysitting situation; young (14 to 16); typically no victimization history.
Co-offender	Triads (Mayer, 1992)	The female has a male partner.
	Male-coerced molester (Mathews et al., 1989)	The female has a male partner.
	Noncriminal homosexual offenders (Vandiver & Kercher, 2004)	No/few prior arrests, female victim, victim about 13 years old, co-offender likely.*
	Male-accompanied, familial (Syed & Williams, 1996)	The female has a male partner; victim is related.
	Co-offending mother & accomplices (McCarty, 1986)	Usually acting with dominant male; borderline intelligence, dependent personality, victim is mother's child.
	Male-accompanied, nonfamilial (Syed & Williams, 1996)	Female acting with a male; victim is not related.
	Male-accompanied, the rejected/revengeful (Nathan & Ward, 2001)	The female has a male partner; the motivation is revenge in response to feeling rejected.
Incestuous	Predisposed (Mathews et al., 1989)	History of sexual abuse in family; abuse family members, including their own children.
	Incestuous abuse (Sarrel & Masters, 1982)	Boys sexually abused by mother or older sister.

	Mother molesters (Mayer, 1992)	Mothers molesting their daughters or sons.
	Young-adult child exploiters (Vandiver & Kercher, 2004)	Mother molesting her own children (sons or daughters).
	Independent offenders of female/male children (McCarty, 1986)	Mother molesting alone either her female or male child.
	Mother molesters, mother-son incest (Mayer, 1992)	Mothers who molest their sons.
Adult on Adult	Female sexual harassment (Mayer, 1992)	On a continuum with female rapists; behaviors include sexual harassment, which may occur in the workplace.
	Female rapist (Mayer, 1992)	Similar to a male rapist; victim is male; typically the offenders knew their victim beforehand.
	Dominant woman abuse (Sarrel & Masters, 1982)	Traditional sex roles are reversed; overt female sexual aggression. Typically involves forced sexual intercourse.
	Forced assault (Sarrel & Masters, 1982)	Adult woman assaults adult male; physically constrains male; male is fearful.
	Angry-impulsive (Syed & Williams, 1996)	Female violently assaults an adult male; motivated by anger.
	Aggressive homosexual criminal (Vandiver & Kercher, 2004)	Adult female molests adult female.
Criminal Offenders	Female sexual predator (Vandiver & Kercher, 2004)	Adult who molests young boys; high rate of rearrest.
	Homosexual criminals (Vandiver & Kercher, 2004).	Adult who molests young girls; high rate of rearrest.
Psychologically Impaired	Severely psychologically disturbed abuser (McCarty, 1986)	Has a history of adolescent psychological problems.
Homosexual Molester	Homosexual molestation (Mayer, 1992)	Woman with homosexual tendencies; abuses child of same or opposite sex; may or may not have a co-offender; victim may or may not be her own child.

* The original research did not include whether the female acted alone or with someone. The characteristics of the women and victim were similar to latter research of co-offending women (see Vandiver, in press).

One of the interesting points to note about this situation is that the woman described the young boy as having nowhere else to go and no one else for support. In other words, he was "social junk."[2] She could not do anything to harm him—he was already damaged goods, so to speak. Similarly, Mary Kay LeTourneau also took a young boy under her wing who was in a similar situation.

The *heterosexual nurturer* category identified by Vandiver and Kercher (2004) was the most common category of female sex offenders. The largest percentage (31 percent, n = 146) of 471 adult women were classified in this category. This category of offenders would also include teachers who fall in love with their male students.

Teacher/Lover

As portrayed in the media, women in a position of authority (i.e., teacher) have engaged in a sexual relationship with a younger male, often a teenager (i.e., student). Mathews, Matthews, and Speltz (1989) found a case that fits the *teacher/lover* category. A teacher who "fell in love" with her adolescent student reported that she saw nothing wrong with the relationship. The teacher was not the victim of sexual abuse as a child; however, she was forced into prostitution as an adolescent. Turning to an adolescent male was described by Mathews et al. (1989) as the result of feeling fearful toward men.

Babysitter Abuse

Mathews et al. (1989) defined *exploration/exploitation* abusers who typically abuse in a babysitting situation. Sarrel and Masters (1982) also defined *babysitter abuse* as a category of female sex offense. Two cases of babysitter abuse were described by Sarrel and Masters (1982). In one case, a 25-year-old man reported he was sexually abused by his babysitter when he was only 10 years old. The young man described the event as pleasurable and reported it had occurred for approximately one year. The young man reported "she frequently manipulated his penis and that sometimes there was an erection, but he had no ejaculatory experience" (p. 122). The boy later told his family about the experience. His father whipped him severely. He then took his son to a priest and a psychiatrist. The father often referred to his son's "shameful conduct" and told his son that he should have reported the sexual activity sooner. He did not know what happened to the babysitter. The young boy reported that afterward he never masturbated and had overwhelming feelings of guilt. He did not date regularly and was not receptive to sexual advances made by women. The man, after establishing a platonic relationship with a young woman at the age of 24, discussed his fears regarding sex and the incidents that occurred with the babysitter. He then began psychiatric treatment.

In another case, an 11-year-old boy was sexually molested by his 16-year-old babysitter. The babysitter undressed the boy and put his penis inside her vagina. He was confused about the incident. Later, he did not masturbate and did not have sexual contact with anyone else. When he was 19, he married a young woman, but was not able to perform sexually on their wedding night. He had been in therapy for two years before he was married, but never mentioned the abuse to either his therapist or his future wife (Sarrel & Masters, 1982).

Both of these case studies indicate that the effects of such abuse are long term and profound. Many may think that babysitter abuse is not serious. In fact, it may even be interpreted (wrongly) as a pleasurable experience where a young boy is allowed to explore sex at an early age with someone who is more experienced than himself (see Hetherton, 1999).

Co-offender

Several of the typologies include a distinction between women who act alone (i.e., solo offenders) and those who act with another person (i.e., co-offenders) (Mathews et al., 1989; Mayer, 1992; McCarty, 1986; Nathan & Ward, 2001; Syed & Williams, 1996). The number of co-offenders in a given population is high, meaning it is not uncommon for women who have sexually offended to have a partner, usually male. In a recent study including a cross-national sample of 227 women arrested for a sexual offense, approximately half acted with another person (Vandiver, in press). This is indicative of high rates of coercion among this population of females who sexually offend.

Researchers reported co-offenders were significantly different than those who act alone. Co-offenders had more victims per incident. They were more likely to abuse a relative and to have both male and female victims. The type of behavior the women exhibit, however, includes a broad continuum from passive to active, with more cases of passive participation cited in the research (Vandiver, in press).

Characteristics that vary among co-offenders are the woman's relationship to the victim and the co-offender, her motivation (i.e., revengeful), whether she was coerced, and level of contact with the victim during abuse (i.e., hands-off or hands-on). Researchers have relied more on the relationship between the woman and the victim (related or not related) and her motivation for engaging in the sexual abuse (i.e., feeling of rejection and revenge) in developing classifications of co-offending women. For the purpose of this discussion, the following subcategories under male-accompanied are discussed: (1) male-accompanied, familial, (2) male-accompanied, nonfamilial, and (3) male-accompanied, rejected/revengeful.

Male-Accompanied

Mayer (1992) proposed a typology of five categories of female sex offenders, which includes a category of triads in which female offenders were not acting alone in the abuse. The typical combination includes a mother, father, and victim. The victim may include a child of the mother and father or a nonrelated child. The mother or the father may be the coercer. It has been speculated that when the mother is the initiator she may feel dependent or is seeking to nurture the child. She may be reenacting her own abuse. When the father is the initiator, the mother may be coerced.

Mathews et al. (1989) identified a category of women who acted with another male (*male-coerced*). This category depicts female offenders who were coerced into sexually abusing a victim, usually their daughters. After Mathews et al. proposed a male-coerced category, other researchers further developed this category by breaking it into those who were related to the victim (male-accompanied, familial), not related to the victim (male-accompanied, nonfamilial), and acting out of revenge (male-accompanied, the rejected/revengeful).

Male-Accompanied, Familial. Syed and Williams (1996), relying on the typology developed by Mathews et al. (1989), found in an examination of nineteen female sex offenders that not all of the cases could be classified within the proposed categories. Instead of relying on a male-coerced category, they found it more appropriate to create a new category: *male-accompanied, familial.* They found four of the offenders in their study fit into a male-accompanied, familial category. Likewise, McCarty (1986) identified a category of co-offending mothers who abused their own child/children.

An example of a mother abusing her children was described in Syed and Williams's (1996) research. A woman allowed her common-law husband to have sex with her daughter. The daughter was not biologically related to the common-law husband. The stepfather took the daughter's privileges away (i.e., telephone use) if she refused to participate in the sexual abuse. The mother assisted in the abuse by striking her daughter when she refused. The mother had a history of sexual victimization by her family members and nonfamily members. Her father was one of her abusers. Psychological tests were administered to the mother, which "indicated she had severe assertive and relationship deficits and, as a consequence, was a woman who did not possess the necessary skills to defend her rights" (n.p.).

Male-Accompanied, Nonfamilial. Syed and Williams (1996) also proposed a second category: *male-accompanied, nonfamilial.* Mathews et al. (1989) had also identified women who fit into this category. They described a husband and wife who molested a pair of 13-year-old twins who lived in the same apartment complex. The details are given below:

> [The woman] lived in an apartment building in an urban area. Her husband was unemployed, and she worked many hours to provide for their needs.

> [The woman's] husband developed a friendship with a pair of 13-year-old twins. . . . He liked to have them come to the apartment to play video games, watch television, and talk. [The woman] was nervous about her husband's interest in these twins, very insecure and jealous of the attention he was showing them, and suspicious of his motive. . . . At a later date [the woman] returned home early from an outing with her sister. When she entered the living room, the male twin was watching television. She found his sister and her husband in the bedroom. The girl was on the bed, her husband was sitting on a chair, and both were nude. [The woman] . . . began screaming and crying . . . she again insisted that the children never come back . . . [her husband] blamed her for his actions . . . [he] "bugged" her about changing her mind and allowing the children to visit again . . . [she] finally relented, and the sexual abuse occurred almost as soon as the children started frequenting their home again . . . [the female victim] threatened to tell about her previous sexual contact with [the woman's] husband if [the woman] did not join in . . . she performed oral sex on [the female victim] . . . [the woman] and her husband also engaged in sexual behaviors in front of the children. . . . A few days later [her] husband was again involved with the girl. [The woman] reported that she felt sorry for the boy because he was left out, so she performed oral sex on him. The sexual contact was very stressful for her. (pp. 19–20)

The woman was arrested after the female victim's boyfriend reported the behavior. The woman was described as cooperative with law enforcement. She spent time in jail and participated in a sex offender treatment program.

This example of a *male-accompanied, nonfamilial* situation highlights the use of coercion by the dominant male. While not all male-accompanied cases include a male who coerces the female, it does show that women, even though they may actively participate in the sexual abuse, are highly vulnerable to coercion into sexual abuse. Additionally, the woman in this situation was the primary source of income for this family; thus, economic reliance on a dominant male was not a factor in her situation.

Male-Accompanied, the Rejected/Revengeful. Nathan and Ward (2002) suggested adding a category of female offenders who had a male partner, but were not coerced, *male-accompanied, the rejected/revengeful.* The authors noted that prior case studies included descriptions of female sex offenders who were motivated by feelings of rejection in their primary relationship; the sexual abuse appears to be out of revenge. One example included a woman who was a victim of chronic domestic violence and she reported that she was motivated by extreme jealousy.

Incestuous

Incestuous relationships with female offenders have been identified in many typologies of female sex offenders. Prior research has found that women

have abused in the capacity of a relative, a mother, and an older sister (Mathews et al., 1989; Sarrel & Masters, 1982).

Mathews et al. (1989) identified a broad category of offenders, *predisposed,* who sexually abused their relatives; this was not limited to just their own children. Several cases were identified in which women acted alone in the abuse of daughters, sons, and nephews. Sexual abuse appeared to be prevalent in these families. While this type of female sex offender is a general incest category, other researchers have described the victim in more specific terms: mother-son incest, and mother-daughter incest.

Sister-Brother Incest

A case of sister-brother incest was discussed in Sarrel and Masters's (1982) research. A 14-year-old girl began molesting her 10-year-old brother, and the abuse occurred for two years. The researchers describe the abuse thus: "She stimulated him manually and orally and then inserted his penis into her vagina. At first he only felt frightened and did not understand what was happening. She usually threatened to beat him or attack him with a knife if he told anyone. He does not recall if he ejaculated. He was too frightened to tell his parents" (p. 125). Later, his sister went to psychiatric treatment; the victim subsequently became suicidal and he too was placed in psychiatric treatment. He entered treatment again when he married and was unable to consummate his marriage.

Mother-Son Incest

Several researchers have reported instances of mother-son incest (Lawson, 1993; Mayer, 1992). Two cases of incest were reported in Sarrel and Masters's (1982) research. A 30-year-old man reported to his therapist that his mother who had been divorced since he was 2 years old began playing with his genitals when he was 13 years old. The sexual activity later included her performing oral sex on him and having sex with him. They had sex two to three times a week until he left for college. When he went home, he continued having sex with his mother. His mother died during his senior year of college. He reported that he never approached his mother, but rather she always approached him. The researchers noted, "He felt strongly devoted to her, stating that he enjoyed her obvious pleasure during their sexual encounters far more than his own" (p. 124). After he left for college, he reported he was not able to achieve an erection when he attempted to have sex with a girl his own age. He felt guilty and felt he was not being faithful to his mother. Once he became so nauseated after having foreplay with a girl that he threw up. He resumed dating but was not able to have sex. He later married and entered therapy.

Mother-Daughter Incest

Accounts of mothers abusing their own daughters have been reported and identified by researchers as a salient category of female sex offenders. Mathews et al. (1989) identified a mother whose husband had passed away and she began first physically abusing her 4-year-old daughter and then sexually abusing her.

> When feeling alone and wanting to be close, "I would go into the bedroom and touch [her daughter]." The abuse consisted of kissing and fondling the child, usually over her pajamas or underwear. Initially the abuse occurred when her daughter was awake. As the child grew older, however, [the mother] would wait for [her daughter] to fall asleep before touching her. (p. 15)

The mother was abused by her own father when she was a child. After the mother entered substance abuse treatment, she reported the sexual abuse she had with her daughter. She was referred to sexual abuse treatment.

Adult on Adult

Several typologies include adult women who sexually assault another adult. Most of the categories describe (adult) women who sexually assault (adult) men. One category, however, includes an adult woman who sexually assaults another adult woman. This category of female sex offenders, therefore, is divided into two groups: female-on-male and female-on-female.

Female-on-Male

Several typologies have been proposed that include an adult woman specifically sexually assaulting an adult man: *female sexual harassment* and *female rapist* (Mayer, 1992), *dominant woman abuse*, *forced assault* (Sarrel & Masters, 1982), and *angry-impulsive* (Syed & Williams, 1996). Mayer (1992) described a continuum of this type of behavior that includes sexual harassment (a woman sexually harassing a man, possibly at the workplace) and female rape, in which she has sex with the man against his will.

Sarrel and Masters (1982) identified *dominant woman abuse* and used the term to describe cases where there was at least one episode of a woman engaging in overt sexual aggression—a complete role reversal where women behaved as men have in sexually aggressive incidents. Three cases were used to describe *dominant woman abuse*. In one of the cases, a man was sexually abused by his wife after they were legally separated. She aggressively approached him sexually and he reported feeling scared and not ejaculating as she had sex with

him. She had an orgasm. It was confirmed by the wife that she did attack her husband and was "in a state of fury." She expressed wanting to hurt him and use sex as a way to express her rage.

In another case a 33-year-old woman who had only homosexual experiences forced a 35-year-old male to have sex with her. He reported being fearful and later suffered from sexual dysfunction. Another case involved a 17-year-old male, who was forced to have intercourse by a 23-year-old woman who was a friend of his family. He was a Mormon and expressed extreme guilt over the sexual incident because it was in conflict with his religious beliefs. No weapon was used, but he felt intimidated by her use of force (Sarrel & Masters, 1982).

Likewise, *forced assault* describes a woman who sexually assaults an adult male (Sarrel & Masters, 1982). The male is described as being fearful, not enjoying the experience. Four cases of forced assault were identified from eleven male victims of female sexual assault. One of the victims was a truck diver who was 27 years old. After meeting a woman whom he had known previously, he went to a motel with her and the following occurred:

> [H]e was given another drink and shortly thereafter fell asleep. He awoke to find himself naked, tied hand and foot to a bedstead, gagged, and blindfolded. As he listened to voices in the room, it was evident that several women were present . . . he was told that he had to "have sex with all of them." He thinks that during his period of captivity four different women used him sexually, some of them a number [of] times. Initially he was manipulated to erection and mounted. . . . He believes that the period of forcible, restrained and repeated sexual assaults continued for [more] than 24 hours. (Sarrel & Masters, 1982, pp. 120–121)

After the incident the man sought therapy. He never reported the incident to law enforcement. He suffered from psychological distress and was not able to complete sexual intercourse. He married later, but still was unable to engage in sexual intercourse. His wife was unaware of the rape that he endured (Sarrel & Masters, 1982).

Three other cases identified by these researchers included a 37-year-old married man who was forced at gunpoint to have sex and receive oral sex from several women. Another case involved a 23-year-old male medical student who was forced to have sex with his female aggressor. He was threatened with a scalpel. Another teenager who was 17 years old was forced by a group of five people (three women and two men) to have oral sex performed on him and was masturbated (Sarrel & Masters, 1982).

In all of the four cases, force or threatened use of force occurred. The men were constrained physically in some way and were fearful of the attackers. All

were able to function sexually during the incident, yet none were able to adequately perform sexually after the incident (Sarrel & Masters, 1982).

A similar situation of a woman violently sexually assaulting a male (*angry-impulsive*) was described by Syed and Williams (1996). This type of female sex offender was motivated by anger. In one case, a woman violently assaulted her victim, an adult male. The researchers noted that none of the prior categories had addressed anger as the central feature of the sexual abuse.

Female-on-Female

One study yielded a unique category of sex offenders not identified in previous research. Vandiver and Kercher (2004) described *aggressive homosexual offenders,* which included women who were typically in their thirties with a victim also in her thirties. The offense of arrest was sexual assault. It was speculated that this group included domestic violence between homosexual couples. Furthermore, this type of female sex offender does not fit the typical female sex offender in that her motivations are different. Her motivations are likely to be similar to male sex offenders who sexually assault their spouse.

Criminal Offenders

Women who have a history of nonsexual arrests in conjunction with at least one sex offense have also been identified. Vandiver and Kercher (2004) identified two categories of such offenders*, female sexual predator* and *homosexual criminal*. The female sexual predator has male victims whereas the homosexual criminal has female victims. The women in the homosexual criminal category were arrested for "forcing behavior," including sexual performance on a child and compelling prostitution. An article appearing in the *Houston Chronicle* provides an example of such incidents.

> A woman and her boyfriend, convicted of making her 12-year-old daughter perform sexual favors for strangers for money, have each been sentenced to 40 years in prison . . . the mother arranged for men to have sex with the . . . daughter. The 12-year-old testified concerning two occasions. On one, she did [not] know how much money was given to her parents, she said, but they received $100 on the other. (Teachey, 2000, p. A, 40)

Reports such as these are not uncommon. The Associated Press ("Police rescue," 2001), for example, also reported of a 17-year-old girl from Milwaukee who was forced into a prostitution ring by a man and woman.

This category of offender can also include having children pose nude for photographs to be sold privately or made available on websites for the purpose

of generating income. This type of offender, therefore, typically involves hands-off offenses. The offender is likely to already have a criminal record and uses the sexual abuse as another method for obtaining money. The payoff is economical rather than sexual. It should also be noted that these women are usually acting in concert with another person, usually a male. Sometimes they are part of a "ring" which involves many co-offenders. This category, therefore, overlaps with co-offenders.

Psychologically Impaired

A category of female sex offenders has been identified that includes psychologically impaired women. These women have been described as aggressive, impulsive, poorly socialized, depressed, and guilty (McCarty, 1981). Additionally, in many of the other identified categories of sex offenders, some form of mental illness has been found. For example, Mayer (1983) noted that mothers who abuse their daughters often exhibit psychotic behavior. As noted in the section titled "Description of Female Sex Offenders," many samples of female sex offenders included high rates of mental illness. Thus, mental illness may be a characteristic that occurs with many other identified characteristics of female sex offenders.

Homosexual Molester

Mayer (1992) identified a category of female sex offenders, *homosexual molesters*, that had many overlapping characteristics with other identified categories of female sex offenders. This type of offender has homosexual tendencies, possibly latent. She may molest a child who is the same sex or even the opposite sex. Additionally, she may act with a male offender or by herself. When she acts with a co-offender, she may assume a passive role to explore homosexual feelings. This category is unique from other categories of sex offenders in that she is motivated by her homosexual feelings; the abuse allows her the opportunity to explore such feelings.

Summary of Female Sex Offender Typologies

Based on prior research, a summary of seven categories of female sex offenders is identified (see Table 3.5). It should be noted that the typologies are based on small sample sizes, and the information about female sex offenders is evolving and developing as more research is conducted. Furthermore, many of the classifications overlap. For example, co-offenders may include relatives. Mental illness, particularly personality disorders and depression, may occur within any classification. Future research can further examine motivations of abuse in relationship to other characteristics to add more dimensions to the classification schemes that already exist.

Table 3.5. Summary of Female Sex Offender Typologies

1. Nurturer: Adult female in a position of authority having a sexual relationship with a younger boy.
   a. Teacher/lover
   b. Babysitter abuse
2. Co-offender: Adult female acting with a male in abusing a victim.
   a. Male-accompanied
      i. Male-accompanied, familial
      ii. Male-accompanied, nonfamilial
      iii. Male-accompanied, rejected/revengeful
3. Incestuous: Offender related to victim.
   a. Sister-brother incest
   b. Mother-son incest
   c. Mother-daughter incest
4. Adult on Adult: Adult sexually abusing another adult.
   a. Female-on-male
   b. Female-on-female
5. Criminal Offender: An offender who engages in many different types of crimes; the sexual offense is only one type.
6. Psychologically Impaired: The offender has marked psychological impairment.
7. Homosexual Molester: The offender has latent sexual feelings and chooses a victim based on those feelings.

MOTIVATIONS/EXPLANATIONS OF BEHAVIOR

Past research, specifically, has identified the following motivations for female sexual offending: reenactment of sexual abuse (Mayer, 1992; Saradjian & Hanks, 1996), emotional women acting out their feelings, narcissistic women abusing their own daughters (Mayer, 1992), extension of battered-woman syndrome, socialization to follow their male accomplices (Davin, Hislop, & Dunbar, 1999), desire for intimacy, economic gain, and domestic violence among homosexual couples (Vandiver & Kercher, 2004).

Reenactment of early trauma has been proposed as a primary explanation of females who sexually abuse (Mayer, 1992; Saradjian & Hanks, 1996). It is proposed that the victim experiences displaced anger and, thus, identifies with the aggressor. The victim later becomes an offender and acts out her experiences on another person. Typically, researchers will cite the high rates of abuse many sex offenders experienced themselves to support this notion; however, the extent to which one affects the other has not been fully supported. While there is a high rate of correlation between experiences of abuse and later abusing cited in studies (see Knopp, 1984), this does not necessarily translate into causation. In fact, as noted by Salter (2003), studies including more objective measures (i.e., polygraph) result in the number of victims-turned-victimizer

decreasing by approximately 50 percent; thus, many sex offenders who report being sexually abused as a child had not been.

Narcissism was discussed by Mayer (1992) as a possible cause of female sexual offending. More specifically, she relied upon an example described by Forward and Buck (1979) of a mother who molested her daughter; she perceived the daughter as simply an extension of herself. The need to be nurtured coupled with the need to nurture resulted in a narcissistic mother with poor boundaries. Groth (1982) also described a similar situation of a woman with severe nurture deprivations.

While sexual gratification has been explored as a possible cause of women sexually offending, it does not appear to be a sole motivating factor (Davin et al., 1999). It is proposed that instead of a sexual motivation, a need exists to connect with another person; sexual abuse is just one avenue for meeting this need.

Several theories have been explored specifically for women who have co-offenders. For example, battered-woman syndrome may lead a woman to sexually abuse. Many women who were coerced into sexual abuse have a history of physical abuse by their male partner (Davin et al., 1999). Many women who are victims of abuse, however, do not sexually offend. Davin et al. also relied on sex-role theories in exploring other possible explanations. The authors note that these theories describe women as passive; thus, their male counterparts initiate the sexual abuse and the women follow the behavior.

In explaining the cause of adult women who "fall in love" with a younger boy (i.e., heterosexual nurturer and teacher/lover), a desire for intimacy has been proposed (Vandiver & Kercher, 2004). Many of these women describe their actions as the outcome of having feelings of "love" for the victim (see Vandiver, 2003). The behavior is not necessarily associated with criminal behavior. Additionally, economic gain has been proposed as a possible motivating factor for women who engage in hands-off offenses such as forcing a child into prostitution or to pose for pornographic pictures, which are later sold (Vandiver & Kercher, 2004).

COMPARISON OF FEMALE AND MALE SEX OFFENDERS

Several studies have included a comparison of female and male sex offenders. In some ways, men and women who sexually offended had similar characteristics. The abuse by male and female sex offenders did not differ in severity (Rudin et al., 1995). Additionally, both female and male sex offenders exhibited a lack of empathy toward their victims (Mayer, 1992), and male and female sex offenders did not significantly differ on self-reported reasons for therapy (i.e., anxiety, depression, relationship difficulty) (Miccio-Fonseca, 2000).

The two groups, however, had more differences than similarities. Women were more likely than men to be caretakers. Women were less likely than men to abuse strangers (Rudin et al., 1995). Female sex offenders were significantly

less likely than male sex offenders to have legal problems (68 percent compared to 63 percent) (Miccio-Fonseca, 2000). The sexual offense arrest was likely to be the first arrest for women, but not the first arrest for the men (Vandiver & Walker, 2002). High rates of substance abuse exist among both populations of sex offenders (Faller, 1987). Female sex offenders reported fewer sexual partners when compared to male sex offenders. While both groups reported having experienced abuse as children (Mayer, 1992; Miccio-Fonseca, 2000), women were more likely to report being a victim of incest when compared to men (approximately 33 percent compared to 13 percent) and being a victim of rape (39 percent compared to 4 percent) (Miccio-Fonseca, 2000). Additionally, one study reported that 76 percent of the women, compared to 36 percent of the men, reported they had been sexually abused (Pothast & Allen, 1994). In another study, 54 percent of the women compared to 33 percent of the men were sexually abused by 6 years of age (Miccio-Fonseca, 2000).

JUVENILE FEMALE SEX OFFENDERS

Prevalence

In 2003, 59 of the 247 (23.8 percent) females arrested for forcible rape were juveniles according to the UCR (U.S. Department of Justice, 2005b). Additionally, juvenile females accounted for 21.9 percent of the females arrested for a sex offense other than forcible rape and prostitution. Although the number of juvenile females arrested for a sex offense is low, they make up a substantial portion (approximately 20 percent) of females arrested for a sex offense. Again, caution should be made in drawing conclusions from the numbers because law enforcement data do not fully capture the scope of this group of offenders.

Data from the NCVS regarding the number of juvenile females who sexually offended is not available.[3] NIBRS data indicates that juveniles were arrested for 172 of the 404 (42.6 percent) sexual offenses committed by females in 2001 (U.S. Department of Justice, 2004). Thus, information from UCR and NIBRS indicates that the number of female sex offenders is low, yet juvenile sex offenders make up a substantial portion of females who sexually offend.

Research on Juvenile Female Sex Offenders

The problems associated with the adult female sex offender population (i.e., few empirical studies and small sample sizes) are even more prevalent with the juvenile literature (Righthand & Welch, 2001). In fact, it was not until 1986 that empirical studies began to emerge in the literature. Since then, only a handful of studies have been conducted (Bumby & Bumby, 1997; Fehrenbach & Monastersky, 1988; Fehrenbach, Smith, Montastersky, & Deisher, 1986;

Fromuth & Conn, 1997; Johnson, T. C., 1989; LeTourneau, Schoenwald, & Sheidow, 2004). The number of juvenile females in the empirical studies ranges from eight to only sixty-one; thus, no study has been conducted on samples larger than sixty-one. The majority of the studies also rely on clinical sources. The source and the number of subjects limit the ability to fully describe this population of offenders.

Description of Juvenile Female Sex Offenders

The reported average age of juvenile females who have sexually offended includes 12 (Fromuth & Conn, 1997), 13.7 (Fehrenbach et al., 1986), and 15 (Hunter, Lexier, Goodwin, Browne, & Dennis, 1993). In regard to race, the juvenile population had a higher proportion of minorities as compared to the adult female population. For example, Hunter et al. (1993) reported 20 percent of a sample of 10 were African American and the other 80 percent were Caucasian. Again, the sample size is small and this finding may not fully represent the population of juvenile female sex offenders.

Psychological maladjustment was not more prevalent when compared to non-perpetrators (Fromuth & Conn, 1997). This study included a sample of 546 female college students in which 4 percent had sexually molested someone when they were younger. Hunter et al. (1993), however, reported that 80 percent of their sample had prior mental health treatment. It should be noted that the sample source included an inpatient clinical setting, which would likely include high rates of juveniles with emotional disturbances. Likewise, Bumby and Bumby (1997), relying on an inpatient sample, reported ten of the twelve females had a history of depression. High rates of depression, anxiety, and posttraumatic-stress syndrome have been found among this group of offenders (Mathews, Hunter, & Vuz, 1997).

Several studies included information regarding whether the juvenile female sex offenders had experienced sexual abuse. In fact, Vick, McRoy, and Matthews (2002) noted one of the strongest characteristics found among this population of offenders is physical and sexual abuse. Fehrenbach & Monastersky (1988) reported six of twenty-eight (21 percent) had been physically abused and fourteen (50 percent) had been sexually abused. Fromuth and Conn (1997) reported 70 percent of twenty-two females who had sexually offended had been sexually abused. Hunter et al. (1993) found all of the ten females had been molested, most with multiple molesters and beginning at a very young age. Sixty percent of the juveniles had been molested by a female.

Victims of Juvenile Female Sex Offenders

Juvenile female sex offenders were found to have more than one victim per offender. For example, Hunter et al. (1993) reported an average of three

victims per offender whereas Bumby and Bumby (1997) reported an average of two. Fromuth and Conn (1997) found the average number of victims to be slightly more than one. The victims were very young, sometimes even in their infancy (Hunter et al., 1993). Few victims were older than 12 (Fehrenbach & Monastersky, 1988; Fromuth & Conn, 1997; Hunter et al., 1993; Vandiver & Teske, in press).

Most often, the victims knew or were related to their abuser. Only one study (Hunter et al., 1993) reported that strangers were molested. In this study, 39 percent of the thirty-three victims were strangers to their abuser. The sex of the victim appears to have no distinct pattern (see Table 3.6). Some studies reported a high proportion of juvenile female sex offenders choosing both males and females (see Hunter et al., 1993), while other studies report more male victims as compared to female victims (see Vandiver & Teske, in press). Still other studies report just the opposite: more female victims as compared to male victims (see Bumby & Bumby, 1997; Fehrenbach et al., 1986).

Motivations/Explanations of Behavior

Explanations of juvenile female sexual offending have been similar to the ones given for adult female sexual offending. For example, reenactment of abuse has been proposed (Johnson, T. C., 1989). One researcher noted that some young female sex offenders appear to act out their own sexual abuse experiences;[4] another suggests it to be the result of being sexually victimized (Araji, 1997). It has also been found in some cases that the child identifies with the aggressor (Turner & Turner, 1994).

It has also been reported that in many of the families of the juvenile female sex offender, sexual abuse is pervasive and the child may engage in the behavior on a younger sibling because it is inevitable he or she will be abused. If the juvenile female sex offender is the abuser, the abuse may be less severe as compared to being victimized by an older member of the family (Turner & Turner, 1994).

Table 3.6. Victim's Sex for Juvenile Female Sex Offenders

Researchers	*Number of Victims of Juvenile Female Sex Offenders*	*Sex of Victim*		
		Male only (%)	*Female Only (%)*	*Male and Female (%)*
Fehrenbach & Monastersky, 1988	28	35.7	57.1	0
Fromuth & Conn, 1997	24	70	30	0
Hunter et al., 1993	10	30	10	60
Bumby & Bumby, 1997	18	25	42	33
Vandiver & Teske, 2006	61	61	39	0

Poor family structure and support appear to be common denominators in many of the cases of young female sexual abuse. Many of the young females had families in which the caretakers had only a modicum of information about sexual issues; they had difficulty in expressing feelings associated with their sexual desire. In many instances the mother discussed her own sexual desires with her young daughter(s). The mother often had successive relationships with different males and sexually molested her daughter when no male was present. This type of behavior may be linked to the young female later sexually abusing (T. C. Johnson, 1989).

Similar to adult female sex offenders, sexual gratification has not been found to be a cause of juvenile female sexual abuse (T. C. Johnson, 1989). Sexual gratification was rarely noted to exist in many of the sexual abuse incidents. In fact, expressions of anger and jealousy were more commonly reported. Many of the young sex offenders abused a sibling who had not been abused previously and was described as the "favored" child in the family. This type of behavior may be explained as a way to get back at her parents. The sexual abuse, therefore, appears to be a way these young sex offenders express anger (T. C. Johnson, 1989).

Comparison of Juvenile Female and Juvenile Male Sex Offenders

Only a few studies have compared juvenile females to juvenile males. One of those studies compared eighteen females to eighteen male sex offenders; both groups were participants in an inpatient psychiatric facility who were being treated for emotional/behavior disorders (Bumby & Bumby, 1997). The females had an average age of 14.9 years, while the males had an average age of 13.2 years. An examination of school performance indicated that females were significantly more likely to be retained in at least one grade in school. Females also had a significantly higher rate of drug abuse and promiscuity than the males. Male and female juvenile sex offenders, however, did not significantly differ in regard to psychological symptoms, past delinquency, or physical and sexual victimization.

Another study, which employed a relatively large sample size, compared sixty-seven juvenile female sex offenders with seventy juvenile male sex offenders, and also found differences between these two groups (Mathews et al., 1997). The subjects were juveniles from sex offender treatment programs. The most notable differences included past victimization experiences. Females had a higher average number of molesters when compared to males (4.5 compared to 1.4) and a younger age at first victimization; 64 percent of the females compared to 26 percent of the males reported they were victimized before they reached 6 years of age. Additionally, females and males chose victims of the opposite sex proportionately (i.e., 45 percent of females chose male victims; 47 percent of males chose female victims). Also, while both groups were

likely to choose young victims, females were more likely than males to choose those in the infancy to 5-years-of-age range (52 percent ccompared to 38 percent).

Kubik, Hecker, and Righthand (2002) found in a comparison of eleven juvenile female to eleven juvenile male sex offenders that females experienced more severe and pervasive abuse. They also found that the juvenile female and male sex offenders exhibited similar sex offender behaviors, criminal histories, and psychosocial characteristics.

SUMMARY AND CONCLUSION

Although the literature on female sex offenders is limited, it is growing. What is known about female sex offenders from available research is that the official reports are low; those numbers do not fully represent the extent of female sexual abuse. With that stated, it is likely that male sex offenders still outnumber female sex offenders. There are many barriers to acknowledging that a female can sexually offend—it is contrary to many fundamental beliefs we hold about gender roles. It is thought that a woman cannot physically rape a man; a man or young boy would not refuse an aggressive woman or one who is attacking; a woman who was trying to have sex with an unwilling participant cannot complete the act—he could not perform. Research has shown that these statements are myths (see Hetherton, 1999).

Research has found that female sex offenders are typically young and Caucasian. High rates of mental illness, particularly depression and anxiety, have been found among this population. Women engage in both hands-on and hands-off offenses. The female sexual offender typically knew or was related to her victim. Incidents of mother-child sexual abuse are prevalent. Her victims are usually very young, younger than 12 years.

Typologies of female sex offenders have been developed and the categories can be summarized into the following groups: nurturer, co-offender, incestuous, adult on adult, criminal offenders, psychologically impaired, and homosexual molester. The categories, however, are not mutually exclusive; many have overlapping characteristics. Women may be related to their victim (*incestuous*) and engage in the abuse with a male (*co-offender*) and have a history of depression (*psychologically impaired*). The last three categories, *criminal offenders, psychologically impaired,* and *homosexual molester,* appear to have features that could be present in the other categories. What the typologies do show is that women exhibit a variety of behaviors and characteristics; female sex offenders are a heterogeneous group of offenders. Many of their characteristics differ from male sex offenders as well.

Juvenile female sex offenders account for only a few of the arrests for sex offenses. They are also relatively young, approximately 13 years old. The majority are Caucasian, yet a higher percentage of minorities are among this population of sex offenders as compared to adult female sex offenders. Similar

to the adult population, the juveniles exhibit high rates of mental illness, particularly depression. This group of offenders also reports a high rate of being sexually victimized. Their victims were very young, usually less than 12 years. The victims typically knew or were related to their abuser.

Female sex offenders, whether adult or juvenile, engage in a broad range of sexual behavior. The effects are long lasting and, many times, severe. The motivations appear to be complex and research has only recently emerged on this topic. As society becomes increasingly less tolerant of sex offenses in general, there may be a greater willingness to report, arrest, charge, and convict females who commit such offenses. It is likely in the future, as more law enforcement and social service agencies become knowledgeable about this type of abuse, that the numbers will increase and subsequent research will include increased sample sizes.

NOTES

1. The same statement was also made by J. L. Mathis (1972, p. 54).
2. "Social junk" is a term coined by Steven Spitzer. He applied Marxist theory in developing the term. It refers to those who make up a segment of society who are not in a position to acquire adequate resources for themselves, often falling between the cracks of social service agencies.
3. The NCVS publications do not include this information; however, the original data may contain such information.
4. T. C. Johnson's (1989) research focused on young juvenile sex offenders; many of the subjects were younger than 13 years. The term "young" sex offender rather than "juvenile" sex offender is used when discussing this research.

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4

Pedophilia

Richard D. McAnulty

INTRODUCTION

Sexuality has always been viewed as a force that must be tightly controlled and regulated. Sexual behavior has only been considered a legitimate topic of scientific inquiry for the past fifty years, beginning with Alfred Kinsey's landmark surveys. Before that time, sexuality and its problems were to be regulated by the church, the government, or medicine. Accordingly, sexual behavior that deviated from the established norm, however it was defined at the time, was declared sinful, criminal, or sick. Deviant sexual behavior, then, called for penitence, punishment, or a cure. This historical heritage still influences our thinking about sexual behavior. For example, do people who molest children suffer from an evil nature, a criminal mindset, or a mental illness?

I cannot answer such a question since it, like most questions relating to sexual behavior, hinges on personal values and beliefs. There are currently no universal and objective criteria for judging sexual attitudes and practices. Outside of sexual homicide, no sexual behavior is universally viewed as harmful or abnormal. Even sexual practices that would be condemned as child molestation in the United States took place openly and regularly in some cultures in the past (see Green, 2002). Although most definitions of sexual disorders emphasize that the associated patterns of sexual arousal deviate from normative patterns (hence the term *sexual deviations*), there are no clear criteria

for defining normal sexual arousal or behavior. Definitions of what qualifies as *normal* vary over time and across cultures. Sexual norms do change, as illustrated by the shift in professional and societal attitudes toward homosexuality. Prior to 1973, homosexuality was classified as a sexual deviation by the American Psychiatric Association. It was dropped from the sexual deviation category after it was decided that homosexuality per se was not a harmful dysfunction or an abnormal sexual orientation (Wakefield, 1992). Curiously, the same line of reasoning has not been applied to other "disorders" such as fetishism and consensual sadomasochism. Several authors (Laws & O'Donohue, 1997) have argued that such conditions are not inherently harmful, and, like homosexuality, they are only variations in sexual lifestyles.

The topic of sexual deviation has the distinction of being one of the most controversial in psychology and related fields. Few disorders elicit as much curiosity and outrage as the sexual deviations, or *paraphilias* as they are officially known. Numerous cases of sexual offenses, and the ensuing sensational media coverage, have provoked alarm, outrage, and curiosity. Studies of victims and perpetrators suggest that these problems are not rare. Additionally, the Internet, with its sexually explicit sites, chat rooms, and special interest groups, has brought sexual deviations out of the closet and into cultural awareness. Sexual deviations themes are evident in several mainstream films, and they are regular features in televised talk shows, documentaries, and criminal justice media programs.

Unfortunately, there remains a great amount of undocumented information and often misinformation about sexual disorders. More than ever before, there is a need for sound research on sexual deviation. There are many unanswered questions about the features, causes, and effective treatments. The objective of this chapter is to provide an overview of pedophilia, or child molestation as it is popularly called. The overview begins with a discussion of definitions and classifications. The research findings on the characteristics common to pedophiles are reviewed, followed by a summary of leading theories. The coverage will be limited to male pedophiles since they are much more common, while female sex offenders are discussed elsewhere in this volume (see Chapter 3).

DEFINITIONS

The official definition of sexual deviation, including pedophilia, has changed considerably over time. According to the original definition by the American Psychiatric Association (1952), sexual deviations (or perversions as they were once called) were related to the "sociopathic personality disturbance." The sociopathic personality applied to individuals whose behavior failed to comply with social or cultural guidelines; in a sense, they were extreme nonconformists with respect to sexual practices. Pedophilia was formally introduced as a sexual deviation in 1968. The term "sexual deviation"

was renamed *paraphilia* in 1980. Paraphilia was adopted because it was presumably more descriptive: *para-*, referring to an abnormality to which the person is attracted, *-philia*. According to the official description (American Psychiatric Association, 2000), the paraphilias involve recurrent and intense sexually arousing fantasies, sexual urges, or behaviors that typically involve (1) nonhuman objects (such as a shoe fetish), (2) the suffering or humiliation of oneself or of one's partner (as in sexual sadism), or (3) children or other nonconsenting persons (which would include exhibitionism and pedophilia).

For some individuals with paraphilias, their unusual urges or practices are necessary, even required, for sexual arousal. The person may not be able to perform sexually without the preferred item, situation, or partner. In other cases, they are not essential but desirable. In any case, the definition of a paraphilia requires that the urges or sexual practices are either distressing to the individual or cause impairments in one or more areas of life. The unusual sexual practices may cause problems in intimate relationships and lead to criminal arrest when they involve nonconsenting partners. Paraphilias entail sexual arousal that often interferes with "the capacity for reciprocal, affectionate sexual activity" (American Psychiatric Association, 1994, p. 524). In cases where the sexual urges and fantasies are essential for the person's sexual arousal, they may become a focus of the person's life. A man with a foot fetish, for example, may take a job as a salesperson in footwear. A man whose sexual urges involve immature children may coach youth sports teams to have access to potential victims.

Pedophilia (literally, *love of young children*) is officially described as involving recurrent, intense sexually arousing urges, fantasies, or behaviors involving sexual activity with a prepubescent child (usually 13 years old or younger). The person must be at least 16 years old and at least five years older than the victim. A relationship between an older adolescent and a 12- to 13-year-old would not qualify as pedophilia. Although the terms "pedophile" and "child molester" are often used interchangeably, there are important differences between them (Barbaree & Seto, 1997; McAnulty, Adams, & Dillon, 2001). Pedophilia is usually reserved for those individuals who show some degree of sexual preference for children: their urges and fantasies often focus on children, sometimes exclusively. Child molestation, however, is a broad term that can be applied to any person who engages in inappropriate sexual behavior with a child. Child molestation may be motivated by the unavailability of an adult partner (Freund, McKnight, Langevin, & Cibiri, 1972). It could be due to cognitive deficits such as mental retardation or dementia, or conditions related to lowered inhibitions, such as alcoholism or a psychopathic personality involving traits such as impulsiveness and thrill-seeking (Dorr, 1998). In these cases, the person's sexual actions with a child probably do not result from persistent and intense urges. In other words, pedophilia is but one of several possible motives for molesting a child. This distinction in terms is not simply a matter of semantics, because it has important implications for understanding offenders and making decisions about their treatment.

An important distinction should be made between sexual behavior and preference. Sexual activity is not always indicative of sexual preference; some gay men engage in heterosexual intercourse although they clearly prefer male sexual partners (and may resort to gay fantasy during encounters with a female). Sexual preferences, values, and behavior may be inconsistent, as evidenced by the observation that some pedophiles find their erotic interests despicable. Yet, they regularly engage in these "immoral" acts. In many cases, though, individuals enjoy their deviant urges and practices, and they resent interference from society.

CHARACTERISTICS OF PEDOPHILES

One consistent conclusion is that pedophiles represent a very diverse group of individuals. There is a high degree of variability in their personal characteristics, life experiences (including their family backgrounds), criminal histories, and reasons for molesting children. As Prentky, Knight, and Lee (1997) concluded, "there is no single 'profile' that accurately describes or accounts for all child molesters" (p. v). With this caution in mind, several consistent findings have emerged in studies of incarcerated pedophiles.

Sexual Preoccupation with Children

Pedophiles differ in the intensity and exclusivity of their sexual interests in children. Whether measured by the sexual histories, number of offenses, or sexual preferences, some offenders evidence an intense and exclusive sexual interest in children. These men have had multiple victims, have few experiences with adult partners, and their "sexual focus" is on children (Prentky et al., 1997). When tested in the lab using the penile plethysmograph, they show marked sexual arousal to pictures or videos of children, often with little arousal to adults of either gender. In one important study, Barbaree and Marshall (1989) discovered five separate sexual profiles among child molesters. Two profiles were indicative of pedophilia or a preference for children, one suggested a normal adult heterosexual orientation, one revealed a preference for adolescents, and the last involved indiscriminate arousal, or equal responsiveness to persons from all age groups. There is also evidence that nonfamilial child molesters are more sexually aroused by children than incestuous offenders are (Marshall, Barbaree, & Christophe, 1986; Quinsey, Chaplin, & Carrigan, 1979). Pedophiles who have a sexual preference for children are also higher risks for recidivism upon release from prison or treatment (see Seto, 2004).

Some research also suggests that offenders who have male victims, multiple victims, younger victims, and victims who are not related to them show more pedophilic sexual arousal than offenders who have female victims, few victims, older victims, and victims that are relatives (Seto, 2004). In other

words, men who have sexually abused multiple young boys who are not relatives are more likely to be true pedophiles. As discussed in the next section, men who show a marked sexual preference for children with little to no arousal to adult partners are often labeled "preferential pedophiles." A consistent finding is that preferential pedophiles generally have deficits in their social and sexual relationships with adults. The majority of child molesters do not appear to be preferential pedophiles because they do not display an intense and exclusive focus on children.

