Pornography

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- I. Defining the Concepts of Pornography and Obscenity
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- III. Gender Differences in Pornography Consumption

"whore," and *graphein*, meaning to write. Pornography literally means the "writing of harlots" or "depictions of acts of prostitutes." It has come to mean materials intended to arouse sexual feelings that may include sexist or violent elements.

Prurient Characterized by lascivious or lustful thoughts or desires.

GLOSSARY

Erotica The word is derived from the name of the Greek god *Eros* and refers to "sexual love." It is typically defined as materials intended to arouse sexual feelings that portray mutually consenting, pleasurable acts. Some writers have emphasized that such materials contain no sexist or violent connotations.

Evolutionary Psychology Scientific approach that applies current knowledge of evolutionary processes to understanding the human mind and behavior.

Obscenity The word is derived from the Latin "ob," meaning "to," and the term caenum, meaning "filth." It is a legal term that is based on offense to accepted standards of decency or sexual morality. Most states use a definition provided by the U.S. Supreme Court in Miller v. California, which considers three criteria. They include considerations of whether the material, taken as a whole, appeals to the prurient interest (i.e., characterized by or lascivious or lustful thoughts or desires), depicts sex in a patently offensive way, and lacks serious literary, artistic, political, or scientific value.

Pornography Derived from the Greek porne, meaning

A VERY LARGE MASS MEDIA INDUSTRY exists throughout the world that produces sexually explicit movies, magazines, books, videos, and various images on the worldwide Internet. Although reliable data regarding this industry are sometimes difficult to obtain, estimated profits are extremely high and indicate that this is a multibillion dollar mass media industry. Not only is this industry a large and important segment of the mass media, but it has often generated a great deal of controversy, rhetoric, and acrimonious debate. One of the major areas of concern in debates about pornography has been the possibility that certain types of portrayals, particularly those referred to as sexually violent ones, may affect some men's attitudinal and other responses to "real world" sexual violence and thereby possibly affect their aggressive behaviors.

This article's focus on the topic of pornography can be meaningfully divided into two major parts. The first describes theory and research regarding the effects of pornography whereas the second part focuses on an evolutionary-based explanation of gender differences in consumption of sexually explicit media.

Numerous efforts have been made to define pornography and distinguish it from other terms, such as erotica. A consensus regarding definitions of terms such as "pornography" or "erotica" does not exist among laypersons, policymakers, or the legal system. A consensus, too, is lacking among researchers. Scientists have approached the issue largely guided by three ideological/theoretical perspectives, including the moralist, feminist, and liberalist approaches. These differ in framing the importance of this topic as primarily about issues such as moral decay, sexuality, oppression of women, free speech, and so on. Each of these theories makes assumptions about human nature. Research has often addressed separate questions raised by each of the three perspectives and has seldom pitted the predictions of one theory against the others. While the moralist perspective focuses on the negative influence of pornography on individuals and social structures, the liberalist perspective generally considers pornography to have negligible and sometimes even beneficial effects. The radical feminist perspective emphasizes the negative effects on women and the power structure between men and women. Each perspective has some findings in support of its position and it is not feasible at this stage to conclude that any one of these theories has been clearly supported while the others have been falsified. It may be that each has some merit under differing conditions.

One thing that is apparent is that there are large gender differences in the consumption of different types of sexually explicit media. Evolutionary psychology provides an explanation for such sex differences based on the evolved sexual strategies that were naturally selected in ancestral environments. Although evolutionary approaches emphasize the possible interactive role of socialization differences as well, explanations based on socialization or cultural differences alone must be better developed if they are to account for the observed differences.

I. DEFINING THE CONCEPTS OF PORNOGRAPHY AND OBSCENITY

Pornography and obscenity have been difficult concepts to define. Supreme Court Justice Potter Stewart even admitted, although he could not define pornography, "he knew it when he saw it" (*Jacobellis v. Ohio*, 1964). Through this infamous admission, he implied that most observers, upon inspection of certain materials would agree whether or not they were pornographic.