Social Skills and Adjustment

It is well established that, as a group, pedophiles are described as deficient in their social skills (see Emmers-Sommer et al., 2004). As a group, pedophiles have been characterized as shy, unassertive, and passive (Langevin, 1983). Additionally, they have been described as introverted and socially withdrawn (Bard et al., 1987; Langevin, Hucker, Ben-Aron, Purins, & Hook, 1985). However, no single personality profile is consistently observed among pedophiles (Levin & Stava, 1987; Okami & Goldberg, 1992).

As a group, pedophiles are worried about negative evaluations by women, feel unassertive, and have very conservative stereotypes of women (Overholser & Beck, 1986). In interactions with adult females, they rate their performance more poorly than do rapists (Segal & Marshall, 1985). Because of these deficiencies and feelings of inadequacy, many pedophiles find children less threatening. These social skills deficits interfere with the offenders' capacity for developing normal sexual and social relationships, and, therefore, these deficits are believed to be important in the origins of perpetrators' deviant urges and fantasies (Prentky et al., 1997). It should be noted, though, that social skills deficits are only one of many factors in the development of pedophilia. Some offenders have relatively effective social skills; they are married and even respected members of their communities (prior to being charged with a sexual offense).

Antisocial Personality Traits

In some cases, men who molest children have a lengthy history of antisocial behavior. Individuals who molest younger children as adolescents are likely to have broken many rules, to have criminal histories, and to have had behavior problems at school and at home. Child molesters who committed their first sexual offense in adolescence usually acted out at school, often in the form of verbal and physical aggression. They were in trouble with the law as teenagers, a pattern that persisted into adulthood (Prentky et al., 1997). In these cases, the sexual offenses represent one part of a longer criminal history and antisocial lifestyle. As adults, these men persistently take advantage of others, often in the form of manipulation, deception, aggression, and impulsivity. Interpersonally,

they are self-centered and insincere, and they seem to experience little remorse or guilt.

Recent studies suggest that a majority of incarcerated child molesters have committed nonsexual crimes. Criminal diversity, which refers to the range of criminal offenses in a person's past, is quite common among sex offenders in prison. Smallbone and Wortley (2004), who examined the criminal records of 362 convicted child molesters, reported that nearly two-thirds (64.4 percent) had prior criminal arrests, the majority of which were for nonsexual offenses such as theft, traffic violations, and drug offenses. In other words, this group of child molesters was criminally diverse. Nonsexual offenses accounted for 86 percent of all previous criminal offenses. These findings have led some researchers to question whether sex offenders are truly unique and different from incarcerated nonsex offenders (see Simon, 2000).

Studies suggest that 8–30 percent of child molesters have an antisocial or psychopathic personality disorder (Quinsey, Harris, & Rice, 1995; Serin, Malcolm, Khanna, & Barbaree, 1994; for a review see Dorr, 1998). Alcohol abuse is one of the most commonly reported problems among child molesters (Marshall, 1997). Antisocial traits, though, are not found in all cases. Paradoxically, some pedophiles are moralistic, conservative individuals in other aspects of their lives (Marshall & McKnight, 1975).

Troubled Childhoods

One final consistent finding is that pedophiles as a group are more likely to have had troubled childhoods. Their developmental histories often include being the victim of physical, emotional, or sexual abuse. Half or more of child molesters report having been the victims of sexual abuse during childhood (Bard et al., 1987; Marshall, 1997). Childhood emotional abuse is a developmental risk factor for sexual deviation, including pedophilia (Lee, Jackson, Pattison, & Ward, 2002). Childhood sexual abuse is also related to the risk of becoming a perpetrator (Lee et al., 2002). Research shows that families that provide ineffective socialization, that are characterized by problematic parent-child relationships, and that involve high levels of parental conflict and violence may place children at a higher risk of sexual offending later in life. Parental absence or inconsistency, as when a parent is emotionally unavailable to the child, increases the likelihood of later emotional and interpersonal problems, including anxiety, distrust, insecurity, excessive anger, and poor social skills (Prentky et al., 1997; Smallbone & Dadds, 1998). Parental insensitivity to a child's needs, in particular, is believed to compromise the child's ability to feel secure in adult relationships. Detrimental childhood experiences, such as having a severely dysfunctional family, can lead to social skills deficits and feelings of inadequacy, which can ultimately interfere with healthy adult relationships and intimacy.

Victim Preferences

Pedophiles often have very specific preferences for victims. They may differ in terms of preferred victim gender (male, female, or both), relationship to the victim (incestuous versus nonincestuous), and whether their sexual preference is exclusive (i.e., the pedophile is attracted only to children) or nonexclusive. The distinction between homosexual, bisexual, and heterosexual pedophilia is well established (Langevin, 1983; Lanyon, 1986). Heterosexual pedophiles (men who prefer immature girls) are apparently more common than homosexual pedophiles (men who prefer boys), whereas the bisexual subtype is uncommon. Homosexual pedophiles, however, tend to have a larger number of victims than the heterosexual pedophiles. For example, Abel et al. (1987) found that their sample of heterosexual child molesters (nonincestuous) reported an average of twenty victims, compared to 150 for the homosexual pedophiles (nonincestuous). Incestuous offenders in the same study admitted to an average of 1.8 female victims and 1.7 male victims. As with nonincestuous child molestation, most incestuous pedophiles chose female victims. In contrast to homosexual pedophilia, heterosexual child molesters are more likely to be married (Langevin, Hucker, Handy, et al., 1985).

Contrary to popular belief, pedophiles are not "dirty old men," as most incarcerated pedophiles are in their midtwenties to midthirties (Groth & Birnbaum, 1978; Langevin, Hucker, Handy, et al., 1985). By definition, the victims in both groups are prepubescent; average victim age is approximately 10 years (Groth & Birnbaum, 1978). Approximately 25 percent of victims are less than 6 years of age, another 25 percent are between 6 and 10 years of age, and roughly 50 percent are between 11 and 13 years of age (Erickson, Walbek, & Seely, 1988). Type of sexual activity with victims ranges from fondling to oral sex and actual penetration (Erickson et al., 1988). Among heterosexual pedophiles, fondling of the victim is by far the most common (54 percent), although vaginal contact (41.5 percent) and cunnilingus (19 percent) are not rare. For homosexual offenders, fondling of the victim is also most common (43 percent), followed by the performance of fellatio on the victim (41 percent). Anal contact in the latter group occurs in one-third of cases. In cases involving younger children, actual anal or vaginal penetration is uncommon; contact usually entails rubbing the penis against the orifice or between the thighs (Erickson et al., 1988; Langevin, Hucker, Handy, et al., 1985). In cases of intrafamilial incest, there tends to be a progression from masturbation and fondling to actual attempts at intercourse over time. Methods of obtaining victim compliance include enticement via bribery, seduction, appeal to curiosity, and intimidation and threats in some cases. The majority of pedophiles are at least acquainted with their victims. Incestuous pedophiles commonly molest biological, adoptive, or stepchildren, whereas the victims of nonincestuous offenders may include neighbors, relatives, and acquaintances.

Pedophiles typically have beliefs about sexual contact with children that facilitate acting out their deviant sexual urges (Hanson, Gizzarelli, & Scott, 1994; Ward, Hudson, Johnston, & Marshall, 1997). In general, the beliefs of pedophiles involve some degree of denial and minimization: they deny or minimize the actual harm suffered by their victims and they also minimize their own responsibility for the offenses. Specifically, they often claim that adult sexual contacts are beneficial to children ("it teaches them about sex"). Offenders not only deny or minimize their own responsibility for the offense, but also tend to view the victim as an instigator or willing participant (Stermac & Segal, 1989). Pedophiles often claim that a child's sexually provocative appearance or behavior actually invited the offense. These rationalizations are often used by offenders to justify their actions while reducing any sense of shame or remorse.

TYPES OF PEDOPHILES

One classification of pedophiles involves the distinction between preferential and situational pedophilia (Lanyon, 1986). This is similar to the exclusive-versus-nonexclusive (American Psychiatric Association, 2000) and fixated-versus-regressed classifications proposed by Cohen, Seghorn, and Calmas (1969) and Groth and Birnbaum (1978). *Preferential* or *fixated* pedophiles are primarily, and often exclusively, interested in children as sexual partners and tend to be unmarried. Homosexual pedophiles are usually preferential molesters. Their sexual experiences with adults tend to be very limited; they commonly have experienced lifelong difficulties in relating to adults, and their sexual development is described as fixated or blocked. For these offenders, encounters with children are usually premeditated rather than impulsive. These individuals tend to be more comfortable emotionally, socially, and sexually with children. The *situational* or *regressed* pedophiles tend to be primarily heterosexual child molesters. Incestuous offenders would generally be classified as situational offenders. These individuals are more likely to be married and to have more extensive sexual experience with adult partners than do preferential pedophiles. A common pattern is to have an apparently normal development with adequate social and heterosexual skills. As the person enters adulthood, however, his social, occupational, and marital adjustment become tenuous and marginal. The pedophilic acts are typically precipitated by direct confrontation with a female or a threat to the person's masculinity. These individuals' sexual encounters with children are more impulsive, usually with older but prepubescent females, and tend to occur intermittently rather than continuously (Lanyon, 1986). A major question is whether these individuals have always had some sexual arousal to children as well as adults. It is important to note that there is overlap between these categories. For example, Prentky et al. (1997) found that social skills problems could be found in cases of both preferential and situational pedophiles.

A final category includes the *aggressive* pedophile (Cohen et al., 1969) or sadistic child molester. Aggressive and sadistic sexual activity occurs in less than 20 percent of cases (Groth & Birnbaum, 1978). The victims are usually boys, and the sexual activity is clearly vicious and cruel. Sexual activity may include the mutilation of the victim's genitalia and the insertion of foreign objects into bodily orifices. In some cases, forcible anal intercourse (with resulting lacerations) may occur. Avery-Clark and Laws (1984) identified a group of aggressive pedophiles who were equally aroused by depictions of consenting intercourse with a child and graphic descriptions of aggressive assault of a child. Their measured sexual arousal suggested that these pedophiles were sexually aroused or at least not sexually inhibited by sexual aggression directed at children. Although these individuals are fairly rare, the results of their deviant sexual arousal are tragic; these offenders may be involved in the serial molestation and murder of boys.

THEORIES OF PEDOPHILIA

Psychoanalytic theories emphasize that pedophiles choose children as partners because they elicit less castration anxiety than do adults (Fenichel, 1945). Others have hypothesized an aversion to adult females and an association with homosexuality. The research evidence, however, does not support these theoretical views (Langevin, 1983; Langevin, Hucker, Ben-Aron, et al., 1985). The behavioral or social learning theories stress the importance of early conditioning, direct reinforcement, or modeling experiences, such as the presence of sexual abuse in the offender's past or an early sexual experience with a younger child. The single most popular theory of pedophilia is the "abused-abuser hypothesis," which proposes that individuals who were sexually abused in childhood are predisposed to developing pedophilia. As Garland and Dougher (1990) commented, despite the popularity of this view there is surprisingly little empirical support. There are at least three problems with this hypothesis: (1) although most victims of child sexual abuse are females, the vast majority of pedophiles are males; (2) only half of all child molesters have a personal history of sexual victimization by an adult in childhood (Weeks & Widom, 1998); and (3) some pedophiles allege having been sexually abused in childhood as a ploy to reduce their perceived responsibility for their sexual offenses (Freund, Watson, & Dickey, 1990). Thus, most individuals who were sexually molested as children do *not* develop pedophilia (Hanson & Slater, 1988; Salter et al., 2003).

Araji and Finkelhor (1985) have advanced a four-factor model of pedophilia. According to them, pedophilia may be understood in terms of (a) *emotional congruence*, or the emotional need to relate to children (e.g., faulty emotional development, feelings of inadequacy); (b) *blockage*, or the inability to attain alternative sources of gratification (e.g., social skills deficits, fear of adult partners); (c) *disinhibition*, referring to any influence that lowers the person's

self-control (e.g., alcoholism, impulsivity); and (d) *sexual arousal* to prepubertal partners. Araji and Finkelhor (1985) noted that most existing theories of pedophilia include one or more of these factors. This proposed model is promising, as it stresses that no single factor will be found in every case of pedophilia. This model takes into account several factors that are common among pedophiles, but it does not fully explain why they occur. Many pedophiles, for example, feel inadequate with adult partners and are sexually attracted to children, but the model does not explain where these problems originate.

One of the influential theories of sexual offending was proposed by Marshall (1989) and Marshall, Hudson, and Hodkinson (1993). According to the model, secure parent-child attachment is essential for achieving intimate and mutually rewarding adult relationships. Inadequate attachment bonds can result from (1) poor parenting (e.g., inconsistency, lack of warmth, unresponsiveness, insensitivity, rejection, etc.), (2) discontinuities in parenting (e.g., loss of a parent, placement in foster care, etc.), or (3) serious family dysfunction (e.g., chaotic family, severe parental conflict, criminality in a parent, etc.). Lacking a secure attachment to a parent figure, children are left feeling insecure, anxious, and frustrated, often leading to behavior problems, such as delinquency, substance abuse, and aggression (Smallbone & Dadds, 2001). Afraid of others and mistrustful, these youths are especially unprepared for normal relationships with opposite-sex peers. These problems persist into adulthood, as these individuals feel isolated, lonely, and incapable of forming intimate relationships with peers (Smallbone & Dadds, 1998). They fear rejection, in the way they were rejected or neglected by their own parents. "Poor attachments in childhood, then, lead to an incapacity for intimacy, which produces painful feelings of emotional loneliness, and may ultimately lead to aggressive behavior" (Marshall et al., 1993, p. 174). Unable to form normal intimate relationships as adults, some of these individuals may resort to force and sexual coercion (as do rapists and exhibitionists) or seek out potential partners who are less emotionally threatening (as do pedophiles). According to this model, a man who lacks social skills and who feels inadequate and undesirable may be attracted to children because they are less rejecting and less critical than adults, thereby allowing an illusion of power, self-worth, and sexual desirability to the pedophile (Garlick, Marshall, & Thornton, 1996; Seidman, Marshall, Hudson, & Robertson, 1994).

The feelings of loneliness and problems with intimacy may be particularly difficult and painful for adults who were raised in cultures that promote sexual intimacy and traditional gender role stereotypes. In such cultures, those vulnerable may be especially prone to accepting mixed messages about sex and gender. Therefore, these men may be more likely to internalize distorted views of women (i.e., objectification of women) and of sex (e.g., sex as a conquest and a measure of a man's worth). This theory of sexual offending is promising because it incorporates the developmental sequence and various

factors that could shape deviant urges and fantasies. It is also supported by a wealth of research that demonstrates that inadequate parent-child attachment bonds are linked to a host of behavioral and emotional problems later in life (see Goldberg, 1997). Sex offenders consistently report insecure attachment as predicted by the theory (Lyn & Burton, 2005).

CONCLUSIONS

Pedophilia is a serious problem in society. Many men and women report being victims of sexual abuse during childhood. According to one national survey (Laumann, Gagnon, Michael, & Michaels, 1994), nearly 12 percent of men and 17 percent of women reported that they had been sexually touched as children by an older adolescent or an adult. In most cases, it occurred between the ages of 7 and 10, and it progressed to oral sex and intercourse in 10–30 percent of the cases. For many victims, the abuse causes short-term and long-term problems in life (see Chapters 5 and 6 in this volume).

Pedophiles are usually men who have some degree of sexual preoccupation with immature children. For some, it is an exclusive sexual preference, but others have also had adult partners. Men with an exclusive sexual preference for children tend to have a larger number of victims and it is often a focus of their emotional, social, and sexual lives. As a group, pedophiles often lack social skills and feel inadequate in their relationships. This is not, however, universal. In some cases, child molestation is only part of a lengthy pattern of problematic behaviors at home and at school; these offenders tend to be antisocial, impulsive, and emotionally immature. Some pedophiles have a marked preference for a type of victim and specific sexual activities; others seem more indiscriminate. Many if not most pedophiles report troubled childhoods involving emotional, physical, or sexual abuse. Inadequate parent-child attachment and related problems are commonly reported by pedophiles and other sex offenders. These experiences are likely important factors in the developmental pathway to pedophilia.

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5

Sexual Assault

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Sexual assault is an enormous problem in the United States as well as internationally. Not only does it impact the lives of millions of individuals, but it also has huge costs to society in the form of economic loss, health burdens, and social problems. The emotional aftermath, short- and long-term disruption in functioning, psychological and physical health problems, increase in suicide risk, and increased vulnerability to additional forms of sexual and physical violence are but a few of the consequences. Survivors are affected most directly, but others in their lives (family, partners, friends, etc.) suffer serious consequences as well.

In this chapter, we will review definitions, impact, risk factors, prevention and intervention, and support services available to victims. The focus will be on adult victims of sexual assault, since child sexual abuse has somewhat different rates, definitions, and related issues.

DEFINING SEXUAL ASSAULT

While the occurrence of rape is a concern of growing importance, incidence estimates often suffer from flawed measurement methods and general underreporting, especially of rapes perpetrated by acquaintances (Koss, 1992). According to some estimates, as few as one in ten rapes are reported. Additionally, the definitions of rape, attempted rape, and sexual assault may be discrepant between researchers and legal/epidemiological sources. These two

issues will be briefly discussed below. While these discrepancies affect any review of prevalence data, the important point is this: rape is a far too common occurrence and has a broad range of potential consequences and risk factors.

In defining various degrees of sexual violence, two main approaches are followed. The first set of definitions is found within the legal realm and is used for the periodic reporting of incidence rates. *Forcible rape* is a crime punishable by law, and thus it is legally defined by the FBI Uniform Crime Report as "the carnal knowledge of a female forcibly and against her will" (Rantala, 2000). This definition includes both attempted and completed rapes, but only includes female victims. The National Incidence Based Reporting System broadens the definition to include both female and male victims, defining *rape* as "the carnal knowledge of a person forcibly, and/or against that person's will; or not forcibly or against that person's will where that person is incapable of giving consent because of his/her temporary or permanent mental or physical incapacity." Additional legal terms which may apply to sexual assault experiences include *aggravated assault*, an unlawful attack by one person upon another for the purpose of inflicting severe or aggravated bodily injury; this type of assault is usually accompanied by the use of a weapon or another force likely to produce death or great bodily harm, and *simple assault*, aggravated assault without the display of a weapon. It is worth noting that legal definitions vary by state.

While important for purposes of filing legal charges and calculating annual incidence rates, the definitions are not as commonly used in research on sexual assault as are those germane to the public health sector. Within this perspective, *sexual violence* is defined as "any sexual act, attempt to obtain a sexual act, unwanted sexual comments or advances, or acts to traffic, or otherwise directed, against a person's sexuality using coercion, by any person regardless of their relationship to the victim, in any setting, including but not limited to home and work" (Jewkes, Sen, & Garcia-Moreno, 2002). As you can see, this definition is quite broad, leaving room for a variety of victim experiences. More specifically, *rape* may be defined as "physically forced or otherwise coerced penetration of the vulva or anus using a penis, other body parts, or an object." *Attempted rape* is a noncompleted rape. Within the context of these definitions, *coercion* applies to physical force, psychological intimidation, blackmail or other threats, or taking advantage of an individual who is incapable of giving consent. (For a review of the discrepancies of legal and public health sector definitions, see Kilpatrick, 2004.)

In an effort to resolve the disparate and often overlapping terminology, the Centers for Disease Control (Basile & Saltzman, 2002) published a compendium of uniform definitions and recommended data elements. Sexual violence was divided into five categories: a completed sex act without victim consent or involving a victim unable to consent or refuse, an attempted sex act without victim consent or involving a victim unable to consent or refuse, abusive sexual contact, noncontact sexual abuse (such as exhibitionism), and sexual

violence unspecified. "Sex act" is uniformly defined as "contact between the penis and vulva or the penis and anus, involving penetration, however slight; contact between the mouth and penis, vulva, or anus; or penetration of the anal or genital opening of another person by hand, finger, or other object." The inability to consent may be due to age, illness, disability, being asleep, or the influence of alcohol or other drugs. Inability to refuse may be due to the use of weapons, physical violence, threats of physical violence, real or perceived coercion, intimidation or pressure, or the misuse of authority.

Within the realm of violence researchers, the most commonly agreed upon definition of *rape* has been defined by Koss (1992) as "nonconsensual vaginal, anal, or oral penetration, obtained by force, by threat of injury or bodily harm, or when the victim is incapable of giving consent (i.e., due to impairment by drugs or other intoxicants)." Although this definition is widely used in the literature on sexual assault, it has several limitations. In addition to the exclusion of attempted rape and other forms of sexual assault, the current definition includes stranger, acquaintance, date, and marital rape and does not necessarily lend itself to distinction among these victim-offender relationships, further clouding the intricacies of the impact that these factors may have in terms of postrape adjustment and potential risk factors. The term "sexual coercion" is frequently used to describe methods of aggression that do not involve force or violence, but occur more frequently in assault where the victim has some prior relationship with the offender (Koss, Dinero, Seibel, & Cox, 1988).

A range of sexual violence is subsumed by the term *sexual assault*. This term commonly includes sex acts such as unwanted fondling or sex play in addition to more severe forms of assault such as attempted or completed rape. While less severe forms of assault may result in physical and psychological consequences for the victim, a general finding is that more severe assaults are differentiated by their more significant impact on the lives of the victims.

Researchers are currently working toward a common lexicon. In the meantime, there is some commonality among the definitions to be highlighted. One such commonality is that whether legally defined or defined by researchers, *rape* may occur either by force or coercion and involves some form of penetration. *Attempted rape* is usually considered to be the lack of completion of these activities. S*exual assault* may include a wide range of unwanted sexual activity that may range from an unwanted kiss, to unwanted sex play, to rape.

PREVALENCE ESTIMATES

Even considering underreporting and the lack of uniform definitions, the prevalence rates for rape are notably high. Prevalence of rape within a community sample has been estimated at 14 percent (Kilpatrick, Edmunds, & Seymour, 1992). According to the National Violence Against Women Survey (NVAWS), one in six women have experienced an attempted or completed

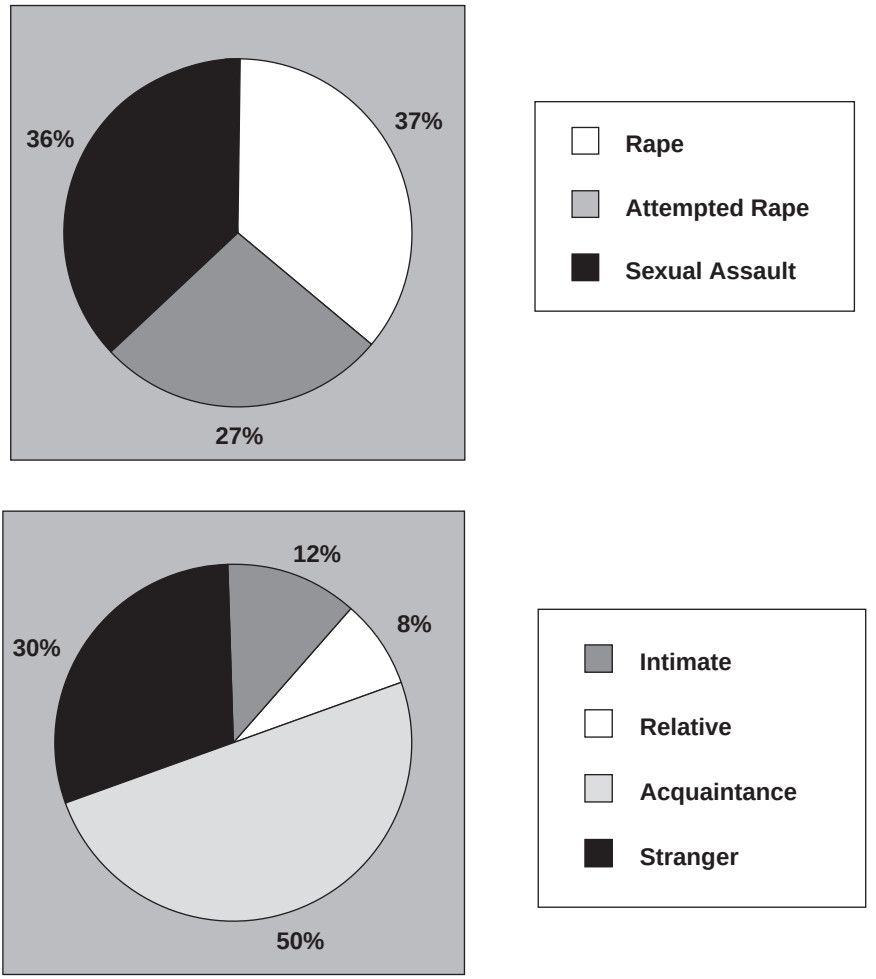

Figure 5.1. Estimates from National Crime Victim Survey results, 2003.

Source: Bureau of Justice Statistics.

rape (Tjaden & Thoennes, 2000). Among college women, estimates are even higher than those within the general population (Sorenson, Stein, Siegel, Golding, & Burnham, 1987). In a college sample of women, Gidycz et al. (1997) found that approximately 17 percent had experienced a rape, while an additional 33 percent had experienced some other form of sexual assault. Greene and Navarro (1998) found 27 percent of first-year college women were sexually assaulted over the course of a twelve-week semester. The combined effects of these estimates indicate that sexual assault is a frequent occurrence, impacting thousands of women each year. Although adolescent and young

adult women are the most common targets of sexual assault, women of all ages, ethnicities, and backgrounds are victims.

Figure 5.1 gives an estimate of the relative incidence of rape, attempted rape, and sexual assault, according to the most recent National Crime Victim Survey results. It also indicates the incidence broken down by perpetrator type. Half of all perpetrators are acquaintances, including dates, neighbors, friends of friends, classmates, etc. Just under one third are strangers, 12 percent are spouses or intimate partners, and the rest are relatives.

CONSEQUENCES

Rape is a trauma that is often a devastating experience for its survivors. It results in both acute and chronic symptoms that may range from temporary emotional and physical reactions like fear and bruising, to more long-term psychological and health conditions such as major depression or fibromyalgia. Early research on the recovery of rape victims reported that almost 40 percent of women stated that recovery took "several years," while over 25 percent reported that they did not feel they had yet fully recovered at four to six years postrape. It is important to keep in mind that each person is different and may present with a wide array of immediate symptoms as a result of sexual assault, which may or may not progress to the development of chronic conditions. The subsequent material summarizes some of the potential immediate and long-term consequences with which rape survivors may be faced. It is by no means exhaustive, but represents a guide to the more common and prevalent reactions of women following the experience of rape.

Immediate Consequences of Sexual Assault

Victims of sexual assault may experience a range of reactions immediately following the trauma, including disorientation, numbness, feelings of vulnerability, shame, guilt and fear, and somatic symptoms. In 1974, Burgess and Holmstrom were the first researchers to collect self-report data from community samples of rape victims on the immediate and long-term effects of rape. To date, their research on the "rape trauma syndrome," as they coined it, remains a keystone in the discussion of immediate reactions to rape.

Burgess and Holmstrom (1979) divided the immediate reactions of rape victims into two basic types: the expressed style and the controlled style. Women who expressed their emotion tended to report feelings of fear and anxiety and exhibited behaviors such as crying, smiling, tenseness, and restlessness. The controlled style consisted of a masking of emotion and generally subdued affect. A fairly equal number of women expressed each style. It is worthwhile to remember that women who have experienced a sexual assault may present with a broad spectrum of emotional and physical conditions that are as varied as the circumstances of their victimization.

Acute reactions that appear within the first few weeks following the assault included a range of somatic and emotional conditions. For women experiencing physically forced sex, physical trauma may be common, including bruising and irritation. Other somatic reactions include tension headaches, fatigue, sleep disturbances, appetite reduction, nausea, hypersensitivity, and gynecological symptoms such as vaginal discharge, bleeding, itching, burning sensation, and generalized pain.

In terms of emotional reactions, fear is a primary feeling described by rape survivors. Women may report being afraid to be alone or fear of places that resemble the site of their attack. Women may also experience heightened anxiety throughout the course of their normal day and during their participation in routine activities. Other reactions common to victims of rape include humiliation, embarrassment, anger, revenge, and self-blame.

Long-Term Impact of Sexual Assault

For some women, short-term symptoms persist and may develop into long-term consequences. It is important to stress that not all victims of sexual assault will experience any or all of the symptoms and consequences discussed. However, it is also important to become aware of several of the more common long-term consequences that research has linked with the experience of sexual assault. As with the immediate impact, these consequences touch upon the realms of physical/somatic health, relationships, risky sexual behavior, and psychological sequelae. A very general introduction to these topics is provided below.

Physical and Somatic Health Consequences

Physical and somatic conditions associated with sexual assault encompass a broad range of chronic illness and reproductive health problems. Chronic conditions more likely to be diagnosed within a population of rape victims include, but are not limited to, arthritis, gastrointestinal disorders, headaches, chronic pain disorders (e.g., fibromyalgia), premenstrual symptoms, chronic pelvic pain, and psychogenic seizures.

Women with a history of sexual assault have approximately 1.6 times the odds of experiencing poor health as people without a history of assault (Golding, Cooper, & George, 1997). Assaults by strangers in particular are associated with an increased risk of poor health outcomes. These poor health outcomes lead to increased utilization of healthcare as well as a significant financial burden in medical costs. Women with a history of assault are more likely to rate themselves as unhealthy, visit their physician almost twice as often, and have medical costs 2.5 times higher than those of women without a history of sexual assault. The more frequent and severe the assault experience, the more adverse the health outcomes.

Another potential health consequence of rape is contraction of an array of sexually transmitted infections (STIs) and AIDS. Koss and Heslet (1992) found that up to 30 percent of rape victims tested positive for some form of sexually transmitted infection. As an additional risk, recent research has pointed to a link between previous victimization and risky sexual behaviors that may increase one's risk for STIs. Some women with a history of sexual assault have been found to have a significantly higher number of sex partners, engage in high-risk sexual practices, and be less likely to use condoms during sexual activity than nonvictims.

Social and Relational Impact

A far greater percentage of rape victims (71 percent) report a decrease in sexual activity. And, among the potential long-term consequences of rape are sexual dysfunction and disruption of preexisting heterosexual relationships. Women often report a significant level of impairment of functioning at work or school, as well as an increase in problems with family relationships. Whether women choose to disclose their experience to their friends and families or not, the experience of rape may have a long-term impact on how they interact within their interpersonal relationships.

Psychological Sequelae

Rape often leaves its mark via psychological conditions such as fear, anxiety, low self-esteem, social adjustment issues, depression, dysthymia, and posttraumatic stress disorder (PTSD). One study, which surveyed over 3,000 households and compared women with a history of sexual assault to those without such history, found that sexual assault predicted the later onset of major depressive episodes, substance use disorders, and anxiety disorders such as phobia, panic disorder, and obsessive-compulsive disorder. Depression and PTSD are the two most commonly experienced long-term psychological consequences of rape.

Depression is characterized by depressed mood most of the day every day, diminished interest and pleasure in once pleasurable activities, significant weight loss or gain, sleep disturbances, diminished ability to concentrate, and recurrent thoughts of death. In addition to acute symptoms of depression following a rape, women may also experience long-term depression (for reviews, see Koss, Bailey, & Yuan, 2003; Crowell & Burgess, 1996). Approximately 50 percent of rape survivors report depressive symptoms one month following the attack. Of these, over 40 percent meet the diagnostic criteria for depression. For comparison, the normal rate of depression for women in the United States is approximately 20 percent (Atkeson, Calhoun, Resick, & Ellis, 1982). Results from epidemiological research have indicated that those with a history of childhood or adult sexual assault are 2.4 times more likely to be diagnosed with major depression than controls. Other research has shown that

over 20 percent of a sample of assault victims had a lifetime diagnosis of dysthymia (low-grade, chronic depression), almost 40 percent met the criteria for major depression, and over 40 percent were diagnosed with some form of depressive disorder. Rates of lifetime diagnosis with depression are higher for women victimized in childhood than for those first victimized in adulthood. However, both groups of women are significantly more likely to have a lifetime diagnosis of depression than nonvictimized women.

PTSD was first noted and studied within populations of war veterans following their return from combat. It was noted that a certain portion of these men experienced more difficulty in their readjustment to civilian life, expressed through a cluster of symptomatology. Soon, these similar symptoms began to be noted in populations other than those with combat experience. Among civilians, sexual assault is one of the largest contributors to the subsequent development of PTSD. The diagnosis of PTSD includes a myriad of symptoms that must persist more than one month following a trauma. It is noteworthy that several of these symptoms are common, acute experiences (i.e., less than one month postassault) for women who have been raped, and should enough of these symptoms be present, may garner the diagnosis of acute stress disorder. These symptoms are clustered into three main groups: reexperiencing (i.e., intrusive recollections, distressing dreams, acting or feeling as if the event is happening again, reactivity or distress upon being exposed to related external or internal cues), numbing (i.e., avoidance of thoughts, feelings, and memories related to the trauma), and increased arousal or hypervigilance. The PTSD diagnosis is only applicable should the symptoms continue to plague the survivor for more than one month. Estimates of the lifetime prevalence rates for PTSD among victims of completed rape are 60 to 65 percent. Kilpatrick et al. (1992) found that women with a history of sexual assault were over six times more likely to suffer from PTSD when compared to women without such history. In sum, PTSD is an all too common part of the postrape sequelae, with effects that may cause significant interference with daily life.

In addition to PTSD, survivors of sexual assault may experience a general increase in fear and anxiety. Calhoun, Atkeson, and Resick (1982) compared victims to nonvictims of sexual assault on longitudinal measures of various domains of fear. Overall, victims were significantly more fearful than nonvictims. While the amount of fear expressed among the victim group declined over the twelve-month follow-up period, these women remained significantly more anxious than those in the nonvictim control group. This fear may take many forms, from overall "edginess" or "jumpiness" to agoraphobia, and may express itself in fears such as fear of the dark, of being alone, or of being in large groups of people.

SEXUAL ASSAULT AND SUBSTANCE USE

In addition to the psychological sequelae of sexual assault trauma, another noteworthy relationship is between sexual assault experiences and lifetime

prevalence rates of substance abuse or dependence. One study found that the odds for developing alcohol or drug use disorders more than doubled for women with a history of sexual assault (Burnam, Stein, & Golding, 1988). Clinicians and researchers report that women seeking treatment for substance use disorders (SUDs) have much higher rates of physical and sexual assault when compared with women in the general population. This relationship appears to be evident among women with a history of childhood sexual abuse.

Although the link between sexual assault and SUDs has been well documented, it is difficult to disentangle the direction and time sequencing of this relationship. Citing research designs reliant upon retrospective report of data, insufficient methodology, psychological symptomology, substance use, and often complex interactions of abuse, researchers have yet to fully determine which comes first—sexual assault or increased use of substances. However, attempts are being made to more clearly delineate the order of onset of these conditions. For example, White and Humphrey (1997) collected longitudinal data over the course of three years of over 700 college women. They found that women who experienced a sexual assault in one given year of the study had nearly doubled their odds of reporting heavy drinking in the following year. Currently, support is strongest for the existence of a bidirectional, at times even cyclical, relationship between sexual assault and substance use.

Supporting Theory

While the temporal directionality of the relationship between sexual assault and alcohol abuse appears to be bidirectional, researchers have formed and tested a hypothetical explanation for the occurrence of alcohol abuse subsequent to sexual assault. This theory has been coined the "self-medication hypothesis." Although this theory has been applied to a broad spectrum of substances, a majority of the research involving women who have experienced sexual assault focuses upon alcohol specifically. According to this theory, women who have experienced a traumatic event (such as sexual assault) are left to deal with the aftermath, which may include many of the symptoms previously discussed, like depressed mood, general anxiety, and PTSD. Alcohol use serves as a coping mechanism in that it may temporarily numb symptoms of anxiety, depression, or PTSD. Some researchers have termed the use of alcohol for the reduction of unpleasant emotions as "chemical avoidance." Because chemical avoidance is often effective on a short-term basis (e.g., it reduces anxiety), the drinking behavior is reinforced by the reduction in distress. This increases the likelihood of that same drinking behavior upon subsequent experience of unpleasant emotions. Over time, when used repeatedly and often exclusively, drinking becomes a maladaptive mechanism for coping. Laboratory research has supported this model. Results of studies, such as one by Levenson, Oyama, and Meek (1987) demonstrating that alcohol was

effective in decreasing both physiological and subjective measures of stress following the administration of a small electric shock (physiological stressor) and a self-disclosing speech (psychological stressor), help to clarify how alcohol use may be negatively reinforced among victims of sexual assault.

Miranda et al. (2002) found that college women with a history of sexual assault experienced increased levels of psychological distress, which, consequently, was related to an increased use of alcohol. An additional consideration when examining this model is the role that alcohol expectancies (e.g., the belief that drinking alcohol will make one more relaxed and more sociable, and may help ease anxiety) may play in social situations. Many women may consume alcohol to help them cope with social anxiety or heightened sensitivity to intimate situations.

Consequences of Heavy Drinking

Alcohol use is one of the most common consequences of sexual assault experiences and is not without its own medical, psychological, and practical ramifications. Its impact may range from temporary impairment to no longer being able to fulfill work or familial responsibilities, interaction with other medications, social and legal problems, and alcohol-related birth defects. If left untreated for long periods of time, alcohol abuse may also lead to long-term health problems such as alcohol-related liver disease, heart disease, pancreatitis, and certain forms of cancer.

Increased Risk for Use of Other Substances

Although we have focused mainly on the development of alcohol-related problems following an assault, it is also worth noting that a strong relationship between previous victimization and the use of illegal substances has also been documented. A history of sexual assault more than doubles the odds of drug abuse or dependence. The self-medication hypothesis can be used to explain this relationship. However, the relationship between sexual assault and drug abuse is cyclical in nature, perhaps even more so than with alcohol abuse. That is, women who have been assaulted are more likely to use illicit drugs, and use of illicit drugs places women at greater risk for future victimization.

SEXUAL ASSAULT AND SUICIDE

Perhaps one of the most troubling consequences related to sexual assault involves an increase in suicidal ideation and suicide attempts among its victims. Studies of adult women indicate the existence of a link between sexual assault and suicidal behaviors. Rates of suicide are four times greater among sexually victimized women (Kilpatrick et al., 1992). Women who experience sexual assault at multiple phases of their lives (i.e., victims of childhood sexual abuse

who are then revictimized as adults) show the greatest odds of exhibiting lifetime suicide attempts. The relationship between victimization and suicidal behavior is often mediated by the occurrence of other stressful life events, depression, PTSD, and alcohol dependence symptoms. Other suggested mediators of the sexual assault–suicide relationship that have not yet received as much empirical support include attributions of blame, hopelessness, and searching for meaning in one's victimization.

REVICTIMIZATION

In addition to the many physical and psychological consequences common in the aftermath of a sexual assault, women with a history of victimization also appear to be at increased risk for future sexual assaults. Although many variables have been recognized as potential risk factors for victimization, research consistently identifies a previous history of sexual abuse as one of the strongest predictors of future sexual victimization (Himelein, 1995; Koss & Dinero, 1989). Although prevalence rates vary, they suggest that up to 72 percent of women with a child or adolescent sexual abuse history will experience additional sexual assaults, with similar rates being documented across a variety of samples including college students, clinical populations, and community samples (Messman & Long, 1996). While most of this research has relied on retrospective reporting of victimization experiences, studies that follow women over time have identified a trend for revictimization as well. Gidycz, Hanson, and Layman (1995) followed female college students over a nine-month period, and found that sexual assault survivors were approximately twice as likely to experience victimization during their first three months of participation, and at subsequent six- and nine-month follow-up periods, this risk increased significantly. Specifically, women who were victimized during the initial three months of participation were three times more likely than nonvictims to experience victimization during the subsequent three-month follow-up period, and at nine months, participants were twenty times more likely than nonvictims to experience additional sexual victimization if they had been assaulted during the earlier time period.

These high prevalence rates are particularly alarming when one considers the impact of multiple assault experiences on a woman's functioning and well-being. All of the negative consequences experienced by rape survivors become exponentially worse for revictimized women, including higher rates of depression, anxiety, posttraumatic stress symptoms, hostility, somatic complaints, and suicide attempts (Ellis, Atkeson, & Calhoun, 1982; Messman-Moore, Long, & Siegfried, 2000). In addition, revictimized women experience more interpersonal dysfunction than single-assault victims, with fewer and less fulfilling social relationships, and problems with assertiveness, sociability, submissiveness, intimacy, responsibility, and control (Classen, Field, Koopman, Nevill-Manning, & Spiegel, 2001; Cloitre, Scarvalone, & Difede, 1997; Ellis et al.,

1982). While the majority of research on revictimization has focused on repeated sexual victimization, the adjustment of sexual assault survivors is further complicated by an increased risk for other forms of trauma. For example, Messman-Moore and Long (2000) found that women with a child sexual abuse history were also at increased risk for adult physical abuse and psychological maltreatment. Increased recognition of the problems associated with the phenomenon of revictimization has led to much research in recent years in an attempt to understand the so-called vicious cycle or link between the assault experiences (Mandoki & Burkhart, 1989). In spite of this significant growth in the literature, however, there is still insufficient evidence to support any of the suggested theories or explanations behind why victimization experiences are not evenly distributed throughout the population.

Although the exact mechanisms involved in risk for revictimization are still uncertain, several variables may increase a woman's vulnerability for multiple victimization experiences. The list of suggested mediators has been extensive, including such widely divergent variables as stable personality characteristics of the survivor, disturbed interpersonal relationships, and greater self-blame following the initial sexual assault experience (for reviews, see Arata, 2002; Breitenbecher, 2001). Research focused on risk perception seems to have received the most consistent empirical support. It suggests that revictimized women have more difficulty identifying threatening cues in dating situations (Breitenbecher, 2001). This impaired ability to detect risk may decrease the likelihood of a woman successfully resisting unwanted sexual advances from a potential perpetrator, putting her at higher risk for victimization. Several experimental studies using an audiotaped vignette of a date rape have documented that revictimized women took significantly longer than single-assault or nonvictims in identifying when the man in the situation had "gone too far," which suggests that revictimized women may have poorer risk recognition (Marx, Calhoun, Wilson, & Meyerson, 2001; Wilson, Calhoun, & Bernat, 1999). However, not all studies on threat perception have supported the same conclusions, suggesting that even with adequate risk recognition, "accurate perception of risk must translate into effective action" (Cue, George, & Norris, 1996, p. 502). A recent study suggested that revictimization was predicted by a woman's behavioral response to risky situations rather than her ability to identify threatening cues, which emphasizes the need to examine variables that may be preventing some women from engaging in self-protective behaviors (Messman-Moore & Brown, in press). Other factors that may reduce risk perception or influence a woman's ability to effectively resist unwanted sexual advances include alcohol and drug use, level of assertiveness, and psychological distress, all of which have received partial support as underlying explanations for revictimization (Greene & Navarro, 1998; Gidycz, Coble, Latham, & Layman, 1993). While these variables point to the importance of a woman's behavior in increasing risk for revictimization, one must also separately consider the role of a woman's beliefs and perceived

self-efficacy in increasing her vulnerability for multiple sexual victimization experiences. According to Bandura (1977), a person's self-efficacy determines "whether coping behavior will be initiated, how much effort will be expended, and how long it will be sustained in the face of obstacles and aversive experiences." Thus, a woman with low self-efficacy regarding her ability to resist unwanted sexual advances may be less likely to engage in protective behaviors with potential perpetrators. Self-efficacy was found to be a protective factor in studies designed to evaluate a program aimed at reducing revictimization risk (Calhoun et al., 2002; Marx et al., 2001). Together, these results highlight the role of a woman's thoughts and beliefs as a possible factor in revictimization. Despite increased attention to this phenomenon, the inconsistency of findings on the subject of revictimization limits the ability of researchers and community health providers to intervene with this population of women and reduce their risk for future assaults. However, while the need continues for research on the mechanisms responsible for putting some women at greater risk, evidence continues to build for the role of previous victimization as one of the strongest risk factors for sexual assault.

RISK FACTORS FOR SEXUAL ASSAULT

Despite limited understanding of revictimization and its underlying causes, general risk factors for sexual assault have been more extensively researched. Theories on sexual assault and associated risk factors have evolved considerably over the past two decades. Several variables have consistently been shown to increase a woman's vulnerability for sexual assault. Using a nationally representative sample of college women, Koss and Dinero (1989) simultaneously examined variables associated with three models or hypotheses, including vulnerability-creating traumatic experiences, social-psychological vulnerability, and vulnerability-enhancing situations. As discussed above, previous traumatic experiences seem to be well established as risk factors for repeat victimization. Observations of victims of sexual abuse have influenced the development of a concept known as traumatic sexualization. Described by Finkelhor and Browne (1985), traumatic sexualization "refers to a process in which a child's sexuality (including both sexual feelings and sexual attitudes) is shaped in a developmentally inappropriate and interpersonally dysfunctional fashion as a result of sexual abuse" (p. 531). These influential early experiences may lead to more liberal sexual attitudes and higher levels of consensual sexual activity at younger ages, which in turn have been identified as risk factors for adult sexual assault (Himelein, 1995; Koss, 1985). Another possible explanation for the relationship between early traumatic experiences and sexual assault risk is the intermediate role of psychological distress and behaviors used to reduce negative affect. A recent study suggested that levels of depression, anxiety, and hostility resulting from child sexual abuse was significantly related to the use of sexual activity as a strategy for reducing this dysphoria, which in

turn significantly increased their vulnerability for adult sexual assault experiences (Orcutt, Cooper, & Garcia, in press). Therefore, the distress caused by exposure to early traumatic experiences may lead to maladaptive coping strategies that increase a woman's risk for sexual assault, such as contact with multiple sexual partners and impaired sexual decision making (Orcutt et al., in press).

Social-psychological characteristics have been commonly suggested as potential sources of risk for sexual victimization. Although there is some evidence supporting the role of assertiveness and social poise in protecting a woman from experiencing victimization, research has failed thus far in identifying any consistent personality profile that distinguishes rape survivors from nonvictims. Some characteristics that are frequently suggested as possible risk variables are a woman's attitudes and beliefs about violence, traditional views of femininity, and acceptance of rape myths. The social control theory posits that some women are socialized to be more accepting of violence, to submit to traditional passive female roles, and to believe in common rape myths, all of which increase their likelihood of being targeted by potential perpetrators (Koss & Dinero, 1989). Research thus far has failed to support this theory, however, with the majority of findings suggesting that there are no differences between nonvictims and sexual assault survivors on measures of sex-role stereotyping, acceptance of interpersonal violence, and adversarial sexual beliefs (Amick & Calhoun, 1987; Koss, 1985).

The third model, suggested by Koss and Dinero (1989), consists of various situational characteristics surrounding the assault itself and the possible role that these variables play in increasing a woman's risk for sexual assault. Studies aimed at understanding these risk factors have emphasized the possible influence of alcohol or substance use by both the survivor and perpetrator, location of the assault, dating behaviors, and frequency of sexual activity. Being in an isolated location with a potential acquaintance rapist has been considered a risk factor. As many as 75 percent of sexual assaults occur within private residences, with these experiences being approximately twice as likely to occur in the man's apartment (Miller & Marshall, 1987; Muehlenhard & Linton, 1987). The seclusion of these environments may reduce a woman's opportunity to escape the situation and successfully resist any unwanted sexual advances. The location may also influence the perceived justifiability of sexual aggression, as research suggests that both men and women believe that rape is more justified if a couple goes to the man's apartment (Muehlenhard, 1988). Other context-specific variables that influence people's perceptions of rape justifiability include the woman initiating the date and allowing the man to pay for all the dating expenses (Muehlenhard, 1988). These research findings imply that risk for victimization may increase in these dating contexts. However, it is important to note that while for some participants the perceived justifiability of rape increased in these dating situations, the vast majority of students (77.5 percent) surveyed indicated that rape was never justifiable under any circumstance.

Therefore, while women may benefit from increased awareness of how these dating behaviors may be misinterpreted by potential assailants, they do not represent negligent actions or behaviors that justify the sexual assault.

In an attempt to integrate the risk factors suggested by these three theoretical models, Koss and Dinero (1989) examined the combined influence of these variables on risk for sexual victimization in order to identify the best set of predictors or risk factors. Looking at fourteen variables hypothesized to increase a woman's vulnerability, findings suggested that taken together, only four of these variables were responsible for predicting a woman's odds of being raped at a rate greater than chance: a previous history of sexual abuse, sexual attitudes, alcohol use, and sexual activity. Thus, the strongest predictors seem to be related to sexual history and alcohol use.

Alcohol Use as a Risk Factor

Among all of these situational variables, alcohol and drug use seems to be the most well-supported and frequently documented risk factor for sexual victimization experiences. In a retrospective examination of risk factors for sexual assault, Muehlenhard and Linton (1987) found that mere use of alcohol or drugs was not related to sexual assault experiences; however, heavy usage was identified as a risk factor. Retrospective data support the finding that when women are intoxicated, men are most likely drinking as well. However, in assaults in which the victim was not drinking, the perpetrator had been drinking in only about half of the incidents. This finding is only a very basic illustration of the complexities inherent in the relationship between alcohol and sexual assault, and an in-depth delineation of the detailed research findings is beyond the scope of this chapter. However, several broad categories of knowledge concerning alcohol as a risk factor for sexual assault are worth attention. Due to the complexity intimated by previous research findings, a review by Abbey et al. (2002) suggested that alcohol use be examined as a risk factor falling into three categories of assault context: those in which the perpetrator was intoxicated, those in which both parties were intoxicated, and those in which neither was intoxicated.

Assaults in which both parties were using intoxicants (primarily alcohol, while some assaults involved alcohol with the use of additional substances) were more likely to find their genesis outside the home of either the perpetrator or the victim, and were less likely to involve a perpetrator who was an intimate partner than incidents in which only the man or neither party was drinking. Conversely, sexual assaults involving alcohol use were more likely to involve a perpetrator who was an acquaintance or casual date, and more likely to involve some time spent at a party or a bar. These incidents were also more likely to culminate in rape as opposed to sexual coercion.

Research detailing the association of "perpetrator-only" alcohol use with factors such as severity of assault and physical injury to the victim has found a

strong correlation between amount of alcohol consumed by the perpetrator and the severity of assault. More recent findings suggest that this relationship is curvilinear. Perpetrators who have not consumed alcohol and those who have consumed heavy amounts of alcohol are less likely to complete a rape. Men who have not consumed alcohol may be more willing to comprehend and respond to a woman's resistance. Men who have been drinking heavily may not physiologically be able to complete the rape or overcome resistance. Interestingly though, research is consistent in finding a linear relationship between the quantity of alcohol the perpetrator consumed prior to the event and the amount of physical aggression used during the assault. The more men drink, the more violent the assault becomes. Victims of assaults involving only perpetrator use of alcohol are more likely to be low in sexual assertiveness and have higher rates of childhood sexual abuse. Additionally, they tend to experience higher rates of partner physical violence (than mutual use victims and nonvictims) and lower income levels.

An interesting twist to the alcohol-sexual assault link is the consideration of the bar environment itself. Is there something about being in a bar that makes women more vulnerable to assault? Researchers are beginning to think so. By interviewing and collecting data from women who frequent bars, researchers began to detect alarmingly high rates of experienced aggression. Approximately one-third of the women interviewed in one such study were victims of either attempted or completed rape. A follow-up study (Parks & Zetes-Zanatta, 1999) indicated that victimization was predicted by more frequent exposure to the bar environment but not by the actual amount of alcohol consumed by the woman or whether the consumption led to intoxication. This study suggests that context alone (including exposure to men who are drinking), independent of alcohol use at the time of assault, is related to an increased risk for sexual assault.

In addition to alcohol risk that is event related, research has linked lifetime (also referred to as global) use of alcohol with increased risk of sexual assault. For example, Testa, Livingston, Vanzile-Tamsen, and Frone (2003) found that adolescent history of alcohol and drug use predicted the subsequent occurrence of incapacitated rape. Although somewhat disparate in their findings, studies with populations of college women tend to find that higher levels of global alcohol use are associated with sexual victimization experiences. Within community samples of women, having been diagnosed with a substance use disorder is correlated with victimization.

Although the relationship between lifetime misuse of alcohol (and other substances) and sexual assault has been suggested, it is still unclear exactly how they are linked. Potential explanations may lie in the third variable. For example, global substance use and sexual victimization share similar historical risk factors (i.e., previous trauma, younger age, single relationship status). Additionally, high levels of substance use are associated with other high-risk behaviors and tendencies toward sensation seeking that make women more

vulnerable to sexual assault (e.g., engaging in unprotected sex, high number of sexual partners). Finally, high levels of global use of alcohol increase women's risk for assault by increasing their likelihood of being in high-risk environments (e.g., bars) and their likelihood of using intoxicants at the time of the assault. Abbey, Ross, McDuffie, and McAuslan (1996) found that alcohol consumption during consensual sex was related to alcohol consumption at the time of sexual assault. In a study involving over 25,000 college-aged women, Mohler-Kuo, Dowdall, Koss, and Wechsler (2004) found that the ones who were involved in the use of illicit drugs, heavy drinking in high school, and attending colleges with high rates of episodic heavy drinking (binge drinking) were at a higher risk for being raped while intoxicated.

Why is alcohol a risk factor for sexual assault? What is it about intoxication that places women at greater risk for being assaulted? Several suggestions include cognitive and motor impairment, perceptions of drinking women, as well as the context in which drinking often places women.

Cognitive and motor impairment is sometimes discussed within the context of the alcohol myopia theory (Steele & Josephs, 1990). According to the alcohol myopia theory, intoxicated individuals are more likely to focus on situational cues that are the most salient in their environment to the exclusion of other potentially important cues. For example, when a woman is intoxicated within a social setting, the focus of her attention, according to the myopia theory, would be on various aspects of the social setting and socialization. Her attention would not likely be given to potential danger or assault cues, which would be inconsistent with the dominant focus of attention. Potential consequences of this myopic focus may include a decreased ability to register the meaning of facial expressions (particularly anger).

Because assaults involving an intoxicated woman often begin within social contexts, cognitive impairments, such as attention deficits, may also make it more difficult for women to enact an appropriate resistance strategy. Norris, Nurius, and Dimeff (1996) found that blood alcohol levels among college-aged women were inversely related to resistance strategies, both physical and verbal. Additionally, researchers have found that alcohol decreases response to displeasing stimuli (Stritzke, Patrick, & Lang, 1995), meaning that women who are intoxicated may be more likely to experience a blunted reaction to assault strategies.

This impairment in a woman's ability to resist sexual assault is often paired with others' perceptions of drinking women. Although, in general, research shows that men find women who drink heavily less attractive and are less likely to want to enter a relationship with a heavy drinker, men are also more likely to perceive these women as being more aroused, more sexual, and more likely to initiate intercourse. In a laboratory study (Abbey et al., 2002), trained observers rated intoxicated women as being more sexy, outgoing, sociable, friendly, expressive, talkative, relaxed, and humorous than low-dose participants. More applied research within a college population of males found

that 75 percent of the sample admitted to getting a woman drunk or high as a means of increasing their chances of having sex with the woman (Mosher & Anderson, 1986).

It has become clear that heavy alcohol consumption and frequenting bars/clubs place women at an increased risk for assault. If drinking is such a risky activity for women to participate in, the question remains then, why do women drink? Several very basic explanations have been posited, including, but not limited to, alcohol expectancies, self-medication, and context/social pressure or support of behavior.

No one drinks expecting to be assaulted. As a matter of fact, it is quite the opposite. In addition to the amount of alcohol consumed, researchers often investigate the motivations behind the consumption of alcohol. One motivation is alcohol expectancy. Alcohol expectancies are, very basically, what one believes will happen to them following their consumption of alcohol. There is support for a relationship between a history of sexual victimization and a higher level of positive alcohol expectancies. For example, Corbin, Bernat, Calhoun, McNair, and Seals (2001) found that when compared with nonvictimized controls, women with a history of attempted or completed rape reported a greater degree of positive outcome expectancies that included a reduction in tension, sexual enhancement, and global positive changes. As such, women may not be expecting drinking to result in assault, but rather to produce these various positive outcomes.

The self-medication theory discussed previously is worth inclusion as a potential reason for continued and increased use of alcohol, despite its consistent identification as a risk factor. Again, according to this theory, women may consume alcohol as a means of coping with or numbing/avoiding unpleasant emotional affect.

Finally, context is an important factor to consider in a discussion of why women at greater risk for sexual assault may continue to drink. Specifically, drinking is a common occurrence in college populations of both men and women, both with and without a history of assaulting or being assaulted. Within this setting, parties and frequenting bars are fairly typical occurrences. Additionally, these environments contain several other positive reinforcements, such as socialization, relaxation, and the potential for meeting others with whom one may be interested in pursuing a relationship.

To conclude, several thoughts are important to keep in mind. Drinking and increased risk of sexual assault have been consistently linked with one another by researchers. Above and beyond the amount of alcohol consumed by the victim, several other important factors include drinking by the male perpetrator as well as exposure to the riskier environment of bars and parties. Although intoxication produces a range of effects that make it more difficult for women to detect and react to threat cues, there are a number of factors maintaining women's pattern of drinking despite their increased risk for assault. However, it is important to also note that this relationship between

sexual assault and alcohol consumption does not mean that if women abstained from drinking, their risk for assault would disappear. There are potentially confounding factors that may better account for the occurrence of assault than consumption of alcohol. Future research hopes to more closely elucidate additional mechanisms for this relationship, both direct and indirect, as well as search for intervening factors that may moderate this relationship, reducing the risk of sexual assault for those women who drink.

Identification of risk factors has been an important step in research on sexual assault as it increases our understanding of how to take preventative action and educate women on how they can reduce their risk. However, it is important to emphasize that even the most conscientious efforts made by a woman to avoid engaging in any of these risky behaviors, such as alcohol use or increased sexual activity, cannot by itself guarantee that she will not experience a sexual assault in her lifetime. The ultimate responsibility for any victimization experience lies with the perpetrator, and although knowledge of risk factors can reduce prevalence rates, every sexual assault occurs under different circumstances and is precipitated by different events or behaviors, making all risk factors equally worthy of attention and consideration.

INTERVENTION AND PREVENTION

Primary Prevention

Although research on sexual victimization and our understanding of associated risk factors have steadily increased in recent years, rates of victimization continue to be distressingly high. Given the well-established and extensive range of negative consequences suffered by women in the aftermath of assault, the importance of directing attention toward prevention and risk-reduction efforts cannot be overemphasized. In order to eliminate or at least reduce the occurrence of sexual victimization, the most logical place to make an impact is with prevention programs aimed at potential perpetrators, as their actions ultimately determine whether an assault takes place. Programs aimed at male audiences typically involve components related to reducing rape-myth acceptance and increasing empathy for victims, and some recent programs have shown success at changing participants' attitudes toward rape (Foubert, 2000; O'Donohue, Yeater, & Fanetti, 2003). Although these attitudes are related to sexual aggression, there is still a lack of evidence for the success of these programs in changing actual behavior and reducing rates of sexual assault (Yeater & O'Donohue, 1999).

While the effectiveness of prevention programs targeting males remains in question, however, there is a more pressing need to educate women on rape statistics and potential risk factors so that they may begin to take steps on their own to reduce their vulnerability. Although sexual assault prevention programs have been widely implemented on college campuses, the effectiveness of

these programs at producing lasting change and reducing prevalence has not been studied adequately. Most of these programs have emphasized attitudinal change through education and awareness of prevalence, rape myths, societal factors involved in promoting the occurrence of rape, and common risk factors and consequences of sexual victimization, and very few investigated whether program participation actually influenced subsequent victimization rates (Yeater & O'Donohue, 1999). In one of the first studies to evaluate the success of a prevention program in producing both an increase in protective dating behaviors and a decrease in rates of victimization, Hanson and Gidycz (1993) implemented a program for female college students that focused on awareness of rape myths, risk factors, and available strategies and precautionary behaviors associated with rape resistance. The program was successful not only in increasing knowledge about sexual assault and reducing risky dating behaviors, but also in reducing rates of sexual victimization for program participants in comparison to the control group. However, while these results appear promising, the success of this program was not universal, as the reduction in victimization experiences was only true for women without a previous history of victimization. For those women who had already experienced a sexual assault, this particular prevention failed to decrease their risk for future victimization. Subsequent modifications of this program have produced inconsistent findings regarding its effectiveness at reducing the incidence of sexual assault (Breitenbecher & Gidycz, 1998; Breitenbecher & Scarce, 1999). Evaluations of programs targeting mixed-gender audiences have also documented positive changes in attitudes toward rape, but the magnitude of this change was small and was unrelated to a reduction in victimization experiences (Gidycz et al., 2001; Pinzone-Glover, Gidycz, & Jacobs, 1998). More research is needed not only to identify the critical elements of these programs that contributed to their relative success, but also to identify ways to generalize their findings to women with a previous history of victimization and women in community and clinical populations. However, the original findings produced in the Hanson and Gidycz (1993) study are encouraging because they highlight the potential that women have to successfully reduce their risk for sexual assault. Because sexual victimization has such devastating costs to both women and society in general, prevention on this level is ideal, and although initial findings from these studies are limited, they suggest that with further research, this may be an attainable goal.

Prevention of Sexual Revictimization

Given the significant role of previous victimization as a risk factor for sexual assault, many researchers have emphasized the importance of targeting previous victims when designing prevention programs. Efforts to do this have been limited by the current inconsistencies in the literature on revictimization and the underlying mechanisms responsible for increasing a woman's risk for

multiple assaults. Without an established theoretical basis or explanation for why this phenomenon occurs, the creation of successful prevention programs for revictimization remains a considerable challenge. Simply modifying empirically supported prevention programs so that they include information relevant for revictimization has failed to make an impact on prevalence rates, and in fact failed to reduce risk for nonvictims as well, contrary to previous findings (Breitenbecher & Gidycz, 1998; Breitenbecher & Scarce, 1999). More recent research, however, on a risk reduction program specifically designed to address the issue of revictimization, has resulted in reductions in prevalence rates following participation. This program consisted of two 2-hour sessions involving a presentation and discussion of sexual assault definitions, statistics, offender characteristics, risk factors, and common postassault reactions. In addition, the topics of how to recognize risk in dangerous situations, problem-solving skills, assertiveness, and communication skills were presented to program participants. Results of a pilot study with a brief follow-up (Marx et al., 2001) indicated that the women who completed the program demonstrated significantly lower rates of rape revictimization than the control group, and also indicated greater increases in self-efficacy. A large multisite study of this program replicated the original findings and extended them in a two-year follow-up (Calhoun et al., 2002). Thus, the program investigated by these two studies shows a great deal of potential for reducing rates of sexual assault among previously victimized women. Because of this population's increased risk for subsequent sexual assault experiences, the success of this program at reducing rates is a promising step toward understanding and preventing the phenomenon of revictimization.

Support Services

Although some of these recently developed early interventions for rape victims show potential for reducing the immediate and long-term distress experienced by women in the aftermath of an assault, the value of both formal and informal support in helping women cope with victimization cannot be overemphasized. For many years now, increased awareness and activism on behalf of rape survivors has led to the creation of more widely available support services in a variety of contexts that women may utilize as part of their healing process. Some of these formal community resources include the legal or criminal justice system, medical services, mental health professionals, and rape crisis centers, all of which offer varying types of support, information, and advocacy for victimized women. While every survivor must decide for herself which of these services to make use of during her recovery process, each of these resources can provide valuable support in helping women cope with a sexual assault experience.

The emergence of rape crisis centers nationwide has created a particularly important resource for sexually victimized women. In 2001, there were

approximately 1,200 active organizations in the United States offering services such as a twenty-four-hour information and crisis hotline, counseling, and legal and medical advocacy for victims (Campbell & Martin, 2001). Rape crisis centers also play an important role in providing services to the entire community in the form of outreach programs designed to educate the public and increase awareness about the prevalence and consequences of sexual victimization (O'Sullivan & Carlton, 2001). The vast majority of women who seek support from rape crisis centers characterize their experience with these organizations as healing, and evaluations of center services indicate that they are effective at providing survivors with support, information, and assistance in making decisions (Campbell, Wasco, Ahrens, Sefl, & Barnes, 2001; Wasco et al., 2004). Despite the valuable programs offered by rape crisis centers, research suggests that their services are underutilized. Campbell et al. (2001) surveyed a community sample of adult rape survivors and found that only 21 percent had sought support services from a rape crisis center, and even more troubling, 91 percent of these women were Caucasian, indicating that ethnic minority women in particular are not taking advantage of the assistance offered by rape crisis centers. However, a recent study suggested that although few victims used rape crisis centers, for those who did, 94.2 percent rated them as being helpful, an approval rate that was higher than for any other source of support (Golding, Siegel, Sorenson, Burnam, & Stein, 1989). Thus, while rape crisis centers offer a number of important and effective services to survivors of sexual assault, women may not be adequately informed of the resources and advocacy they can provide.

Another support service available to sexual assault victims is the criminal justice system. If a survivor decides to report a sexual assault to the police, law enforcement agents may investigate the crime and identify the perpetrator after which a prosecutor may decide whether to press charges and potentially convict the perpetrator for his crime (Campbell, 1998). In addition, the criminal justice system is involved in victim compensation programs that vary by state and are designed to reimburse victims for costs incurred as a direct result of the crime, such as lost wages, medical expenses, and counseling (for information about these programs by state, contact the Office for Victims of Crime, www.ojp.usdoj.gov/ovc). Although seeking justice against sex offenders is undoubtedly a worthwhile endeavor, very few women report their rape to the police, and of those reported, only 12 percent result in a successful conviction (Frazier & Haney, 1996). While some women do have positive experiences working with the criminal justice system, the majority of survivors characterize their contact with the legal system as hurtful with outcomes that contradicted their wishes, particularly for victims who were raped by acquaintances without the presence of a weapon and who sustained few physical injuries (Campbell et al., 2001; Campbell, 1998). Thus, every survivor must decide for herself whether the legal process and associated complexities is something she would like to pursue as part of her healing process.

Finally, another important service provided to rape victims in the aftermath of an assault is medical care, usually provided through hospital emergency rooms. In addition to collection of forensic evidence, women who seek medical care are examined and treated for any physical injuries, tested for sexually transmitted diseases, and provided with information regarding risk for pregnancy and emergency contraception (Campbell, 1998). Vaginal and perianal trauma is indicated in approximately half of rape victims who seek medical care, and up to 30 percent of these women contract sexually transmitted diseases from their assault experience (Goodman, Koss, & Russo, 1993). Thus, even without severe physical injury, survivors should be encouraged to seek medical care in order to detect the presence of any health risks. Also, the medical exam conducted to collect forensic evidence can confirm a woman's report of nonconsensual activity if performed within seventy-two hours of an assault (Dunlap, Brazeau, Stermac, & Addison, 2004). Therefore, medical professionals have the opportunity to provide many valuable services to sexually assaulted women. As with the criminal justice system, very few women seek out medical care following a sexual assault (Golding et al., 1989; Campbell et al., 2001). However, the rates of reporting to medical professionals increased 60 percent between 1974 and 1991, particularly by women who were raped by acquaintances (Magid et al., 2004). Suggested reasons for this increase include changing attitudes toward acquaintance rape, increased media awareness, and improved community education about the nature and significant prevalence of acquaintance rape (Magid et al., 2004). While this increase in victims seeking medical care is encouraging, it appears that there are still barriers preventing some women from seeking medical care. Research suggests that women are most likely to seek support from medical professionals if they were raped by a stranger, and if they experienced severe injuries (Ullman & Filipas, 2001). In addition, for those victims who did seek out medical assistance, approximately one-third classified their experience as hurtful, with less than half of the victims receiving information on risk for pregnancy (49 percent), emergency contraception (43 percent), and information on sexually transmitted diseases (39 percent) or HIV risk (32 percent) (Campbell et al., 2001). Therefore, while there are many valuable and necessary services provided to victims by medical professionals, many women are not seeking out this type of care at all, and for those who do, many of their needs are still neglected in the process.

Because the physical and psychological consequences of a sexual assault can be so extensive, use of these formal support services and available resources may help considerably with the recovery process, but the trend across rape crisis centers, criminal justice workers, and medical professionals suggests that a large proportion of survivors are not taking advantage of the individual contributions these services can offer. In order to understand the barriers to women seeking support services, focus groups have been employed to interview sexually assaulted women about their reasons for not utilizing these

available organizations (Logan, Evans, Stevenson, & Jordan, 2005). Across rural and urban communities, women identified such barriers as limited or costly services, lack of awareness about what services are available, encounters with service providers who lack education on sexual assault issues, shame and fear of blame from others, insensitive healthcare providers, community pressure to keep quiet about their victimization experience, and lack of control over legal and court processes (Logan et al., 2005). Whether these barriers are misperceptions or not, it is clear that education for women, service providers, and the general community is greatly needed to reduce the likelihood of these fears being realized by survivors who seek support services.

However, while it would appear that formal support services are not fully utilized by rape victims, it is clear that informal support seeking is much more prevalent among sexually assaulted women. Among self-identified sexual assault survivors, rates of support seeking from friends and relatives were as high as 94.2 percent, and using an epidemiological survey approach, rates of disclosure to friends and relatives were 59.3 percent (Golding et al., 1989; Ullman & Filipas, 2001). Therefore, while some women may not be fully benefiting from available community resources, they do seem to be more likely to seek support from friends and family members. In addition, women reporting to these informal support services seem to be receiving less negative social reactions, which are predictive of better adjustment (Ullman, 1996). A recent study suggested that on average, when women disclose sexual assault experiences to a friend, these friends do not blame the survivor and the disclosure can have a positive impact on their friendship (Ahrens & Campbell, 2000). However, when friends have strong feelings of ineffectiveness and emotional distress, this can actually have a negative impact on the relationship, and men in particular tend to be more likely to blame the survivor and have more feelings of confusion and ineffectiveness following a woman's disclosure of sexual assault (Ahrens & Campbell, 2000). Despite this potentially greater difficulty for male significant others to cope with the rape of a loved one, a recent study suggested that the most uniquely helpful response experienced by sexual assault survivors was emotional support from their romantic partner, indicating that male significant others can play an important role in helping a loved one through her recovery (Filipas & Ullman, 2001). Other reactions and forms of support endorsed by victims as being particularly helpful included emotional support from friends, tangible aid, having other survivors share their experience with them, having romantic partners and friends listen to them, experiencing validation and belief from others, and not being discouraged from talking about their assault (Filipas & Ullman, 2001). Because women are much more likely to disclose their sexual assault to friends, family members, and romantic partners, their reaction and involvement in helping the survivor cope is an essential ingredient throughout a woman's healing process (Koss & Harvey, 1991). Significant others should be encouraged to seek information and resources from formal support services such as rape crisis centers and

mental health professionals, as well as publications and books that are available to educate loved ones on rape and how to best support the survivor (see McEvoy & Brookings, 1991).

Early Interventions for Rape Victims

Although reducing the incidence of sexual assault is the primary goal of prevention efforts, there is still a need for effective interventions for women who have already experienced a sexual assault. As previously described, the physical and psychological consequences experienced by rape victims are extensive and often debilitating, and initial levels of distress have been shown to be directly related to later outcome (Resick, 1993; Rothbaum, Foa, Riggs, Murdock, & Walsh, 1992). However, the individual reactions to sexual assault can be widely different, indicating that there may be protective factors involved in preventing some of the negative aftereffects of a victimization experience. With this in mind, research has begun to examine more closely the experiences of rape victims after their assault occurs in order to understand factors that may contribute to their symptomatology and find ways to reduce the impact of those variables. Foa, Hearst-Ikeda, and Perry (1995) created a brief intervention for rape victims involving four weekly sessions in the weeks immediately following an assault. These sessions incorporated cognitive-behavioral treatment approaches and were effective at reducing posttraumatic stress symptoms immediately following the intervention. Although participants in the intervention group displayed a more rapid reduction in distress than participants who did not receive the intervention, there were no differences between the groups at five and a half months postassault. Despite this short-lived advantage over participants who did not receive the intervention, however, this study indicates that women can significantly reduce their suffering in the immediate aftermath of an assault experience through these relatively brief intervention methods.

One experience thought to contribute to the trauma and distress of sexually victimized women is the forensic rape exam performed at hospitals following an assault. Although many hospitals have rape crisis counselors available to meet with victims, this experience is by nature an invasive procedure that can significantly increase anxiety and distress. A recent study on acute rape responses has introduced a video to be watched by survivors immediately preceding their forensic exam that discusses not only the process of what will happen during the exam, but also common reactions to sexual assault and strategies survivors may implement to reduce their anxiety and fear-related responses as they recover from their victimization experience (Resnick, Acierno, Holmes, Kilpatrick, & Jager, 1999). These preliminary findings are promising in that the video successfully created a reduction in distress during the exam, which was later connected with fewer PTSD symptoms at a six-week follow-up. Given the cost-efficiency and ease of implementation of such

a video, the success of such an intervention is commendable. However, while interventions such as these may successfully reduce a woman's distress following a sexual assault, the degree of trauma experienced by rape victims in many cases requires more extensive and involved clinical treatment.

Treatment for Long-Term Posttraumatic Symptoms

Although a majority of women who experience sexual assault demonstrate an amazing level of resilience, an interpersonal trauma as severe as rape may lead to the development of posttraumatic symptoms that require long-term, intensive psychotherapy. As previously discussed, posttraumatic stress disorder (PTSD) is a clinical diagnosis that describes a cluster of symptoms one may continue to experience more than one month postassault. These symptom clusters include avoidance (particularly of reminders of the event or related cues and emotional numbing), reexperiencing (including flashbacks, nightmares, and reexperiencing of emotions of the event), and hypervigilance (which includes difficulty falling or staying asleep, outbursts of anger, difficulty concentrating). Should these symptoms persist, they can greatly interfere with a survivor's functioning and enjoyment of daily life.

Fortunately, treatments are available that are specifically tailored to address the symptoms that characterize posttraumatic reactions. A very brief overview of several of the available treatments for PTSD is presented here. While a broad spectrum of treatment approaches exists, this brief overview will focus on the treatments that have garnered empirical support through studies of treatment outcomes.

Most models of treatment with demonstrated efficacy consist of some combination of three main treatment modes. These modes are sometimes referred to as *exposure*, *anxiety management training*, and *cognitive therapy*. Various treatment packages may involve a unique combination of some or all of these components, with or without additional components. Some treatments may combine these typical "PTSD components" with treatment addressing potential comorbid conditions such as substance use or depression. It is important that the treatment plan match the needs of the individual and thus while common elements of effective treatments have been identified, treatment for PTSD may remain somewhat ideographic to meet the needs of each client (for a review of empirically supported treatments for PTSD, see Keane & Barlow, 2002).

Exposure therapy aims to reduce anxiety through exposure to the traumatic memory that is typically either *in vivo*, a reenactment of the actual event, or *imaginal*, using imagery to recall the traumatic event in detail. In addition to these more traditional methods, virtual reality technology is being applied to exposure treatment. Regardless of mode, the purpose of exposure is to reduce symptoms of avoidance while at the same time increasing a survivor's sense of mastery over a given experience and its memory. Exposures are most often

conducted in a gradual manner. That is, the client progresses through her particular set of exposure situations in a way that allows her to progressively face more difficult (anxiety-producing) situations.

Anxiety management training aims to teach survivors an assortment of skills that will help them cope with and manage (as the name suggests) their anxiety and its symptoms. This form of treatment may include things such as anger management skills, relaxation training, trauma education, interpersonal skill training, job skills training, etc. While, in general, research has shown that this form of treatment alone is not as effective in the long term as exposure treatment, it has shown effectiveness and may be an especially beneficial addition to a treatment package that includes exposure.

Resick and Schnicke (1993) have developed a treatment for PTSD specifically geared toward survivors of rape. The treatment, called *cognitive processing therapy*, combines the third element, cognitive restructuring, with a form of exposure that involves writing about the traumatic event in graded levels of detail. The cognitive restructuring component provides a means of addressing potential distortions in thoughts about or resulting from the assault.

An additional avenue of assistance for survivors of assault suffering from PTSD is psychopharmacological intervention. While pharmacological treatments for PTSD are in somewhat earlier stages of development, treatment outcome studies have lent support to the use of selective serotonin reuptake inhibitors such as sertraline (Brady, Pearlstein, Asnis, Baker, Rothbaum, Sikes, et al., 2000). In most cases, these should be combined with psychotherapy.

Whatever the treatment option a survivor may choose to pursue, the most important point is that there are options. In order to become more informed of the options that may exist in any particular area, there are several worthwhile resources that are a good start for seeking out treatment. Some of these resources include state psychological associations, which will typically be able to provide a list of therapists and some brief description of the populations they serve. An additional potential resource for those seeking a treatment similar to the ones described above is the Association for Behavioral and Cognitive Therapies (www.aabt.org). This site has listings of member psychologists and other professionals around the country, many of whom specialize in the treatment of PTSD and other related problems, and may be a helpful starting point for those seeking treatment. Finally, for those living near a large research university, doctoral programs often operate training clinics, which may serve as a resource for further information and treatment.

Regardless of the services and resources a sexual assault survivor uses to best cope with her experience, it is clear that the reactions and quality of services provided by formal and informal support systems can impact the overall adjustment and well-being of survivors in the aftermath of an assault. As suggested by Koss and Harvey (1991), "together these reactions will define the victim's position relative to the larger society and will contribute to or detract from her sense of personal and social power. As these intersecting communities

act or fail to act on her behalf, the woman raped literally will rebuild her sense of self" (p. 96).

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6

Incest Victims and Offenders

Rita Kenyon-Jump

Incest, the sexual exploitation of a child by a family member, is socially abhorred, yet occurs far too frequently and is clearly linked to psychopathology and social dysfunction in children, adolescents, and adults. What follows is a review of the research on incest, including the most widely accepted definition, prevalence data, (the number of cases found in a population at a given time), descriptions of the characteristics of both survivor and offender, the psychological effects (problems or disorders) that result from experiencing childhood sexual abuse by a family member, and effective treatments to assist survivors of childhood sexual trauma in reclaiming their lives. I have attempted to cover the effects of incest on male and female survivors at various developmental stages, such as during childhood, adolescence, and adulthood as well as in different victim-perpetrator relationships, such as mother-son incest, father-daughter incest, and with extended family members. I have also provided current thinking into male and female juvenile and adult incest offenders.

Much of the research on childhood sexual abuse combines intrafamilial (immediate and extended family members) and extrafamilial (acquaintances and strangers) child sexual abuse victims into one sexually abused group, and typically they are compared with a group of persons who have not experienced sexual abuse. Studies will report the percentage of incest and nonfamilial sexually abused participants in the sexual abuse group but use the combined group for the statistical comparisons. This makes it more difficult to determine

the differences and similarities between people who have experienced incest and those who have experienced sexual abuse by nonfamily members. When possible, I have delineated the effects of childhood sexual abuse specifically attributed to intrafamilial abuse.

DEFINITION AND PREVALENCE

Three types of populations are typically studied in research on childhood sexual abuse: community samples, clinical samples, and college student samples, and the bulk of the research is retrospective, meaning that the participants in the research are being asked to remember details from their past; thus, the data are not always as accurate as they might be if it was gathered at the time of the abuse. Information regarding incidence of reported childhood sexual assault is also gleaned from law enforcement data banks, such as the National Incident-Based Reporting System (NIBRS) operated through the U.S. Department of Justice, Bureau of Justice Statistics. Although it is widely accepted that cases of child sexual abuse reported to law enforcement agencies represent only a small fraction of the total number of childhood sexual abuse victims, such information can still be valuable. Recent data from NIBRS reveal that almost half (49 percent) of all child sexual assault victims under the age of 6 were assaulted by family members—51 percent of female victims and 42 percent of male victims (U.S. Department of Justice, 2000). The percentage of those experiencing incest among reported child victims of sexual assault decreases somewhat for both males and females as the children age, with 44 percent of female victims and 38 percent of male victims in the age range of 6–11 years and 24 percent of both male and female victims aged 12–17 being victims of incest (U.S. Department of Justice, 2000).

Diana Russell (1986) conducted the seminal prevalence study of incest with a probability sample of 930 women in the San Francisco area. She defined incest as any kind of exploitive sexual contact or attempted contact that occurred between relatives, no matter how distant the relationship, whether they were blood relatives or not, before the victim turned 18 years old. The relative with whom the respondent had sexual or attempted sexual contact had to be five years or more older than the respondent or, if the offending relative was less than five years older, the experience was considered abusive if there was evidence that it was unwanted, if the relative initiated the contact, and if it caused the respondent some degree of distress or some long-term effects. The other most cited research on child sexual abuse was Finkelhor's (1979) study of 530 female college students. His research addressed both intrafamilial and extrafamilial childhood sexual abuse, and his definition of incest was not limited to sexual contact but also included sexual propositions and exhibition.

Finkelhor (1979) reported that 10 percent of the women in his sample were sexually abused by a relative and when no age limit was applied the prevalence

increased to 20 percent. Russell (1986) reported that 16 percent of her sample identified at least one experience of incestuous abuse, and 12 percent of these women had been sexually abused by a relative before reaching the age of 14.

A more recent retrospective survey involving over 8,000 non-institutionalized civilian men and women between the ages of 15 and 54 years from all forty-eight contiguous states indicated that the prevalence for childhood sexual abuse (defined as rape and molestation), combining both intrafamilial (relatives and steprelatives) and extrafamilial (acquaintances and strangers) abuse, was 13.5 percent for females and 2.5 percent for males. For intrafamilial rape or molestation the prevalence for females was 7.6 percent and for males 0.8 percent (Molnar, Buka, & Kessler, 2001). Briere and Elliott (2003) found that 32.3 percent of the female and 14.2 percent of the male participants in a national, geographically stratified, random sample of adults reported having experienced childhood sexual abuse and, of that sample, 46.8 percent had been sexually abused within their immediate or extended family. All of these statistics reveal a consistent and significant number of victims of childhood sexual abuse over a period of many years.

FAMILY ENVIRONMENT

There have been conflicting reports of the independent effects of family environment and childhood sexual abuse in predicting long-term negative outcomes for males and females who were sexually abused in childhood. Some report that the childhood family environment rather than the abuse is responsible for the psychological difficulty that survivors of childhood trauma exhibit (Beitchman et al., 1992; Flemming, Mullen, Sibthorpe, & Bammer, 1999; Merrill, Thomsen, Sinclair, Gold, & Milner, 2001; Peters, 1988, cited in Fassler, Amodeo, Griffin, Clay, & Ellis, 2005), while others assert that childhood sexual abuse has been linked to multiple short- and long-term psychological problems both in child and adult survivors of childhood sexual abuse and has been associated with psychiatric disorders whether or not the abuse is part of a larger collection of family adversities (Dinwiddie et al., 2000; Fassler et al., 2005; Kendler et al., 2000; Molnar, Buka, & Kessler, 2001; Mullen, Martin, Anderson, Romans, & Herbison, 1996; Nelson et al., 2002; Peleikis, Mykletun, & Dahl, 2004; Stevenson, 1999; Weiss, Longhurst, & Mazure, 1999). Rind, Tromovitch, and Bauserman (1998) indicated in their meta-analysis of child sexual abuse studies using college samples that the family background risk factors predicted more risk for adult psychological distress than did child sexual abuse in the college student population. They also suggested that in clinical samples with a higher proportion of persons with intrafamilial childhood sexual abuse, the experience of childhood sexual abuse may be more of a predictor than the family background. Thus, it may be in the case of incest that sexual abuse is the significant risk factor.

PSYCHOLOGICAL EFFECTS OF INCESTUOUS ABUSE

Sexual abuse by a family member is associated with more psychological distress and social adjustment symptoms than extrafamilial childhood abuse (Browne & Finkelhor, 1986; Finkelhor, 1979; Herman, Russell, & Trocki, 1986; Jackson, Calhoun, Amick, Maddever, & Habif, 1990; Kelly, Wood, Gonzalez, MacDonald, & Waterman, 2002; Ketring & Feinauer, 1999; Molnar, Buka, & Kessler, 2001; Russell, 1986; Tsai, Feldman-Summers, & Edgar, 1979; Wind & Silvern, 1992). When comparing female victims of childhood sexual abuse, father-daughter incest is the most psychologically damaging sexually abusive relationship (Finkelhor,1979; Russell, 1986) and when both male and female intrafamilial sexual abuse victims are studied, those abused by their fathers also scored significantly higher on symptoms related to dissociation, anxiety, depression, postsexual abuse trauma, and sleep disturbance than males and females abused by acquaintances, strangers, and other family members (Ketring & Feinauer, 1999). Perpetration by a father/father figure produced significantly higher mean trauma scores even when controlling for the severity of the sexual trauma. In addition, abuse by other family members resulted in significantly more negative symptoms than that experienced by persons who were sexually abused by strangers (Ketring & Feinauer, 1999).

Younger children are more likely to be abused by family members (Fischer & McDonald, 1998) and sexual abuse at a young age, before 7–8 years of age, has been associated with more psychological disturbance (Nash, Zivney, & Hulsey, 1993) and more physical injury (Fischer & McDonald, 1998). Intrafamilial sexual trauma is typically repetitive and of a longer duration than abuse by nonfamily members (Cole & Putnam, 1992; Fischer & McDonald, 1998; Ruggiero, McLeer, & Dixon, 2000). Duration of the abuse has been found to be associated with poorer adjustment in adulthood (Bennett, Hughes, & Luke, 2000; Rodriguez, Vande Kemp, & Foy, 1998). Internalization of the abuse (i.e., attributing self-blame) is correlated with duration of abuse and has been found to explain more of the adulthood maladjustment of childhood sexual abuse survivors than duration of the abuse, relationship to the offender, or age of onset of the abuse (Steel, Sanna, Hammond, Whipple, & Cross, 2004).

There is a longer delay in disclosure of abuse in incest, with more coercion to keep the abuse a secret and greater fear of what will happen to the family if the sexual abuse is revealed (Fischer & McDonald, 1998; Kogan, 2004; Lawson, 1993; Russell, 1986; Sheinberg & Fraenkel, 2001). The more closely related the sexually victimized child is to the perpetrator, the less likely that the child will disclose the abuse (Wyatt & Newcomb, 1990). The younger the child is when disclosing incest, the more likely she will receive a negative reaction whether she discloses to a parent or friend (Roesler & Wind, 1994)

and the less likely that the sexual assault will result in an arrest (U.S. Department of Justice, 2000). In fact, over half of a sample of female incest survivors reported that their parent either ignored the disclosure, responded with anger, or blamed the victim (Roesler & Wind, 1994). Mothers with a history of childhood sexual trauma display more distress than mothers who have not been sexually abused when their children disclose sexual abuse (Deblinger, Stauffer, & Landsberg, 1994). Mothers have been found to be most supportive of their children upon disclosure of incest when the perpetrator is an ex-spouse (Everson, Hunter, Runyon, Edelsohn, & Coulter, 1989), biological father, uncle, cousin, or grandfather (Sirles & Franke, 1989) and least supportive when a current, unmarried partner (Everson et al., 1989; Sirles & Franke, 1989) or stepfather (Sirles & Franke, 1989) is the offender. Telling of the abuse will not ensure that the abuse will stop. In a retrospective survey of 228 female survivors of incest, the abuse continued for at least a year for over half of the respondents who had disclosed their abuse prior to age 18, and in over a fourth of the cases, the abuse did not stop for over a year following the disclosure (Roesler & Wind, 1994).

Intrusiveness (i.e., anal, vaginal, oral penetration) of the sexual abuse does not differ between groups of children abused by family members or nonfamily members; both groups of children experience force and penetration (Hall, Mathews, & Pearce, 2002).

Child and Adolescent Survivors of Incest

Children who have experienced incest engage in more sexualized behavior, such as touching sex parts in public, asking others to engage in sexual behavior, and touching another child's private parts. They also exhibit more self-stimulating behaviors than children molested by nonfamily members, with male victims of sexual abuse displaying significantly more sexualized behavior than females (Estes & Tidwell, 2002). Younger children are more likely to engage in self-stimulating behaviors than are older children, and younger males are more likely to do so than younger females (Estes & Tidwell, 2002). Sexualized behavior and posttraumatic stress are the two most common problematic consequences of sexual abuse during childhood (Kendall-Tackett, Williams, & Finkelhor, 1993).

Male and female preschool children who have been sexually abused are likely to experience emotional distress, sexualized behavior, sleep problems, bedwetting, sadness, and regression to an earlier developmental level (Fontella, Harrington, & Zuravin, 2000).

A lower level of functioning is associated with an older age of onset of abuse, greater frequency and longer duration of sexual abuse, and disclosure first to someone other than the victim's mother (Ruggiero et al., 2000). Ruggiero et al. (2000) indicated that the children in the study who were

abused by stepfathers and fathers had higher global functioning and fewer symptoms of avoidant behavior. Their finding was opposite of those who report that abuse by fathers and stepfathers is the most damaging (Finkelhor, 1979; Ketring & Feinauer, 1999; Russell, 1986). A possible explanation of this could be that they included adult relatives other than fathers and stepfathers in their extrafamilial group and did not define if the perpetrator children in the extrafamilial group were related to the offended children. Including family members may have lowered the functioning of the extrafamilial group.

Adolescents are at particular risk for developing psychological problems as a result of sexual abuse (Feiring, Taska, & Lewis, 1999). Peer interaction is crucial for normal adolescent development, and the secrecy of sexual abuse, especially incestuous abuse, can isolate an adolescent from his/her peer group (Marvasti & Dripchak, 2004a; O'Brien, 1987; Schultz, 1990). Adolescence is also a time for developing one's identity, including a sexual identity. It is confusing for young girls to view themselves as their own age when they have been forced to engage in activities intended for adults (Sheinberg & Fraenkel, 2001). Girls, more so than boys, experience increased personal vulnerability and perceive the world as a dangerous place (Feiring et al., 1999). Male and female adolescents with histories of sexual abuse report more distress than adolescents who have not experienced sexual abuse, with sexually abused female adolescents more likely to experience depression than sexually abused male adolescents (Meyerson, Long, Miranda, & Marx, 2002). Both male and female sexually abused adolescents report more symptoms of depression and hopelessness than similar adolescents without histories of sexual trauma (Martin, Bergen, Richardson, Roeger, & Allison, 2004). Sexually abused girls with severe family conflict experience higher levels of depression (Meyerson et al., 2002). Incest prior to the age of 14 significantly increases the risk of a lifetime incidence of major depression (Pribor & Dinwiddie, 1992).

Adolescent male and female sexual abuse victims are more likely to think about suicide, make suicidal threats or attempts, or deliberately self-injure than their nonabused counterparts. However, boys who experienced sexual abuse respond more negatively than girls (Martin et al., 2004; Molnar, Berkman, & Buka, 2001; Ystgaard, Hestetun, Loeb, & Mehlum, 2004). They have a tenfold increased risk of making suicidal plans and threats and a fifteenfold increased risk of attempting suicide compared to nonabused males, even after controlling for symptoms of depression, hopelessness, and family functioning. In abused girls, depression, hopelessness, and poorer family functioning make it more likely that they will become suicidal (Martin et al., 2004). High levels of distress related to the sexual trauma are strongly associated with suicidal ideas and plans in both male and female adolescents (Martin et al., 2004). Males with low levels of distress are also likely to make suicidal threats while those with high levels of distress will deliberately harm themselves in addition to making threats (Martin et al., 2004).

Sexually and physically abused adolescent boys and girls are more likely to use alcohol and other drugs at a young age, including a greater variety of substances, and engage in more frequent attempts to "self-medicate painful emotions" than are nonabused adolescents (Harrison, Fulkerson, & Beebe, 1997, p. 536). In a sample of 122,824 public school sixth, ninth, and twelfth grade students in Minnesota, 25.6 percent of the female students and 6.8 percent of the male students endorsed having experienced sexual abuse either by an older family member or an older nonfamily member; of this group of sexually abused adolescents, 64 percent of the males and 46 percent of the females who reported intrafamilial sexual abuse also reported extrafamilial sexual abuse (Harrison et al., 1997). Substance use and abuse is especially problematic for adolescents, as it interferes with the development of appropriate coping skills and negatively impacts social and academic functioning (Harrison et al., 1997).