There is, however, little agreement among layper-

sons and policymakers about the definition of pornography. Various commissions have acknowledged the difficulties associated with this concept. Members of the 1970 President's Commission of Obscenity and Pornography complained that attempts to draw conclusions about the effects of pornography have been "marked by enormous confusion over terminology." In addition, the Attorney General's Commission on Pornography (1986) noted that "the range of materials to which people are likely to affix the designation 'pornographic' seems to mean in practice any discussion or depiction of sex to which the person using the word objects" (Attorney General's Commission, 1986, p. 227).

The search for a workable definition is illuminated by understanding of the etiology of the terms pornography and obscenity. One should consider what terms have come to mean in both the legal system and in practice. It is important to distinguish between "conceptual" and "operational" definitions used by communication researchers who have investigated the effects of pornography. Finally, it is important to consider categories of stimuli used by researchers to aid in the definition of terminology.

The three terms most often used in this area are erotica, obscenity, and pornography. The following is a brief summary of the origin of these terms and their definitions:

- 1. Erotica. The word is derived from the name of the Greek god Eros and refers to "sexual love." It is typically defined as materials intended to arouse sexual feelings that portray mutually consenting, pleasurable acts. Some writers, such as the noted feminist writer Gloria Steinem, have emphasized that such materials contain no sexist or violent connotations.
- 2. Obscenity. The word is derived from the Latin "ob," meaning "to," and the term caenum, meaning "filth." It is a legal term that is based on offense to accepted standards of decency or sexual morality. As described below, most American states use a definition provided by the U.S. Supreme Court.
- 3. Pornography. Derived from the Greek porne, meaning "whore," and graphein meaning to write. Pornography literally means the "writing of harlots" or "depictions of acts of prostitutes." For writers such as Gloria Steinem and others, it has come to mean materials intended to arouse sexual feelings that include sexist or violent elements.

A. Legal Definition

In the legal system, the term obscenity has been used in the evaluation of sexual materials. What is pornographic to the law is not necessarily obscene. *Playboy* and *Penthouse* magazines, for example, might be considered pornographic by some, but they would not be considered legally obscene in most states. In practice, the term obscenity has come to mean those materials, within the broader set of pornographic depictions, that have been adjudicated "obscene" by the courts.

Most states use the 1973 U.S. Supreme Court decision in *Miller v. California* as the legal definition of pornography. To summarize the Court's decision, the material would be judged obscene if the following apply: (a) the average person, applying contemporary community standards, would find that the work, taken as a whole, appeals to the prurient interest; (b) the work depicts sexual conduct in a patently offensive way; and (c) the work, taken as a whole, lacks serious literary, artistic, political, or scientific value.

B. Scientific Definitions

For social scientists studying pornography and its effects, defining this concept has also been problematic. Because the term has been applied loosely to many depictions of human sexuality, inconsistent use of the term pornography has made it difficult to compare results of different studies.

Early research on what is now known as the effects of "pornography" frequently used the term "erotica." The Effects Panel of the 1970 Commission's Report, for example, was titled "The Impact of Erotica." Pornography later became the favored term. For both social scientists and the general public, the term erotica has now come to mean "mutually consenting and pleasurable, sexual expression between adults." Incompatible or contradictory terms such as "aggressive erotica," have unfortunately become part of the research terminology, further complicating research efforts.

1. Conceptual and Operational Definitions

Not only is it important to understand the legal and scientific definitions of pornography, but it is also important to understand pornography both on a conceptual and operational level. Conceptual definitions characterize concepts or classes of phenomena by relating them to other concepts, whereas operational definitions assign meaning to a construct or variable by specifying the activities or "operations" used to measure it. A conceptual definition of "violent pornography" might be material that depicts coercion in a sexually explicit context. An operational definition of this term might involve showing subjects a short film about rape in which a young woman is tied up, stripped, and raped by men.