Childhood sexual abuse during adolescence increases the risk for later sexual victimization (Ryan, Kilmer, Cauce, Wantanabe, & Hoyt, 2000) and is strongly associated with attempted suicide in homeless adolescents (Feitel, Margetson, Chamas, & Lipman, 1992; Ryan et al., 2000) and with high levels of depression and anxiety in adolescents (Meyerson et al., 2002; Ryan et al., 2000). Adolescent male victims of sexual abuse have a higher risk of suicidal ideation, sexual risk-taking, substance abuse, delinquency, and eating disorders than adolescent males without a history of sexual abuse (Chandy, Blum, & Resnick, 1999). Male and female high school students with a history of childhood sexual victimization engage in high-risk sexual behaviors, such as having consensual intercourse before age 15, having two or more sexual partners in the previous three months, and sex resulting in pregnancy. The risk of multiple partners, substance use at last intercourse, and sex resulting in pregnancy is four to five times greater for high school boys who experienced sexual abuse compared with boys with no such history (Raj, Silverman, & Amaro, 2000). High school-aged girls who experienced childhood sexual abuse are twice as likely to have early intercourse, three or more sex partners ever, and to become pregnant than are girls who have not experienced sexual abuse during their childhood (Raj et al., 2000).

Adolescents who have a history of childhood sexual abuse are at an increased risk of eating disorders as well (Chandy et al., 1997; Neumark-Sztainer, Story, Hannan, Beauhring, & Resnick, 2000). Those who experienced incest are significantly more likely than adolescents who have not been sexually abused to engage in bingeing and purging with their eating, to express dissatisfaction with their bodies, and to report a loss of control with regard to their eating habits (Wonderlich et al., 2001).

Adult Female Survivors of Childhood Incest

Mood disorders, anxiety disorders, especially posttraumatic stress disorder (PTSD), substance use disorders, eating disorders, and personality disorders

have been linked to the experience of childhood sexual abuse in adult women (Cole & Putnam, 1992; Gladstone, Parker, Mitchell, Malhi, Wilhelm, & Austin, 2004; Hofmann, Levitt, Hofman, Greene, Litz, & Barlow, 2001; Molnar, Buka, & Kessler, 2001; Owens & Chard, 2003; van Gerko, Hughes, Hamill, & Waller, 2005; Weiss et al., 1999).

Female inpatients who have been diagnosed with major depressive disorder and who have experienced childhood sexual trauma are four times less likely to recover from their depression within twelve months than those depressed female inpatients with no history of child sexual abuse and, at a five-year follow-up, chronic depression is significantly more prevalent in those with histories of childhood sexual abuse (Zlotnick, Ryan, Miller, & Keitner, 1995). Childhood sexual abuse has also been linked to longer episodes of depression in female outpatients (Zlotnick, Mattia, & Zimmerman, 2001) and in females with comorbid anxiety and major depressive disorders (Zlotnick, Warshaw, Shea, & Keller, 1997). Outpatients with histories of childhood sexual abuse are significantly more likely to be diagnosed with PTSD, multiple psychological disorders (e.g., major depression combined with an anxiety disorder), and borderline personality disorder (Zlotnick et al., 2001) than patients with no histories of childhood sexual abuse. Although this study of 235 depressed outpatients combined those who experienced incest with those who experienced extrafamilial abuse in their sample of sexually abused subjects, 25 percent of the sample endorsed having experienced childhood sexual abuse and 52 percent of those experienced incest (Zlotnick et al., 2001). The odds of PTSD are higher for sexually abused females who have experienced rape by steprelatives and acquaintances than by strangers (Molnar, Buka, & Kessler, 2001). Others have concluded that childhood sexual abuse is a substantial risk factor for chronic, recurrent major depressive episodes (Browne & Finkelhor, 1986; Pribor & Dinwiddie, 1992; Saunders, Villeponteaux, Lipovsky, Kilpatrick, & Veronen, 1992). In fact, a history of childhood sexual abuse in females was associated with fourteen of seventeen lifetime mood, anxiety, and substance abuse disorders (Molnar, Buka, & Kessler, 2001). In a study of 301 women in New Zealand who met lifetime criteria for an eating disorder, affective disorder, and/or substance abuse, women with a lifetime diagnosis of depression were twice as likely to report a history of incest than women who had no history of depression (Bushnell, Wells, & Oakley-Brown, 1992, cited in Weiss et al., 1999).

Substance abuse is strongly linked with childhood sexual abuse, more so than any other psychiatric disorder (Kendler et al., 2000; Teusch, 2001) and, in particular, with victims of incest (Wonderlich et al., 2001). Female victims of incest who do not receive treatment for their trauma have more difficulty in the early stages of alcohol sobriety than women without a history of incest or childhood sexual trauma and are also more likely to relapse (i.e., use alcohol again) (Kovach, 1986). Incest is also associated with lifetime difficulty with crack cocaine (Freeman, Collier, & Parillo, 2002).

Survivors of incest frequently engage in promiscuity and oversexualization of relationships (Gordy, 1993). Children molested by a parent have difficulty distinguishing between affection and sex because of the confusing blurring between parental love and incest (Marvasti & Dripchak, 2004a). As adults, they often are revictimized because of a lack of social judgment in determining which situations are safe and which are risky, an overall belief that one does not have the right to object or resist sexual advances, and a lack of confidence and assertiveness that can be paralyzing in the face of unwanted sexual advances (Marvasti & Dripchak, 2004a). Women with histories of incest typically have difficulty with trust, intimacy in their marriage and dating relationships, and managing their sexuality (Cole & Putnam, 1992).

Female adult victims of childhood sexual abuse, especially those who experienced incest, self-mutilate (including cutting and burning themselves) and self-injure (including hitting themselves, placing ice on parts of their bodies, scratching to the point of bleeding, and adding salt to the site of the cutting) (Gladstone et al., 2004; Marvasti & Dripchak, 2004b; Molnar, Berkman, & Buka, 2001; Ystgaard et al., 2004). Self-injurious behavior allows incest victims to "demonstrate control and ownership of their bodies" (p. 39) and also is a safer expression of anger and rage (Marvasti & Dripchak, 2004b). Hospitalized females who self-mutilate and repeatedly attempt suicide are more likely to have histories of sexual trauma and physical abuse than women who have not made repeated suicide attempts and who do not self-mutilate (Ystgaard et al., 2004). Suicidal behavior is more prevalent among persons who have reported childhood sexual abuse than persons who have not, with the odds of suicide attempts two to four times higher for female victims of childhood sexual abuse. In fact, 12 percent of all females raped as children will attempt suicide even if they do not have a psychiatric disorder or any other experiences of childhood trauma, and 7 percent of all females who were molested will attempt suicide (Molnar et al., 2001).

As noted with adolescents, adult women with a history of childhood sexual abuse are also more likely to be raped and develop PTSD in adulthood than are nonvictims (Gladstone et al., 2004; Kessler & Bieschke, 1999; Peleikis et al., 2004). The risk of sexual revictimization of incest victims in adulthood is also higher than that for childhood victims of nonfamilial abuse. The odds of sexual coercion of incest victims as compared to women abused by nonfamily members were 5.13 times higher and the odds for rape were 4.58 times higher (Kessler & Bieschke, 1999).

In a recent study of 299 women with a diagnosed eating disorder, those who reported childhood sexual abuse had higher levels of bingeing, vomiting, use of laxatives, and use of diuretics; in addition, they differed significantly from those without a history of sexual abuse in body image disturbance (defined as distorted), a negative evaluation of self based upon body shape (van Gerko et al., 2005). Although the researchers asked the participants if their abuse was intrafamilial, they unfortunately did not report this data in the study

and explained that they had "not recorded in a sufficiently systematic way" to allow this information to be used in the analysis (p. 377). Other studies have found similar links to eating disorders and body image disturbance (Kendler et al., 2000; Waller, 1992; Waller, Hamilton, Rose, Sumra, & Baldwin, 1993).

Adult Male Survivors of Childhood Incest

There is relatively little research specifically on male victims of incest as compared to the study of females. In her review and critique of the literature on mother-son sexual abuse, Lawson (1993) highlighted that such abuse is rarely reported to child protective authorities or police, is most likely to be disclosed in long-term psychotherapy, and, when the abuse is subtle, is often not thought of as abuse. She reported that "in cases of mother-son sexual abuse, the taboo against disclosure is far stronger than the taboo against the behavior itself" (p. 264). In the research that has been conducted with male victims of childhood sexual abuse, distinctions often have not been made between those abused by family members and nonfamilial offenders. In recent years, more attention has been paid to mother-son sexual abuse, but research on father-son sexual abuse remains lacking.

Even with the paucity of research on male survivors of childhood sexual abuse, it is clear that such abuse has a negative impact on the lives of these boys and men. Male incest survivors have reported severe, long-term, negative effects on social, sexual, family, and physical areas of their lives (Ray, 1996), and men who experienced either incest or extrafamilial abuse have reported difficulty forming and maintaining sexual relationships, avoidance of intimacy, and problems initiating and sustaining their careers (Gill & Tutty, 1999).

Mother-son incest is associated with more self-reported difficulties than all other victim-perpetrator relationships, including that of father and son (Kelly et al., 2002). Specifically, males abused by their mothers report more sexual problems, dissociation, aggression, and interpersonal problems than males not abused by their mothers and, even controlling for those abused by their fathers, mother-son incest is still associated with significant problems in sexual functioning, dissociation, and interpersonal problems. In addition, these males report more symptoms of PTSD than men who have had no experiences of any parental abuse (Kelly et al., 2002).

Father-son incest is associated with more PTSD symptoms compared with males not abused by their fathers, even with no differences in the intrusiveness (i.e., penetration) of the sexual acts (Kelly et al., 2002). Mother-son incest is somewhat less intrusive than that of the other groups of perpetrators; however, there are men in the mother-son group who experience intercourse. Males abused by their mothers, or females in general, are more likely to report a heterosexual orientation while there is no significant relationship between sexual abuse by a father and sexual orientation as an adult. Mother-son incest survivors who initially perceive the sexual abuse positively or with a mixed

reaction experience the most severe, long-term adjustment difficulties, especially problems with anger, trust, and aggression in intimate relationships (Kelly et al., 2002).

Suicidal behavior is more prevalent among men who have reported childhood sexual abuse than men who have not, with the odds of suicide attempts four to eleven times higher for male victims (Molnar et al., 2001). Even male victims of child rape who have no other childhood adversities or psychiatric disorders are far more likely to make a serious suicide attempt than are nonvictims. However, males victims with a psychiatric disorder are likely to attempt suicide at a younger age than male victims who do not also have a psychiatric disorder (Molnar, Berkman, & Buka, 2001).

Younger boys (i.e., age 7 and under) as compared to older boys (i.e., age 10 and older) are more likely to be sexually abused by a family member, especially a parent (Fischer & MacDonald, 1998; Kelly et al., 2002), while older boys are more likely to be abused by nonrelatives but persons familiar to them. Sexual abuse by a family member also places a male child at risk for extrafamilial sexual abuse. Approximately two-thirds of the males who experience sexual abuse by a family member also report sexual abuse by a nonrelative outside of the immediate family (Harrison et al., 1997).

Males who experience incest are less likely than females who have been abused by family members to be removed from the home (Spiegel, 2003), which places them at risk for continued abuse. Male incest victims are also less likely than female incest victims to report the abuse at the time of its occurrence or in their lifetime (Gill & Tutty, 1999; Spiegel, 2003).

COPING

Negative attributional style has been defined as the tendency for people to ascribe the "cause of a negative event to themselves (internal), across situations (global), and over time (stable)" and has been associated with psychological distress following childhood sexual abuse (Steel et al., 2004, p. 787). Attributions of shame and self-blame are associated with depression and lower self-esteem in children as early as two months after disclosure of the abuse (Feiring et al., 1999). Accepting responsibility for the abuse, internalization of the abuse, resistance, and confrontive coping all contribute to serious psychological problems in adulthood (Steel et al., 2004). Failing to use social support as a coping strategy also leads to more psychological distress in adulthood (Steel et al., 2004).

Duration of the abuse is correlated with internalization of abuse, which in turn is related to a poorer adjustment in adulthood. For example, the longer the abuse takes place, the more likely the victim will blame him-/herself. Others (Bennett et al., 2000; Rodriguez et al., 1998) also found a positive relationship between duration of abuse and significant psychological distress but did not look at the coping styles. The older the child at the time of abuse,

the poorer the adjustment in adulthood, as the older the victim, the more likely he/she will accept responsibility for the abuse (Steel et al., 2004). Older victims may experience increased negative symptomatology because they have awareness that the sexual experiences are unacceptable and harmful (Ruggiero et al., 2000).

In general, victims appear to have poorer outcomes if they deny the abuse, distance themselves from the abuse, or otherwise minimize the abuse. Furthermore, the long-term impact of childhood sexual abuse may be lessened if the victim tells another person about the abuse and problem-solves possible strategies to end the abuse (Guelzow, Cornett, & Dougherty, 2002). Endler and Parker (as cited in Guelzow et al., 2002) proposed three coping strategies used by persons when placed in stressful situations. They identified emotion-focused coping (i.e., self-blame for being too emotional, preoccupation with worry) and avoidance-focused coping (i.e., engaging in activities to ignore the abuse) as maladaptive, while task-focused coping (i.e., outlining priorities and developing and following through on a course of action) is viewed as adaptive. Family support is likely to reduce extreme long-term consequences from childhood sexual abuse and decrease the impact of childhood sexual abuse (Guelzow et al., 2002). A mother's support is an important mediating variable when the perpetrator of the abuse is familial, while lack of a father's support increases the likelihood of emotion-focused coping (Guelzow et al., 2002).

In their study of over 100 female survivors of incest, Brand and Alexander (2003) found that avoidance-focused coping and emotion-focused coping were the most used styles of coping and were associated with poorer adult functioning. Use of avoidance seems to be dysfunctional in the long run as it prevents the development of effective coping strategies. They found little use of task-focused coping and explained how this highlights the extreme powerlessness of children who are being sexually abused. They suggested that sexually victimized children's main method of protecting themselves is to attempt to manage their emotional reactions. Contrary to the finding of others, seeking social support was associated with more distress. Victims of incest typically report significantly less family support than victims of extra-familial sexual abuse (Stroud, 1999) and for this reason telling of the abuse is not always effective in ending the abuse (Roesler & Wind, 1994). Brand and Alexander (2003) also suggest that when "abuse is frequent, chronic, and/or perpetrated by a family member, distancing from the current abuse may be beneficial" (p. 291). They also hypothesized that children who are able to distance themselves may function better as adults because the distancing strategy could make them more resilient. Thus, it is not clear-cut when seeking support will be helpful or harmful. Perhaps if the mother believes her child and takes action to protect the child, then the social support may prevent adulthood distress.

Developmental factors affect a child's capacity to handle stress and sexually abused children react to incest differently depending upon age and develop-

mental level (Cole & Putnam, 1992). Preschool victims use the coping style of denial and dissociation and are unable to use instrumental coping strategies of refusal and avoidance because they cannot tell others of the abuse and cannot get away from their family member perpetrator. Sexual abuse during the elementary school years interferes with development of social self-competence because children who experience severe guilt, shame, and confusion regarding their sexual abuse are unlikely to feel secure enough to make friends or create any type of social support away from home. Adolescence is a significant period of social and sexual identity development. Incest during adolescence may interrupt learning to use reasoning, reflection, and planning, which leaves incest survivors relying on denial, dissociation, and other immature coping strategies and places them at greater risk for severe psychological problems (Cole & Putnam, 1992).

NONOFFENDING MOTHERS

Early work in the area of incest tended to blame mothers and promoted a belief that mothers were aware of the incest prior to the disclosure and colluded with the perpetrator on a conscious or unconscious level. However, the vast majority of mothers believe their children when they disclose the sexual abuse and make an effort to protect them (Joyce, 1997).

Crawford (1999) concluded in her review of literature on the role of nonoffending mothers in intrafamilial sexual abuse of daughters that these mothers are a mixed group with each needing individual assessment by professionals to determine if that mother is capable of supporting, protecting, and assisting in her daughter's healing. Lastly, Bolen (2003) also focused on the literature pertaining to nonoffending mothers of sexually abused children with an emphasis on intrafamilial abuse and suggested that there has been a sociohistorical context in which nonoffending mothers are held accountable for the abuse of their children in the eyes of child protection professionals, whereas there appears to be no similar level of responsibility for the nonoffending father.

There is conflicting information regarding a mother's history of childhood sexual abuse being a risk factor for sexual abuse of her own children. Some studies have shown that a mother's history of childhood sexual abuse, especially incest, is a risk factor for her own children to be sexually abused, especially by a father or stepfather (Faller, 1989; Joyce, 1997; McCloskey & Bailey, 2000; Russell, 1986), while others found no difference in the mother's history of sexual abuse with regard to sexual abuse of her children, including incest (Estes & Tidwell, 2002). Mothers who abuse alcohol and drugs place their children at greater risk for sexual abuse than mothers who do not (McCloskey & Bailey, 2000).

Daughters whose mothers experienced incest have reported a negative impact upon them as children that transcended into their adulthood. Research

suggests that mothers who have been victims of incest themselves suffer long-term negative effects, including parenting difficulties as a result of problems related to their own sense of organization, control, and confidence (Cole & Putnam, 1992). A negative attitude toward one's own body and sexuality, viewing all women as victims, difficulty integrating sex and intimacy, impaired judgment of the trustworthiness of others, hypervigilance, lack of assertiveness, lack of parenting skills, difficulty recognizing and expressing anger, eating disorders, and external locus of control were found in both the mothers who experienced incest and their daughters. In addition, the daughters attributed many of their own psychological problems to their mother's parenting and history of incest, including sexually acting out, sexualized relationships with males, feeling defective, fear of all men, impaired functioning in their occupations, and substance abuse (Voth & Tutty, 1999).

OFFENDERS

Characteristics of Adult Male Incest Offenders

Men who abused children known to them but unrelated have been found to have more years of education than those who molest children in their extended or immediate families and those who molest children unknown to them (Greenberg et al., 2000). Sex offenders with low levels of education are more likely to offend again than are those with more education (Hanson & Bussiere, 1998).

Men who abuse their daughters or stepdaughters are thought to be less antisocial and have lower levels of psychopathology than child molesters who offend strangers, extended family members, or acquaintances (Greenberg et al., 2000; Rice & Harris, 2002), with those who abuse biological daughters not only showing the lowest level of psychopathology among groups of child molesters but also not scoring above the cutoff to indicate psychopathology (Rice & Harris, 2002).

No significant differences have been found between sexually offending biological fathers and stepfathers with regard to the number of victims, the age of the victim, use of threats or force, penetration, and the influence of alcohol and drugs. There are few victims for each group and little use of force or threats. Half of the biological offenders and half of the stepfather offenders engage in oral, vaginal, or anal penetration, and a quarter of both groups report using drugs or alcohol at the time of the offense (Greenberg, Firestone, Nunes, Bradford, & Curry, 2005). There are no differences between incestuous biological fathers and stepfathers with regard to their own histories of childhood sexual abuse and physical abuse; however, over 50 percent of these men had been sexually and/or physically abused. While there are also no differences between these incestuous offenders with regard to recidivism, criminal charges, or being placed outside of the home prior to age 16, over a third had a criminal

record and had been placed outside of their homes prior to age 16 (Greenberg et al., 2005).

Childhood sexual victimization of incest offenders presents a complex picture. Male sex offenders who were abused by family members as children are more likely to have female victims and less likely to bribe their victims than are male offenders who were abused by strangers or acquaintances (Craissati, McClurg, & Browne, 2002). Those males abused by strangers are more likely to abuse males or a combination of both males and females (Craissati et al., 2002).

Familial offenders more so than nonfamilial offenders minimize their behavior (Webster & Beech, 2001) and view their victims as adults (Wilson, 1999). Some studies have shown that nonfamilial offenders are more likely to blame their victims and are less likely to admit their responsibility (Miner & Dwyer, 1997; Webster & Beech, 2001), while others found the contrary (Parton & Day, 2002).

Arousal Patterns of Incest Offenders

Exclusively incestuous male offenders who abuse female children generally have more deviant arousal and deviant sexual preferences than males who are not sex offenders, but are less deviant than males who abuse children outside of their families (Freund, Watson, & Dickey, 1991; Greenberg et al., 2005; Rice & Harris, 2002; Seto, Lalumiere, & Kuban, 1999). Exclusively intrafamilial father-daughter child molesters are not as predatory as and are less antisocial than extrafamilial child abusers (Rice & Harris, 2002). There is conflicting information regarding deviant arousal using phallometric measures with biological fathers and stepfathers. Greenberg et al. (2005) reported that biological fathers are significantly less aroused by children than are stepfathers; however, others (Rice & Harris, 2002; Seto et al., 1999) found that biological fathers do not differ from stepfathers with regard to arousal to child stimuli. Incestuous biological fathers respond less than extended family molesters and child molesters who abused females both within and outside of the family (Seto et al., 1999). Yet, when comparisons are made between intrafamilial male offenders and extrafamilial offenders with a single victim, the two groups have identical mean phallometric deviance differentials indicating sexual attraction to children (Rice & Harris, 2002).

Recidivism

While researchers have consistently demonstrated lower sexual and violent recidivism (i.e., offending again) rates for those molesting their biological daughters and stepdaughters as compared to child molesters who molest acquaintances, strangers, and extended family members (Firestone et al., 1999; Greenberg et al., 2000; Hanson & Bussière, 1998), it is difficult to know true

rates of recidivism with incest offenders, as incestuous abuse is often not reported or detected (Greenberg et al., 2000) and pleas to lesser offenses are frequently made to save the child victims from the trauma of testifying in court. Of importance, however, is the realization that in absolute terms, the recidivism of incestuous biological and stepfathers is not low (Rice & Harris, 2002).

Characteristics of Female Incest Offenders

It has long been believed that females, especially mothers, do not abuse children. This belief so permeates our Western culture that even knowledgeable professionals, such as police officers, social workers, child protection workers, psychologists, and psychiatrists, have minimized and dismissed the possibility. In a study of such professionals' responses to female offenders of children, female sex offenders were less likely than male child sexual abusers to be investigated by the police or involved in social service agencies, and female child molesters were allowed to voluntarily discontinue involvement with child protection agencies (Hetherton & Beardsall, 1998). Another study of eighty-three confirmed cases of child sexual abuse by females revealed that only one of the females was criminally prosecuted, even when there was also significant physical abuse, such as "burning, beating, biting or pinching the breasts or genitals of the children or tying them up during acts of sexual assault" (Ramsay-Klawsnik, 1990, cited in Denov, 2003, p. 49). It is also a common belief that when women do sexually abuse children, especially their own, they do so in conjunction with a male (Mathews, Mathews, & Speltz, 1990, cited in Kelly et al., 2002).

Adult female sex offenders present complicated interactions between victim and offender characteristics as well as patterns of offending. Convicted adult female incest offenders are most likely to abuse children ranging in age from 12 to 17 years and are next likely to abuse children ranging in age from 6 to 11 years; while female incest offenders do not neatly fit into any one of the six types of female sex offenders, they are most likely to fall into the category of Young Adult Child Exploiters who molest both male and female children under the age of 7 (Vandiver & Kercher, 2004).

One study showed that the vast majority of female adult and juvenile sex offenders have experienced intrafamilial sexual abuse, and the tendency for incest continues in their offending histories with 46 percent of the adult female sex offenders sexually molesting their daughters, 39 percent molesting their sons, and 92 percent with a "mother or maternal figure tie with their victims (daughter, son, nephew, niece)" (Tardif, Auclair, Jacob, & Carpentier, 2005, p. 162). And over half of the sample of female juvenile perpetrators also molested family members (brothers, half-brothers, stepsisters) (Tardif et al., 2005). Extreme conflict in the mother-child relationship in both the adult and juvenile female sexual perpetrators plays a crucial role in these women and girls

becoming perpetrators. Having had a sexually and physically abusive father is also a risk factor in the adult offenders whereas an absent or uninvolved father is implicated for the juvenile offenders (Tardif et al., 2005).

Typically, clinicians and researchers have believed that children who are sexually abused by other children are less distressed than children abused by adults; however, recent research has indicated that this is not the case. Children abused by both adult offenders (over age 18) and offenders under age 17 display clinically relevant levels of behavioral and emotional problems, with one-fourth of each of the groups experiencing suicidal ideation (Shaw et al., 2000). Both groups of victims experience excessive sexual problems, sexual concerns, sexual preoccupation, sexual fears, and unwanted sexual feelings. Furthermore, those abused by juveniles experienced even more of these problems. Children abused by children are more likely to be abused by siblings and more likely to display more sexual problems (Shaw et al., 2000). Thus, sexual acts between children, even with a minimum of three years' difference in age, result in similar levels of emotional and behavioral distress found in children abused by adults (Shaw et al., 2000).

TREATMENT

Group treatments are particularly effective for victims of incest because being in a group decreases isolation and provides an awareness that others have also experienced incest. Groups typically last ten weeks with follow-up six months later. Group treatments for women victims of childhood incest effectively reduce symptoms of anxiety, avoidance, dissociation, and depression, increase self-esteem and the ability to protect oneself, and decrease feelings of guilt, shame, and self-blame (Alexander, Neimeyer, Follette, Moore, & Harter, 1989; Carver, Stalker, Stewart, & Abraham, 1989; Hazzard, Rogers, & Angert, 1993; Herman & Schaatzow, 1984; Morgan & Cummings, 1999; Roberts & Lie, 1989; Zlotnick, Shea, et al., 1997).

Several studies showed conflicting results regarding the impact of individual therapy in addition to the group experience. Some research shows that prior individual therapy contributes to more successful outcomes from the group treatment (Hazzard et al., 1993; Westbury & Tutty, 1999), while other research found no additional benefit from concurrent individual therapy (Morgan & Cummings, 1999).

A treatment model that focuses on shame-based behaviors may significantly decrease a woman's risk for sexual revictimization, increase her ability to express emotions, such as rage and humiliation, and decrease self-blame (Kessler & Bieschke, 1999). Shame is also a significant emotion that results in negative consequences for male victims of incest and is important to target in treatments for men and boys. Psychiatric disorders most prevalent with survivors of childhood incest reflect impairments in self- and social functioning and suggest use of a developmental model for treatment (Cole & Putnam,

1992). Interventions that target ruminative behaviors, affect modulation, and active problem-solving are indicated for adolescent females while adolescent boys need assistance in tolerating emotions without acting out sexually and learning to ask for help and support (Feiring et al., 1999).

While group therapy has been studied more than individual therapy and has been thought to be the most effective with adult survivors of childhood sexual trauma, two general approaches to group therapy have emerged. Trauma-focused group therapy focuses on a survivor's symptoms and past environment while present-focused group therapy emphasizes the current environment and symptoms (Speigel, Classen, Thurston, & Butler, 2004). Trauma-focused therapy involves telling the story of one's trauma and has the benefit of exposure and desensitization in reducing symptoms related to trauma (Foa & Meadows, 1997). Present-focused therapy alleviates symptoms by focusing on current problem behaviors without discussing specifics of the trauma (Spiegel et al., 2004; Classen, Koopman, Nevill-Manning, & Spiegel, 2001). Both approaches have particular strengths; the present-focused group decreases the risk of vicarious traumatization while the trauma-focused group allows the survivor's story and voice to be heard and acknowledged. To date, there has been only one randomized clinical pilot study, with a larger study underway, that has attempted to ascertain which approach is most effective (Spiegel et al., 2004). Interestingly, neither group reduced trauma symptoms. However, the trauma-focused group was effective in decreasing interpersonal problems while the present-focused group showed promise in reducing sexual revictimization (Spiegel et al., 2004).

Outcome studies of group treatment for males who have experienced incest are almost nonexistent. Clinicians and researchers who work with males who have experienced both intrafamilial and extrafamilial sexual abuse insist that to apply the constructs, paradigms, and treatment strategies designed for female survivors of childhood trauma to male survivors would be ineffective at best and a disservice at worst (Spiegel, 2003). Two published studies with males who experienced childhood sexual abuse did not differentiate between those males who were molested by family members and those who were not but showed promise for treatment (Sharpe, Selley, Low, & Hall, 2001; Morrison & Treliving, 2002). One approach for working with male victims of sexual abuse is called the SAM (Sexual Abuse of Males) Model and is based upon research, therapy, and practice specific to men and boys (Spiegel, 2003).

Trauma-focused cognitive behavior therapy and cognitive behavior therapy with children who have experienced sexual abuse have been shown to be effective in reducing PTSD, depression, behavior problems, sexualized behavior, abuse-related attributions, shame, and anxiety while also increasing social competence and improving parenting (Cohen, Mannarino, & Knudsen, 2005; Cohen & Mannarino, 1996, 1997, 1998; Cohen, Deblinger, Mannarino, & Steer, 2004; Deblinger, Lippman, & Steer, 1996; Deblinger, Steer, & Lippman, 1999; King et al., 2000).

CONCLUSIONS

Incest is a serious ongoing problem in our society that continues to be unreported and underreported and has significant negative, long-term consequences for its victims, both male and female. Untreated childhood sexual abuse creates problems that last a lifetime. We must do a better job of detecting incest by specifically inquiring of this experience in our clinical populations. The unexplored nature of incest with males needs to be studied along all developmental levels in order to design effective treatments. In the outcome-based world of psychological treatment, we need to provide treatment that has proven to be effective and efficacious. Discovering and treating sexual abuse during childhood and adolescence could prevent significant impairment, revictimization, and disruption in the lives of adult survivors of childhood incest as well as reduce the transgenerational risk of incest.

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7

Treatment of Sex Offenders

Lester W. Wright, Jr., and Angela P. Hatcher

INTRODUCTION

The term "sex offender" can be defined as any individual who, because of the nature of his or her sexual behavior, has come into contact with the legal system. The sexual behavior for which the individual has gotten into trouble might have been coercive in nature, as in the case of rape, or it might have been for what is known in psychology as paraphilic behavior. Paraphilias, formerly known as sexual deviations, represent a group of heterogeneous disorders. The common theme in this group is that they involve sexual urges, fantasies, and behaviors that are viewed as atypical and often socially unacceptable (American Psychiatric Association, 2000). The essential features of a paraphilia in the *Diagnostic and Statistical Manual of Mental Disorders* (*DSM-IV-TR*, a diagnostic guide used by mental health professionals) are recurrent, intense sexually arousing fantasies, sexual urges, or behaviors generally involving (1) nonhuman objects, (2) the suffering or humiliation of oneself or one's partner, or (3) children or other nonconsenting persons. For some clients, the atypical fantasies are essential for sexual arousal and, therefore, they are always incorporated into sexual behavior, even if just in fantasy. For others, the atypical urges and fantasies are occasional, and they may still engage in normative sexual practices.

The *DSM-IV-TR* states that paraphilias, regardless of their prevalence, are typically persistent; however, they do sometimes diminish with age. Because

perpetrators of sexual offenses are most commonly men, we will limit our discussion to the treatment of male sex offenders.

It is important to remember that not all atypical sexual behaviors fall into the sex offense category. Likewise, what is considered deviant behavior can change and vary across cultures. As a result, treatment is generally limited to those individuals whose sexual behavior involves nonconsenting partners, including pedophilia, exhibitionism, voyeurism, and frotteurism, or to those individuals whose atypical sexual arousal is personally problematic. It has been found that men whose sexual fantasies center on fetishes, including cross-dressing or masochism, rarely request treatment; they seek a consenting partner who either shares or tolerates their atypical sexual interests (McAnulty & Burnette, 2004).

THEORETICAL FOUNDATIONS

In order to effectively treat sex offenders, it is important to have a thorough understanding of how atypical sexual arousal is developed and maintained. Behavioral modification is the main component of most contemporary treatment programs for paraphilias and other types of sex offenses (Abel et al., 1984; Barnard, Fuller, Robbins, & Shaw, 1989). Behavioral treatments are based on the assumption that atypical sexual interest is primarily learned behavior. Conditioning, the process whereby learning occurs, can either be operant or classical in nature. In the case of atypical sexual arousal, it is thought that a combination of both types of conditioning is responsible for the learning process. Operant conditioning generally occurs when a reinforcing consequence immediately follows a response and increases the future frequency of that response, or when an aversive consequence immediately follows a response and decreases the future frequency of that response. Classical conditioning occurs when a neutral stimulus acquires the eliciting properties of an unconditioned stimulus through pairing the unconditioned stimulus with a neutral stimulus.

As for the role of conditioning of atypical sexual interest, with regard to classical conditioning, a neutral, or in this case previously nonsexually arousing, stimulus becomes sexually arousing by repeatedly being paired with a stimulus that is sexually arousing. The sexually arousing stimulus that the neutral stimulus is paired with may be an unconditioned, or unlearned stimulus, or it might be a conditioned, or learned stimulus. Operant conditioning, in this situation, would be important in the reinforcement of behavior as sexually arousing. Specifically, masturbation to atypical fantasies will increase their strength to sexually arouse and also function as mental rehearsals in which future sexual offenses are planned (Marshall & Barbaree, 1990). Evidence for the relationship between atypical stimuli and orgasm is provided by a few early analogue laboratory studies. These studies (Rachman, 1966; Rachman & Hodgson, 1968) paired pictures of boots to nude pictures of adult women and

led to increased responding (i.e., sexual arousal) to the fetishistic stimuli (i.e., the boots). Abel and Blanchard (1974), Evans (1968), Laws and Marshall (1991), and McGuire, Carlisle, & Young (1965) provide support for the use of masturbation to alter sexual interests; however, Herman, Barlow, and Agras (1974) and Marshall (1974) found it difficult to produce such arousal. It is important to remember that while atypical sexual arousal can be conditioned in a laboratory, this does not provide proof that atypical sexual interests develop along similar lines (Laws & O'Donohue, 1997). Regardless of how it developed, inappropriate or atypical sexual arousal is thought to be a significant factor in the cause and maintenance of sexual offending (Ward, Hudson, & Keenan, 2000), and, as such, learning to have a sexual preference for, and arousal to, consenting adult partners is viewed as necessary for changing one's sexual practices (Ward & Stewart, 2003).

There is good evidence that atypical sexual behavior, at least in the short term, is amenable to behavioral modification techniques (Feierman & Feierman, 2000), which are based on the above theoretical assumptions. The goal is to decrease the strength of the atypical arousal and to increase normative sexual arousal. Support for these principles comes from several lines of research. Stava, Levin, and Schwanz (1993), for example, demonstrated that it was the aversive component of covert sensitization trials, rather than merely distraction or habituation, that was responsible for reductions in sexual arousal to pedophilic stimuli in a 30-year-old pedophile.

Broadly speaking, treatment for sex offenders includes strategies to decrease atypical arousal and increase appropriate arousal. However, because men who commit sex offenses often have multiple deficits, including social skills deficits, poor impulse control, and low victim empathy, most treatment programs employ multiple modalities to address these problems. Likewise, treatment for sex offenders may also include skills training, sex education, and cognitive restructuring. Finally, relapse prevention is included in most sex offender treatment programs as a means of preventing the offender from committing another sex offense.

DECREASING ATYPICAL AROUSAL

Early behavioral interventions for atypical sexual arousal focused primarily on decreasing atypical arousal through aversive conditioning procedures. Using these procedures, atypical sexual arousal is decreased by repeatedly pairing atypical fantasies and urges with aversive stimuli so that rather than eliciting sexual arousal, the atypical fantasies eventually acquire aversive properties and are no longer sexually arousing. Three aversive conditioning procedures are described below: aversion therapy using either electrical or olfactory aversion, covert sensitization, and masturbatory satiation. In addition to these procedures, medication is sometimes used to decrease sexual arousal.

Aversion Therapy

The goal of aversion therapy is to decrease the sexually arousing properties of atypical fantasies and images; this is accomplished by pairing the atypical fantasies and images with an aversive stimulus. McAnulty and Adams (1992) noted that while there does appear to be evidence in the literature for the effectiveness of aversive conditioning in treating paraphilic disorders, the use of aversion therapy is sometimes challenged on ethical and moral grounds.

There are two types of aversion therapy, differentiated primarily by the type of aversive stimulus that is used. Electrical aversion involves the use of a mild but painful shock (McAnulty & Adams, 1992). Olfactory aversion involves the use of a noxious odor, such as ammonia. For each type of aversion therapy, the aversive stimuli are immediately presented when the individual engages in atypical imagery or fantasy.

Covert Sensitization

Another form of aversive conditioning, covert sensitization, was introduced by Cautela (1967). Just as with other forms of aversive conditioning, the purpose of this procedure is to decrease the level of an undesired behavior. While covert sensitization is a form of aversive conditioning, it does not involve the actual presentation of an aversive stimulus. Cautela claimed that this procedure is covert in that the aversive stimuli are presented in the imagination only.

In this procedure the individual is asked to fantasize using his atypical fantasy; however, before the fantasy reaches the point of actually engaging in the atypical behavior, the individual is instructed to imagine an aversive image (e.g., getting caught by the police, spending time in jail, etc.) as a way to reduce the sexually arousing properties of the atypical fantasy (Cautela, 1967). In order for this procedure to be most effective, it is typically recommended that the aversive image that is used be one that the client would find most aversive. Likewise, images that are realistic are likely to be most effective.

With regard to effectiveness, in a review of the literature, Little and Curran (1978) noted that there have been several controlled, within-subject studies that provide empirical support for the use of covert sensitization in the treatment of sexual deviance. Likewise, Brownell, Hayes, and Barlow (1977) effectively used covert sensitization in the treatment of two exhibitionists, a sadist, a transvestite, and a child molester. Using a combination of orgasmic reconditioning, described below, and covert sensitization, Lande (1980) successfully treated an individual with a history of fire setting accompanied by masturbation.

Masturbatory Satiation

The technique of masturbatory satiation is intended to decrease an individual's arousal to atypical fantasies by pairing the atypical fantasies with boredom. When using the procedure, the individual is instructed to masturbate to orgasm while fantasizing about something that is normal or appropriate. Once the individual has reached orgasm, he is instructed to continue masturbating for forty-five minutes to one hour during which time the preferred atypical fantasy is used (Witt & Sager, 1988). Continuing to masturbate to an atypical fantasy after orgasm is punishing to the person, rather than rewarding and makes the atypical fantasy less exciting and, therefore, less likely to be used in the future. Using this technique the person learns that the normal fantasies help him have an orgasm and that the atypical fantasies produce boredom and may cause him pain or embarrassment.

Medication Management

The use of medications to treat sex offenders is controversial. Grubin (2000) pointed out that some cognitive-behavioral therapists perceive the use of medications as "cheating" and that the use of medications might suggest to the offender that his ability to control his offending is limited because his sexual drives are not completely under his power. The most commonly used classes of medications are antiandrogens and selective serotonin reuptake inhibitors (SSRIs).

Hyde and DeLamater (2006) stated that sexual arousability is dependent on maintaining the level of androgen in the bloodstream above a certain level. Therefore, antiandrogen drugs are sometimes used either to reduce the production of androgen or to block the effects of androgen. The two most commonly used antiandrogen medications are cyproterone acetate and medroxyprogesterone acetate (Depo-Provera). By either blocking the production of androgens or blocking their effects, these medications reduce sexual drive as well as the individual's ability to respond physically (i.e., get an erection) to sexual stimuli (Grubin, 2000).

The SSRIs, frequently prescribed for depression and anxiety, are also sometimes used in the treatment of sex offenders. In their review of the literature, Greenberg and Bradford (1997) reported that SSRIs have been useful in reducing fantasies, sexual urges, masturbation, and paraphilic behavior in exhibitionists, fetishists, voyeurs, and child molesters. Grubin (2000) suggested that SSRIs may be most beneficial for those individuals whose sexual offending has an obsessive-compulsive quality to it.

Hyde and DeLamater (2006) suggested that antiandrogen and SSRIs in the treatment of sex offenders should only be used as one element of a more comprehensive treatment program. Likewise, Grubin (2000) stated that most

men want to quit taking the medication at some point as a test, because of side effects, or because they are unhappy with being asexual. Regardless of the reason, it is important that individuals who have committed sex offenses have other skills at their disposal to prevent committing another offense. It should also be mentioned that the use of these medications, just as with any other medication, does not guarantee the desired effect.

INCREASING APPROPRIATE AROUSAL

Early attempts to change atypical behavior were not especially successful since clinicians focused exclusively on eliminating atypical arousal without attending to normative arousal (Barlow, 1973). Many individuals whose atypical sexual arousal has been lifelong and exclusive do not have sexual fantasies or urges that contain "normal" stimuli, such as consenting adult sexual interactions. Because eliminating the individual's atypical urges does not guarantee the emergence of normal urges to replace them, conditioning procedures to enhance sexual arousal to appropriate stimuli (i.e., consenting adult sexual partners) were developed.

Orgasmic Reconditioning

Orgasmic reconditioning is one of the techniques designed to enhance arousal to appropriate stimuli (e.g., adult heterosexual and/or homosexual partners) by pairing appropriate stimuli with orgasm. It is also sometimes referred to as directed masturbation, masturbation training, or masturbatory reconditioning; however, some of these terms have specific meanings. According to McAnulty and Adams (1992), "The rationale for orgasmic reconditioning is based on the assumption that stimuli acquire sexually arousing properties through their pairing with pleasurable sensations, namely sexual arousal and orgasm" (p. 188). There are currently four distinct forms of masturbatory reconditioning: (a) thematic shift (Marquis, 1970; Thorpe, Schmidt, & Castell, 1964); (b) fantasy alternation (Abel, Blanchard, Barlow & Flanagan, 1975; Van-Deventer & Laws, 1978); (c) directed masturbation (Kremsdorf, Holmen, & Laws, 1980; Maletzky, 1985); and (d) satiation (Marshall & Lippens, 1977). The most frequently used type of orgasmic reconditioning, and the one that we will discuss, is thematic shift.

Thematic shift orgasmic reconditioning, as originally used by Marquis (1970), required the client to masturbate using atypical stimuli until the point of ejaculatory inevitability, at which time the client was to switch to an appropriate fantasy. The aim is to increase the attractiveness of the conventional fantasy by such association (Hawton, 1983). As therapy progresses, the client is instructed to begin using an appropriate fantasy earlier and earlier in his masturbatory sessions until he can ultimately use appropriate fantasies from the beginning of masturbation to orgasm (McAnulty & Adams, 1992). Initially,

the client may lose his arousal and erection when he switches to the appropriate fantasy. If this happens, the client is instructed to switch to his preferred fantasy to achieve a high level of arousal and then return to the appropriate fantasy. Bancroft (1974) found that gradual reshaping of atypical fantasies is more effective than trying to masturbate without using the atypical/nonnormative fantasy at all.

Quinsey and Earls (1990) concluded that evidence for the effectiveness of orgasmic reconditioning is limited in depth and significance. Laws and Marshall (1991), while optimistic, stated that there are insufficient data to conclude that orgasmic reconditioning is a clearly effective treatment for sexual deviations of any kind over the long term. Several studies (Davison, 1968; Marquis, 1970) reported success in using orgasmic reconditioning with clients, but treatment did not rely on orgasmic reconditioning exclusively. Marshall and Eccles (1991) consider orgasmic reconditioning to be one component of a comprehensive program to modify one's sexual behavior.

SKILLS TRAINING

Social Skills Training

Deficient social skills are an important factor in understanding sexual deviations (Quinsey, 1977). The rationale for social skills training is quite simple. If an individual does not feel competent to interact with someone in an age-appropriate manner then he or she is more apt to interact with someone younger and/or with someone in an inappropriate manner. The aim of social skills training is to teach an individual how to develop social relationships that could eventually lead to a consensual intimate relationship with an appropriate partner. Some of the early work in skills training, called heterosocial skills training, was conducted with men and women to teach them how to interact with adult partners of the opposite sex (Bellack & Morrison, 1982; Curran, 1977; Curran & Monti, 1982). Some of the skills taught in social skills training include how to initiate a conversation, appropriate eye contact, how to respect another's personal space, how to take turns in a conversation without interrupting, how to end a conversation, as well as how and when it is appropriate to touch another person. Other programs have been designed to assist individuals who engage in a range of atypical sexual behaviors (Abel et al., 1984; Marshall & Barbaree, 1988; McFall, 1990; Rooth, 1980). The skills training component is often incorporated into a comprehensive treatment program that is designed to fit the individual's needs. When working with someone who does not appear to be socially skilled, a distinction must be made between a person with skills deficits and a person whose performance in social situations is inhibited (Arkowitz, 1981; Bellack & Morrison, 1982). If the individual has skills deficits then skills acquisition is in order. If the individual has the requisite skills but does not use them, then the individual will require some type of

treatment to enable the use of these skills. Usually social skills are inhibited by anxiety/irrational fears. The individual may require some anxiety reduction technique, such as desensitization, that is, helping the person to relax in the presence of something that makes him anxious or scared; or perhaps some cognitive restructuring, which is explained below, to challenge rationalizations, or the thoughts people have that make it okay for them to engage in atypical behavior, and change distorted thinking (McMullin, 1986; Murphy, 1990).

Assertiveness Training

Stermac and Quinsey (1986) found that a significant number of rapists lack social competence skills, particularly assertiveness skills. Likewise, it is often the case that sex offenders need to be taught the difference between assertive, aggressive, passive, and passive-aggressive behaviors. An individual who possesses assertive skills is able to respond to problematic situations by making requests when something is wanted and by refusing inappropriate requests (Schroeder & Black, 1985). When acting in an assertive manner, one protects his rights as well as the rights of others (Lange & Jakubowski, 1976). When acting aggressively, one is protecting one's rights but trampling on the rights of others. An aggressive person may overact in some situations, become angry, and be abusive toward others; these types of people usually want things done their way and do not take turns or negotiate fairly (Dow, 1994). A person who is passive is allowing his rights to be neglected while protecting the rights of others. A passive person may not express opinions, does not refuse unreasonable requests, and allows others to have their way most of the time. A person who is passive-aggressive acts as if he is subjugating his rights and protecting the rights of others but will trample on the rights of others behind their backs. Individuals who are constantly passive may lash out in an aggressive manner when they get tired of having their rights violated. The goal of assertiveness training is to teach individuals that everybody has rights and how to protect their rights without violating the rights of others. Cognitive restructuring may be necessary to help the offender realize that he has rights and that it is alright to say no to certain requests or that it is alright to make appropriate requests of others. Individuals with low self-esteem and negative core beliefs, such as "I am stupid" or "I am worthless," often place the rights of others ahead of their own rights. When this happens the person often feels angry and taken advantage of and may act out sexually in an atypical way to get even or to feel better. Several models of assertiveness training can be used, depending upon the situation. Basic assertion involves a simple expression of standing up for one's rights, beliefs, feelings, or opinions and can also be used to express affection (Lange & Jakubowski, 1976). Empathic assertion allows you to convey sensitivity to another and is useful in situations in which you have a relationship with an individual (Lange & Jakubowski, 1976). Escalating assertion (Rimm & Masters,

1974) involves starting with a response that can accomplish the speaker's goal with a minimum of effort and negative emotion and has a small possibility of negative consequences (Lange & Jakubowski, 1976). If, however, the other person fails to respond to a request and continues to violate one's rights, the speaker escalates the assertion and becomes increasingly firm. The broken record model of assertiveness (Smith, 1975) is probably best used in situations in which one does not have a relationship with the individual and does not plan to start such a relationship. When using the broken record model, the individual basically sounds like a record that is stuck repeating the same phrase over and over.

Anger Management

For some offenders, sex and aggression are inextricably linked. Individuals develop scripts for interpersonal relationships through their observations and interactions with others. Negative events from their past, such as poor parenting, parental rejection, inconsistent and harsh discipline, violence between parents, physical and sexual abuse, being exposed to inappropriate models, as well as many others can lead to distorted internal dialogue and a faulty belief system about one's environment (Fagen & Wexler, 1988; Marshall & Barbaree, 1990). These aggressive cognitive scripts that develop throughout one's childhood and adolescence could become blueprints for aggression depending on whether the behaviors exhibited are punished or rewarded (Huesmann, 1988). The aim of anger management is to reduce the intensity of the anger that is experienced and to control the way the individual behaves when anger is elicited.

Turkat (1990) proposed treating aggression problems using graduated exposure to stimuli that elicit anger. He suggested constructing a hierarchy of anger-eliciting stimuli and training the individual to engage in a competing response, such as distracting oneself with another thought or activity or using a relaxation technique to get rid of the anger. The idea is that one cannot be angry and relaxed at the same time. Cognitive restructuring, or changing how one thinks about something, can be used with offenders who hold adversarial attitudes toward their partners and for those who use interpersonal violence to attain desired goals. Skills training—for example, assertiveness and social skills training—may be necessary to supplement the offender's armament of tools to use in interpersonal relationships. Teaching the client to take a time-out is also a good technique to allow him to compose his thoughts and calm down before he responds when he is angry. Stress management and communication skills training may be implemented if necessary.

Victim Empathy Training

Empathy is the awareness and understanding of another's thoughts and feelings. It is widely accepted by clinicians within the field that a lack of

empathy plays a major role in the etiology and maintenance of sex offending. The data from studies assessing empathy in sex offenders, however, have provided mixed results (Geer, Estupinan, & Manguno-Mire, 2000). Researchers examining empathy in sex offenders have recently begun to investigate the nature of empathic responding to determine if this is a general deficit or if it is circumscribed to a class of victims. Fernandez, Marshall, Lightbody, and O'Sullivan (1999) assessed the level of empathy in child molesters and a control group of nonoffenders for three types of victims: an accident victim, a general sexual abuse victim, and their own victim. They found that child molesters displayed the same amount of empathy as nonoffenders toward the victim of an accident. However, relative to the accident victim, the child molesters demonstrated a deficit in empathy toward a general sexual abuse victim, that is, not their own victim. Similarly, the child molesters displayed significantly less empathy toward their own victim than toward the general sexual abuse victim. This finding is important as it calls into question a long-held assumption that sex offenders lack empathy/lack the ability to experience empathy. Despite the lack of clear-cut evidence for the role of empathy, most treatment programs for sex offenders include a component designed to increase an offender's capacity for victim empathy to reduce recidivism.

SEX EDUCATION

Barbaree and Seto (1997) suggested that sex education be included in a comprehensive treatment program for sex offenders. Given that myths and misinformation about sexuality abound, it is likely that an offender lacks information and/or has incorrect information. The aim of sex education is to make the individual more comfortable with sexual information and to improve one's sexual skills by providing comprehensive knowledge of the sexual anatomy, sexual response, sexual technique, and communication skills. Kolvin (1967) suggested that sexual education, counseling, and reassurance alone could generate behavior change. Sex education can be provided in a group format, and/or self-help books can be given to the client to read on his own time.

SEX THERAPY

Clients who have a sexual dysfunction may require sex therapy to correct the problem. Conditions such as erectile disorder, premature ejaculation, or delayed ejaculation may cause the client to be embarrassed or to get angry and act out with his partner. The end result is that the person could seek out nonconsenting or underage partners and become abusive if provoked. The goal of sex therapy is to restore normal functioning so that he will be comfortable with his sexual performance and will hopefully seek out appropriate

partners, or be comfortable with his dysfunction and learn other ways to please his partner. There are empirically validated techniques for treating sexual dysfunctions and these can be administered in individual therapy. Leiblum and Rosen (2000) and Wincze and Carey (2001) offer treatment recommendations for sexual dysfunctions.

COGNITIVE RESTRUCTURING

Our thoughts, appraisals, and expectancies can elicit or modulate our mood and physiological processes, influence the environment, and serve as stimuli for behavior (Turk, Rudy, & Sorkin, 1992). Conversely, mood, physiology, environmental factors, and behavior can influence thought processes (Turk et al., 1992). The goals of cognitive therapy are to help the client identify and correct maladaptive thoughts, to retrain the client to think more logically and realistically, and to modify any irrational core beliefs (Abel et al., 1984; Turk et al., 1992). Murphy (1990) found that sexual aggressors reported such cognitive distortions as claims that the victim enjoyed the assault, blaming the victim, and a general belief in rape myths. This self-deceptive and distorted thinking, which is based on false assumptions, misperceptions, and self-serving interpretations, helps the sex offender justify his behavior (Feierman & Feierman, 2000). The application of cognitive-behavioral therapy to sexual disorders evolved from the research on anxiety disorders and depression.

Cognitive restructuring involves teaching the client to challenge irrational attitudes and beliefs, not only about sexuality, but also about how he views the world and life in general. The client is taught to self-monitor his thoughts, to recognize maladaptive thought patterns, and to log his irrational thoughts on tracking sheets that are used in therapy to monitor progress (Beck, Rush, Shaw, & Emery, 1979). The client is instructed to dispute the irrational thoughts and state evidence as to why the thoughts are irrational. The client is then encouraged to state a rational response and provide evidence for the validity of this response. Clients usually have difficulty recognizing their distorted thoughts and may argue that their distorted thoughts are accurate since they have evidence as to the veracity of their thoughts and beliefs. However, the evidence provided by the client can usually be identified as another type of cognitive distortion. As the client becomes better at identifying his irrational thoughts and beliefs, he reduces the amount of time spent thinking irrationally and is able to make better decisions that lead to more desirable outcomes. Once the client starts to change his attitude and thought patterns and begins to see events and situations more realistically, the therapist can begin to work on the client's core beliefs to help the client see himself in a more positive manner. Negative core beliefs such as "I'm stupid" or "I'm powerless" can be tackled and replaced by more accurate beliefs once the client no longer engages in distorted thinking. By experiencing these negative core beliefs about oneself—for example, "I'm stupid"—the person feels inadequate around

people his own age. He then spends time with individuals younger than himself, perhaps children, so that he feels smarter than them, which can lead to sexual abuse. If a man has a negative core belief that he is powerless, he might rape a woman or a child to prove that he has power over that person. By helping the offender to realize that the negative core belief is incorrect, he can then develop an accurate core belief that does not lead to distorted thinking and/or inappropriate behavior.

An alternative to using cognitive restructuring to help clients change their thinking in order to change their negative feelings or problem behavior is to use acceptance-based therapy to help people accept their negative thoughts and feelings rather than change them (Hayes, Stossahl, & Wilson, 1999; Hayes & Wilson, 1994). Acceptance, in this paradigm, refers to the willingness to experience a full range of thoughts, emotions, memories, bodily states, and behavioral predispositions, including those that are problematic, without necessarily having to change them, escape from them, act on them, or avoid them (Paul, Marx, & Orsillo, 1999). According to LoPiccolo (1994), using acceptance-based therapies allows the client to relinquish the struggle to gain control over his thoughts, which then allows him to develop and engage in more adaptive, alternative behaviors.

RELAPSE PREVENTION

Relapse prevention is a self-control program designed to teach individuals who are trying to change their behavior how to anticipate and cope with the problem of relapse (Laws, 1989, p. 2). The aim of relapse prevention is to prevent the recurrence of a problematic behavior (Hanson, 2000; Ward & Hudson, 1998), which is frequently accomplished by helping the individual identify and control or avoid triggers of the behavior (Hyde & DeLamater, 2006). Relapse prevention is frequently used as an adjunct to cognitive-behavioral therapy but has also been used as a stand-alone program. The program has a psychoeducational thrust that combines behavioral skills training, cognitive therapy, and lifestyle change (Larimer & Marlatt, 1994; Laws, 1989). This method of treatment teaches coping strategies to avoid lapses, which are viewed as opportunities to learn which stimuli control behavior, and relapses, which are viewed as failures (Maletzky, 1997). The model, as described by Pithers (1990), is based on the work of Marlatt and Gordon (1985), who developed this procedure for treating addictive behaviors.

Behavior chains and cycles are central concepts to relapse prevention (Maletzky, 1997). A sex offense is viewed as a sequence or chain of behaviors that ultimately leads to the offending behavior. A number of antecedents and assumptions precede the final act. With relapse prevention, the client is taught to analyze the chain of behaviors and assumptions that lead to the offending behavior. Clients are taught the value of breaking the chain of behaviors as early in the chain as possible to avert another offense. In the early stages of

treatment the client is instructed to keep records of his lapses and triggers to create self-awareness and self-scrutiny (Maletzky, 1997). By helping the client anticipate events that predispose a lapse—that is, making a mistake, such as a child molester wanting to engage in sexual fantasies about children (as opposed to actually masturbating to fantasies about children, which would be a relapse)—and by having escape strategies to exit high-risk situations, lapses can often be circumvented. Additionally, stimulus control procedures are put in place to make the client accountable and to decrease offending opportunities. If a client has a relapse, the event is used as an opportunity to learn from his mistakes, and he is encouraged to begin using his treatment plan immediately. In summary, the essential components of relapse prevention include:

1. Identifying situations in which the individual is at high risk of relapse (feeling sad, lonely, etc.) and teaching the client to identify these high-risk situations and to avoid them.
2. Identifying lapses as behaviors that do not constitute full-fledged relapses, but which may be precursors to full-blown relapse (fantasizing about a child, walking near a playground, etc.), and teaching the client to identify lapses.
3. Teaching the client coping strategies to use both in high-risk situations and after lapses to prevent relapse.

While internal self-management strategies are important to stop the offending behavior (Pithers, 1990), it is also useful to include measures of external control, such as involving the client's family and coworkers (Maletzky, 1997). Therapy sessions often involve reviewing the situations the client found difficult and helping him engage in problem-solving to alleviate the problem. Maletzky (1997) warns that this process must be engaged in repeatedly so that it becomes a behavioral habit rather than an intellectual process. Relapse prevention can be conducted in either group or individual format.

IS TREATMENT OF SEX OFFENDERS EFFECTIVE?

Sex offenders have historically been viewed as difficult to treat, if not hopeless. This skepticism is based in part on the denial that is common among sex offenders and the prevailing belief that sexual preferences cannot be altered. There is also a common assumption that a person who has committed one sexual offense will invariably commit others. A number of studies give us reason to reconsider these notions. Overall recidivism rates do increase with the length of follow-up, but they are not 100 percent; in fact, one review concluded that 55 percent of sex offenders recidivate. Hanson and Bussière (1998), in their analysis of sexual offender recidivism studies, found that on average, the sexual offense recidivism rate is low (13.4 percent), with rapists having a higher average rate of recidivism than child molesters. Treatment

does seem to help some offenders. Hall (1995) concluded that treatment produces a 30 percent reduction in recidivism. Treatment outcome rates, on a short-term basis, are significantly better than no treatment at all and often rival the outcome rates for many other *DSM-IV-TR* psychiatric disorders (Feierman & Feierman, 2000).

Treatment plans should be tailored to the individual offender based on his need and risk level in order to increase his chances of overcoming his problems. Anyone working with sexual offenders should be prepared to be patient and flexible because many offenders do not wish to change but are forced to do so as a result of external pressure, usually a family member or the legal system. Laws (2003) stated that resistance should be viewed as a phase of treatment rather than an obstacle. Therapists must help clients work through the resistance, or precontemplation, phase before contemplating actual change (Laws, 2003).

In most cases, any treatment technique in isolation will be ineffective and a combination of procedures is likely to be needed (Hawton, 1983). The client's unique behavioral excesses and deficits should guide the therapist in choosing which techniques to use. Assessment should include the presence of disinhibiting factors such as alcohol or drugs, stress or emotional states, the use of pornography, and the role of atypical fantasies in the commission of a sexual offense (Finkelhor, 1984). Treatment for sex offenders should generally cover a variety of issues such as distorted cognitions, sexual issues, victim empathy, social skills training, problem-solving, life skills, stress management, and relapse prevention training (Hudson, Marshall, Ward, Johnston, & Jones, 1995). We concur with Grossman, Martis, and Fichtner (1999), who concluded, "What emerges from the literature is a strong suggestion that a comprehensive cognitive-behavioral program should involve components that reduce atypical arousal while increasing appropriate arousal and should include cognitive restructuring, social skills training, victim empathy awareness, and relapse prevention" (p. 360). The research assessing the treatment of sex offenders demonstrates that treatment does seem to reduce recidivism among sexual offenders.

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8

The Management of Sex Offenders: Introducing a Good Lives Approach

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Sexual offending is a socially significant and complex problem that has become the focus of intensive research and treatment efforts over the last thirty years. The public's anxiety and concern about the release of sex offenders to the community is understandable; sexual offending affects some of the most vulnerable members of our community, and is inherently difficult to understand. What would make an adult sexually interested in a child, or lead one adult to force another to have sex against his/her will? Ideas that those who commit sexual crimes are "sick" or "evil" and "untreatable" are reinforced by media portrayals of sensational albeit rare cases of sexual murder. No matter how explanations for sexual offending are cast, the resulting fear and disgust heightens public pressure to defer the release of offenders, or to guarantee that release is conditional on "curing" the underlying pathology.

These concerns have deterred corrective efforts away from considering offenders' welfare, and have ensured that public safety drives treatment efforts with sex offenders in much of the Western world (i.e., Canada, UK, Australia, New Zealand). Thus, the goal of treatment is simply to reduce sex offender risk and minimize the harm caused by offenders. This perspective toward sex offender treatment is called the *risk management* approach or *Risk-Need Model* (RNM). Within this approach, the main aim of treatment is to identify deficits or problems with the offenders' psychological and behavioral functioning that are commonly associated with sexual offending (e.g., offense-supportive beliefs or deviant sexual arousal) and to eliminate, reduce, or contain the extent of

these problems to control and reduce reoffending. In summary, the primary aim of treatment is to make society a safer place by reducing the occurrence of future sexual offenses in those sex offenders who are returning to the community.

Efforts over the last two to three decades have shown that sexual offender programs can be successfully implemented within the prison and community, and that the predominant risk management approach to sexual offender treatment does appreciably reduce future sexual offending (Hollin, 1999; Marshall & McGuire, 2003). For example, a recent review of treatment outcome studies found that treatments with a risk management approach (i.e., cognitive-behavior and relapse prevention programs) reduced sexual reoffending from 17.4 percent to 9.9 percent in treated sexual offenders (Hanson et al., 2002). The same review found that treatment also reduced the nonsexual reoffending rate from 51 percent to 32 percent (Hanson et al., 2002). The magnitude of these reductions in reoffending are at the more effective end of the spectrum compared to treatment programs for nonsexual (general) offenders, are roughly similar to the overall effects of psychotherapy (when all forms are combined together), and are larger than many of the effects found for established medical treatments, such as bypass surgery and the use of aspirin to reduce myocardial infarction (Marshall & McGuire, 2003). Hence, in many regards, current treatment approaches for sex offenders represent a significant achievement and can be considered a success.

Despite the effectiveness of the risk management approach to sex offender treatment, we believe this approach has a number of flaws that mean it may not be the most effective means we have of managing sexual offenders in the community. The main criticism is that risk management exclusively focuses on risk, or offending, and gives insufficient attention to the factors associated with a healthy law-abiding life. In short, we think the effectiveness of sex offender treatment can be improved by incorporating an explicit focus on offender well-being in treatment. Thus, in this chapter, we advocate for a dual focus on risk management and offender well-being, where offenders learn to manage their risk of reoffending within the broader goal of learning to lead a better kind of life. A better kind of life is one in which an individual meets his needs in socially acceptable and personally satisfying ways. It is our contention that embedding the task of achieving and maintaining behavior change within a model of personal well-being, identity, and lifestyle makes treatment more meaningful for offenders, optimizing their motivation to "buy in" to, and benefit from, the treatment opportunities offered. Thus, by enhancing treatment in these ways we believe that the effectiveness of sex offender treatment can be further improved. Ultimately, improving the effectiveness of treatment leads to fewer sexual crimes and increased public safety.

In this chapter, we first describe the fundamental tenets of the risk management approach to sex offender treatment, how treatment works when based purely on a risk management model, and some of the issues we think are

problematic for effective sex offender management using this approach. Second, we describe the relatively new approach to sex offender management called the Good Lives Model (GLM) and describe how the GLM incorporates the risk management principles while also adopting a much more holistic approach to sex offender management. Finally, we outline how treatment could be implemented using the GLM and draw main conclusions about this approach and its strengths. We note from the outset that we use male pronouns when referring to offenders. Although there is increasing recognition of women as perpetrators, by far the vast majority of sexual offenses are committed by men, and almost all research has been conducted with male offenders.

RISK MANAGEMENT AND THE RISK-NEED MODEL

The risk management approach to sex offender treatment has been the dominant perspective for many years now and represents a substantial and impressive achievement (see Andrews & Bonta, 2003; Gendreau, 1996; McGuire, 2002). The risk management approach relies on the following basic ideas: Criminal behavior or offending is associated with a number of risk factors. A risk factor is anything that, when measured at time one (e.g., during imprisonment), predicts the occurrence of offending at time two (e.g., five years after release from prison). Thus, reducing or eliminating risk factors linked to offending will lead to reductions in future offending.

Of course, many of the factors known to predict future offending are related to past offending. For example, the age that offending began, the number of past offenses, and age at first imprisonment all reliably predict involvement in future offending, including sexual offending (e.g., Gendreau, Little, & Goggin, 1996; Hanson & Bussière, 1998). Such historical or *static risks* are largely unchangeable and so their value is in helping predict offending over time. In contrast, other factors known to predict offending are related to situational and psychological factors. For example, holding values or beliefs that crime is justified and causes little harm is a *psychological* risk factor correlated with future offending, while having easy access to criminal opportunities such as unsupervised access to victims is a *situational* risk factor (Andrews & Bonta, 2003; Hanson & Harris, 2000). Unlike unchangeable static risk factors, psychological and situational risk factors can change over time. Hence they are called *dynamic risk factors*. According to the risk management approach, reducing or eliminating dynamic risk factors will lead to reductions in future offending. The value of dynamic risk factors therefore is that they become the clinical problems that should be explicitly targeted in treatment to reduce likelihood of future reoffending.

Extensive effort has gone into identifying the factors that can reliably predict future sexual recidivism. Until recently, much of this research has focused on static risk factors resulting in greater agreement about the static

Static Risk Factors

Demographic Factors

- Younger age
- Marital status (single)

General Criminality

- Total number of prior offenses (any/nonsexual)

Sexual Criminal History

- Number of prior sexual offenses
- Stranger victims (versus acquaintance)
- Extrafamilial victims (versus related victims)
- Early age of onset of sexual offending
- Male child victim
- Diverse sexual crimes

Adverse childhood environment

- Separation from biological parents

Dynamic/Psychological Risk Factors

Sexual Deviancy

- Any deviant sexual interest
- Sexual interest in children
- Paraphilic interests (e.g., exhibitionism, voyeurism, cross-dressing)
- Sexual preoccupations (high rates of sexual interests & activities, paraphilic or nonparaphilic)
- High (feminine) scores on MMPI Masculinity-Femininity Scale

Antisocial Orientation

- Antisocial/psychopathic personality disorder
- Antisocial traits, such as general self-regulation problems, impulsivity, poor problem-solving, employment instability, any substance abuse, intoxicated during offense, procriminal attitudes, hostility
- History of rule violation, including noncompliance with supervision & violation of conditional release

Intimacy Deficits

- Emotional identification with children
- Lack of intimate relationship
- Conflicts in intimate relationships

Sexual Attitudes

- Attitudes tolerant of sexual crime

Figure 8.1. Risk factors for sexual offense recidivism.

Sources: Hanson & Bussière (1998) and Hanson & Morton-Bourgon (2004).

(historical) risk factors for sexual recidivism than the dynamic (psychological) risk factors. Figure 8.1 summarizes the static and dynamic risk factors identified in the two most recent and complementary meta-analyses on sexual recidivism (see Hanson & Bussière, 1998; Hanson & Morton-Bourgon, 2004). Of note, the risk factors presented are those that were consistently associated with sexual recidivism across several studies (each risk factor is aggregated across three to thirty-one studies). Also, the risk predictors vary in their predictive strength; some are more strongly associated with future sexual recidivism than others. For example, sexual deviancy and antisocial/psychopathic personality were found to be stronger predictors of sexual recidivism than intimacy deficits or adverse childhood environment.

Research has only more recently begun to address the situational or acute risk factors for sexual recidivism. Results from the most comprehensive study of acute risk factors are presented in Figure 8.2 (see Hanson & Harris, 2000). Situational or acute risk factors are usually not predictive of sexual recidivism over the longer term, but instead they indicate when a particular offender is more likely to reoffend. For example, personal distress variables, such as negative mood, show no or only a very weak association with future sexual recidivism in studies of large groups of sexual offenders (Hanson & Bussière, 1998; Hanson & Morton-Bourgon, 2004), but in those offenders who do recidivate, sexually negative mood is often reported in the relapse process. One way of understanding this fact is that negative mood *per se* does not predict future sexual recidivism across offenders but the way that negative mood is managed by offenders (e.g., regulating mood using deviant sexual fantasy and/or masturbation), particularly by those at higher risk for reoffending, is linked to sexual recidivism (Hanson & Morton-Bourgon, 2004).

Risk management has become synonymous with the Risk-Need approach. According to the Risk-Need Model (RNM), effective treatment depends upon classifying offenders according to three main principles: Risk, Need, and Responsivity (Andrews & Bonta, 2003). First, the *risk principle* states that offenders' risk of reoffending should be assessed and that the intensity of treatment delivered to the offender should match this assessed level of risk. Thus, according to the risk principle, offenders with highest risk should receive the most intense treatment (i.e., the largest "dose"), whereas offenders with lowest risk should receive minimal or no treatment. In practice, risk assessment instruments combine a number of risk factors to produce an estimate of risk. Thus, the more risk factors present for an offender, the higher the level of assessed risk and in turn the greater the intensity of recommended treatment.

Second, the *need principle* specifies that treatment should primarily target dynamic risk factors (i.e., those factors potentially amenable to change) associated with risk of future offending. In the RNM, psychological and situational dynamic risk factors are relabeled as *criminogenic needs*.[1] Examples of sexual offending criminogenic needs are deviant sexual arousal, intimacy

Self-management

- Victim access
- Sees self as no risk to recidivate

Attitudes

- Low remorse/victim blaming

Psychological Symptoms

- Anger
- Negative mood
- Psychiatric symptoms
- General hygiene problems

Drug Use

- Substance abuse
- Started anti-androgens (sex drive reduction medication) the month before recidivating

Social Adjustment

- General social problems

Cooperation with Supervision

- Overall cooperation with supervision (low)
- Disengaged from supervision
- Manipulative
- No-show/late for appointments

Figure 8.2. Acute (situational) risk factors for sexual offense recidivism.

Source: Hanson & Harris (2000).

deficits and loneliness, and problems with emotional regulation (Hanson & Harris, 2000). In contrast, other clinical problems with weak or nonexistent statistical relationships to reoffending are labeled *noncriminogenic needs*. Examples of noncriminogenic needs are low self-esteem, anxiety, and personal distress (Andrews & Bonta, 2003). Noncriminogenic needs are deemed largely irrelevant as primary treatment targets because changing them is not linked to reductions in reoffending (Ward & Stewart, 2003).

In practice, the RNM is often accompanied by a *relapse prevention* treatment framework or component. Relapse prevention teaches offenders to recognize the situational and psychological dynamic risk factors associated with past offending, such as being alone with children or feeling very down. Offenders are then taught how best to avoid or respond to these risk situations and psychological states so as to minimize their chances of reoffending (Ward & Hudson, 2000).

Third, the *responsivity principle* is concerned with a program's ability to reach and make sense to the offenders for whom it was designed. In other words, program delivery should be matched to offenders' characteristics to maximize their absorption of the program material so they then can make the desired changes to stop offending. Potential treatment responsivity barriers arise from offenders' characteristics or program characteristics (either individually or in combination). For example, an offender may not think his offending is wrong or may perceive little benefit from participating in a program (i.e., the offender has low treatment motivation). Alternatively, an offender may be keen for treatment but struggle to understand and apply the program material because the program pitches the material too high for his individual ability (i.e., the offender has a low IQ and/or the program emphasizes cognitive and verbal skills), or is delivered by therapists who have little understanding of the offender's cultural background (i.e., the program is culturally mismatched with the offender's ethnicity and culture).

In practice, the responsivity principle is implemented using treatment programs that favor a cognitive-behavioral, skill-oriented delivery style (Andrews & Bonta, 2003). Such programs are highly structured, directive, and combine a psycho-educational approach with a skills development one. In addition, some programs address offenders' unique responsivity issues, such as social anxiety, depression, and so on, by providing prior or adjunct individual therapy and/or by modifying the standardized program to take into account such issues. Some responsivity barriers are also noncriminogenic needs (i.e., clinical problems experienced by the offender that have a weak or nonexistent statistical relationship with reoffending). Thus, if noncriminogenic needs moderate the effectiveness of treatment then they can be targeted to the extent necessary to assist the offender to engage in and benefit from treatment.

In addition to the basic Risk-Need-Responsivity principles described above, the role of *assessment integrity* and *professional discretion* are highlighted by Andrews and Bonta (2003). *Assessment integrity* requires that both the assessment approaches underpinning the classification decisions and the principles informing the classification decisions are carried out as they are prescribed. In contrast, *professional discretion* requires that treatment providers be flexible and use their clinical judgment to override the three principles (i.e., Risk, Need, and Responsivity) if warranted under certain circumstances. Clearly, agencies and clinicians need to arrive at a balance between implementing the RNM rigidly as designed and exercising flexibility for individual circumstances and differences.

In summary, the RNM makes a number of basic claims about how to maximize the effectiveness of treatment. First, risk assessment should drive treatment dosage. The more risk factors present for any offender, generally the greater that offender's risk of reoffending and, in turn, the greater the intensity of recommended treatment. Second, matching risk and treatment dosage results in better outcomes, that is, lower recidivism. The implications are that best outcomes are achieved by channeling treatment resources into higher-risk

offenders (i.e., those with the most risk factors). Conversely, giving low-risk offenders high levels of treatment is wasteful and may actually *increase* their chances of reoffending (Andrews & Bonta, 2003). Third, treatment that directly targets criminogenic needs or dynamic risk factors rather than other clinical problems (i.e., noncriminogenic needs) will result in better outcomes. Fourth, offenders' other clinical problems or characteristics that affect their responsiveness to treatment should be addressed to the extent necessary for the offender to engage and learn in the program.

RNM Sexual Offender Treatment

As we alluded to earlier, the RNM of sex offender treatment is dominated by relapse prevention treatment approaches. Relapse prevention was first developed by Marlatt and Gordon (1985) to describe the process of relapse in individuals suffering from serious alcohol problems. The approach assisted recovering alcohol abusers to recognize the factors that trigger abstinence failure and promoted the use of cognitive-behavioral methods for responding adaptively to those triggers. Five years later, the relapse prevention model was adapted to describe the sexual offense relapse process (Pithers, 1990) and has remained the dominant approach to sexual offender treatment ever since (Laws, 2000; Ward & Hudson, 2000).

Relapse prevention with sex offenders has two main goals. The first is to teach individuals to recognize the situational and psychological risk factors associated with their offending (Ward & Hudson, 2000). Offenders are typically taught to identify their *offense cycle or process*; that is, the sequence of psychological and situational risk factors or decision points that predisposed and immediately precipitated their offending. The offense cycle is broken into various phases to enable the easy identification of risk factors. Typical phases include: background problems and lifestyle issues (i.e., offense precursors), offense planning, entering high-risk situations, offending, and postoffense evaluations. In this way, the offender is taught how problems and decisions at one point in time or in one aspect of his life contribute to offending occurring at a later point. To illustrate, an offender might identify how his loneliness and social isolation was a background problem (i.e., *offense precursor*) that created an incentive for seeking out the company of children (i.e., *offense planning*). Socializing with children would be labeled a *high-risk situation* because sense of self-control over deviant sexual thoughts and feelings may become compromised in children's company. All aspects of the offender's sexually abusive behavior, whether officially prosecuted or not, would be included in the *offending phase* (e.g., inappropriate touching or fondling a fully clothed child). Finally, *post-offense evaluations* that either exacerbated background problems (e.g., feeling guilty and further isolating himself) or diminished offending responsibility (e.g., rationalizing that the offense was accidental) are highlighted as perpetuating the cycle of offending.

The second major goal of relapse prevention is to teach offenders coping skills to more adaptively respond to their risk factors and therefore to lessen the chances of reoffending. Treatment techniques typically include psychoeducation and cognitive-behavioral methods organized into treatment modules. Each treatment module is usually linked to different aspects of the offenders' offense cycle; thus the offense cycle acts as a continuous thread, through which treatment components are planned and integrated.

A useful illustration of a state-of-the-art RNM sexual offender program is the Kia Marama child sexual offender treatment program that operates in New Zealand (Ward, 2003). Although delivered only to child sexual offenders, this type of program is commonly delivered to both child and adult sexual offenders in other countries. In brief, the Kia Marama program is thirty-three weeks long and provided to groups of eight to ten men on three days per week for up to three hours per day. Where individual therapy is provided, the primary purpose is to enable a participant to engage in the group program. The program comprises discrete modules that are sequenced accordingly: norm building; understanding offending (i.e., the offense cycle); arousal reconditioning; victim impact and empathy; mood management; relationship skills; and relapse prevention. A brief description of each component follows.

Norm Building

The main aims are to establish the social rules for the group, encourage motivation to engage in the program, and encourage accepting personal responsibility for offending and offense-related risk factors. The treatment philosophy is explained; the men are told that the program does not aim to cure them but rather to teach them to control their behavior through understanding their offending and learning ways to break the offense pattern. Each group generates group rules that will assist them to function effectively to achieve the program aim. Rules typically cover confidentiality (prohibiting the discussion of issues raised in the group with people outside the group), communication procedures (e.g., using "I" statements, turn-taking), the importance of accepting responsibility for one's own issues, and challenging other group members constructively and assertively (rather than aggressively or colluding).

Understanding Offending

The main aims are for each man to fully understand his offense cycle and the role of his various risk factors, and to understand how distorted thinking has facilitated his cycle. Men are encouraged to develop an understanding of how background factors (e.g., low mood, lifestyle imbalances,[2] sexual difficulties, intimacy problems) set the scene for their own offending. The men are then encouraged to be honest about the steps taken to set up an opportunity for offending, whether involving explicit planning or unintentional choices,

and to be honest about the nature of their offending. Men are assisted to see how their own particular postoffense reactions added to background difficulties and perpetuated reoffending risk.

Arousal Reconditioning

This module focuses on the role of deviant arousal in offending and teaches techniques to reduce deviant sexual interest. Inappropriate or deviant sexual arousal to children is hypothesized to be an important factor causing and maintaining sexual offending (Marshall & Barbaree, 1990). In essence, the pairing of orgasm to imagined or real sexual contact with children is thought to condition offenders' sexual responsiveness to children. Thus, the arousal reconditioning module aims to teach each man techniques to *unpair* or recondition deviant sexual arousal patterns. Men are taught imaginal (or covert) sensitization, a technique that involves pairing deviant sexual arousal (and other early aspects of the offense cycle) with the negative consequences of apprehension in the offenders' imagination and with an alternate escape script. Directed masturbation is another technique used that attempts to strengthen sexual arousal to appropriate images and thoughts, while satiation procedures attempt to reduce arousal to deviant sexual fantasies.

Victim Impact and Empathy

A lack of empathic concern for victims and an inability or refusal to seriously consider the traumatic effects of sexual abuse is a common feature of many sex offenders. This pattern of empathy deficit is thought to reflect the dysfunctional and distorted thinking patterns of the offenders, rather than a general deficiency in capacity to be empathic (although for some offenders this can be the case) (Ward, Keenan, & Hudson, 2000). This module aims to enhance each man's understanding of the negative impact of his offending and promote normal empathy so he is less willing to inflict that harm again. A range of psycho-education tasks are used to teach men about the negative effects of sexual abuse in general, and each man is required to recognize and acknowledge the effects for his own victims in a written task and role-plays.

Mood Management

The mood management module aims to teach knowledge and skills to enhance emotion regulation. Men are taught to identify and distinguish a range of feelings that are commonly linked with offending, such as sadness, fear, and anger, and to focus on those feelings associated with their risk of reoffending. A range of cognitive-behavior techniques used in mainstream mood or emotion management are taught in the module, the main aim being to help men avoid making emotion-focused snap decisions.

Relationships

In this module, men consider the importance of intimate relationships and the ways that they can enhance appropriate intimate relationships through a variety of psycho-educational tasks. Communication and problem-solving techniques are taught. Education about healthy sexuality and sexual dysfunction is also included.

Relapse Prevention

The final module is an extension of the relapse prevention focus that has run throughout the program. By this stage, men should have learned to self-monitor their risk factors and to use a range of cognitive and behavioral techniques to respond more effectively when risk factors emerge or are operating. Particular emphasis is placed on "breaking the cycle" as early as possible to ensure that the risk of reoffending is always minimized. The men present a revised understanding of their offense cycle in the form of a personal statement. Men are encouraged to understand that risk management incorporates both an internal risk management component (i.e., internal self-monitoring and coping skills) and an external risk management component that involves external monitoring and support from prosocial family and friends who are prepared to help him achieve his goal of avoiding reoffending. Thus, in his personal statement, each man is required to link each of his risk factors to the internal and external risk management strategies that are designed to reduce risk.

Reintegration Component

A reintegration component runs alongside the group program that focuses on each man's release planning and strengthens his proposed support network in the community. Prosocial support people (e.g., professionals, family, and friends) are identified by program staff together with the man, and these support people are informed about the man's participation and progress in treatment. In the latter stages of the program, reintegration meetings are typically held that involve the man and his support network. In these meetings the man presents and discusses his offense pattern, relapse prevention, and release plan with his support network, who in turn evaluate and strengthen his understanding, relapse, and release plan. A key purpose of these reintegration meetings is to equip the man's support network to be able to externally monitor the man's progress in the community and to act to reduce or disclose high-risk situations when they emerge.

Although the various sexual offender programs differ in their organizing structure, a number of common features characterize the RNM of sexual offender treatment. First, the treatment emphasizes a formulation of the offense-related *risk* factors. Second, treatment is problem-focused. Third, treatment

mostly teaches skills to *avoid* or *reduce* risk factors/problems. More specifically, treatment teaches some eliminative skills and strategies (i.e., techniques to suppress the problem) and some constructional or prosocial skills and strategies (i.e., techniques that build new repertoires of behavior) (McGuire, 2002). However, the constructional or prosocial skills are often only broadly tied to adaptive or healthy outcomes rather than tied to individualized formulations of prosocial personal, interpersonal, or lifestyle goals. Fourth, all participants complete all modules and receive the same dose of each module irrespective of individual offense-related risk factors. For example, all men at Kia Marama complete the sexual arousal reconditioning module although not all child sexual offenders exhibit deviant sexual interest to children (Marshall, 1997). Fifth, treatment is predominantly, if not exclusively, group-based.

Problems with the RNM

The RNM is clearly effective, and has resulted in lower recidivism rates for sex offenders (Andrews & Bonta, 2003; Hanson et al., 2002). However, we believe the RNM and attendant relapse prevention approach have weaknesses that limit the ability to provide *meaningful* treatment, thus reducing the potential *effectiveness* of this treatment. An appropriate metaphor that captures our primary concern about the RNM is that of a pincushion. The RNM views sex offenders as compilations of disconnected risk factors or criminogenic needs (i.e., pins) that are all embedded within offenders' personalities, lifestyles, and cultural and social environments (i.e., the pincushion). The main aim of treatment is to remove as many of these risk factors or pins as possible so that overall level of risk is reduced. Unfortunately, the danger is that by primarily focusing treatment on the pins, rather than the pincushion (or whole person), individuals are viewed as disembodied bearers of risk rather than integrated agents or individuals.

Viewing risk factors independently, and in isolation from individuals' overall psychological and social functioning, fails to make clear how various risk factors relate to each other, why various risk factors exist and how they produce offending (i.e., the underlying causal mechanisms of the risk factor), or what psychological or social needs are being met by offending. Contemporary theory about the causes of sexual offending strongly suggests that there are various interrelationships between individual risk factors that operate to produce sexual offending (Beech & Ward, 2004). Simply viewing risk factors as independent entities conceals the more complex causal mechanisms that exist. Just like removing pins from a pincushion leaves gaps or holes where the pins once existed, removing risk factors from offenders' lives also runs the risk of leaving holes or gaps in the ways psychological and social needs were previously met. When offenders are treated *strictly* according to the RNM, the intermediate indicators of treatment success are significant reductions in the offenders' dynamic risk factors. For example, the offender shows less sexual interest in children, endorses fewer distorted beliefs about sex with children,

and shows knowledge of the situations he should avoid (i.e., relapse prevention). What may not be addressed or considered is whether the offender has other socially acceptable and personally satisfying ways of meeting the psychological and social needs once met by offending.

Like all humans, sex offenders have inherent human needs that require fulfillment (Deci & Ryan, 2000). In contrast to the pincushion model, we argue that the primary purpose of treatment should be to help offenders learn new ways of living that are both *socially acceptable* and *personally satisfying*. In essence, we believe that "good lives" and risk management are like two sides of the same coin. Focusing on a *good life* and offender well-being helps offenders learn what to do to have a satisfying life where offending is unnecessary. In turn, this approach results in the automatic reduction of risk factors that once flagged a good life problem.

A number of related concerns about the basic RNM stem from or have contributed to the development of the GLM that we present in the following section. First, many of the core treatment techniques using the RNM and attendant relapse prevention approach are framed in negative terms. For example, treatment focuses on *extinguishing* deviant sexual arousal, *eliminating* problematic attitudes, *reducing* cognitive distortions (i.e., biased thinking), and *avoiding* high-risk situations (e.g., avoiding use of substances or babysitting young children for friends). We think an important focus of treatment is on what kind of life to lead, not simply what problems or situations to avoid or reduce. Stopping offending involves replacing the old patterns associated with offending with new ways of living life. Broadly discussing or speculating about *alternative prosocial options* is insufficient. The best way to learn something new is to develop specific goals and focus attention on achieving those goals. We suggest that treatment should focus on building strengths or capabilities to enable offenders to meet their needs in acceptable ways, rather than promoting narrow skills purely for managing risk factors.

Second, human beings have a range of basic or inherent human needs that motivate us to pursue certain experiences and outcomes (Deci & Ryan, 2000). The categorization of needs into criminogenic and noncriminogenic does not reflect this kind of understanding of human need (Ward & Stewart, 2003). In the RNM "needs" are defined entirely by their statistical relationship to subsequent offending. No attempt is made to link an understanding of criminogenic needs to broader psychological models of human need and functioning. Although knowing the correlates or predictors of offending is relevant information, what is more important for treatment is why an offender sexually offended (i.e., knowing the cause, not just the symptoms).

In the GLM, criminogenic needs/dynamic risk factors are reframed as the internal or external obstacles that interfere with offenders' meeting their basic human needs in personally rewarding and socially acceptable ways. For example, offenders' antisocial attitudes are viewed as an internal obstacle to meeting the basic human need of intimacy in relationships. A common theme

to antisocial thinking is that other people are hostile and malevolent individuals who will hurt or take advantage if given the opportunity. Thus antisocial thinking creates suspicion, hostility, and mistrust that distorts the perception of interpersonal encounters and interferes with establishing the trusting and secure relationships that provide intimacy.

Fourth, the RNM gives no attention to the role of personal identity and personal agency in the change process. Although both are intuitively relevant, little research exists on the role of personal identity or personal agency in the process of desisting from offending. A notable exception is Maruna's (2001) study on the self-narratives of offenders who either desisted from crime or persisted with crime. The results revealed that desisters and persisters differed little in their personality traits, but substantially in their personal identities. *Persistent offenders* tended to live according to a *condemnation script* that emphasized little possibility for change and an impoverished sense of personal agency or self-efficacy. In contrast, *desisters* tended to live according to a *redemption script* where they viewed themselves as inherently good people whose pattern of crime resulted from negative external events and misdirected attempts to assert some form of power or control. For desisters, change involved giving new meaning to past events and gaining a sense of power and control over their destiny.

Fifth, the principle and issue of treatment responsivity is not sufficiently developed, a fact that is acknowledged also by advocates of the RNM (Andrews & Bonta, 2003; Ogloff & Davis, 2004). Treatment responsivity barriers can be both criminogenic needs (e.g., impulsivity and antisocial thinking) and noncriminogenic needs (e.g., low self-esteem, anxiety, and psychological distress). Although the responsivity principle affords a valid reason for addressing noncriminogenic needs, the primary focus of treatment always emphasizes criminogenic needs. Instead, we believe treatment engagement and effectiveness can be maximized if issues of emotional safety, self-esteem, and emotional well-being are explicitly considered and attended to throughout the treatment process.

Sixth, the RNM is silent on the crucial role of context or ecological variables in the process of rehabilitation. Offenders do not commit offenses in a vacuum and equally cannot be expected to make changes in a vacuum. Instead, each offender is embedded in a local social, cultural, personal, and environmental context. Offenders' contexts should be considered so that treatment focuses on the specific skills and resources necessary to function adaptively in those specific contexts. For example, an offender who returns to live in a rural area will face somewhat different barriers to social integration than an offender who returns to live in an urban area. Equally, the skills and resources relevant to individuals from various ethnic or socioeconomic groups are likely to be different in important ways. Tailoring the development of internal (e.g., skills, attitudes) and external resources (e.g., social supports, work opportunities) to each offender's distinct social contexts is likely to improve treatment relevance and effectiveness.

In summary, we acknowledge that the RNM and the attendant relapse prevention approach to sex offender treatment has a number of merits. Most notable is the RNM's strong empirical base and simplicity; programs consistent with the RNM are typically shown to reduce the rates of sexual reoffending. However, the RNM fails to conceptualize offending within broader psychological models of human needs, motivation, and functioning. Insufficient attention is focused on how to live a better kind of life in which inherent human needs are being met in personally satisfying and socially acceptable ways. Treatment needs are compartmentalized into those that lead to reductions in offending (i.e., criminogenic needs) and those that do not (i.e., responsivity barriers), whereas in practice, issues of motivation, personal agency, and personal identity are always present and influencing the change process. Explicitly recognizing the role of these influences and utilizing them in treatment affords an opportunity to make treatment not only more meaningful for offenders, but also more effective.

A POSITIVE APPROACH TO SEX OFFENDER MANAGEMENT: A GOOD LIVES MODEL

The Good Lives Model (GLM) is a capabilities- or strength-based treatment approach (Rapp, 1998). By being strength-based, we mean that the aim of treatment emphasizes equipping individuals with the necessary psychological and social conditions to achieve well-being in socially acceptable and personally satisfying ways. The aim of strength-based approaches is to enhance individuals' capacity to live meaningful, constructive, and ultimately happy lives so that they can desist from further offending (Ward, Polaschek, & Beech, 2005).

The GLM is underpinned by three related core ideas. First, humans are viewed as active, goal-seeking beings who constantly attempt to construct a sense of meaning and purpose in their lives. Second, all human actions reflect attempts to meet inherent human needs or *primary human goods* (Emmons, 1999; Ward, 2002). Primary human goods are actions, states of affairs, or experiences that are inherently beneficial to humans and are naturally sought out for their own intrinsic properties rather than as a means to some other end (Arnhart, 1998; Deci & Ryan, 2000; Emmons, 1999; Schmuck & Sheldon, 2001). Examples of primary human goods are autonomy, competence, and relatedness (Deci & Ryan, 2000). Third, instrumental or secondary goods provide the concrete means or strategies for achieving primary human goods. For example, being in a relationship provides an opportunity to obtain the primary human good of intimacy (a subclass of relatedness); intimacy is the experience of familiarity, closeness, and understanding necessary for optimum psychological functioning and well-being.

The pursuit and achievement of primary human goods is integral to individuals' sense of meaning and purpose in their life, and in turn their well-being. In other words, when individuals are able to secure the full range of primary

human goods (i.e., meet their inherent human needs), their well-being flourishes. For such individuals their good lives plan is working well. However, when individuals are unable to secure a number of primary human goods, constructing meaningful and purposeful lives is frustrated and well-being is compromised; the good lives plan is dysfunctional. According to the GLM, the presence of dynamic risk factors simply alerts clinicians to problems in the way offenders are seeking to achieve primary human goods and construct meaningful and purposeful lives. Different categories of risk factors point to problems in the pursuit of different types of primary human goods. For example, social isolation indicates difficulties in the ways the goods of intimacy and community are sought and may indicate social skills deficits and/or lack of social opportunities and resources.

Research findings from a number of disciplines (i.e., anthropology, evolutionary theory, philosophy, practical ethics, psychology, social policy, and social science) appear to converge on nine types of primary goods (see Arnhart, 1998; Aspinwall & Staudinger, 2003; Cummins, 1996; Emmons, 1999; Linley & Joseph, 2004; Murphy, 2001; Nussbaum, 2000; Rescher, 1990). No one of these goods is "better" to attain than others; rather, all in some form or another are necessary for a fulfilling life. The main categories of primary human goods sought are *life* (i.e., healthy living, optimal physical functioning, sexual satisfaction), *knowledge* (i.e., wisdom and information), *excellence in work and play* (i.e., mastery experiences), *excellence in agency* (i.e., autonomy, self-directedness), *inner peace* (i.e., freedom from emotional turmoil and stress), *relatedness* (i.e., intimate, family, romantic, and community relationships), *spirituality* (i.e., finding meaning and purpose in life), *happiness*, and *creativity*. As a comprehensive list, these nine primary human goods are, of course, multifaceted and may be broken down into related subclusters of goods. For example, the primary good of relatedness may be further subdivided into the goods of intimacy, friendship, support, caring, reliability, honesty, and so on. Table 8.1 summarizes these primary human goods and outlines potential secondary (instrumental) human goods that individuals may use to secure their primary human goods.