Prior to the experiment, samples of individuals could be asked to report their perceptions of the intended manipulations (e.g., degree of coercion, sexual explicitness, etc.) or experimental subjects might be asked to respond to validity assessment scales. Research in this area can benefit by greater emphasis on more consistency among researchers in conceptual and operational definitions and more frequent systematic attempts to validate the researcher's distinctions among concepts with ratings by independent observers.

2. Classification of Stimuli and Materials

To reduce the confusion among terms, some researchers have used multicategory classification systems and have validated them with empirical support. For example, in one study the researchers differentiated between erotica, "nonviolent pornography," and violent pornography:

- (i) Erotica, which was defined as sexual "... images that have as their focus the depiction of mutually pleasurable sexual expression between people who have enough power to be there by positive choice.... They have no sexist or violent connotations and are hinged on equal power dynamics between individuals as well as between the model(s) and the camera/photographer." (Senn & Radtke, 1990, p. 144).
- (ii) "Nonviolent pornography," which was defined as sexual "images that have no explicitly violent content but may imply acts of submission or violence by the positioning of the models or the use of props. They may also imply unequal power relationships by differential dress, costuming, positioning..., or by setting up the viewer as voyeur (the model is engaged in some solitary activity and seems totally unaware or very surprised to find someone looking at her)" (Senn & Radtke, 1990, p. 144). (It should be emphasized that the use of the term "nonviolent" by these investigators and in this chapter differs somewhat from the way it is often used in other areas of this encyclopedia and the literature. The term "nonviolent pornography" is therefore placed in quotation marks throughout this chapter.)
- (iii) Violent pornography, which was defined as sexual "... images that portray explicit violence of varying degrees perpetrated against one individual by another" (Senn & Radtke, 1990, p. 144).

Using these categories in research, Senn and Radtke found that their subjects, female Canadian undergraduates, could reliably differentiate between these categories of materials. For the stimuli used (depictions taken from *Playboy*, *Penthouse*, and *Hustler*) there was considerable agreement among subjects on about 75% of the materials, but considerable disagreement on about 25% of the materials. Findings also showed exposure to different categories of materials has different effects on subjects. For example, violent and nonviolent pornography were negatively evaluated. Erotica, on the other hand, was positively evaluated. In addition, subjects exposed to violent and nonviolent pornography had increased mood disturbance, while those exposed to erotica or a control condition did not experience these negative effects, suggesting that different types of material have different effects.

II. IDEOLOGICAL/THEORETICAL PERSPECTIVES AS ORGANIZING FRAMEWORKS FOR RESEARCH

The overwhelming role that researchers' ideological stance has on their evaluation of research findings in this area is shown by the widely divergent conclusions that reviewers of the literature have come to. Some reviewers, such as Diana Russell, conclude that the data clearly show strong and consistent effects in a wide variety of areas. Some, such as the Attorney General's Commission on Pornography conclude that there are data that are quite convincing for negative effects of some types of pornography (e.g., violent pornography) but not for other stimuli. Yet others, such as Paul Abramson, believe that the findings are not convincing of negative effects and that considerable evidence actually supports largely beneficial effects of pornography.

It is also important to consider the ethical and practical constraints placed on research studying these complex processes. For example, from a methodological perspective, the ideal study investigating the effects of sexually violent media (which includes violent pornography and other stimuli that combine sex and violence) on children might include having youngsters randomly assigned to view, over several years, sexually violent media. Since for obvious ethical reasons such "ideal" research cannot occur, the studies available typically involve considerable compromises to the limits imposed by various constraints.

In keeping with a book published by Daniel Linz and Neil Malamuth, this article will consider the topic of pornography within three major ideological and theoretical perspectives. These differ in framing the importance of this topic as primarily about issues such as moral decay, sexuality, oppression of women, free speech, and so on. The theories are (1) Conservative-Moralist; (2) Liberal; and (3) Feminist. It will be shown that each of these theories makes assumptions about human nature. These assumptions, in turn, lead to definitions of what is pornographic and predictions about pornography's impact on both individuals and society as a whole. Specific legal and policy decisions about pornography are often based on these predictions. These social/legal policies and their underlying assumptions have also guided the formation of scientific research on the effects of pornography. Specifically, they have influenced the formation of hypotheses and the selection of dependent variables by investigators from among the vast array of outcomes that could be measured. These policies have also influenced the interpretation of ambiguous or inconsistent research results. Finally, the findings from scientific investigations, have, in turn, often been used by policy and lawmakers who operate within each of the perspectives to bolster their notions of what should or should not be done about pornography.

These three theories have explicitly or implicitly been the primary guiding forces underlying pornography research. Such work has often addressed separate questions raised by each of the three perspectives and has seldom pitted the predictions of one theory against the others. Each perspective has some findings in support of its position and it is not feasible at this stage to conclude that any one of these theories has been clearly supported while the others have been falsified. It may be that each has some merit under differing conditions. Rather than attempt to directly contrast these approaches, the presentation below will present examples of supportive research for each of these three theoretical approaches.

A. The Moralist Perspective

1. Explication of the Conservative-Moralist Perspective

Derived from Judeo/Christian theology, the moralist perspective argues that man's creation in the image of God enables him, unlike animals, to choose between good and evil. Although people are viewed as having a certain degree of "free will" or choice, the social environment created in a given culture plays a significant role in the choices made. A society that does not have control over messages portraying undesirable behavior can encourage such behavior among its members. Humans, therefore, have the potential to behave in evil ways when exposed to "tempting social environments."

According to the moralist perspective, sex is a private act engaged in by consenting married adults, primarily for the purpose of procreation. Pornography, therefore, is viewed by moralists as offensive as well as a negative influence on society. Not only does it encourage sexual acts outside the boundaries of private behavior among married adults, but it also publicly displays sex. Through these public displays of sex, pornography sexually arouses consumers in ways that might encourage unacceptable sexual behavior. Some pornography communicates positive messages about adultery, homosexuality, and bestiality, which according to the moralist perspective are unacceptable and undesirable behaviors. Through its emphasis on the importance of sex and sexual gratification, pornography encourages illicit fantasies and acts, degrading sex and marriage.

Not only does exposure to pornography have the power to affect individuals' behavior, but it also has the power to affect the moral climate of a society. Pornography's message of permissiveness can result in sexual promiscuity and a moral climate of laxness. Pornography, therefore can lead to a decrease in authority and can influence other moral institutions. Exposure to pornography, according to the moralist view, has the potential to undermine important social connections and moral judgments, specifically sexual monogamy and the traditional family structure.

2. Research Supporting the Moralist Position

Dolf Zillmann and Jennings Bryant argue that pornography is causally related to the general decline of basic American values. In their research, they tested the moralist assumption that pornography fosters a lack of respect for, and belief in, traditional institutions such as marriage, relations between men and women, and traditional roles for women. With exposure to pornography, viewers may accept "sex crimes," alter perceptions and evaluations of marriage, spawn distrust among intimate partners, inspire claims for "sexual freedom," and even diminish the desire to have children.

Dolf Zillmann and his colleagues argue that exposure to "nonviolent pornography" (a term used in this chapter to refer to pornography that does not contain explicitly violent content) can foster distorted beliefs. Viewers may believe that nontraditional sex acts occur frequently. Furthermore, viewers may believe that women are generally promiscuous, so promiscuous that they will even tolerate rape.