Individuals are unique in the priorities or weight they give to different types of goods due to cultural context, personal preferences, strengths, and opportunities. For example, an individual from a culture that places greater social value on *relatedness* than *excellence in agency* per se may internalize that value and prioritize pursuit of group mastery over individual mastery (i.e., greater well-being is achieved when the group does well rather than when the individual does well). Thus, all individuals have their own unique *good lives plan* that reflects the priority given to the various primary human goods and the secondary goods or strategies chosen to achieve the primary goods. In essence, an individual's good lives plan reflects an individual's *personal identity*; it is like an internalized metascript that guides the kind of life a person seeks and the type of person he tries to be.

A good life is attainable when an individual possesses both the *internal* skills and capabilities and *external* opportunities and supports to achieve primary

Table 8.1. Primary Human Goods and Potential Secondary Goods

Primary Goods	*Secondary Goods (examples)*
Life	
• Healthy living	• Leisure & sporting involvement
• Optimal physical functioning	• Attention to diet
• Sexual satisfaction	• Maintain intimate relationship
Knowledge	
• Wisdom	• Work, career
• Information	• Education
	• Reading
Excellence in work & play	
• Mastery experiences	• Involvement in work, career, sport, hobbies, interests
	• Engage in training, mentoring program
Excellence in agency	
• Autonomy	• Achieve financial independence
• Self-directedness	• Seek employment that matches desire for autonomy/direction
Inner peace	
• Freedom from emotional turmoil and stress	• Achieve lifestyle balance
	• Maintain positive relationships
	• Learn emotional regulation skills
	• Physical exercise
Relatedness	
• Intimate	• Work on building intimacy within relationships
• Family	
• Romantic	• Invest in establishing & maintaining a romantic relationship
• Community	
	• Have children, be an active parent
	• Involvement in community groups & activities
Spirituality	
• Meaning & purpose in life	• Practice religious beliefs
	• Live life according to values
	• Engage in cherished life projects
Happiness	• Engage in relationships & activities that bring joy & pleasure
Creativity	• Work, parenting, music, art, gardening

human goods in a socially acceptable manner. For a fulfilling and balanced life, it is important that the full range of primary goods is attained within an individual's lifestyle. In the case of individuals who offend, problems reside in four major types of difficulties: (1) problems in the *means* used to secure goods (e.g., seeking intimacy through child sexual abuse); (2) a lack of *scope* or variety in the goods

being sought (e.g., devaluing relatedness or intimacy resulting in a lack of socially acceptable means to achieve sexual satisfaction); (3) the presence of *conflict* among the goods sought (e.g., wanting both autonomy of sexual freedom and intimacy within the same relationship); and (4) a lack of skills or capacity to adapt the good sought or means chosen to changes in circumstances (e.g., impulsive decision making). To illustrate, an offender might achieve a sense of intimacy and mastery in a sexual relationship with a child. Clearly, sexual abuse is an inappropriate way of seeking intimacy and mastery and is unlikely to result in higher levels of well-being. However, although the activity is harmful, the drive for a sense of intimacy and mastery is a common human pursuit.

In summary, the GLM proposes that humans pursue primary human goods because such goods are inherently beneficial and linked to our sense of meaning, purpose, and well-being. Individuals each have a unique *good lives plan* that reflects their personal identity and is influenced by individual preferences, strengths, cultural context, and opportunities. No one good lives plan is supreme (Den Uyl, 1991; Rasmussen, 1999), so primary human goods should not be combined in exactly the same way for all individuals, although all should be present. Put another way, humans all need the essential nutrients for a healthy diet and optimal functioning, yet each individual obtains these through different dietary preferences. When a person sexually offends, the GLM proposes that there is a problem in his good lives plan. That is, there are problems in the way he is pursuing his primary human goods and seeking to meet inherent human needs (e.g., the plan may lack sufficient scope, include inappropriate means, lack coherence, or the offender may have planning deficits). Within the GLM, dynamic risk factors simply inform the therapist that problems exist and steer the therapist toward an understanding of the nature of these problems.

IMPLEMENTING THE GLM

We propose the GLM and Risk-Need approaches should be combined to provide a more sophisticated treatment for sexual offenders with a dual focus on attending to optimal human functioning and individual risk factors. Here, risk factors are used as markers of specific problems in an offender's good lives plan, providing a rehabilitation framework that deals more systematically with motivation, the functions of offending, and treatment responsivity. According to the GLM, treatment should proceed on the assumption that effective rehabilitation requires acquisition of the competencies and external supports necessary to achieve a better good lives plan. Thus, the goal of treatment should be to enhance human well-being (i.e., good lives) as this will reduce risk.

A treatment plan should be explicitly constructed in the form of a good lives formulation. The good lives formulation should take into account offenders' preferences, strengths, primary goods, and relevant environments when specifying the internal conditions (e.g., competencies, beliefs) and

external conditions (e.g., opportunities, social environment) required to achieve his primary goods. Tinkering with standard treatment plans is insufficient: the good lives formulation should be explicit, specific, individualized, and centered around an offender's personal identity, primary goods, and lifestyle (see Ward, Mann, & Gannon, 2005 for a detailed discussion).

Conceptualizing criminogenic needs (i.e., dynamic risk factors) as internal or external obstacles that frustrate or block the achievement of primary human goods integrates the GLM and the RNM. In other words, criminogenic needs indicate some form of impairment in the good lives plan; either a healthy good lives plan was never present or a healthy good lives plan was present but was compromised in some way. There is likely to be common relationships between different types of risk factors and distinct primary human goods. For example, deviant sexual interests indicate that some of the necessary internal and external conditions for healthy sexuality and relationships are distorted or missing in some way. Internal obstacles may include deviant sexual scripts, inappropriate sexual knowledge, or fears concerning intimacy. External obstacles may include social isolation or physical characteristics/disability that compromise relationship opportunities.

Risk factors and appropriate self-management are not ignored; instead, they are explicitly contextualized as part of achieving the individual's good lives plan. For example, most child molesters will still need to avoid working with children or adhere to very strict conditions placed around such work. Although this type of risk management may be necessary for reduced reoffending it is not sufficient for long-term desistence. Instead, long-term desistance from offending appears to result from the process of an individual constructing and achieving a healthy good lives plan that is reflected in his or her personal identity and lifestyle. In the following sections, we sketch out the main foundations of the GLM of sexual offender assessment and treatment. The interested reader, however, can find more detailed information on GLM treatment in Ward, Mann, and Gannon, 2005 or Ward and Mann, 2004.

GLM Assessment

The GLM approach to assessment has distinctive content and style dimensions. As described earlier, the traditional RNM focuses assessment on eliciting offenders' personal history relevant to offending, offenders' understanding of their offending, and measuring a range of potential risk factors with psychological tests. In addition to these traditional foci, the GLM assessment model places equal importance on discovering the offenders' own goals, life priorities, strengths, achievements, and aims for their intervention. The purpose is to understand how clients conceptualize their own lives, and how they prioritize and operationalize their range of primary human goods. The result is a balance between assessment of risk and vulnerability, and assessment of client strengths and personal identity.

The GLM requires a particular, collaborative style. If the primary purpose of assessment is to establish the client's risk for reoffending on society's behalf, it is likely the client has little reason to engage openly. Instead, the contingencies favor trying to impress the assessor as being low risk by concealing or minimizing offending and the related risk areas. However, if the interests of the client are given explicit recognition and value, there is a greater likelihood that the client can see personal benefits to engaging more fully in the assessment process. The latter approach reflects the aims of the GLM assessment model. A collaborative approach to assessment can be facilitated by presenting evidence to the client as a collaborative investigation. Results of assessment procedures, such as phallometric testing (i.e., physiological testing of sexual response patterns) and psychological testing, can be fed back to the client and the client can be asked to help draw conclusions from them.

Perhaps most important to the collaborative assessment approach advocated by the GLM is that strengths and life achievements are considered to be as important as offense-related needs in determining treatment plans and prognosis. Mann and Shingler (2001) recently produced a set of guidelines for collaborative risk assessment to help reconcile the goals of the assessor with the goals of the client. The early indicators are that using collaborative risk assessment strategies greatly improves the relationship between therapy staff and clients. More impressively, there is a subsequent positive effect on motivation and treatment retention.

Taking direct interest in clients' conceptualization of their lives, priorities, and desires for the future in a respectful and collaborative way sets the scene for developing treatment plans where potential benefits are more apparent. For example, undertaking extensive treatment to learn what went wrong and how to avoid or cope better in risky situations so as to reduce reoffending may seem necessary but not particularly appealing. In fact, it may seem an extension of the punishment given for the crime. In contrast, undertaking extensive treatment to realize goals, promote well-being, and live a satisfying life free from further offending is a more attractive option and less likely to conflict with the individual's goals. The assessment process is therefore a potential motivational intervention in its own right, the outcome of which is an individual beginning treatment with a clear sense of how the treatment is relevant and why it is worthwhile.

GLM Treatment

A GLM approach to sex offender treatment is informed by an explicit and particular understanding of sex offenders and the therapeutic task. First, the GLM acknowledges that a large proportion of sex offenders have developmental histories marked by a diversity of adversarial experiences. These adversarial experiences may involve negative developmental experiences (e.g., physical or sexual abuse, instability in the family or caregiver arrangements,

and so on) and/or may involve experiences that were missing in development (e.g., there was emotional neglect, insecure relationships, lack of positive personal and interpersonal modeling, and so on). Hence, sex offenders are seen as individuals who have lacked the opportunity and resources necessary to develop an adequate good lives plan. Second, sexual offending represents an attempt to achieve human goods that are desired and normative, but where the skills or capabilities necessary to achieve them are lacking. Third, the absence or problems in achieving some primary human goods appear to be more strongly related to sexual offending than others. These goods are agency (i.e., autonomy and self-directedness), inner peace (i.e., freedom from emotional turmoil and stress), and relatedness (i.e., including intimate, romantic, family, and community) (Ward & Mann, 2004). Fourth, reducing the risk of sexual reoffending is achieved by assisting sexual offenders to develop the skills and capabilities necessary to achieve the full range of primary human goods, with particular emphasis on agency, inner peace, and relatedness. Fifth, treatment is seen as an activity that adds to a sexual offender's repertoire of personal functioning, rather than being an activity that removes or manages a problem. Restricting activities that are highly related to sexual offending or offense-related problems may be necessary but should not be the primary focus of treatment. Instead, the goal should be to assist clients to live as normal a life as possible, where restrictions are only used when necessary.

The aims of GLM treatment are always specified as approach goals (Emmons, 1999; Mann, 2000; Mann, Webster, Schofield, & Marshall, 2004). Approach goals involve defining what individuals will achieve and gain, in contrast to avoidance goals that specify what will be avoided or ceased. Specifying the aims of treatment as approach goals has several advantages. For example, goals that are life-enhancing rather than problem-avoiding are more likely to create intrinsic motivation for change rather than the motivation for change being extrinsically driven (i.e., to avoid trouble with the law). Goals that focus on what the offender wants to obtain in life are more in line with what offenders want to achieve. The reality is that most offenders are much more focused on their own problems and quality of life than the harm they have caused their victims. Hence, incorporating offenders' goals as well as society's goals into treatment is more likely to tap into offenders' intrinsic motivation for change.

Research shows some advantages to using approach goal programs. Cox, Klinger, and Blount (1991) found that alcohol abusers who participated in an approach-goal focused program were less likely to lapse than individuals working toward avoidance goals. Mann et al. (2004) found teaching traditional relapse prevention ideas and skills to sex offenders with an approach-goal focus rather than the traditional avoidance and risk reduction focus resulted in greater engagement in treatment (i.e., greater homework compliance and disclosure of problems). Instead of teaching offenders what risk factors to notice and avoid, offenders were taught personal and interpersonal qualities to

notice and work toward for a more adaptive personal identity. At program completion, offenders in the approach-goal group were equally able to articulate their personal risk factors but were rated as more genuinely motivated for living a nonoffending lifestyle than offenders in the avoidance-goal group.

Treatment using the GLM involves two broad steps: First, the offender must learn to think of himself as someone who can secure all the important primary human goods in socially acceptable and personally satisfying ways. In other words, the offender has to learn to believe that change is possible and that change is worthwhile. Second, the treatment program should aim to help offenders develop the scope, strategies, coherence, and capacities necessary for living a healthy personal good lives plan. To achieve this, individuals' offending should be understood in the context of the problematic or unhealthy good lives plan operating when the offending occurred, or until now. Also, the treatment goals should be understood as the steps necessary to help the individual construct and achieve the healthy personal good lives plan.

Many of the specific activities of traditional RNM programs can be utilized in a GLM program. However, the goal of each intervention will be explicitly linked to the GLM theory and offered in a style consistent with the GLM principles. Ward and colleagues (Ward & Mann, 2004; Ward, Mann, & Gannon, 2005) recently reviewed the traditional targets of sex offender treatment and reinterpreted these in light of the GLM. For example, a common target of sex offender treatment is offenders' sexual preferences for children. According to the GLM, sexual preferences for children point to the following potential problems and treatment approaches: (i), the offender uses inappropriate means to achieve sexual satisfaction and sexual intimacy (through which the primary human goods of *life* and *relatedness* that we outlined earlier are achieved, respectively). Treatment should focus on helping the offender develop a wider range of strategies for achieving sexual satisfaction and sexual intimacy (i.e., provide appropriate means to achieve these goods); (ii), the offender lacks scope in his good lives plan and places too much emphasis on achieving sexual satisfaction or sexual intimacy at any cost. The offender should be helped to learn to value and invest in a broader range of primary human goods (i.e., improve the scope of the good lives plan); and (iii), the offender uses inappropriate means to achieve agency or mastery and attempts to achieve these through sexual domination of a minor. Treatment should help the offender develop a wider range of strategies for achieving agency and mastery in both appropriate sexual relationships and in nonsexual situations (i.e., provide appropriate means for achieving these goods). The extent that any one of these formulations is accurate for an individual offender would be ascertained through the assessment process. It is also entirely feasible that a different link to a primary human good may exist. The GLM is not intended to be a rigidly prescriptive approach; rather, what is important is that the problem area is understood in terms of the individual's good lives plan and treatment

aims to achieve a healthy good lives plan (in which offending is not necessary or compatible).

Adopting a combined GLM and RNM treatment approach requires rethinking some of the ways that sex offender treatment programs are packaged and operationalized. As discussed earlier, RNM sex offender treatment programs tend to be highly structured psycho-educational programs where a series of skills are taught in sequential modules. Although a one-size-fits-all program structure has advantages in terms of the simplicity of streaming individuals for treatment, the rigidity of such an approach is inconsistent with the emphasis on making treatment explicitly relevant and tailored to the individual offender. An alternative approach is to develop individualized formulation-based GLM treatment programs that tie intervention modules or areas specifically to the offenders' good lives formulations and plans. Offering formulation-based interventions is not the same as offering unstructured treatment. Unstructured treatments have been shown to have no impact on recidivism rates (Gendreau, 1996; Andrews & Bonta, 2003), so they obviously are not sufficient. Formulation-based treatment derives clear structure from the formulation, treatment methods, and treatment processes used, and is capable of providing a transparent program model that is auditable.

Few formulation-based treatment programs for sex offenders currently exist on which to base a GLM treatment approach. One exception is a program run by William Marshall et al. in Canada (Marshall, Anderson, & Fernandez, 1999), where group members work through a series of assignments at their own pace. Assignments include both offense-related topics and topics related to achieving human goods, such as intimacy, attachment, and emotional well-being. While one way to deliver an assignment or topic-based program is for each participant to complete each assignment at his or her own pace, another option is for participants to only complete treatment components or modules derived from their formulation. Although a departure from the current practice, it would be possible to manualize the major clinical areas addressed in a modularized program. Each program participant would have a selection of the modules based on his or her individualized formulation. In practice, some modules could be designed as core modules that are relevant to all program participants so participants can continue to meet as a group and obtain the benefits of a group process. Others could be selected based on individual need. For example, a core module focused on *building and maintaining progress toward a good lives plan* could include psycho-education about good lives plans, basic self-management skills, problem-solving and motivation enhancement skills. Other modules could focus on sexual health, interpersonal competence, self-esteem, anxiety management, and so on, and be completed on an *as needed* basis either in other groups or individually, depending on the resources and operational constraints of the agency. An example of a highly individualized program that uses manualized treatment components, much like choosing the best tools from a tool kit, is Multi-Systemic Therapy (MST;

Henggeler, Melton, Smith, Schoenwald, & Hanley, 1993; Henggeler, Schoenwald, Borduin, Rowland, & Cunningham, 1998). Designed for youth with serious mental health and offending problems, MST has proven to be an innovative and very successful program that is supported by rigorous treatment integrity processes and evaluation research.

Whatever decisions are made about the best method to organize and deliver the program, it would be important to have a carefully controlled system of recording what treatment had been offered so evaluations of treatment efficacy can be undertaken. Clear guidelines for determining which treatment components were and were not included in the treatment plan would also be required to ensure consistency in decision making. We strongly advocate that adoption of the GLM also include adoption of a rigorous empirical approach to program evaluation and continuous improvement.

CONCLUSIONS

In this chapter we have presented a new theory of sex offender rehabilitation. The GLM is a strength-based approach to working with offenders that has the major aim of equipping offenders with the necessary internal and external resources to live better lives. In the GLM, criminogenic needs or dynamic risk factors are conceptualized as distortions in the internal and external resources necessary to live healthy lives. Although criminogenic needs are important for understanding the occurrence of sexual offending, they should not be the sole focus of treatment. Instead, we advocate embedding the RNM within the GLM to create a twin focus on establishing good lives and avoiding inflicting harm. Such an approach grounds individuals' offending within a broad understanding of their functioning, personal identity, lifestyle, and social context and provides a rich and comprehensive guide for clinicians who undertake the difficult task of treating sex offenders.

By making treatment more meaningful for offenders and optimizing offenders' intrinsic motivational and change processes, we believe we can increase the effectiveness of treatment and, in turn, increase public safety. In particular, the GLM provides us an opportunity to explore a better means of reaching unmotivated or treatment-resistant offenders and enhancing the maintenance of positive changes following treatment completion in the community. The combined approach also provides the potential to be more efficient with those offenders who are already motivated and well on the road to change.

We believe that the GLM and principles will continue to grow and exert influence in clinical practice with sex offenders. Of course, full integration of such principles is dependent upon the outcome data from programs that have begun to pilot the model. It is our hope that researchers' and practitioners' interest in the GLM will flourish and produce a sizable evidence base upon which the GLM can be more fully evaluated. However, adopting the GLM

approach will require researchers, practitioners, and the public to be open to new innovations in sex offender rehabilitation and to be willing for treatment to explicitly work toward offenders' well-being.

NOTES

1. Strictly speaking, some dynamic risk factors may not be criminogenic needs. For example, some risk assessment instruments look at the recency of criminal behavior, such as the number of assaults committed over the last twelve months. Although such dynamic risk factors may change over time (e.g., there are more or fewer assaults committed over the last twelve months), they still do not represent the psychological or situational clinical problems that are targeted in treatment.

2. Lifestyle imbalance is created when life is dominated by activities perceived as hassles or demands (shoulds) compared with activities perceived as pleasures or self-fulfilling (wants). Lifestyle imbalance is often associated with a perception of self-deprivation that can trigger a desire for indulgence in an avoided or abstained behavior (Marlatt, 1985).

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9

Offender Profiling

Laurence J. Alison and Jonathan S. Ogan

Anecdotes are one thing . . . hard evidence is a totally different thing.
The "Amazing Randi," Master Magician and Skeptic

This chapter seeks to challenge the several assumptions on which many "traditional" offender profiling methods are based and to illustrate the pitfalls of too heavy a reliance on methods that have been widely presented in the media and in fictional portrayals. We also give a brief overview of the relatively less-well-discussed (or least media-friendly) developments within psychology and behavioral science that are now successfully assisting the police with sexual assault, rape, and murder enquiries. We begin by defining what we mean by "traditional," explore the assumptions on which it is based, and challenge them. We then continue with a discussion of the more varied and diverse means by which psychologists can contribute to major investigations, including a consideration of decision making and suspect prioritization. Our principal argument is that senior officers engaged in major enquiries deserve the best advice possible and that the most suitable method for enhancing the professional standing of profiling and other behavioral contributions is to ensure that they are built on a logical and systematic scientific foundation and not speculation, whim, intuition, or anecdote.

''A MORON IN A HURRY COULD SEE IT WOULD NOT STAND UP IN COURT''[1]

In the United Kingdom, a severe blow was delivered to offender profiling in the Rachel Nickell murder case.[2] A clinical psychologist developed a profile based on the supposed fantasies on the apparently sexually related murder of a young woman in one of London's public parks. The resultant advice supplied by the profiler was used to direct a police undercover operation, in which the enquiry team hoped the suspect (Colin Stagg) would reveal some guilty knowledge of the offense (i.e., that only the actual offender would know about). This guilty knowledge or a confession was never forthcoming and there was no compelling evidence against Stagg. Indeed, there is some recent plausible speculation that a variety of other suspects who were not focused on with the same verve are far more compelling. However, at the earliest stages of the trial, even before the evidence was heard before the jury, the case was thrown out. The judge, Justice Ognall, severely criticized the use of "profiling" and behavioral advice in this particular investigation—in part because of its lack of scientific foundations and the apparent unquestioned intuition on which it was based (Britton, 1997). He argued that the enquiry was run with an "excess of zeal" and classified the case as an example of "misconduct of the grossest kind."

This case doubtless had a negative impact on profiling in the United Kingdom. However, the hiatus provided academics and practitioners with the time to review the subject and how to move profiling forward to standardize advisory output. Moreover, there was a clear remit to ensure that advice should offer practical results and be based on a firmly scientific foundation. Prior to this painful introspection, profiling in the United Kingdom had been a phenomenon that was trying to run before it could even crawl, let alone walk. The approach taken by Britton was largely based on his experience and the format generally involved the provision of inferences about the "type" of offender responsible and the "types" of characteristics associated with this "type" of offense behavior. Alison and West (2005) referred to this approach, which is still used by many advisors in the United States and a number of European countries, as "traditional" profiling.

By traditional offender profiling, we broadly mean the range of advice given in major criminal investigations in which an "expert" draws up a list of demographic details of an offender based upon inferences about the type of person whom she or he thinks has committed the crime (see Alison & West, 2005 for a detailed review). We need to distinguish this from more contemporary approaches, which are less well considered, but will be covered in the latter half of this chapter. Traditional profiling is now less well used than it was ten years ago and is best exemplified in the accounts of ex-FBI officers in the United States (for example, Ressler & Shactman's *Whoever Fights Monsters*, 1992) and by one or two clinical psychologists in the United Kingdom (e.g.,

see Britton's 1997 *The Jigsaw Man*). It is the most frequently represented portrayal of what offender profilers do in crime fiction (TV, films, and books) although its weaknesses have gradually led to a decline in how often it is used by police investigators. In traditional methods, "types" of offenders are inferred from characteristics of the crime scene (i.e., whether the offender used a garrotte or a gun, whether he bound the victim or spent time speaking with him or her). The idea of an expert with special insight into the minds of killers and who can, through an examination of the crime scene, draw conclusions about the type of person who committed it is an enticing prospect and perhaps is the reason why this approach is the one most frequently reflected in the media. The archetype of visionary crime fighter, succeeding where the rest of the enquiry team has failed, seems to have a very firm grip on the public's imagination. However, we will show that such portrayals, as well as some of the now actual but outdated approaches that these were based on, represent a very incomplete and naïve view of theories of personality as well as what is possible in profiling. Doubtless, such archetypes will continue to entertain us in TV shows, films, and books, but it is important that we understand that this glorification of the expert as mystical crime fighter should be appreciated as based on anecdote and fiction and not on fact.

In contrast, in this chapter, we will show that what is far more important for us to gain a psychological "purchase on" is the central figure of any investigation, namely the senior investigating officer (SIO), *not* the "expert" pulled in to assist the enquiry. Indeed, psychologists wishing to contribute to major investigations would do well to consider their expertise in relation to understanding how the SIO will make decisions, lead his or her team, and network with the local community, the family of the victim(s), and, potentially, even state or federal government. We illustrate that the skills required to be a successful detective are far from just being a good sleuth and, although the detective's role can be enhanced by working with psychologists, a good investigating officer cautiously approaches external advice and is fully aware of how to critically evaluate it and incorporate it wisely into the investigation. However, before we consider the range of contributions to investigation beyond the simpleminded view of profiling types of offenders, we outline the justifications for our very skeptical view of traditional profiling.

BASIC ASSUMPTIONS

According to *Sexual Homicide: Patterns and Motives*, an often-cited "handbook" on offender profiling, it is possible to establish what sort of person has committed a crime based on the offender's behavior at a crime scene (Ressler, Burgess, & Douglas, 1988). So, with this assumption in mind, a profiler could, for example, in examining the injuries of the victim, the level of ransacking, and the method of entry to the property, predict the type of person "whodunnit." This process would involve reading the fine details of the crime scene

and coming up with the kind of person responsible. This might include the offender's age, personality, social competencies, and even the type of car the offender drives. Perhaps the most popular example of this style of profiling is the supposed distinction between organized and disorganized killers. This model of offender behavior assumes that each type will have a distinct and consistent method of committing crimes. The details of this model are summarized in the following tables. Burgess, Douglas, and Ressler (1985) derived the system in interviews with thirty-six offenders who volunteered to speak to FBI officers.

Burgess et al. argue that these two "styles of offending" match up with two equally distinct offender types, organized and disorganized (see Table 9.1). For example, an individual engaging in the organized behaviors is the sort of person who would be married, have a good work record, and generally be more social than his dysfunctional, socially inept, disorganized counterpart. The style of offending is also thought to reflect the poor personal hygiene habits associated with disorganized offenders (see Tables 9.2 and 9.3).

Although this system holds great appeal (once one had learned what was present in an organized killing and a disorganized killing, one would simply learn by rote memory the list of characteristics associated with one or the other), criminal behavior is, sadly, much more complex than this simple twofold system. Let us consider an analogy: If we think about the behavior of people we know, we might be able to say whether they keep a reasonably tidy house or not ("organized" or "disorganized" house owners). We might even find that there are some very basic differences in the way these people think. Thus, we might want to measure the extent to which individuals who keep their house in pristine condition are more particular in the organization of their office space. We might also measure the extent to which their level of organization relates to other behaviors such as punctuality. The former

Table 9.1. Crime Scene Characteristics

Organized Crime Scene	*Disorganized Crime Scene*
Planned offense	Spontaneous offense
Victim is a stranger	Victim is a stranger
Controlled conversation	Minimal conversation
Scene reflects control	Scene is random/sloppy
Demands submissive victim	Sudden violence to victim
Restraints used	Minimal use of restraints
Aggressive prior to death	Sex after death
Body hidden	Body left in view
Weapon/evidence absent	Weapon/evidence present
Transports victim	Body left at scene

Source: Burgess et al. (1985).

Table 9.2. Organized Perpetrator Characteristics

Perpetrator Characteristics	*Postoffense Behavior*
High intelligence	Returns to crime scene
Socially adequate	Volunteers information
Sexually competent	Police groupie
Lives with father	Anticipates questioning
High birth order	May move body
Harsh discipline	May dispose of body to advertise crime
Controlled mood	
Masculine image	**Best Interview Strategies**
Charming	
Situational cause	Direct strategy
Geographically mobile	Be certain of details
Occupationally mobile	Only admit what he has to
Follows media	
Model prisoner	

Source: Burgess et al. (1985).

measure would tell us how consistently tidy they are in different environments and the latter measure would be one indication of how the organization of their house measures up (or not) with other behaviors that we might hypothesize are organized behaviors. Both of these are plausible hypotheses (although similar efforts have not been tested or examined in relation to

Table 9.3. Disorganized Perpetrator Characteristics

Perpetrator Characteristics	*Postoffense Behavior*
Below average intelligence	Returns to crime scene
Socially inadequate	May attend funeral/burial
Unskilled occupation	Memorial in media
Low birth order status	May turn to religion
Father's work unstable	May keep diary/newspaper clippings
Harsh/inconsistent discipline as a child	
Anxious mood during crime	May change residence
Minimal use of alcohol during crime	May change job
Lives alone	May have personality change
Lives/works near crime scene	
Minimal interest in media	**Best Interview Strategies**
Significant behavior change	Empathize with him
Nocturnal habits	Indirectly introduce evidence
Poor personal hygiene	Counselor approach
Secret hiding places	Nighttime interview
Usually does not date	
High-school dropout	

Source: Burgess et al. (1985).

offense behavior).[3] However, it is a far more ambitious psychologist who would argue that all of the people we know who keep their house very tidy are of a narrowly defined age range, of exactly the same social competence, and drive exactly the same type of car. Although there might be some loose associations (with younger individuals tending toward the less tidy end of the spectrum) it is probable that there is considerable variation among individuals and that this variation does not neatly match up with sociodemographic features (age, gender, ethnicity, etc.).

Moreover, there is probably a range of levels of tidiness rather than a system in which an individual was either tidy or untidy. Might we be able to say, for example, that incredibly tidy Dave is tidier than Jan, and that Jan is in turn tidier than our filthy friend Mick? Might it also be the case that most of the people we know could not be classified as at extreme ends of the spectrum? Thus, although we might know one or two people like Mick and Dave, most of the people we know would be more like Jan—that is, reasonably tidy. Therefore, for an offender classification system with only two types to prove successful would mean that very few offenders were hybrids or in the mid-range. Instead, the overwhelming majority would have to be at one end of the spectrum or the other.

Finally, if only we have a snapshot (say an hour) to look around an individual's house at some random point in his or her life (e.g., on the morning after Dave has had a dinner party for fifteen people and when Mick is preparing to sell his house and has tidied up for prospective buyers), we might get a very different view of the person. Similarly, in the offenses we examine, we have to be sure that the situation does not have too powerful an effect on the offender's behavior.

Therefore, for all sorts of complex reasons, including the fact that behaviors are usually on a continuum, the fact that psychological processes do not normally map neatly onto demographics such as age, and the fact that situations often have a powerful influence on behavior, this simple twofold system is unlikely to prove very useful.

Alison and Canter (1999) argued that organization might more fruitfully be considered a continuum rather than an either/or system. They claimed that the behaviors may represent various levels of planning, rather than discrete types, and that this might be reflected in crime scenes actually having a mixture of organized and disorganized behaviors. While Burgess et al.'s original system concedes that hybrids exist (i.e., contain both organized and disorganized elements), we have found that a majority of examples contain "both elements" (i.e., most are "Jans" and not "Micks" or "Daves") and, as such, the utility of the two discrete types to profile the likely background characteristics of offenders loses its power as a method for discriminating among individuals (Canter, Alison, Alison, & Wentink, 2004). Indeed, there is some suggestion in our study of such offenders that most of them are relatively organized, but it is the nature of their "type" of disorganization that varies.

Second, the belief that profilers can predict an offender's background characteristics relies on two major assumptions: consistency and homology.

Consistency and Homology

For profiling to work, perpetrators have to remain consistent across a number of crimes (in the same way that Dave must always be tidy and Mick always filthy). If during the first crime an offender gags and binds the victim, the second they kiss and compliment the victim, and the third they punch and stab the victim, then clearly it would be impossible to claim that certain clusters of behaviors are closely associated with certain clusters of offender backgrounds. Happily though, there is a fair amount of research that suggests that offenders are somewhat consistent. This has been demonstrated in rape, burglary, and, more recently, serial murder (see Salfati & Taylor, forthcoming).

The second assumption (homology), however, is more controversial (Mokros & Alison, 2002). Homology assumes that where two different offenders have the same personality they will commit a crime in the same way. Similarly, if two crime scenes are similar then they will have both been committed by the same type of person. This would mean that if Mick, whose house is untidy, is 24 years old, lives with his mother, and collects *Playboy* magazine, then all people with a similar level of untidiness in their house would also have to be about 24 years old, live with their mother, and collect pornography. In the crime example we would have a system where rapists who gag and bind victims would be more likely to be between 25 and 30. Conversely, those who kiss and compliment the victim are likely to be between 30 and 35. While there is some evidence that certain crime scene behaviors are associated with certain background characteristics, there is no compelling evidence that "clusters" of behaviors can be closely matched with particular clusters of background characteristics.

There is a subtle but very important distinction between the claim that clusters of behaviors are related to clusters of background characteristics "compared" to the claim that single behaviors are related to single characteristics. To further elucidate, let's take two examples:

1. The offender did not leave any fingerprints at the rape crime scene. It is therefore my assertion that this offender is likely to be a prolific burglar. Research by Professor X (1987) indicates that 76 percent of offenders who do not leave fingerprints have more than seven previous convictions for burglary.
2. This offense demonstrates that the offender is a "planner" rapist—there are no fingerprints, the crime scene is tidy, there is no ransacking, and he has only stolen electrical goods and children's clothes (both of which can be easily sold for gain). "Planner" rapists are between the ages of 25 and 30, feel no remorse, are likely to be in a semiskilled job, and are likely to be married.

The first is called a "one to one relationship" and typifies the sorts of claims made by profilers who may refer to themselves as crime analysts or behavioral advisors (these individuals might be considered the "new generation" of contemporary profilers). The second example reflects the more traditional method of profiling and is in line with the previous work of some FBI agents (most of whom are now retired) who advised in the early days of profiling in the 1970s, as well as an increasingly dwindling selection of individuals from a variety of backgrounds who appear to be happy to put themselves forward as expert profilers.

Traditional profiling methods (as in point 2) make far more ambitious claims than those offered by the behavioral advisor approach. Indeed, what is so enticing is the seeming promise of a rich and detailed character assessment or "pen portrait" of the offender. However, this approach assumes that offenders' behaviors are a product of stable personality traits (consistency) and that all offenders who share a particular personality (a "planner type") will behave in the same way (homology). Thus, the traditional view makes a number of inferential leaps (see Figure 9.1) in which one derives a type from a cluster of behaviors and a cluster of background characteristics from those different types.

However, research has indicated that this model fails to hold water. Several studies have now tested this process and consistently failed to find these sorts of relationships (see Davies, Wittebrood, & Jackson, 1998; House, 1997; Mokros & Alison, 2002).

Many developments have emerged since, and the FBI and their associated academic colleagues have begun to produce many more academically rigorous studies (particularly in relation to the study of child abduction—see, for example, Boudreaux, Lord, & Dutra, 1999; Boudreaux, Lord, & Jarvis, 2001; Prentky, Knight, & Lee, 1997), but prior to these more recent studies, and even though there was little to no empirical support for the theories upon which traditional methods relied. Witkin (1996) demonstrated that the demand for

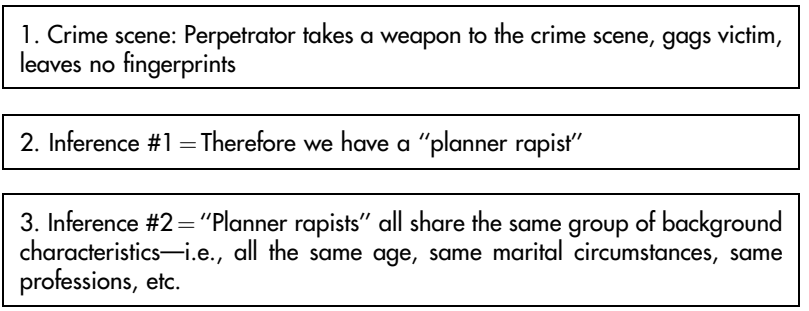

Figure 9.1. Traditional model of offender profiling, revealing the number of inferential leaps based on an evaluation of the crime scene.

profiles was high, with the FBI having a number of full-time profilers who, collectively, were involved in around 1,000 cases per year. Unfortunately, it has taken some time for science to catch up with and question the methods that had previously been relied upon. Furthermore, science is only just beginning to develop more reliable bases upon which to advise crime investigations (issues that we shall consider shortly). However, despite its more labored journey, the scientific method is gradually weeding out the bogus approaches and providing more fruitful, reliable, tested, and transparent evidence-based methods for assisting the police. Part of the contribution lies in a change of tact, from the exclusive focus on the killer and his likely "psychological profile," to contributions that consider the way the police collect information, make decisions, and direct and lead a team that they must motivate during times of stress, often with difficult challenges that require them to deal effectively and sensitively with the community they serve and often rely upon. Thus, behavioral advisors and profiles are now realizing that their contribution may lie more productively in a greater appreciation of the myriad issues that are involved in investigating crime.

BEYOND THE CRIME SCENE

This is an important juncture at which to point out the small part that, to date, profiling has played in apprehending killers. Copson's (1995) study indicated that in less than 10 percent of cases did a profile lead to the identification of the offender. Thus, it is worth keeping the utility of the method in perspective. Doubtless, profiling has been utilized wisely and judiciously and has proved operationally useful. Indeed, recent promising scientific developments are beginning to emerge that have adopted a more systematic and critical approach. However, it is worth considering other methods by which psychologists might assist the police in the apprehension of offenders and the successful resolution of major enquiries. Keppel (1989) notes that very little has been written with regard to how serial killers are caught, other than the investigative techniques undertaken at the original crime scene. He points to several solvability factors in homicide investigation that go beyond the crime scene. These include the quality of police interviews of eyewitnesses, the circumstances that led to the initial stop and arrest of the murderer, the circumstances that established probable cause to search and seize physical evidence from person/property of suspect, the quality of the investigation at the crime scene, and the quality of the scientific analysis of the physical evidence seized from the suspect and its comparison to physical evidence recovered from victims and murder scenes. These are all issues that can be assisted through contact with and advice from psychologists. Recent work has indicated that the way in which this information is collected and collated can be improved with guidance from a psychological perspective. Apart from Keppel's work, the bulk of discussions regarding solvability have been critical

of the police's role in the investigation and have frequently concluded that the police force has had little to do with solving crime (Greenwood, 1970; Greenwood, Chaiken, & Petersilia, 1977). Even certain FBI officers (Ressler, Burgess, D'Agostino, & Douglas, 1984) have admitted that many of the United States's most notorious serial murderers have been caught either through happenstance or during some unrelated routine police procedure. Keppel (1989), though, is dismissive of the role of chance. Instead, he views this as an opportunity eagerly grasped by a smart cop: "what usually occurs is that some patrol officer on routine duty comes across the killer, it then takes alert and intelligent investigators to turn the opportunity into a final resolution of the case" (p. 68). We have argued that bringing to bear a psychological and systematic approach to several aspects of policing (leadership, information collection, decision making, and so on) can make these "chances" more probable.

Alison and Whyte (2005) identified a number of factors involved in apprehension. Their descriptive study considered 101 single-offender American serial murder cases. The average age for these offenders was approximately 30 years old, with the youngest at 17 years old and the eldest 52 years old. Many previous studies have indicated that serial killers are in their late twenties or early thirties (Hickey, 1991). In our sample these offenders killed a total of 617 victims ranging from three to twenty-three people killed as a series.

Figure 9.2 outlines the frequency distribution for the methods by which the present sample of serial murderers were apprehended (the apprehension variables). In many cases there were several apprehension variables that contributed to an individual's capture. However, the most frequent contributions were from eyewitness testimony, the fact that the offender had previously been institutionalized, that he had committed another crime in a similar way (and so the crimes were linked) and, most frequently of all, because the offender committed another (often less serious) crime that led to the offender's capture.

The overlapping nature of these apprehension variables is captured in Figure 9.3. We have classified these as belonging to five central issues: the way in which the offender's own behavior assists in his own apprehension, the role of an informant, the role of the direct work of a detective, the role of the victim, or, at the core of the overwhelming majority of cases, the role that the offender's previous crimes have in apprehension.

OLD SINS CAST LONG SHADOWS

As we noted, it is unusual for one factor to be solely responsible for catching killers. Instead, factors tend to co-occur in varying degrees within thematically prescribed "clusters." That is to say, in a case where there is forensic evidence, it is often also supported by eyewitness information (variables within the *detective* cluster); whereas, in cases where there is a confession, it is more likely that the offender knows the victim (variables within the *offender* cluster). Alison and Whyte (2005) termed these as "roles" that relate

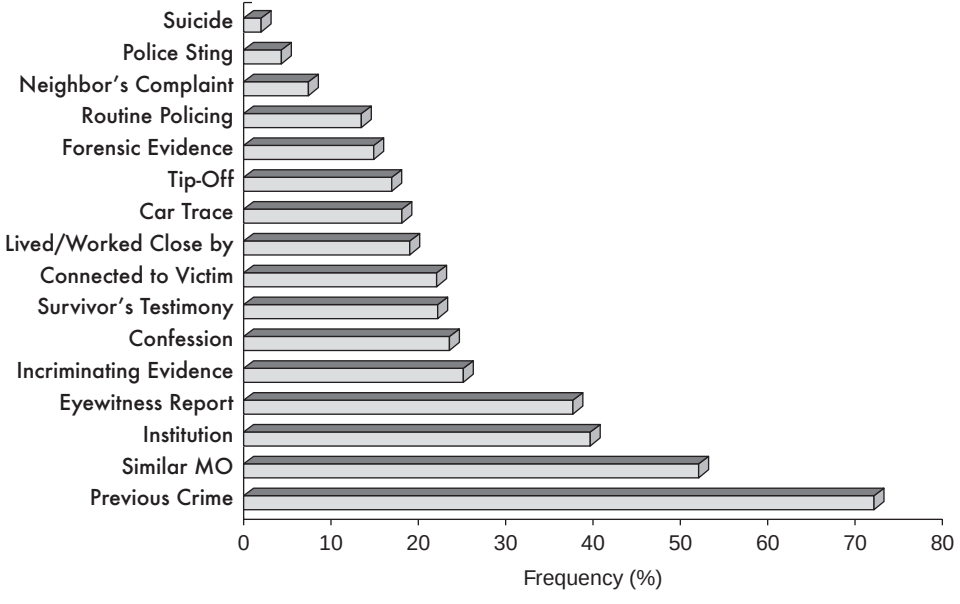

Figure 9.2. Frequency distribution for methods of apprehension in a sample of eighty-seven serial murderers.

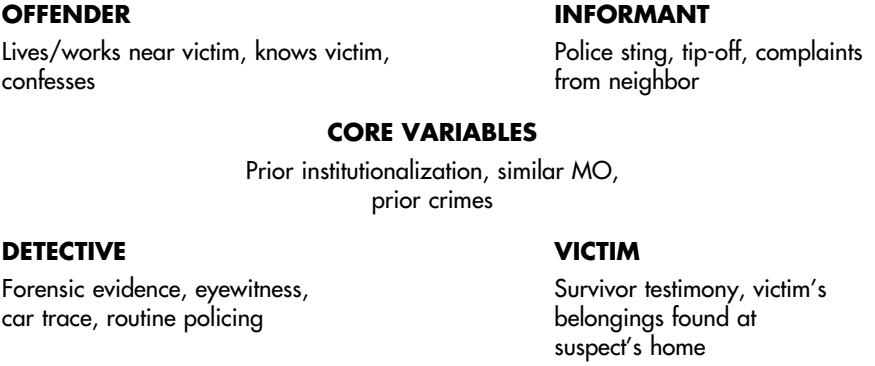

Figure 9.3. Schematic representation of co-occurrences.

to different emphases on the part of different "participants" in the overall picture of serial murderer apprehension. We have labeled these roles: *detective*, *offender*, *victim*, and *informant*, with the central box consisting of aspects that relate to the offenders' *previous history of offending*. This central region is common to most apprehension cases and overlaps with all four of the other regions. Thus, in many cases, solid and robust recording and tracking of an offender's previous history is the quality that most frequently assists in apprehension. The offender's past literally catches up with him!

Statistics reveal that detective work is directly relevant in 79 percent of cases, followed by offender = 67 percent, victim = 48 percent, and finally, informant = 23 percent. This demonstrates that apprehension (in serial killer cases) depends very significantly on good detective work and the ability to capitalize on the information gained, followed by "errors" on the offenders' part, followed by the impact of the victim, and finally, the use of informants.

As one may expect, the *detective* region contains variables that encompass police procedures: forensic and eyewitness reports, the crime scene, the "mugshot," car (either tire marks or a vehicle left nearby, or one seen by a witness), and a chance encounter during routine policing. This lends some support to the "smart cop theory"—putting two and two together and effecting an arrest.

However, the most pertinent factor throughout the investigative process is the impact of the offenders' past criminal activities—a factor that relies on accurate, robust, and reliable recording systems. Aside from the direct investigative implications of recording offenders' previous convictions accurately, all profiling decision support systems must rely on accurate archives (House, 1997; Egger, 1998; Keppel & Weis, 1993).

However, as Ogan and Alison (2005) have argued, the process of dealing with such decision support systems and taking advice from those who operate

them is one small component of detective work. The job of the detective will seldom be restricted to "sleuthing" and, instead, involves a multilayered set of aims and objectives. This is perhaps best summed up by the management pyramid of Figure 9.4.

Indeed, far from being a macho "supercop," successful SIOs will possess a myriad of interpersonal and diplomatic, managerial, media-handling, and administrative and logistical skills—a far cry from the stereotypical TV portrayal of the "rogue cop" who bends the rules but gets results! The structure of the pyramid implies that if the broader foundations are rocked or managed ineffectively, the integrity of the management of the incident will be compromised. For example, insensitivity to the local community can damage community relations that can last for many years and suppress intelligence and information. This has been the sad inheritance of the Stephen Lawrence enquiry in England.[4] The case involved the murder of a young black male in London. The subsequent public inquiry flagged institutional racism as endemic within the Metropolitan Police, an allegation given more credence by the perceived lack of police success with the case. This subsequently led to a fractious relationship between the police and the local black community, severely damaging relationships for many years. The police have had to work very hard to regain the trust of the community, and a variety of initiatives in recent years have been largely successful in this process of repair. Efforts included changes in how the police liaise, recruit from, and work alongside ethnic groups. It is therefore important to have some understanding of the wider context within which policing and investigation emerge and to recognize that behavioral advice is one component in a very large and sophisticated system. Profiling is simply one element within the wider remit of behavioral advice and, as such, really is at the very tip of the narrowest point of the management pyramid.