To test whether exposure to pornography resulted in a greater acceptance of nontraditional sex acts and whether perpetrators of rape are punished less severely following exposure to pornography, Dolf Zillmann and Jennings Bryant exposed 80 unmarried male and 80 unmarried female college students to depictions of heterosexual activities. Subjects viewed "Swedish Erotica" films that depicted heterosexual activities, mainly fellatio, cunnilingus, coitus, and anal intercourse. Subjects received one of four exposures: "massive exposure" (six sexually explicit films per session, approximately 48 minutes, one session per week for 6 weeks, for a total of 4 hours and 48 minutes); "intermediate exposure" (3 films a week for 6 weeks, for a total of 2 hours and 24 minutes) "no exposure" (36 nonerotic films); and a no-treatment control condition where subjects showed up for a session in the final week of the experiment to complete questionnaires only.

After viewing the last film, subjects were assessed on several dependent variables, including estimates of the percentage of American adults that perform common and uncommon sexual acts and recommended prison sentence (in years) for a man described in a newspaper account as a rapist. In addition, subjects completed the sexual callousness toward women scale. Findings showed males and female subjects in the massive exposure condition not only estimated higher percentages of persons involved in uncommon sex acts such as fellatio, cunnilingus, anal intercourse, group sex, sadomasochism, and bestiality. Subjects with this intense exposure were also more lenient in their punishment of the rapist. Furthermore, massive exposure to pornography significantly increased males' sexual callousness toward women.

These investigators have also investigated the effects of prolonged exposure to pornography on marriage and family. Under the assumption that the nuclear family plays a significant role for societal welfare, they note the values expressed in pornography obviously clash with the traditional family concept, and potentially undermine the traditional values that favor marriage, family, and children. They tested the implications of prolonged pornography exposure on perceptions and attitudes concerning sexually intimate relationships, marriage, and the family as essential societal institutions. Male and female subjects were exposed to either "nonviolent pornography" or "control materials" in hourly sessions over a 6-week period. One week after the exposure treatment, subjects participated in an unrelated project on the "American family and aspects of personal happiness." To measure attitudes and perceptions, the "Value of Marriage," and "Indiana Inventory of Personal Happiness" surveys were then administered

Results showed that prolonged exposure to pornography fostered greater acceptance of pre- and extramari-

tal relations. Those exposed to pornography also showed significant effects on evaluations regarding the desirability of marriage and the desire to have children when compared to the control group. Only 39% of the subjects in the treatment condition viewed marriage as an essential institution compared to 60% of those in the control group. Finally, subjects exposed to pornography wanted fewer children than did control subjects. These results led the investigators to conclude that prolonged exposure to pornography diminishes the value of marriage as an essential institution.

B. The Liberal Perspective

1. Explication of the Liberal Perspective

In the liberal perspective, the concepts of "good" versus "evil" are viewed as culturally defined and therefore arbitrary. Human adults who are given free access to the full range of messages and information are able to make rational choices about what is appropriate behavior in their culture. This view is based on political theorists such as John Locke and John Stuart, who asserted that individuals have the basic human right to free expression of ideas. They further argued that the state should not restrict such a right because the free exchange of ideas leads to an effective government. Restricting the rights of one individual should only be considered if his or her actions infringe on the rights of another person. Pornography is considered an expression of ideas regarding women, men, and sex. According to the liberal perspective, adults should be given complete freedom to use pornography for their personal pleasures, such as sexual fantasy or as a sex stimulant in interactions with other consenting adults.

Four assertions made by supporters of the liberal theory help to understand pornography research guided by this perspective: (1) Most pornography merely triggers sexual thoughts that are not acted out. Unless these thoughts result in harmful actions against others, pornography should be considered "harmless." (2) Pornography may even be a socially beneficial form of communication that allows for self-expression of sexual interests. (3) The state should not restrict individuals' basic human right to free expression of ideas. As long as the recipient restricts his behavior to private actions such as sexual arousal, fantasy or use of pornography with consenting partners, society has no right to interfere. (4) While pornography is generally not harmful, consumers who are particularly susceptible to it and cannot behave rationally may require some form of message restriction once they have acted illegally.