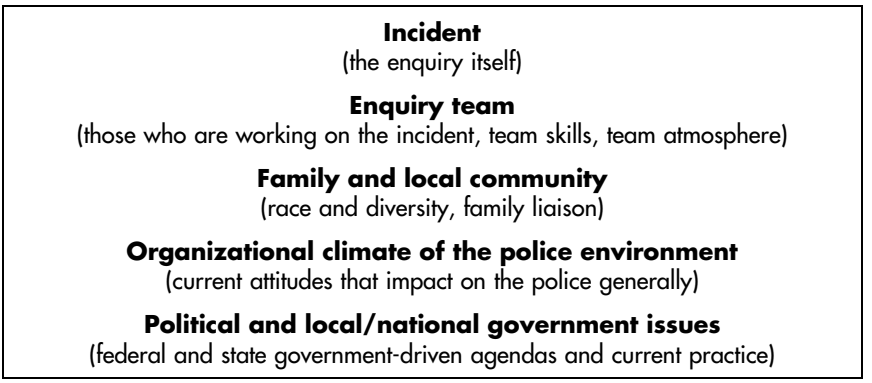

Figure 9.4. Management pyramid in critical incidents.

Source: Alison & West, 2005.

FROM ''PROFILING'' TO ''PRIORITIZING''

Bearing in mind that a profile should yield operationally useful information to the police, there needs to be some way of describing how each piece of advice can be practically applied to an investigation. It is hard to argue why it might be useful to know whether an offender collects pornography. However, indicating a likely area in which he may reside may prove more operationally useful. Suspect prioritization is aimed at reducing the pool of suspects. In achieving this, each item in an investigative report would have to demonstrate on what basis a range of suspects could be narrowed down. Alison and Wilson (2005) have argued that this is most productively considered through a range of filters, rather than a list of likely characteristics of the offender. Thus, one would provide the following sort of filter:

"First consider all individuals within a 1 mile radius of the crime scene, who have any prior convictions for any kind of offense within the last year" (Geographic Filter).

"Then prioritize all those with any prior violent or sexual convictions" (Preconvictions Filter).

"Of this group, first consider all those matching the physical description provided by your victim" (Eyewitness Filter).

This system carries the assumption that the most reliable information is the geographic, followed by the preconvictions, followed by the eyewitness information, because if we are wrong about the first filter (and the offender lives farther than one mile away) all the other filters become redundant. However, if the eyewitness information is incorrect (research does indicate that it can be quite unreliable) and the geographic and preconviction filters are correct, our offender is still within the right search parameters. This system has proved effective in a variety of investigations, from rapes to kidnaps and child abductions (Alison, 2005). However, it is important to establish the right filters and their levels of reliability. This is important because it allows us (and the SIO) to know how much trust to put in any one filter. Thus, as well as moving toward a different approach in terms of the content of the advice, Alison, Goodwill, and Alison (2005) have argued that the structure of advisory reports is critical in ensuring that they are clearly interpreted and used judiciously.

NOT ALL CLAIMS ARE EQUAL

Alison, Smith, Eastman, and Rainbow (2003) reviewed Toulmin's (1958) philosophy of argument and how this can be used to generate advisory reports. They argued that "the strength of a 'Toulminian' " approach lies in its ability to deconstruct arguments into their constituent parts, thus allowing for close scrutiny of the strengths and weaknesses of various aspects of the argument" (Alison et al., 2005). So, if we have a hypothetical claim in a profile, for example: "The unknown offender lives within 5 km of the sexual assault site,"

a Toulminian approach would substantiate this assertion by demonstrating the grounds on which it is based, as well as the certainty of the claim (how confident we are in the claim), namely: "The offender is 75% likely (how certain we are) to live within 5 km of the rape (claim), since rapists tend not travel more than 5 km from home to offend (basis) as reported in a study by X & Y."

Compared to traditional offender profiling methods, this approach makes clear how reliable each claim is and, as such, enables the lead investigator to consider how much trust or emphasis she or he can put in any given claim. Thus, it provides room for speculation, intuition, and experience, as well as empirically based claims, but makes clear on which basis any given claim is made. Such clarity may well have saved the senior officers in the Nickell enquiry from too heavy a reliance on the profiler and saved the profiler from allegations of too heavy an involvement and influence over the enquiry team, since the bases for each of the claims should have been clearly articulated and recorded during the enquiry, as opposed to under cross examination by a tenacious attorney.[5]

AN INVESTIGATIVE CREDO

Although the temptation for psychologists to assist police with their enquiries can be great, and there is a laudable desire to "do good," inappropriate and unclear advice in high-profile cases can actually prove quite dangerous and drag an enquiry team in entirely the wrong direction. Sadly, there is little to assist psychologists in making decisions about whether to engage in an enquiry, or indeed, how to engage. The current British Psychological Society Codes of Conduct, as well as the American Psychological Association Ethical Guidelines, do provide a framework, but they are not designed specifically for contributing to crime investigations. However, Alison and West (2005) have put forward a number of questions that the profiler should contemplate during the initial contact, reviewing evidence, and writing-up stage. This Investigative Credo is as follows:

1. Will my report be provided on time?
2. Have I discussed fees and have these been agreed to?
3. Have I agreed to the objectives of the report?
4. Do I know who the central contact is in this enquiry if I need further details?
5. Do I have a realistic idea of how long this case will take me?
6. What features of the case are influencing current investigative priorities?
7. Has an exhaustive crime scene assessment been used to maximize the information that can be derived to determine the sequence of events and offender behavior?
8. Have I visited the crime scene and its environs so that I am aware of the geography of the case?

9. Is photographic evidence sufficient for me to appreciate the crime scene and its geographic significance?
10. Has an exhaustive assessment of the emerging statements been conducted to determine what information is convergent or corroborative; divergent or contradictory?
11. What information has been decided to be redundant for the investigation?
12. What features of the offense, alone or in combination, are influencing my interpretation?
13. What are my provisional hypotheses?
14. What are the investigative team's provisional hypotheses?
15. Am I influenced by 14?
16. Is my current interpretation congruent with any related theories?
17. Have any similar (historical) cases been identified as sources for further understanding?
18. Have any cases or incidents been identified as potential links?
19. Have I allowed myself to be subject to peer review?
20. What further enquiries have now been initiated?
21. Have my findings been influenced by external pressures, group dynamics, heuristics, or biases in a way that reduces their accuracy or usefulness?
22. Have I based my findings on a clearly defined evidence base, and used this evidence to support any recommendations made?
23. Which datasets have I accessed and are they relevant to the case under investigation?
24. Am I presenting my findings in a way that is unambiguous and will not lead to misunderstanding or misinterpretation?
25. Have I succeeded in meeting the objectives originally defined?
26. What has been the effectiveness of my advice?
27. Have I written up the facts of the case, the process of my decision making, my analysis, interpretation, and discussions with other experts?

THE TORTOISE AND THE HARE

Offender profiling has been inextricably linked to murder and, perhaps even more so, with serial killing. Thankfully, such cases are relatively rare events, and the rather skewed notion of probing the mind of killers does not fully capture the scope of work that is emerging in reference to what psychology can contribute. We need to remind ourselves though, that many of the assumptions that are promulgated in the media have not been scientifically scrutinized, so there needs to be some discretion exercised when evaluating profiling reports. On a more proactive note, developments are emerging as

researchers test hypotheses and return to the tried and tested methods to scrutinize a variety of methods for assisting the police. With this has come the recognition that profiling is a small cog in a far larger machine, and for that machine to work effectively psychologists need to be more creative and expansive in their thinking. Gradually, work is emerging that has assisted us in our understanding of information collection, decision making, leadership, community relations, media, and prioritization. It is through this joint, multivariate endeavor that science will gradually catch up with and overtake the anecdotes and fictional portrayals and make a real contribution to crime investigation.

NOTES

1. A reference in *The Independent* (a UK newspaper) to the psychological evidence against Colin Stagg in the Nickell enquiry.

2. The first author was one of the several psychologists who provided a defense report in this case.

3. There are now several articles that have failed to find such relationships in offending behavior (see Alison, 2005 for a review).

4. "The Stephen Lawrence Inquiry," http://www.archive.official-documents.co.uk/document/cm42/4262/sli-00.htm

5. Jim Sturman, the legal representative for the defense, provides an interesting overview of this case in Sturman and Ormerod (2005).

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10

Severe Sexual Sadism: Its Features and Treatment

William L. Marshall and Stephen J. Hucker

INTRODUCTION

The idea that some people are sexually stimulated by inflicting suffering (physical and psychological) on others has a long history in mental health literature. Krafft-Ebing (1886) was the first to clearly describe this clinical entity and his description of the features of sexual sadists has influenced diagnostic criteria ever since. However, instances of sexually sadistic acts appeared in the more popular literature far earlier than Krafft-Ebing's description. Baron Gilles de Rais was hanged in the fifteenth century for the rape, torture, and murder of several hundred children, and most people are aware of the behavior of the notorious Donation Alphonse François under his rather grandiose, self-adopted name of the Marquis de Sade. In the early part of the twentieth century, Stekel (1929) expanded on Krafft-Ebing's work distinguishing masochism (the sexualized experience of being subject to suffering) from sadism (the sexualized experience of inflicting suffering). It was Stekel's work, in particular, that led to the adoption of these terms in clinical work. In this chapter we will restrict our concerns to those people identified as sexual sadists and, more particularly, to those sexual offenders who meet criteria for sexual sadism.

Some sexual sadists, like Gilles de Rais, also murder their victims. However, some sexual offenders who are not sadists likewise kill their victims, sometimes to eliminate the only witness (other than themselves), sometimes as

a result of rage, and sometimes for other reasons (see Grubin [1994] for a discussion of these reasons). Unfortunately, the literature on sexual sadism does not always clearly distinguish sadistic sexual murderers from other types of sexual murderers, and similarly, articles on serial sexual killers may fail to identify the subgroup of sexual sadists among their samples.

These problems make it difficult to review or summarize the existing literature. In addition, we (Marshall & Kennedy, 2003) found that although most authors indicated they had followed the criteria outlined in a relevant edition of the American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders* (*DSM*), the actual criteria used to identify their samples of sexual sadists was not a match for *DSM* criteria. Quite a number of researchers (Apsche, 1993; Brittain, 1970; Dietz, Hazelwood, & Warren, 1990; Egger, 1998; Fromm, 1973; Giannangelo, 1996; Gratzer & Bradford, 1995; Levin & Fox, 1985; Langevin, Ben-Aron, Wright, Marchese, & Handy, 1988; Myers, Scott, Burgess, & Burgess, 1995) claim that the crucial feature of sexual sadists is the exercise of power and control over the victim, while the other features (e.g., torture, humiliation, aggression) are seen as the means by which power and control is exercised. At other times, some of these same authors (e.g., Myers, Burgess, Burgess, & Douglass, 1999; Ressler, Burgess, & Douglas, 1988), as well as others (Seto & Kuban, 1996), describe the expression of violence or aggression as the key feature of sexual sadists. Whatever features are seen as diagnostic, all authors view sexual sadists as being sexually aroused by these features. *DSM-IV-TR* (American Psychiatric Association, 2000) describes sexual sadism as a paraphilia that involves "recurrent, intense sexually arousing fantasies, sexual urges, or behaviors involving acts (real, not simulated) in which the psychological or physical suffering (including humiliation) of the victim is sexually exciting to the person" (p. 574). Like all the features described in the literature (e.g., violence, torture, control, power, aggression, humiliation), the *DSM* requires that the psychological and physical suffering of the victim must be sexualized for the offender to meet criteria as a sexual sadist. The problem with this requirement is that the only person who can know with any degree of certainty that these acts generate (or are necessary for) sexual arousal, is the offender. Not surprisingly, few sexual offenders who commit violent or degrading acts willingly admit that such acts are sexually arousing to them. Indeed, very few sexual offenders of any type are readily forthcoming about what sexually excites them. Thus, the diagnostician must make an inference based on other information (e.g., details of the crime scene, reports by victims, the offender's life history and offense history) about the client's sexual motivation. The authors of *DSM-III* (American Psychiatric Association, 1980) recognized that the rather poor interdiagnostician reliability of earlier versions of *DSM* was the result of requiring diagnosticians to make inferences about their client's motivations or about other unobservable processes. As a result, from *DSM-III* onward, the subsequent editions of *DSM* have, for almost all diagnoses, attempted to specify observable criteria; the

paraphilias, including sexual sadism, remain, unfortunately, an exception to this wise decision.

Despite this confusing state of diagnostic criteria (differing views of what is crucial, and a reliance on diagnostic inferences) some authors continue to try to integrate the findings on sexual sadists. Recently, for example, Proulx, Blais, and Beauregard (2005) have summarized what they believe the extant literature tells us about sexual sadists. They focused primarily on their own research studies and compared their findings with those generated by Dietz et al. (1990) and by Gratzer and Bradford (1995). Table 10.1 describes some of the data from each of these studies plus data that Marshall, Kennedy, and Yates (2002) extracted from files in Correctional Service of Canada (CSC) prisons where a diagnosis of sexual sadism had been applied by one or another psychiatric expert. As can be seen from the table, the percentage of each study group who enacted the listed behaviors was quite discrepant across these four reports. In some instances the differences are startling, particularly on the issue of the infliction of physical torture. It would appear that the CSC psychiatrists were using different diagnostic criteria than were the clinicians in the other studies, although even in Proulx et al.'s (2005) report the incidence of torture among sexual sadists seems very low given the *DSM* criteria on which the diagnosis was supposedly based. In examining the data in Table 10.1 on the incidence of humiliation, it is clear that the criteria employed by the FBI, ROH, and CSC diagnosticians, and to a significant extent by Proulx et al., could not have been a match for *DSM*. The diagnostic manual clearly specifies the psychological suffering (i.e., humiliation) of the victim to be critical to the diagnosis as is the physical suffering of the victim. Since none of the indices of physical suffering (i.e., torture, the use of aggression or violence) or of humiliation reveal that these were present in 100 percent of the cases (with the exception of torture for the FBI study), it seems safe to conclude that the diagnosis of sexual sadism in these studies did not follow *DSM* criteria rigorously at all. Thus we cannot

Table 10.1. Percentage Rates of Various Behaviors during Sexual Assault

	FBI[a]	*ROH*[b]	*CSC*[c]	*Proulx et al.*[d]
Abduction/confinement	76.7	64.3	22.0	18.6
Torture	100.0	78.6	9.8	30.2
Bondage	76.7	14.3	29.3	16.3
Aggression/violence	60.0	64.3	24.4	90.7
Suffocation	13.3	46.4	36.6	50.0*
Humiliation	23.3	0	12.2	53.7
Insertion of object	40.0	14.3	4.9	9.3

Sources: (a) adapted from Dietz et al. (1990); (b) adapted from Gratzer & Bradford (1995); (c) adapted from Marshall, Kennedy, & Yates (2002); (d) adapted from Proulx et al. (2005).

* Proulx et al. reported suffocation only for the sexual sadists who attacked children.

reliably conclude that the features described in these studies accurately convey what it is that sexual sadists do when they sexually offend, and we are on far more shaky ground when it comes to inferring sexual motivation in relation to any of these behaviors.

Proulx et al. also described personality features of their putative sexual sadists. The sadists, in comparison with a matched group of nonsadistic sexual offenders, displayed more schizoid, schizotypal, histrionic, and avoidant personality features. More interesting perhaps was Proulx et al.'s observations of the behaviors and experiences of the sadists in the forty-eight hours preceding their offense. They found that sadists were more likely than nonsadistic sexual offenders to have had a specific conflict with a woman during this preoffense period and to have had conflicts with women in general. They were also far more angry and sexually excited, and they reported fantasizing about deviant sexual acts prior to their offenses. In addition, the sadists in Proulx et al.'s study were far more likely to have planned their offense and to have deliberately selected the victim than were the nonsadistic offenders.

Although the differences in the percentage of subjects who displayed each feature across these three studies no doubt reflect both differing diagnostic practices and different samples of sexual sadists, there is some consistency in the features seen as crucial to this diagnosis. However, diagnostic inconsistency presents a real problem that, to date, has to some extent obfuscated the identification of the primary characteristics of sexual sadists. We now turn to a consideration of diagnostic issues.

DIAGNOSTIC ISSUES

In order to address the problems presented by sadistic sexual offenders, it is necessary to have a clear and agreed-upon definition of what constitutes sexual sadism. Research cannot proceed in a useful way unless all researchers are in agreement on the criteria necessary to identify sexual sadism. If researchers employ different definitions of the problem, then the data derived from research cannot be integrated in a way that would lead to an understanding of sexual sadism that could guide assessment and treatment. Since sadistic sexual offenders constitute a real threat to the community, it is essential that methodologically sound research be conducted that can appropriately inform treatment providers and decision-makers. Sexual sadists who commit offenses to satisfy their deviant desires may not always present as a high risk to reoffend based on actuarial measures, but their risk to harm if they do reoffend is always high. Thus, an agreed-upon set of criteria necessary to reliably diagnose sexual sadism is critical.

The *DSM* in its various incarnations has ostensibly been the agreed-upon guide for researchers attempting to study sexual sadism. We say "ostensibly" because in our review of the existing literature (Marshall & Kennedy, 2003) we found that although almost all authors claimed to adhere to *DSM* criteria,

the actual criteria they specified were rarely a match for those specified in the *DSM*. Given these differences in the diagnostic criteria employed in various studies, it is no surprise that estimates of the incidence of sexual sadism range from 5 percent to 80 percent (Marshall & Kennedy, 2003). Of course, these different estimates may also result from the different samples examined in the various studies of sexual offenders.

Fortunately, there was a good deal of overlap in the studies we reviewed concerning the features that were considered indicative of sexual sadism. While our review revealed thirty-plus supposedly critical features, there was agreement among most researchers that the following are essential to the diagnosis of sexual sadism: torture or cruelty, victim suffering, humiliation of victim, use of force or violence, control over victim, sexual mutilation. Some authors (e.g., Brittain, 1970; Gratzer & Bradford, 1995; Myers et al., 1999) suggest that the motivation behind sexual sadism is the exercise of power and control over the victim, which has become sexualized in these men; that is, the exercise of power and control is sexually arousing to sexual sadists. These authors claim that all the other features (e.g., torture, cruelty, force and violence, humiliation) are enacted for the sole purpose of achieving and demonstrating this power and control.

Faced with the evident disagreement across studies revealed on the specifics of diagnostic criteria, Marshall and collegues (2002) conducted two studies meant to evaluate the reliability of the diagnosis of sexual sadism. First, they extracted from the files held in three Canadian federal prisons psychiatric reports where the psychiatrists were asked to evaluate the dangerousness of various sexual offenders. All these assessments occurred over a ten-year period (1989–1999). All the evaluated offenders had previously been assessed as high risk to reoffend sexually using one or another actuarial risk assessment instrument. Combined with the actuarial instruments, the psychiatrists' evaluations were intended to reveal each offender's risk to reoffend and the associated likelihood of harm. Fifty-nine evaluations were located of which forty-one involved cases where the offender was diagnosed as a sexual sadist, while the remaining eighteen cases were given various other diagnoses. The fourteen evaluators were all experienced forensic psychiatrists who reported using *DSM-III-R* or *DSM-IV* criteria.

Marshall, Kennedy, and Yates (2002) compared the offenders who were given a diagnosis of sexual sadism with those who were not given such a diagnosis. The groups were compared on twenty offense features (extracted from extensive police and victim reports and from court records), ten sets of self-reported information, and seven data sets derived from phallometric assessments of sexual interests. All this information was available to the psychiatrists doing the evaluations. Contrary to expectations, those offenders who were not diagnosed as sexual sadists were significantly more likely to have beaten or tortured their victims than were those deemed to be sexual sadists. In addition, the nonsadists showed greater sexual arousal to nonsexual violence

while the sadists displayed greater arousal to consenting sexual scenes. Marshall et al. calculated a composite sadistic score based on offense details, but again it was the nonsadists who scored the highest. It appears that the diagnosticians in the study did not systematically employ the information Marshall et al. used to compare the sadists and nonsadists. Perhaps they relied more on how the offender presented at interview. However, the only thing that predicted their diagnoses was what an earlier psychiatric report identified as the diagnosis. Apparently, once a diagnosis is made it tends to be perpetuated by subsequent diagnosticians even when the available information contradicts the diagnosis.

Since Marshall and Kennedy's (2002) literature review revealed that the authors of each study used idiosyncratic criteria to apply the diagnosis of sexual sadism, it may be that Marshall et al.'s (2002) first study simply revealed the idiosyncratic tendencies of each of the psychiatrists the prisons hired to evaluate the offenders. Marshall, Kennedy, Yates, and Serran (2002), therefore, decided to conduct a further study to examine the interdiagnostician reliability of sexual sadism. They carefully extracted information from the files of twelve of the offenders in their first study, six of whom had been identified as being sexual sadists while the other six were identified as having some other diagnosis (e.g., pedophilia, antisocial personality disorder). The information contained details of the life history of each offender, crime scene data and other details of his offense(s), the results of various psychological tests as well as the results of phallometric evaluations (which measure a person's sexual arousal to selected cues), and self-reported sexual interests and activities provided by the offenders. All this information on each of the twelve offenders was provided to fifteen internationally renowned forensic psychiatrists, each of whom had experience working specifically with sexually sadistic offenders. These experts were asked to complete several tasks, but the one of prime interest was the requirement that they decide whether each offender was or was not a sexual sadist. A resultant calculation revealed a percentage of agreement among the experts that was marginally above chance (75 percent agreement where chance agreement would be 53.3 percent). Generally, the statistic considered appropriate to determine inter-rater agreement is the *kappa* coefficient. For very important decisions it is generally agreed that a *kappa* coefficient of .9 is necessary, whereas for a decision having rather trivial consequences a *kappa* of .6 is acceptable (American Educational Research Foundation, 1999). Given that psychiatric diagnoses of sexual sadism (or not) markedly influence a variety of decisions (e.g., determining if an offender meets criteria for Dangerous Offender status, or is a Sexually Violent Predator, or a decision to release the offender to the community) that have very important implications for the safety of the community and for the offenders' freedom, it would seem necessary for interdiagnostician agreement to be high. Unfortunately, not only was the percent agreement among the experts quite low, but the *kappa* statistic revealed completely unsatisfactory interdiagnostician agreement (*kappa* = .14).

Clearly Marshall et al.'s two studies do not encourage confidence in the application of the diagnosis of sexual sadism.

Perhaps the best study yet of psychiatric diagnoses applied to sexual offenders was conducted by Levenson (2004). She examined diagnoses given to sexual offenders being considered by Florida courts for the application of a civil commitment as a Sexually Violent Predator (SVP). The successful application of this status means the offender is to be incarcerated indefinitely until it can be shown that he has so profited from treatment as to no longer be an unacceptable risk to the community. In these cases the courts require two acknowledged experts to independently evaluate the offender. For the SVP status to be applied, the offender must meet criteria for a paraphilia and be determined to be at high risk to reoffend. Levenson compared the diagnoses identified by each of the two independent assessors. The resultant *kappa* coefficient for sexual sadism was 0.3, which is far below acceptable standards. Evidently so-called experts in Florida do no better at diagnosing sexual sadism than did Marshall et al.'s samples of Canadian psychiatrists or international forensic psychiatrists.

Despite these disappointing data, we are not inclined to dismiss the relevance of sexually sadistic behaviors, but rather, we believe the present diagnostic practices are inadequate. We could urge forensic psychologists and psychiatrists to exercise greater care, or we could insist that they employ the same criteria. Perhaps, however, the problem resides in the insistence of the diagnostic manual that the sadist must be sexually aroused by the suffering and humiliation of the victim. Since no one but the offenders can know the answer to this question, and they are unlikely to reveal such interests, the diagnosis requires the clinician to infer sexual motivation in the infliction of cruelty, torture, or degradation. Such a reliance on inference is almost certain to limit the reliability of the diagnosis.

One way around this problem of inferring sexual motivation that has been adopted by some authors is to employ phallometric assessment (see Marshall & Fernandez [2003] for a review). Phallometric assessments involve the measurement of the client's erectile changes in response to the presentation of various sets of sexual stimuli. No one has yet developed a satisfactory stimulus set specifically for sadists, but several researchers have adapted current assessment stimuli designed for men who sexually assault adult females. Seto and Kuban (1996), for example, used arousal to a description of a brutal rape as an index of sexual sadism. Unfortunately, they found no differences between rapists they defined as sadists and rapists whom they determined were not sadists. Seto and Kuban's data match those found in similar studies (Barbaree, Seto, Serin, Amos, & Preston, 1994; Langevin et al., 1985; Rice, Chaplin, Harris, & Coutts, 1994). Proulx et al. (2005) modified their standard phallometric stimuli to include sets describing rapes that involved either extreme physical violence or had additional elements involving the humiliation of the victim. Proulx et al.'s stimulus sets are closer to the *DSM* criteria for sexual sadism than are any other

available stimulus sets. In comparing rapists who were deemed to be sadists with rapists who did not meet the criteria, Proulx et al. found that the sadists showed significantly greater arousal to both the physically violent and humiliating scenes. These data suggest that specifically designed sadistic stimuli may reliably distinguish sadistic from nonsadistic sexual offenders. We have designed such stimuli but because of the extreme nature of the content we have not yet been able to get ethics approval for a study to examine the value of this phallometric procedure. In addition, such studies suffer from a seemingly inescapable conundrum; namely, that each group (i.e., sadists and nonsadists) must be distinguished prior to the phallometric evaluation and yet the phallometric test is being evaluated as a diagnostic tool in identifying sadism.

As an alternative to current diagnostic practices, we suggest that the actual behaviors of sexual sadists may provide a basis for more accurately and more reliably identifying these problematic offenders. In the study by Marshall, Kennedy, Yates, et al. (2002) where international experts were asked to identify sexual offenders as sadists or not, these experts were also required to rate the importance for diagnostic purposes of a variety of features of the offender's behavior. While the

Table 10.2. Experts' Ratings of Sadistic Features

Feature	*Experts' Ratings of Importance*
1. Offender exercises power/control/ domination over victim	3.15
2. Offender humiliates/degrades victim	3.15
3. Offender tortures or is cruel to victim	3.14
4. Offender is sexually aroused by sadistic acts	3.14
5. Offender mutilates sexual parts of victim's body	2.72
6. Offender has history of choking consensual partners during sex	2.50
7. Offender engages in gratuitous violence toward or wounding of victim	2.35
8. Offender attempts to, or succeeds in, strangling, choking, or otherwise asphyxiating victim	2.21
9. Offender has history of nonsexual cruelty to other persons or animals	2.14
10. Offender keeps trophies of victim or keeps records of the offense	2.11
11. Offender carefully preplans offense	2.00
12. Offender engages in bondage with consensual partners during sex	2.00
13. Offender mutilates nonsexual parts of victim's body	1.85
14. Victim is abducted/confined	1.85
15. Evidence of ritualism in offense	1.85

Source: Adapted from Marshall, Kennedy, Yates, et al. (2002).

experts were not, as we have seen, able to agree on the diagnosis, they were in general agreement on what features are important in making a diagnosis. Table 10.2 describes the features identified by these experts as relevant and records the average ratings of the importance of each of these features. The rating scale ranged from 0 to 4 where 4 indicated that the feature was crucial to the diagnosis and 1 indicated it was somewhat relevant; 0 meant the feature was not relevant. In addition to the features described in Table 10.2, both cross-dressing and fire-setting have been suggested by some authors (Dietz et al., 1990; Gratzer & Bradford, 1995) as distinguishing features of sexual sadists, but experts in Marshall, Kennedy, Yates, et al.'s (2002) study rated both of these features as zero (i.e., not relevant).

We intend to develop a rating scale based on the features listed in Table 10.2 with ratings for each feature being weighted according to the values assigned by the experts in the Marshall, Kennedy, Yates, et al. (2002) study. The scale has been developed to the stage where we are now conducting inter-rater reliability studies in several locations worldwide. We will also examine the relationship between scores on the rating scale and various other features of the offense, offender, and actuarial risk measures. Whether such a dimensional approach, rather than a categorical diagnosis, will prove helpful remains to be seen, but there have been calls for the *DSM* to move to a more dimensional approach across all diagnoses (Widiger & Coker, 2003). In any event, it is clear that current diagnostic practices, as they apply to sexual sadism, are in need of serious repair.

TREATMENT

Given the present state of knowledge, we firmly believe that if a sexual offender clearly meets criteria for sexual sadism (or scores high on our Sadism Scale), then psychological treatment alone is insufficient. A combination of antiandrogens and psychological treatment (specifically, cognitive behavioral therapy) is, in our view, necessary to effectively minimize the risk of re-offending and thereby maximally protect the public. For sexual sadists the risk not only concerns the likelihood of a reoffense, but also includes the very high risk of considerable harm to the victim. For some sexual sadists (particularly those who have only one identified victim), scoring actuarial risk assessment instruments (see Doren [2002] for details) may indicate a low risk to reoffend, but this will not reveal anything about risk to harm. Antiandrogens may serve to reduce both the risk to reoffend and the risk to harm, but psychological interventions may also equip the offender with the skills, attitudes, and beliefs necessary to meet his needs in a prosocial manner.

Psychological Intervention

We have elsewhere described in detail the application of a cognitive behavioral treatment program designed specifically for sexual offenders and we

have demonstrated its effectiveness (Marshall, Anderson, & Fernandez, 1999; Marshall, Marshall, Serran, & Fernandez, in press). We will not describe this program in detail here, but briefly outline its main features and how these might be adjusted for sexual sadists. The reader is referred to the original sources for greater details of this program. Table 10.3 describes the treatment targets. Those targets identified as "primary" are addressed with all sexual offenders although the procedures and degree of concentration are adjusted to meet the needs and capacities of each individual client (this represents what Andrews & Bonta [1998] call the "responsivity" principle). The additional targets listed in Table 10.3 simply identify the most common extra needs of sexual offenders and are not meant to exhaust all the possible array of additional problems any one client might have.

Acceptance of responsibility requires the client to give a full disclosure of the details of his offense, describe his history of prior offenses, indicate whatever planning he made to commit the offense, and reveal his persistent sexual fantasies. When having sexual sadists give a disclosure of their offense, it is best to avoid having the client provide the sexual, violent, and sadistic elements in any detail. They need to indicate what they have done but not in sufficient detail to allow them to become aroused. For example, the sadist may indicate that he sexually mutilated the victim but not provide specific details of the mutilation. He may say he deliberately humiliated the victim but should not describe this in graphic detail.

During the disclosure of their offense, as well as in discussing all other topics, sexual offenders display attitudes, beliefs, and perceptions that reveal their underlying inappropriate schemas. For sexual sadists the schemas of

Table 10.3. Treatment Targets for Psychological Intervention

Primary Targets	*Additional Targets*
Acceptance of responsibility	Anger/violence management
Self-esteem	Substance abuse
Autobiography	Reasoning and rehabilitation
Pathways to offending	
Victim empathy/harm	
Social skills	
Coping/mood management	
Sexual interests	
Self-management plans	
• Avoidance strategies	
• Good life plans	
• Release plans	
• Warning signs	
• Support groups	

particular relevance that guide their perceptions, expressed attitudes, and behaviors, concern sex, violence, women and children, and their own sense of entitlement. Every surface expression of these schemas (e.g., their expressed attitudes, beliefs, and perceptions) needs to be challenged and alternative views need to be encouraged and reinforced.

Self-esteem is enhanced because doing so appears to enhance the offender's involvement and commitment to treatment, and enhancements of self-esteem are related to improvements in various other targets of treatment (see Marshall et al. [1999] for details). Having clients complete an autobiography helps them recognize the origins of their problems, assists the therapist in developing a broader understanding of the client, and facilitates, along with the offense disclosure, the beginning of the development of the offender's pathways to offending. The offense pathway identifies the background factors that led to the creation of a frame of mind that allowed the offender to develop the specific steps required to offend. The background factors (e.g., problems with adult relations, anger at the world or women), the preparations to offend (e.g., planning, getting intoxicated), and the specific steps taken to be able to offend all need to be clearly elucidated. This is necessary so that eventually steps to circumvent these problems can be identified (i.e., self-management plans) and skills training (e.g., mood management, and the enhancement of coping skills and relationship skills) implemented to facilitate putting the client's self-management plans into action.

In discussions, numerous therapists have expressed concerns about having sexual sadists understand the harmful effects they have inflicted on their victims, as is typically done to increase the empathy sexual offenders have toward their victims. Since sexual sadists are, by definition, excited by the prospect of harming their victims, it is suggested by these therapists that helping such offenders recognize the harm they have done will enhance their motivation to offend rather than reduce it. It is thought that sadists would enjoy, rather than be deterred by, the idea that their victim has suffered harm in the aftermath of the offense. This may, however, be a misplaced concern. Sadists clearly derive some pleasure (whether sexual or as a result of control, etc.) from their victim's suffering *during* the offense, but this does not mean that they are necessarily excited by postoffense suffering. Indeed, it seems to us unlikely that they are. To be aroused by suffering, the sadist has to be in the process of inflicting it on the victim. In his sexual fantasies the sadist imagines hurting and humiliating the victim, but he does not imagine this suffering to last after the imagined offense is over. There is no evidence suggesting that sexual sadists dwell on or are excited by the prospect of their victim continuing to suffer long-term. In our treatment of sadists, we find that most of them have either not thought about the postoffense suffering of their victim or they have expressed some degree of regret about the suffering. It appears they enjoy victim suffering during the offense but they are either indifferent to long-term consequences or they may actually prefer their offense not to have long-term consequences for

the victim. In any event, sadists depersonalize their victims during the offense in order to inflict pain and degrade the victim. The process of identifying postoffense victim harm and its spillover effects on the victim's family serves to make the victim a real person with feelings, hopes, and all the other features that make someone human. Reducing the sadist's capacity to depersonalize other people should make it harder for him to offend in the future. Therefore, in alerting a sexual sadist to the long-term harm that his victim has experienced (or is likely to experience), the therapist must portray the victim as a real person with hopes and aspirations that have been disrupted by the offense. This, we believe, will cause the sadist to think of his victims (and all potential future victims) as fully formed people, thus reducing his capacity to depersonalize them in a way that allows him to treat them as objects for his peculiar pleasure.

Sadists are typically isolated individuals, or at least have serious problems in forming deep attachments to others. Teaching them the skills, attitudes, and self-confidence needed to effectively relate to others should allow them to feel not only more connected to others (and consequently less likely to depersonalize others) but also to feel less need to control others. The desperate need to have control over another person reflects the sadist's inability to feel any sense of control over various aspects of his own life, particularly in terms of his relationships with other people. Giving him the skills needed to meet his needs (including the need for control) should serve to reduce his attempts to control others by inappropriate means.

It appears that sadists exercise strong control over the expression of their emotions except when offending. They often present as cold and detached individuals, devoid of any real emotions. Attempts at suppressing emotions fail to give the person any experience at enjoying and modulating their emotions in an appropriate and satisfying way. Everybody experiences emotions, but some people attempt to suppress the expression of feelings, and this leads to all manner of problems (Kennedy-Moore & Watson, 1999). Also, poor emotional regulation (which in the case of sadists typically manifests as over-controlled emotional regulation) has numerous damaging consequences both for the individual and others (Baumeister & Vohs, 2004). Encouraging sadists to become more emotionally expressive may not only be beneficial; it should also provide the therapist with a window into the world of the client, which would not be available were the sadist to remain emotionally unexpressive. Problematic schemas and problematic motivations are frequently obscure in emotionally unresponsive clients. Also, emotional expression helps to reveal the things that distress clients so that coping skills can be developed to reduce distress that may otherwise initiate the chain of events leading to offending.

There can be no doubt that sexual sadists have deviant sexual fantasies. Whether they enjoy these fantasies as persistent and preferred sexual interests, or whether the fantasies occur only under stressful or other problematic circumstances, does not matter. These sexual fantasies involve the control of,

as well as the physical and psychological suffering of, their victims. Clearly, even occasional fantasies of this kind, in someone who has committed a serious sexual offense, need to be eliminated. We can expect antiandrogens to reduce the frequency and intensity of deviant sexual fantasies (Bradford, 2000), but behavioral procedures should also be employed to reduce the possibility of these fantasies recurring in the future. Marshall et al. (in press) provide detailed descriptions of appropriate behavioral strategies to achieve this goal. Our preference is to employ the combination of deliberately masturbating to appropriate fantasies (which we help the client construct) until orgasm and then shifting (during the refractory period—see Masters & Johnson [1966] for a description) to articulating all possible variants of the deviant themes for a further ten minutes. This latter aspect of the procedure is called "satiation." This combination of masturbating to orgasm while fantasizing appropriate sex and then engaging the satiation procedure has been shown to be effective across a range of deviant sexual fantasies and behavior (Johnston, Hudson & Marshall, 1992; Marshall, 1979; Marshall, in press).

Finally, the sadist, like all other sexual offenders in treatment, must formulate plans for the future that he will implement after discharge from the program. These plans include some limited avoidance strategies (i.e., what have been called "relapse prevention plans") meant to reduce contact with potential victims or to prevent the reemergence of risk factors, but they should emphasize the development of what Ward (2002; Ward & Marshall, 2004) calls a "good life plan" designed specifically for, and with, the client. This good life plan is meant to encourage the offender to build a new life that will prove to be more fulfilling across various domains of functioning such as health, knowledge, work and leisure, creativity, and relationships. Associated with these plans, the client's plans for accommodation, work, and friendships need to developed, and he needs to identify support groups who will help him with both the transition back to the community and with his attempts to remain offense-free.

Pharmacological Treatment

There has been a wide range of medical intervention used to treat sexual offenders, from psychosurgery at one end of the body to castration at the other. Clearly, the motivations for their use can be considered as either punitive or therapeutic depending on one's point of view. The scientific grounds for operating on an otherwise healthy brain are highly suspect and the evidence for so doing in terms of control of sexually deviant behaviors is questionable (e.g., Rieber & Sigush, 1979) such that the procedure has not been used for many years (Pfäfflin, 1995). Physical castration is no less controversial (Berlin, 2005; Weinberger, Sreenivasan, Garrick, & Osran, 2005) and in most Western countries it is not a practical consideration. As a result, since World War II, pharmacological approaches have been explored.

In the 1970s the antipsychotic drug benperidol was tested a number of times in sexually deviant individuals. It was found to reduce sexual desire but not sexual behavior when compared with chlorpromazine and placebo in a double-blind trial (Tennant, Bancroft, & Cass, 1974). Subsequently, other antipsychotics, including thioridazine and haloperidol, enjoyed a vogue, as did the anticonvulsant carbemazepine. However, they lacked demonstrable effect on sexual behavior, other than what could be accounted for by overall sedation. In addition to unwanted side effects, the availability of hormonal alternatives led to the eventual abandonment of antipsychotics and anticonvulsants.

Hormonal compounds were the most frequently used medical treatment for sexual offenders in the latter half of the twentieth century. The rationale for their use is to imitate the effect of physical castration, which lowers levels of circulating testosterone and thereby reduces sexual arousability. The female hormone, estrogen, was found effective in lowering male sex drive (Foote, 1944; Golla & Hodge, 1949) but was soon abandoned as it was found to cause severe side effects such as nausea, vomiting, feminization, and thrombosis (Gijs & Gooren, 1996). Two substances in particular replaced it in common use. In Europe, cyproterone acetate (CPA, Androcur) became the standard and is still in common use, whereas in North America, following its introduction by Money (1968) at Johns Hopkins Hospital, medroxyprogesterone acetate (MPA, Provera) was the alternative, as CPA was not available.

Cyproterone acetate has its principal mode of action on androgen receptors and is therefore a true antiandrogen. This term is often misapplied to sex-drive-reducing hormones as a group, even those, like MPA, that do not act by blocking androgen receptors. Over the years since its introduction, a wide variety of sexual offenders and paraphiliacs have been treated with CPA and the studies reported have included double-blind controlled trials (e.g., Bancroft, Tennant, Loucas, & Cass, 1974; Bradford & Pawlak, 1993; Cooper, Sandhu, Losztyn, & Cernovsky, 1992), which confirm the drug's efficacy in reducing sexual activity and arousability. Side effects experienced include fatigue, hypersomnia, depression, and weight gain, feminization, breast enlargement, reduction in body hair, and increase in scalp hair. At the same time, reduction in sexual fantasies and drive, as well as reduced erections and ejaculate volume, are usually noted (Bradford, 2000).

Experience with MPA has been similar, and in clinical practice there is little to choose between the two drugs (Gijs & Gooren, 1996). MPA is not, however, an antiandrogen, and reduces testosterone levels mainly by increasing testosterone metabolism. There have been double-blind controlled studies confirming the effectiveness of the drug in suppressing sexual behavior and arousal compared with placebo (Hucker, Langevin, & Bain, 1988; Langevin et al., 1979; McConaghy, Blaszcznski, & Kidson, 1988; Wincze, Bansal, & Malamud, 1986). The side-effect profile of MPA is similar to CPA. Rare but serious side effects of both drugs include thrombo-embolic disorders, hypertension, gallstones, hyperglycemia, and bone demineralization (Grasswick &

Bradford, 2003). These effects are more likely to occur with prolonged usage (Gijs & Gooren, 1996).

Both MPA and CPA are artificial steroid hormones chemically related to the sex steroid hormones that occur naturally in the body. More recently, interest has focused on a different class of drug, a nonsteroid, which lowers the blood testosterone levels even more dramatically than MPA and CPA. This type of drug, known as a luteinizing hormone releasing hormone (LHRH) agonist, is a peptide or protein substance similar to a naturally occurring hormone that is released from the hypothalamus. This LHRH agonist mimics this naturally occurring hormone and stimulates the anterior pituitary at the base of the brain to produce luteinizing hormone (LH), which, in turn, acts on the testes to stimulate release of testosterone. After injecting the LHRH agonist, by a feedback loop the initially increased testosterone levels circulating in the blood quickly cause the hypothalamus to cease producing LHRH and testosterone levels then fall.

The LHRH agonists have to be administered by injection, as they would, like any other protein, be digested in the stomach if taken by mouth. Two special precautions have to be taken with these drugs. First, a small test dose has to be given with the first injection to ensure that the patient is not allergic to the foreign protein that the drug constitutes. Second, to combat the potential increase in libido that the initial surge of testosterone might cause, it is important to concurrently administer an anti-androgen, such as CPA, for about the first two weeks. Longer-term side effects with LHRH agonists include hot and cold flashes, loss of facial and body hair, asthenia, diffuse muscle pain, and loss of bone density (Briken, Nika, & Berner, 2001; Grasswick & Bradford, 2003). Unlike CPA and MPA, LHRH agonists have not yet been subjected to the same degree of scrutiny. Briken, Hill, and Berner (2003) reported that there had been only four case reports, one single-case controlled study, seven open uncontrolled studies, and one study comparing an LHRH agonist with CPA. Nonetheless, it appears that this type of drug is a safer alternative to CPA and MPA and likely to be more effective as testosterone suppression is more complete (Briken et al., 2003, 2001; Dickey, 1992). However, more research is needed (Briken et al., 2003) and the issue of bone loss as a potentially serious side effect needs further exploration, especially with respect to preventative measures (Grasswick & Bradford, 2003).

In the face of such potentially serious side effects as have been described above in connection with hormonal treatments, it is not surprising that interest has been shown in more common psychotropic drugs, such as antidepressants, as well as the antipsychotics already described. The possible benefits of the traditional antidepressants and lithium carbonate were explored a number of years ago (e.g., Snaith & Collins, 1981; Ward, 1975), but it was not until the introduction of the specific serotonin reuptake inhibitors (SSRIs) that their utility as sex-drive suppressants became fully exploited. These drugs, of which Prozac is one major type, have a high incidence of sexual side effects. In fact,

hypotheses have been elaborated to explain sexually anomalous behaviors, as well as other obsessive-compulsive behaviors, in terms of cerebral serotonin dysfunction (Kafka & Coleman, 1991; Pearson, 1990).

Unlike hormonal agents, SSRIs are not associated with thrombotic disorders and have no deleterious effects on the bones. However, there appear to be other troublesome, though comparatively mild, side effects, including nervousness, irritability, nausea, diarrhea, constipation, headaches, and insomnia. Evidence for the effectiveness of antidepressant drugs on sexual behavior and arousability appears impressive although it has been observed that there are many methodological problems with nearly all the published studies of drug treatments with sexual offenders (Gijs & Gooren, 1996). Most of the studies include a variety of offenders so that the groups treated are not homogeneous either in terms of diagnosis or, more importantly, with respect to the type and frequency of the subject's sexual urges and fantasies. Review of the published studies suggests that the types of paraphilia represented in them include the more common ones such as exhibitionism, pedophilia, voyeurism, and frotteurism. Specific mention of cases of rape or sadism is quite rare (e.g., Bradford & Pawlak, 1987).

Several authors have attempted to develop protocols for the use of hormonal treatments (Reilly, Delva, & Hudson, 2000), while Bradford (2000, 2001) has outlined an algorithm to assist in the selection of the most appropriate medication. Bradford suggests a classification scheme based on the three levels of severity of paraphilia included in *DSM-III-R* (American Psychiatric Association, 1987): mild, moderate, and severe, to which Bradford has added an additional category of "catastrophic." He links his treatment algorithm with this classification. Thus, for any paraphilia, regardless of severity, he believes, as we would, that cognitive behavioral/relapse prevention treatment is essential. However, Bradford also believes, unlike us, that all paraphilias also need pharmacological interventions.

For all cases of mild paraphilia, Bradford recommends starting treatment with an SSRI, and for mild to moderate paraphilias, if the SSRI is not effective after adequate dosage for four to six weeks, he recommends adding a small dose of an anti-androgen. For most moderate and some severe cases, he suggests that a full dose of oral anti-androgen therapy is indicated. For severe cases, and some catastrophic cases, Bradford suggests that CPA or MPA be given intramuscularly. Bradford's final category describes a regimen for some severe cases and is his preferred treatment for catastrophic cases. This approach entails complete testosterone suppression with CPA, MPA, or an LHRH agonist. In contrast, Briken et al. (2003) describe only three levels of severity (mild, moderate, and severe). In agreement with Bradford, they recommend that mild cases be treated with SSRIs, especially for those clients with concomitant depressive or obsessive-compulsive symptoms. For moderate cases, Briken et al. suggest the use of CPA or MPA employing the intramuscular mode of administration if compliance is problematic. If the patient does not

improve, or if there are medical complications such as liver disease that preclude treatment with CPA or MPA, Briken et al. switch to an LHRH agonist, which is the treatment they recommend for all severe cases. Briken et al. also recommend that all sexual offenders should receive psychotherapy together with pharmacotherapy for comorbid disorders.

Properly identified sexual sadists would fit into Bradford's classification as at least severe, and more likely catastrophic, cases, and would be included in Brinker et al.'s severe cases. Thus, sexual sadists would appear to warrant both extensive psychological treatment, either cognitive behavioral/relapse prevention or some other form of psychotherapy, as well as either CPA, MPA, or an LHRH agonist. Whether it is necessary with sexual sadists to apply a dosage that would completely suppress testosterone production, as Bradford recommends, remains to be seen. However, when sexual sadists are released to the community, it would seem prudent, given the threat for harm that they pose, to aim for complete suppression as the first step in a process of careful monitoring of their functioning and behavior.

So far, no research has demonstrated the effectiveness of treatment with sexual sadists, although, as we have seen, there is evidence of its effectiveness with other sexual offenders. It will be difficult to evaluate treatment for these individuals because (fortunately) they constitute a small proportion of sexual offenders and thus there are rarely enough available to justify an outcome study. In addition, quite a number of sexual sadists are incarcerated indefinitely, further reducing the number available for an outcome study. However, the following case description illustrates the potential benefits of combining medications and psychological treatment.

A CASE STUDY

Donald, now in his 30s, is currently free of any legal constraints and living and working in the community with periodic visits to his psychiatrist and a relapse prevention group. He rarely experiences sadistic fantasies but has them well under control, thanks to many years of combined psychological therapy and pharmacological treatment. However, Donald's early offense history was truly alarming.

Donald had his first and only girlfriend, who was a year younger than himself, at age 14 years. They had enjoyed sexual contacts short of intercourse over a fifteen-month period before her parents found them in bed together and terminated their relationship. This experience left Donald feeling angry and frustrated.

Donald's first sexual assault occurred at the age of fifteen when he attacked a 10-year-old girl. He maintained that this was a spontaneous act and that he experienced "raw" feelings of "anger, fear, and rejection" at the time, accompanied by the urge to hurt her. Using a knife he used to carry to fix his bike, Donald coerced the girl into removing her clothing and then tied her feet and hands with her shoelaces. She became uncooperative, which increased

Donald's anger. He slapped her face and buttocks, forced her to fellate him, and attempted anal and vaginal intercourse but was only able to manage digital penetration. He held her captive for a short period and then allowed her to dress and leave.

Within the next three days, Donald committed two other similar sexual attacks on girls of a similar age. Shortly thereafter, Donald was apprehended. He received a twelve-month sentence followed by two years' probation. During his incarceration Donald ruminated on his offenses, and his fantasies of kidnapping, raping, and bondage became more intense. Before the end of his sentence, Donald was transferred to a psychiatric facility, but he was afraid to disclose the extent of his fantasies to clinicians and was not motivated to seek treatment.

Within four months of his discharge from the hospital, Donald was working in the community. Although he was on probation, Donald's sexual fantasies of kidnapping and raping young girls, and his feelings of revenge against females who had spurned or ridiculed him, were beginning to preoccupy him. He also engaged in voyeurism and cross-dressing at that time and started breaking into houses.

Donald was laid off from work and as a result had more time to fantasize. Shortly after becoming unemployed, Donald broke into a home he had been observing voyeuristically. After entering the house, Donald discovered the young woman he had been watching. Using scissors he had taken with him, Donald forced her to perform fellatio. He was unable to complete sexual intercourse, but he cut up her clothes and hair in order to frighten her; then he left.

A few days later Donald broke into another home of a victim he knew who had once refused to date him. Donald was very resentful and angry toward her. This victim was humiliated by having kitchen refuse smeared on her. Unfortunately for Donald, she recognized him as he ran off. Donald turned himself in shortly afterward.

Donald was found "not guilty by reason of insanity" (NGRI), though he has never shown any signs of major mental illness. This verdict reflects the somewhat idiosyncratic way the insanity defense was applied at the time in Canada. His clinical diagnoses have included sexual sadism together with various combinations of personality disorder, though he has never been considered psychopathic or antisocial.

As was typical at that time, Donald began his treatment in a maximum-security forensic facility. There he eventually elaborated his sexual fantasies to his therapists. He admitted to having intense and frequent sadistic sexual fantasies involving tormenting females, though not involving cutting or stabbing them, but sometimes breaking their fingers while raping them. Donald expressed a strong interest in pornography, especially bondage, as well as fetishism for female clothing and transvestic fetishism, which he had practiced

on a number of occasions. His stated interest at that time was in females aged 12–16 years. Phallometric testing demonstrated a clear sexual preference for pubescent females and he responded to both rape and nonsexual violence. It was noted that Donald was introverted, egocentric, and emotionally constricted, had great difficulty forming relationships with others, and spent much of his time sexually fantasizing. His primary treatment was in a social therapy program and also a variety of behavioral treatments, but he made little headway in controlling his fantasies.

Eventually, Donald was transferred to a medium-security facility where he participated voluntarily in a research study of cyproterone acetate (CPA). However, this produced only a limited reduction in his arousal to violent themes. Although Donald remained a loner in most of his interpersonal relations on the unit, he did become attracted to a female copatient. Donald's fantasies about her quickly became sadistic in nature and he admitted to entering her dormitory at night to watch her sleep.

Another attempt was made a few years later at suppressing Donald's deviant fantasies with CPA. At this time he responded better to an increased oral dose of 200 mg daily. Donald's interpersonal behavior also began to improve and there was noticeable increase in his self-confidence and socialization. About seven years after his NGRI finding, he was enjoying an open ward in the hospital and was able to have access to the hospital grounds in the company of staff.

Donald began a cognitive behavioral relapse prevention (CBT/RP) program at this time, during which he admitted that he was spending several evenings a week writing out his sexual fantasies and pornographic letters. He showed his therapist a large pile of these writings that he had collected. Donald willingly allowed nursing staff to confiscate these and any others that were later found in his possession. He also indicated that he felt depressed and overwhelmed at times, so he was given antidepressant medication, which he said elevated his mood and controlled his deviant thoughts.

Donald's progress was such that he was transferred to another psychiatric facility with a minimum-security forensic unit. He began attending an upgrading course in the community and did very well. Meanwhile, Donald continued with individual psychological counseling aimed at improving his relapse prevention strategies.

Phallometric testing was repeated ten years after his index offense. Unfortunately, this demonstrated that Donald's maximum response was still to pubescent females and he continued to be aroused by sadistic/bondage stimuli despite his claim that CPA had effectively suppressed his arousal. The results of the assessment and pressures of his schoolwork increased Donald's depression and he was given an increase in antidepressant medication (Fluvoxamine 300 mg per day). On this regimen, combined with psychotherapy, Donald stabilized over the following year. He began attending a regular CBT/RP group

and he functioned extremely well in that program. His compliance and attendance were excellent. However, a random check of Donald's computer revealed a number of sadistic images. As a result, his medication was switched to medroxyprogesterone acetate, but this was discontinued because of lack of efficacy and it was decided to change to leuprolide acetate (an LHRH agonist), which can only be given by injection. Donald felt that this was much more successful in curbing his paraphilic desires than his previous medications had been.

Since beginning treatment with leuprolide acetate nearly ten years ago, Donald has been regularly monitored by an endocrinologist with annual bone scans. He takes supplementary calcium and vitamin D but has not so far suffered any significant bone loss or other serious side effects from the medication. He discontinued the antidepressant medication two years ago with no relapse into depression.

After nearly twenty-five years of progressive treatment in the forensic system, Donald was given an absolute discharge, which means that he is no longer subject to legal restrictions of any kind. He is free in the community and working at a job that gives him satisfaction, and he is no longer tormented by the sadistic and pedophilic fantasies that caused suffering in himself and others. Donald appears to have been successfully rehabilitated through a combination of psychological and pharmacological approaches.

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11

Violent Sex Crimes

Lester W. Wright, Jr., Angela P. Hatcher, and Matthew S. Willerick

INTRODUCTION

Most of us fear being the victims of violent crimes, particularly ones that are sexual in nature. It is horrific enough to lose one's life to criminal behavior, but to be captured and tortured sexually prior to being killed is beyond comprehension. Violent sex crimes often get sensationalized in the media and then take on lives of their own. The hype associated with these cases leads to inaccurate information and heightened fears, many of which are unfounded. Additionally, there have been many movies, novels, and works of fiction about violent sexual crimes that are often confused with actual cases. What follows is a review of the literature regarding violent sex crimes. The focus of this chapter will be on the act of sexual homicide, on the individuals who commit these crimes, and on how sexual homicide is investigated.

Sexual homicide has been defined as the killing of another person in the context of power, sexuality, and brutality (Ressler, Burgess, & Douglas, 1996). A murder may be classified as a sexual homicide when the evidence or observations at the crime scene indicate that the murder was sexual in nature. The evidence or observations could include the attire or lack of attire of the victim; exposure of the sexual organs of the victim; sexual positioning of the victim's body; the insertion of foreign objects into the victim's body cavities; evidence of oral, anal, or vaginal sexual intercourse; and/or evidence of substitute sexual activity, interest, or sadistic fantasy (Ressler et al., 1996).

Individuals who commit this type of crime derive some sort of sexual satisfaction from committing the crime, either as a result of a connection between sexual satisfaction and violence or as the result of dominating the victim.

It is difficult to assess the number of sexual homicides for several reasons. For instance, many crimes get reported as ordinary or motiveless homicides even when it is obvious that the crimes were sexual in nature (Ressler et al., 1996). Additionally, the evidence may have been inadequate to state conclusively that the crime was sexual in nature (Groth & Burgess, 1977), the investigators at the scene may not have been trained to detect the underlying sexual dynamics of the crime scene (Cormier & Simon, 1969; Revitch, 1965), or the investigators may not have shared their findings (Ressler, Douglas, Groth, & Burgess, 1980). It is largely agreed upon that the majority of serial murders are sexual in nature (Lunde, 1976; Ressler, 1985; Ressler et al., 1996; Revitch, 1965).

Hickey (2002) suggested that while serial murder is rare, the number of serial killers surged between the years 1950 and 1995, and since 1975 the rise has been even more dramatic. Similarly, Jenkins (1992) suggested that the number of serial murders in American society is increasing. Schlesinger (2001) argued that this increase in serial homicide may be an artifact of the increase in contract killings; thus, while the rate of serial murder may have increased, the rate of sexual homicide may not have increased. According to Hickey, the FBI estimates that there are between 35 and 100 serial killers active in the United States at any one time; however, Holmes and Holmes (1998) estimated that there are as many as 200 serial killers at large. Regardless of the actual number of serial killers at large, the odds of becoming a victim of a serial killer are minuscule when one takes into account the size of the population as a whole (Hickey, 2002). Serial killing does appear to be correlated with population density, that is, states with the largest populations and large metropolitan areas are most likely to report cases of serial murder; however, Hickey pointed out that researchers have not been able to find any regional subcultural variables, that is, poverty or race, that correlate with serial violence.

TYPES OF MULTIPLE KILLERS

The term "serial killer" encompasses several types of murderers, but is sometimes mistakenly applied. It is important to realize that serial murder is different from mass murder or spree murder; the distinction between these types of crimes will be described below. Specific types of serial killers will also be described.

Mass Murderer

Mass murder is a situation in which several victims are killed within a few moments or hours of each other (Hickey, 2002) and in one place (Holmes &

Holmes, 1998). Mass murderers, except those who kill their own families, will usually commit their crimes in public places (Hickey, 2002). Douglas and Olshaker (1999) reported that a mass murderer often kills in a place that is familiar to him, a place where he feels comfortable. The victims of mass murderers are often intentionally selected, such as a former boss, ex-wife, or friend, but other people who happen to be in the vicinity may also be killed. Sometimes, however, an offender gets so frustrated that he lashes out at groups of people who have no relationship to him. When an offender is angry at society in general, the best way to get even is to kill innocent children, perhaps in a schoolyard (Hickey, 2002).

Spree Killer

The spree killer kills a number of victims, usually at least three, at different locations in a short period of hours or days (Douglas & Olshaker, 1999; Hickey, 2002), and the killings are usually accompanied by the commission of another felony (Holmes & Holmes, 1998). Hickey noted that spree killers "often act in a frenzy, make little effort to avoid detection, and kill in several sequences" (p. 16). There appears to be no cooling-off period even though the murders occur at different places over what may be several hours or days (Greswell & Hollin, 1994; Hickey, 2002). Fox and Levin (2005) explained that the short amount of time between murders for a spree killer is spent planning and executing his crimes or evading the police.

Serial Killer

A serial killer is an individual who kills three or more people over a period of more than thirty days with a "cooling-off" period between killings (Holmes & Holmes, 1998). This is a person who hunts human beings for the sexual thrill it gives him, and he will do it over and over again. The serial killer individualizes his murders and often continues to kill over a longer period of time than the types of killers described above (Hickey, 2002). During the cooling-off periods the serial killer may continue about a daily routine that could include going to work and spending time with friends and family (Fox & Levin, 2005). He believes he can outwit and outmaneuver the police, sometimes posing as a police officer, and never expects to get caught (Douglas & Olshaker, 1999; Fox & Levin, 2005). If a serial killer is apprehended, it is typically only after he has eluded detection for weeks, months, or even years (Hickey, 2002). In some instances a serial killer will appear to stop killing; however, it is not known if the killer was jailed for another offense, that is, a single murder or another crime not linked to the other murders, died due to an illness or an accident, changed his modus operandi (method of operation), moved to a new location, or simply decided to stop killing. A serial killer is capable of producing quite a bit of fear since he is often thought to be killing for sport and is able to

blend in with others, making him difficult to detect. Hickey noted that he may be one of the nicest people by day and a killer by night. Serial killers are often described as charming, ordinary, are often loners or asocial, and may have a good relationship with a wife or a girlfriend; likewise, it has been noted that when a serial killer does get apprehended, neighbors, acquaintances, or co-workers will often express shock and report that he was the last person they would have suspected of being a vicious murderer (Douglas & Olshaker, 1999). Fox and Levin (2005) noted that the typical serial killer does not "look or act like the strangers that our mothers always warned us about" (p. 36). They added that many serial killers are clever, inventive, and project a "nice guy" image that makes them so difficult to apprehend.

Within serial murder, it is frequently noted that there are different categories. Hickey (2002) distinguished between the visionary, mission-oriented, hedonistic, and power/control-oriented serial killers. According to Hickey's classification system, a visionary serial killer is an individual who murders at the command of voices that he hears or visions that he sees; a missionary-oriented serial killer is an individual who murders because it is his mission to get rid of certain groups of people; a hedonistic serial killer is an individual who obtains some sort of pleasure from the murders that he commits; and a power/control-oriented serial killer is an individual who obtains pleasure by exerting control over others. A sexual homicide might fall into either the hedonistic type or power/control-oriented type of serial killing.

From a psychological perspective, the evidence at crime scenes seems to indicate that there are two types of sexual murderers: the rape or displaced anger murderer (Cohen, Garofalo, Boucher, & Seghorn, 1971; Groth, Burgess, & Holmstrom, 1977; Prentky, Burgess, & Carter, 1986; Rada, 1978), and the sadistic or lust murderer (Becker & Abel, 1978; Bromberg & Coyle, 1974; Cohen et al., 1971; Groth, et al., 1977; Guttmacher & Weihofen, 1952; Podolsky, 1966; Prentky et al., 1986; Rada, 1978; Ressler, 1985; Scully & Marolla, 1985). The rape or displaced anger murderer kills his victim after committing the rape to avoid getting caught (Podolsky, 1966). It has been noted (Rada, 1978) that these murderers rarely report sexual satisfaction from their murders and do not perform postmortem sexual acts with their victims. The sadistic murderer, however, kills as part of a ritualized, sadistic fantasy (Groth et al., 1977). As Ressler et al. (1996) explained, for the sadistic murderer, "aggression and sexuality become fused into a single psychological experience—sadism—in which aggression is eroticized" (p. 6). Additionally, Brittain (1970) pointed out that the subjugation of the victim is important to the sadistic murderer, and cruelty and infliction of pain are merely the means by which this subjugation is achieved.

SOLO VERSUS TEAM KILLERS

Serial killings are often masterminded by one person, but may have one or more individuals who play subservient roles, as in the case of team killers

(Hickey, 2002). Team killers, that is, dyads, triads, or even larger groupings, are thought to be less common than solo killers (Hickey, 2002). With regard to relationship, Hickey noted that sometimes the members of a team are related, either legally (for example, spouses or stepsiblings) or by blood (for example, siblings or parent-child combinations). However, members of a team may also be intimately involved with each other but not related, acquaintances, or even strangers. As with solo serial killers, team killers are likely to have had a sexual motivation for committing their murders (Hickey, 2002). An example of team sexual serial killers is Kenneth Bianchi and Angelo Buono, better known as the Hillside Stranglers, who were adoptive cousins.

It has been noted (Hickey, 2002) that within teams there is always one person who maintains psychological control over the other member(s) of the team. Likewise, Kelleher and Kelleher (1998) noted that while the dynamics of team killers are frequently volatile, these teams will be dominated by a single individual who attempts to organize the criminal activities of the team, taking a leadership role in most of the homicides. Sometimes the control seems mystical, as in the case of Charles Manson; however, in other cases the control may take the form of coercion, intimidation, and persuasion (Hickey, 2002). Some leaders have reported experiencing a sense of power and gratification, not only through the deaths of their victims, but from getting others to do the killing for them. If caught, the leader of the team will usually turn on the other member(s) of the team and blame them for the murders (Hickey, 2002). Hickey also pointed out that not all members of the team share equally in the thrill of the kill; although, for some, killing not only becomes acceptable, but desirable.

Kelleher and Kelleher (1998) noted that the primary criminal activity of serial-killing teams that include one male and one female is sexual homicide. Kelleher and Kelleher stated, "male/female teams that specialize in sexual homicide are maintained by the synergy of the sexual relationship between the partners and their combined pathological obsession with sexual domination and control" (p. 121). While a majority of the female serial killers are part of a male-dominated team, there have been a number of cases in which the female member is very active in murders and whose magnitude of sexual psychopathic killing rivals that of her male counterpart (Kelleher & Kelleher, 1998).

Hickey (2002) determined that among nonrelative team killers, a man almost exclusively assumed leadership; in fact, very few cases have been documented in which a woman masterminded multiple homicides, was the main decision maker, or was the main enforcer. Kelleher and Kelleher (1998) noted that while the male partner of a serial-killing team was usually the dominant partner, a man was often a solo sexual serial killer as well. Hickey noted that some women who were followers went on to become " 'equal partners in the killing' and participated directly in some of the bloodiest murder cases ever chronicled" (p. 187).

Team killers, according to Hickey (2002), are not responsible for as many victims as solo killers. Specifically, he noted that on average team killers were

responsible for four to five killings per offender whereas solo killers had a slightly higher average number of victims. He also noted that team killers were most likely to remain in local proximity to their killing sites and were not as mobile as other types of offenders (Hickey, 2002).

Team killers were similar to their solo counterparts on many background variables. However, some of the dissimilarities are that team offenders had a slightly higher rate of psychiatric problems, were less likely to have criminal records for sex-related crimes, and seemed more interested in financial gain than solo killers (Hickey, 2002). Solo killers, however, were more likely to report feelings of rejection in childhood, remember more beatings as a child, report having been adopted, and report parents dying or being an orphan. Team killers, for the most part, did not receive college educations and few received postsecondary training, such as vocational training. Most were employed in blue-collar work (Hickey, 2002).

FEMALE KILLERS

It is commonly thought that most women who kill do so in domestic situations and, thus, are not multiple killers (Hickey, 2002). However, some of these women go on to remarry and kill again. The notion of women as mass murders or serial killers goes against some long-held, and perhaps sexist, views of women, and is still quite controversial. These beliefs, held by mainstream society, as well as those of the courts, about female killers make it less likely that a woman will come under suspicion for multiple killings. According to Hickey, in 1991 the FBI labeled Aileen Wuornos the nation's first female serial killer basically because she was the first woman to kill like a man. She was not, however, the first female serial killer. It has been noted that there have been approximately fifty-six female serial killers since 1900; however, statistics have shown that the number of women who kill is relatively low in comparison to the number of men (Hickey, 2002).

One facet that sets female serial killers apart from male killers is their preferred choice of weapon—more specifically, poison; however, other female killers, particularly those with an accomplice, may also resort to more violent methods, such as shooting, bludgeoning, or stabbing (Hickey, 2002). According to the data in the Hickey study, female offenders differed from their male counterparts in several ways. Female offenders, in general, selected less-violent methods of killing, did not sexually attack the victim, did not mutilate the corpse, and were generally not sexually involved with their victims. Kelleher and Kelleher (1998) pointed out that the "female serial murderer was most successful when motivated by reasons other than sex and when operating alone" (p. 15). They also found that compared to the male serial killer, who frequently attacks strangers, the female serial killer's victim of choice is usually someone who depends on her for care or a person with whom she has some type of relationship. Hickey pointed out that the motives for female serial

crimes are largely unknown, but financial security, revenge, enjoyment, and sexual stimulation have been identified as reasons for killing. However, as previously mentioned, women who commit serial murder are less likely to commit sexual homicide (Keeney & Heide, 1994; Kelleher & Kelleher, 1998).

MOTIVATIONAL FACTORS

Serial killers have frequently reported experiencing trauma during their formative years (Hickey, 2002). This trauma often took the form of instability in the home and included such things as alcoholic parents, prostitution by mother, incarceration of parent(s), periodic separation from parents due to trouble at home, and psychiatric problems involving the parents (Hickey, 2002). Many childhood factors, such as experiencing a trauma, and family of origin variables for sexual murderers have been examined in order to determine what motivated their acts. Several characteristics have been identified and include childhood abuse, neglect, poverty, violence in the home, violence in the media, exposure to pornography, genetics, cognitive disabilities, insanity, PMS, blood sugar imbalance, and/or substance abuse. However, these variables either singularly or in combination have been identified in the backgrounds of many individuals who do not grow up to be serial killers. While these variables have been identified in, and seem to be correlated with deviant offenders, these variables are not causal, that is, possessing these characteristics does not cause an individual to commit serial murder.

Development of Deviant Fantasies

Hazelwood and Michaud (2001) stated that aberrant sexual fantasies play a central role in the planning and the enactment of violent sexual offenses. They also pointed out that only a small minority of fantasies actually led to sexual crimes. Salter (2003) added that aberrant fantasies play an enormous role in the development of compulsive rapists, yet she cautioned that not every person who may have rape fantasies will turn into a rapist. Hazelwood and Michaud defined fantasy as "a mental rehearsal of a desired event" but noted that it may also include behaviors that the individual has no desire or intention of actually engaging in (p. 18). This continual mental rehearsal serves as a kind of editing mechanism that allows the offender to focus on the details of the crime that are uniquely arousing to him (Hazelwood & Michaud, 2001). He can rearrange the parts of his fantasy to his liking and mentally practice his crime with no negative consequences; thus, the fantasy ultimately becomes a template or map for the offender to follow when he commits the crime and, once the offender has a fully developed fantasy, he is ready to search for a victim to live out the fantasy (Hazelwood & Michaud, 2001). Salter stated that this process may take months or even years as these fantasies often start very early and continue for years before the assaults begin.

Hazelwood and Michaud (2001) have noted two disturbing trends with regard to sexual fantasies: (1) "Offenders today are conceptualizing their crimes at a much earlier age than their predecessors did," and (2) "Their fantasies are growing more complex and, in some cases, deadlier over time" (p. 19). As previously mentioned, Hazelwood and Michaud noted that an individual might fantasize about engaging in sexual murder but will not actually engage in the behavior. The distinction between individuals who only fantasize about committing a sexual murder and those who actually commit a sexual murder is that the latter actually made the choice to cross over from fantasy to reality. Salter (2003) stated that individuals who actually commit rape differ from those who only fantasize about rape in that the rape fantasies are more prevalent, are more obsessive, and are more important to the rapist.

It is not enough to know that deviant fantasies are part of the motivation for committing a sexual homicide; it is also important to examine what actually motivates an individual to act out his aberrant sexual fantasies. It is sometimes mistakenly believed that rape is a sexually motivated act and that the offender committed the crime because he was "horny" (Hazelwood & Michaud, 2001); however, sexual assault is an act of aggression, an assertion of power, an expression of anger, or some combination thereof. The rapist achieves gratification, not from the sexual release, but from the result of having power, exerting aggression, and expressing anger, while gaining the thrill of domination and control. Rapists are basically using sex as a tool of aggression as it serves nonsexual needs (Hazelwood & Michaud, 2001). Hickey (2002) stated that sexual assault appears to be the method of gaining control over the victims, which is very similar to an individual who commits sexual homicide for which he might receive sexual gratification from the power, control, or domination that he has over his victim.

The Role of Paraphilias

Paraphilias may also play a large role in the fantasies of serial killers. The *Diagnostic and Statistical Manual of Mental Disorders* (*DSM-IV-TR*; American Psychiatric Association, 2000) describes paraphilias as recurrent, intense sexually arousing fantasies, urges, or behaviors that generally involve nonhuman objects, the suffering or humiliation of one's partner or children or other nonconsenting persons that occur over a period of at least six months. The *DSM-IV-TR* includes nine categories of paraphilias and it has been noted (Abel, Becker, Cunningham-Rathner, Mittelman, & Rouleau, 1988) that individuals typically have more than one paraphilia, although one paraphilia may be dominant over the others. The paraphilias that are most relevant to sexual homicide are sexual sadism and necrophilia.

Sexual sadism involves real, not simulated acts in which the individual derives sexual excitement from the psychological or physical suffering of his or her partner (American Psychiatric Association, 2000). This suffering may include humiliation

and the partner may or may not consent to the activity. What is important is the suffering of the partner; this is the stimulus that elicits sexual arousal in these individuals. Sadistic fantasies or behaviors may include activities that indicate the dominance of the sadist over the partner, such as being forced to engage in submissive behavior and restraints, bondage, beating, burning, rape, cutting, stabbing, strangulation, torture, and/or mutilation. Killing of the partner may also occur.

Necrophilia, a sexual attraction to corpses, may take a variety of forms. Rosman and Resnick (1989) distinguished between three forms of genuine necrophilia—necrophilic homicide, the commission of murder in order to obtain a corpse for sexual purposes; regular necrophilia, the use of already dead bodies for sexual purposes; and necrophilic fantasy, the fantasizing about sexual activity with a corpse without actually engaging in necrophilic behavior. In examining the motivations behind necrophilia, it was noted that 68 percent of the individuals in their sample ($n = 34$) engaged in necrophilia in order to have an unresisting and unrejecting partner, and 12 percent of the sample engaged in necrophilia in an "attempt to gain self-esteem by the expression of power over homicide victims" (p. 159). Other reasons for engaging in necrophilia included reunion with a romantic partner (21 percent), conscious sexual attraction to corpses (15 percent), and attempting to gain comfort or overcome feelings of isolation (15 percent).

Committing Murder and the Escalation to Increased or Repeated Violence

There are a number of circumstances that might lead an individual to commit sexual homicide. As previously mentioned, perpetrators of this crime enjoy the power, control, and/or domination that they exert over their victim; likewise, if the individual feels as if he has no control over his life, he might commit murder in order to gain some form of control. Ressler et al. (1996) noted that an individual might commit a sexual homicide following a conflict, with either a woman, another man, parents, or a spouse; if the individual is under financial stress; is having marital, legal, or employment problems; after the birth of a child; or if there has been stress due to a death.

Douglas and Olshaker (1999), as well as Holmes and Holmes (2002), noted that as a serial killer progresses in his criminal career, there is sometimes an increase in violence, less planning, and less time between murders. For example, before he was apprehended, Ted Bundy escalated his rate of murder and engaged in very little planning.

PROFILING

The examination of criminal behavior, particularly sexual homicide, is multidisciplinary with fields such as psychology, sociology, geography, biology,

and law enforcement making important contributions (Hickey, 2002; Ressler et al., 1996). The field of psychology offers assistance by providing diagnoses of the offenders, examining the childhood antecedents to criminal behavior, assessing the development of criminal behavior as a result of learned responses to particular stimuli, and implementing techniques for treating offenders (Ressler et al., 1996). Sociology helps to explain the actions of a murderer as a social phenomenon, examining murder within the larger social context in which it occurs (Ressler et al., 1996). Spatial mapping is a technique that combines geography with environmental criminology in order to connect crime scenes to offender habitats and hunting grounds (Hickey, 2002). Geographic profiling allows investigators to determine if various crime scenes are related to one another by location, which aides in finding a relational pattern to the crime scenes in order to pinpoint an offender's zone of familiarity—for example, where he lives or works (McCrary & Ramsland, 2003). Biology has contributed techniques such as DNA analysis to link perpetrators to specific crimes (Hickey, 2002). The primary objective of law enforcement is to determine the identity of the offender and apprehend him as soon as possible in order to prevent future victims (Ressler et al., 1996). The synergy of these fields working together makes it possible to accomplish more than they could working alone. While there are many types of profiling, the focus of this chapter will be on offender (criminal) profiling, victim profiling, equivocal death profiling, and crime scene profiling.

History of Profiling

Attempts at profiling prior to the 1970s were basically composite construction of murderers, which described the "typical murderer" (Palmer, 1960; Rizzo, 1982). Criminal profiling, as we now think of it, began informally in the early 1970s by using crime scene information to infer various offender characteristics to help in the apprehension of the criminal (Ressler et al., 1996). During the early days, criminal profiling was referred to as "psychological profiling" or "criminal personality profiling" and was a little-known and spare-time service that was provided to local law enforcement officers if requested (Hazelwood & Michaud, 2001). These newer criminal profile analyses conducted by the FBI proved useful in identifying offenders and, due to the requests of local authorities, were then made available to all law enforcement agencies (Ressler et al., 1996). Within a span of a decade, criminal profiling became very popular. The results of a 1981 evaluation questionnaire revealed that criminal profiling had helped to focus 77 percent of the cases in which the subjects were later identified (Ressler et al., 1996). Today, criminal profiling is just part of a more comprehensive behavioral assessment program called criminal investigative analysis (McCrary & Ramsland, 2003). For more information on criminal investigative analysis, see McCrary and Ramsland, *The Unknown Darkness* (2003).

What Profilers Do

Criminal profilers examine crime scenes for clues that reveal behaviors that are characteristic of, and perhaps unique to, the offender. Hazelwood and Michaud (2001) stated that although investigators can find patterns and common elements among offenders, no two offenders ever commit the exact same sexual crime. "The crime scene may be the point of abduction, a location where the victim was held, the murder scene, and/or the final body location" (Ressler et al., 1996, p. xiii). Crime scene characteristics, as described by Ressler et al., include "those elements of physical evidence found at the crime scene that may reveal behavioral traits of the murderer" (p. xiii). This could include a variety of physical remnants of the crime, including a weapon, tools used in the crime, positioning of the victim, and evidence of various acts committed against the victim, just to name a few. Ressler et al. defined profile characteristics as "those variables that identify the offender as an individual and together form a composite picture of the suspect" (p. xxii). Profile characteristics may consist of any defining feature about an individual, including the perpetrator's sex, age, occupation, level of intelligence, acquaintance with the victim, residence, and mode of transportation. According to Hazelwood and Michaud, the most difficult crimes to profile are those in which there is no known cause of death, an unidentified victim, and/or a lack of behavior to study and analyze.

Criminal profilers assist with investigations by describing the type of individual who committed a crime (Douglas & Olshaker, 1999). A major fallacy that exists is that profilers can identify a specific person as the individual who committed a crime. Ressler et al. (1996) pointed out that rather than providing the identity of the offender, a criminal profile indicates the kind of person who is most likely to have committed a crime based on observation of the characteristics at the crime scene. Thus, criminal profilers can help law enforcement narrow its field of investigation and concentrate its efforts in a particular area, but cannot tell the law enforcement personnel who is responsible for the crime, (Ressler et al., 1996; Hazelwood & Michaud, 2001; see also Chapter 9 in this volume).

Criminal investigative analysis has been shown to be especially useful in solving cases of sexual homicide (Ressler et al., 1996). To an untrained investigator, many of these crimes appear to be motiveless and the crime scenes seem to offer few obvious clues about the killer's identity, which may often be the case in many sexual homicide crime scenes. Since obvious as well as implied clues are pieced together to form leads that contribute to the killer's profile, attention to detail is extremely important when profiling crime scenes (Ressler et al., 1996). Hazelwood and Michaud (2001) stated that when creating a profile for any type of crime, it is very important for the profiler to maintain an open mind and not lock in on only one possibility. Victims of a killer often share common characteristics that may or may not, at first, be

obvious. Analyzing the similarities and differences among the victims of a particular murderer can provide information about the motive for the crime as well as information about the perpetrator himself (Ressler et al., 1996).

In addition to sexual homicide, criminal profiling has also proven to be useful in solving such crimes as hijacking of aircrafts, drug trafficking, anonymous letter-writing, spoken threats of violence, arson, and rape, to name a few (Ressler et al., 1996; Casey-Owens, 1984; Hazelwood, 1983; Miron & Douglas, 1979).

The FBI, in order to manage their workload, will now only get involved in cases that meet the following three criteria: (1) the crime must be violent or potentially violent; (2) the crime must be unsolved; and (3) all major leads must be exhausted (Hazelwood & Michaud, 2001).

Crime Scene Profiling

In crime scene profiling, investigators rely on information from the crime scene to construct a profile of potential perpetrator characteristics. A classification system for serial killers that was developed by the FBI classifies perpetrators of sexual homicide as organized, disorganized, or mixed. This classification system denotes how much planning and how much control the offender had over the victim during the commission of the crime (Ressler et al., 1996).

An organized perpetrator is deliberate in his actions, methodical, premeditated, mature, and resourceful, which denotes more experience (Hazelwood & Michaud, 2001; Hickey, 2002). An organized offender usually brings his preferred weapon and whatever else he needs with him to commit the crime and will leave as little evidence of his identity as possible (Hazelwood & Michaud, 2001). Organized killers most often select total strangers as victims, and they tend to hunt outside their neighborhood (Hazelwood & Michaud, 2001). They are also more likely to engage in sexual perversions (Hickey, 2002).

A disorganized offender appears to act more randomly or opportunistically, as if he was in a rush, careless, or sloppy (Hazelwood & Michaud, 2001; Hickey, 2002). A disorganized offender has not thought ahead; he acts impulsively, using any available weapon. He may "leave both his victim and ample evidence of his own identity, i.e., fingerprints or blood, where they can be readily discovered" (Hazelwood & Michaud, 2001, p. 127). For a complete list of variables that distinguish between organized and disorganized offenders, see Hickey (2002) and Ressler et al. (1996).

Criminal/Offender Profiling

Criminal profiling is the way in which law enforcement has sought to combine the information from research in other disciplines with more traditional investigative techniques in an effort to combat violent crime (Ressler

et al., 1996). Various other authors have described profiling as a collection of leads (Rossi, 1982), an educated attempt to provide specific information about a certain type of criminal (Geberth, 1981), thinking about a case in a way in which no one else has (Hazelwood & Michaud, 2001), and a biographical sketch of behavioral patterns, trends, and tendencies (Vorpagel, 1982; Ressler et al., 1996). The process of criminal profiling is more of an art than a science; it is subjective rather than objective. However, it does not involve psychic powers, such as ESP, second sight, intuition, or voodoo (Hazelwood & Michaud, 2001). It should be viewed as an investigative tool rather than a magical solution to a crime (Hazelwood & Michaud, 2001; see Chapter 9 in this volume).

A profile of an UNSUB, that is, an unidentified subject, according to the Behavioral Science Unit of the FBI is "a listing of the characteristics and traits of an unidentified person" (Hazelwood & Michaud, 2001, p. 133); those characteristics and traits are the variables that together form a behavioral composite of the unknown offender (Ressler et al., 1996; McCrary & Ramsland, 2003). When completed, "a profile is a detailed analysis that reveals and interprets significant features of a crime that previously had escaped notice or understanding" (Hazelwood & Michaud, 2001, p. 123).

Victim Profiling

In order for a profiler to assist in identifying an offender, he or she must understand the motive for the crime, and, according to Douglas and Olshaker (1999), the key to understanding motive is in the victimology. Specifically, the profiler wants to know who the offender has chosen as his victim and why (that is, if it was a victim of opportunity or if a careful and deliberate choice was made). This is based on the assumption that behavior reflects personality and, even though every crime is unique, behavior fits into certain patterns (Douglas & Olshaker, 1999). Identifying significant pieces of the crime pattern enables the profiler to determine why the offender committed the crime, which will aid in answering the ultimate question of who committed the crime. For example, when examining a break-in, it is important to know what items were taken because this can provide valuable information as to what type of perpetrator you should be looking for and what his motive was for committing the crime (Douglas & Olshaker, 1999). Specifically, if the property taken was valuable and could be sold for cash, you will have one type of offender; however, if the property taken was some personal item of little value, such as women's underwear, then you have a very different type of offender. The offender who stole the women's underwear had a very different motive than the offender looking for valuable property to sell. Knowing the motive helps the officials know the dangerousness of the offender. A panty thief does not take women's underwear because he cannot afford to buy them; the theft is motivated by the sexual images related to the items, the fantasy, and the associated sexual arousal (Douglas & Olshaker, 1999). Based on experience

from other crimes, profilers know that fetish burglars are not likely to stop on their own; however, criminals who commit crimes for different motives, that is, for money or for drugs, may stop when they gain employment or enter rehab (Douglas & Olshaker, 1999).

An examination of the victim in relation to the offender helps us to understand the social dynamics of serial murder (Hickey, 2002). It allows investigators to clarify the victim side of the killer-victim relationship and to measure, in part, the degree of vulnerability and culpability of some victims. Research on victims of serial killers has shown that they were more likely to be killed away from their homes, which means that they may have been in areas of the community where their assailants had easy access. Three categories of potential victims—family, acquaintances, and strangers—have been identified. Research has demonstrated that serial killers most often kill strangers, whereas with homicide in general, relatives and close friends are most often the victims (Hickey, 2002).

Various reasons have been offered as to why the majority of serial killers focus on strangers. It may be easier to dehumanize a stranger, which enables the killer to view the victims as objects of hatred and lust; the offender likely perceives that killing strangers provides some level of safety from detection (Hickey, 2002); and the offender might get a thrill from seeking out unsuspecting strangers (Leyton, 1986). Most homicides are committed by an individual with whom the victim had a relationship, and, as a result, the focus of the investigation will be on the victim's friends and family members until the death is linked to a serial killer.

With regard to victim selection, some victims are chosen because they match the killer's paraphilic fantasy; some murderers engage in proxy killings in which they focus on individuals who remind them of someone, perhaps their mother (Hickey, 2002); and there have been victims who have just been at the wrong place at the wrong time. Some offenders are drawn to victims who represent what they want for themselves, such as beauty, wealth, or assertiveness; other offenders destroy those who symbolize what they fear or loathe, such as gay individuals, the homeless, the elderly, and the infirm (Hickey, 2002). The latter groups of individuals represent what Egger (2003) calls the "less dead," or the "devalued stratum of humanity" (p. 48). He refers to these groups—gays, homeless, prostitutes, migrant workers, runaways, elderly, infirm—as "less dead" because they were "less alive" before their violent deaths. In other words, these groups were marginalized and devalued members of the community who were seen as vulnerable and powerless by the perpetrator. There is, unfortunately, support for Egger's proposition that marginalized groups are viewed as being "less alive" and that their deaths will not cause a public outcry. For example, the task force for the Green River serial killer was disbanded prior to the conclusion of their work due to lack of public support and dwindling leads even though the investigation produced over fifty verifiable victims, most of whom were prostitutes (Egger, 2003).

The degree of power and control the killer is able to exert over the victim is another factor influencing victim selection (Hickey, 2002). Serial killers seem to carefully target and prey upon individuals whom they perceive as less physically and intellectually capable than themselves. These categories of strangers, while not mutually exclusive, were reportedly the most frequently sought after by serial killers: young women alone, including female college students and prostitutes; children, both boys and girls; and travelers, including hitchhikers. On the one hand, when acquaintances were killed, the top three categories that represent the majority of victims were friends and neighbors, children, and women alone; on the other hand, when the victims were family members, children, husbands, and wives were the top three categories. When the three categories of victims (strangers, acquaintances, and family) were combined, women and children made up the majority of the victims, which makes sense if these offenders prey on those they perceive as weaker, helpless, or as having less power and control. This statistic is in sharp contrast to homicide in general, in which 78 percent of the victims were men. Another difference between the types of homicide is that the majority of victims of serial killers are Caucasian, whereas overall, the majority of general homicide victims are African American. Young and middle-aged adults and teens were the most likely targets of serial killers, but the very young and the elderly were also represented. Hickey has noted that since 1975, there has been an increase in those offenders who target only the elderly. Hickey suggested that with the aging of the population in the United States, nursing homes and hospitals may need to pay close attention to employees to prevent individuals from living out their "angel of death" fantasies.

Victim facilitation, or the degree to which victims make themselves accessible or vulnerable to attack, is another factor that needs to be considered (Hickey, 2002). Most serial killers murder strangers and their victimization may be determined by the degree to which the victim placed him- or herself in a vulnerable situation (Hickey, 2002). Reiss (1980) determined that victims who had been multiply victimized were more likely to experience the same form of victimization than be subject to two different criminal acts. McDonald (as cited in Hickey, 2002) determined that victim-prone individuals developed certain attitudes and lifestyle choices that increased their vulnerability. People who hitchhike or prostitute themselves, as well as individuals who pick up hitchhikers and prostitutes, are considered high facilitators. Low-facilitation victims can be thought of as sharing little or no responsibility for victimization, such as when a stranger kidnaps a child playing in a yard or when a nurse poisons a patient in a nursing home. The risk of being a victim of a serial killer is small and most victims are considered low facilitation, but there are those who are at greater risk as a result of their age, gender, place of residence, or lifestyle, and the number of these individuals is increasing (Hickey, 2002).

Children are more likely to die in domestic homicide than at the hands of a serial killer, but they can be at risk both in and out of the home (Hickey, 2002). Female serial killers of children are more likely to murder either their own children or those of relatives, whereas male offenders were seven times more likely to be strangers to their victims. The primary motives for female offenders of children from highest to lowest were financial, to collect insurance money; to exert control; enjoyment; and sexual gratification (the last two were tied at 8 percent). The primary motives of male offenders of children in order from highest to lowest were sexual gratification, to exert control, enjoyment, and financial reasons; however, the majority of men reported having a combination of reasons for why they murdered children. Serial killers who kill children engage in a variety of methods to lure children. They will sometimes ask for the child's assistance, perhaps in looking for a lost puppy; they will sometimes tell the children that there has been an emergency and that they are there to escort them home; they will sometimes use a badge to look as if they are an authority figure; or they may sometimes appeal to the child's ego by telling the child that he or she should be in a beauty contest or in a television commercial (Wooden, 1984; Hickey, 2002). As is true with those who kill adults, the offender is usually a psychopath and will use a combination of techniques that begin with charisma or manipulation, move to intimidation, and, ultimately, become brutal (Hickey, 2002).

Linkage Analysis

Criminal investigative analysts use a different profiling procedure called linkage analysis to determine if a murder is linked to other murders and to help the investigators determine if the same killer is responsible for multiple homicides (Hazelwood & Michaud, 2001). Investigators using linkage analysis look for a particular modus operandi and ritual behaviors, that is, type of weapon used, age and gender of victim, performance of sexual acts, amount of violence used, etc. They also look to see if the murders were grouped together, both geographically and chronologically. According to Hazelwood and Michaud, in addition to examining the similarities in the crime scenes, it is also important to look at the differences, as dissimilarities in crime scenes do not necessarily mean that different people committed the crimes. Dissimilarities in various aspects of two crime scenes could merely mean that as the killer committed more murders, he altered his preferred method of killing (that is, changed type of weapon, acted alone rather than as part of a team, chose a different type of victim, used a different method to dispose of the body, etc.) (Hazelwood & Michaud, 2001). Differences or inconsistencies in crime scenes could also be due to variables such as the specific crime scene circumstances, victim behavior, the amount of time the offender has, and even the killer's mood. Linkage analysis can be a valuable tool to link cases together in situa-

tions where there are no reliable witnesses or physical evidence (Hazelwood & Michaud, 2001).

Equivocal Death Analysis

Equivocal death analysis, or what is sometimes referred to as a psychological autopsy, is another facet of the criminal investigative analyst's work (Hazelwood & Michaud, 2001). The goal for someone conducting an equivocal death analysis is to verify what happened when the way in which a person died is unclear or in dispute; the analyst attempts to determine whether the death was an accident, suicide, or homicide (Hazelwood & Michaud, 2001). Rather than answering the question of who committed the murder, an equivocal death analyst's task is to answer the question of what happened to the victim. Knowing what happened to a loved one can be very important to the victim's family, as well as having ramifications regarding insurance payment and burial rights in a church-sanctioned facility. In order to determine what happened to the victim, the equivocal death analyst needs to have a lot of information about the victim and the circumstances surrounding his or her demise. The analyst attempts to identify and list every material fact or instance of behavior that is consistent, or inconsistent, with homicide, suicide, or an accident. The result is an evidence tally sheet of all the relevant data pointing toward a manner of death (Hazelwood & Michaud, 2001). It might be necessary for the analyst to interview family, friends, coworkers, neighbors, teachers, acquaintances, etc., in order to obtain as much information as possible regarding the individual's personality and behavior. Hazelwood and Michaud stated that they interview each person on two different occasions from three to six months apart since most people will not speak ill of someone shortly after his or her death. Letting time lapse between interviews allows people to provide contrasting views of the deceased, which results in a well-balanced description of the victim (Hazelwood & Michaud, 2001). The investigator will want to obtain answers to such questions as: Who might have benefited from the victim's death? Was the victim suicidal or depressed? Did the victim engage in behaviors that might have led to an accidental death? Based on this information and evidence from the crime scene, the equivocal death analyst can provide a determination as to the manner of death.

Problems in Profiling

Profiling should be considered one tool that can assist in the investigation of criminal behavior. It is often, as stated earlier, a technique that is employed as a last resort, when all other leads have been exhausted. When using profiling as a tool in investigations, one has to always consider that the profile could lead investigators in the wrong direction, which is a waste of resources and could

facilitate the loss of additional lives (Hickey, 2002). Even if the profile is based on the best crime scene evidence and employs the most precise attention to detail, it is rarely 100 percent accurate, which, again, may cause investigators to ignore other leads that do not match the information in the profile (Goodroe, 1987; Hickey, 2002). Additionally, some investigators may not understand how to properly use the information in the profile. They may base their conclusions about the identity of a suspect or whether two cases can be linked to a common suspect on one piece of physical evidence from the crime scene(s) that was mentioned in the report (Hickey, 2002). In conclusion, it takes experienced investigators to thoroughly investigate a crime and create a profile, and it takes investigators trained in their use to properly use profiles once they are obtained (see Chapter 9 in this volume).

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