2. Research Supporting the Liberal Perspective

Social scientists researching the effects of pornography using the liberal framework have examined dependent measures that address the possibility of direct or demonstrable physical harms following exposure to pornography. These measures include actual physical aggression or crime. Guided by such a perspective in 1970 a commission appointed by the president of the United States concluded that "On the basis of the available data . . . it is not possible to conclude that erotic material is a significant cause of crime" (*Presidential Commission on Obscenity and Pornography*, 1970, p. 243).

Several researchers, who had originally conducted research for this commission, continued for many years to investigate the relationship between pornography and criminal sexual behavior such as rape. In particular, Berl Kutchinsky examined the incidence of rape and aggravated assault in several different societies where pornography had become readily available, such as Denmark, Sweden, West Germany, and the United States. This study was similar to an earlier study conducted by the 1970 commission, but this time he examined data from a longer time period, 1964 to 1984. With 20 years of crime data, he could be assured that a substantial number of people had been exposed to pornography as part of a general trend in greater availability of sexually explicit materials of all forms.

Although the countries studied experienced a large increase in availability of pornography, results showed that rape did not increase more than nonsexual violent crimes. In fact, in three countries, Denmark, Sweden and West Germany, rape increased less than nonsexual assault. In some Western countries that had not similarly changed their pornography laws during this period, rape and nonsexual assault followed the same pattern. Consistent with the liberal theory, these results led the investigator to conclude that there is no causal connection between rape and pornography.

The liberal perspective also assumes that pornography may be beneficial. By allowing an individual to create a fantasy world built around sexual interests, pornography can provide a way of releasing strong sexual urges without harming others. The 1970 commission administered public opinion surveys to test the assumption regarding the beneficial effects of pornography. To determine whether Americans thought the availability of erotic materials was a social problem, the Commission surveyed 2486 adults (aged 21 and up) and 769 young persons (aged 15–20). These individuals were asked about the effects of exposure to erotic materials. Results of the survey showed individuals were more likely to list effects the commission termed "so-

cially desirable" than socially undesirable ones. "Socially desirable" responses included pornography gave individuals information about sex and it improved their sexual relations. Virtually none of those surveyed reported that it led them to commit rape or made them "sex crazy," effects considered socially undesirable, although many people believed that it could have such an effect on some other people.

In addition to public opinion surveys, findings from sexual arousal studies conducted by the 1970 Commission suggested that pornography had little, if any negative effects. Commission researchers found that individuals became less "excited" and more "bored" after continuous exposure to sexually explicit materials. In their study, men were first shown a sexually explicit film and for the following 3 weeks viewed sexually explicit materials for 90 minutes a day, 5 days a week. Five and eight weeks after the initial exposure, the men were shown the original sexually explicit film. Over the period of the study, the men were less physiologically responsive to sexual materials and showed less interest in the materials (as measured by time spent viewing them). In addition, the men exposed to massive pornography became more "liberal" in their attitudes toward pornography. Not only did they believe that pornography would not harm adults or stable adolescents, but they were also less inclined to place restrictions on sales and distribution of pornography. Based on these findings, Howard and colleagues concluded that "exposure to pornography was a relatively innocuous stimulus without lasting or detrimental effect on the individual or his behavior" (Howard, Reifler, & Liptzin, 1971, p. 97).

The 1970 Commission also demonstrated that exposure to pornography did not significantly change patterns of sexual behavior. Subjects who were sexually active before exposure remained so afterward, and those inactive before exposure remained so afterward. Commission researchers did not find changes in antisocial sexual behavior after short- or long-term exposure to erotica. Following exposure to erotica, married couples experienced a temporary increase in sexual activity (up to 24 hours after exposure), then returned to normal levels. For people not currently involved in a sexual relationship, results showed no increase of heterosexual activity. Generally, any increase in heterosexual activity following exposure to pornography depended upon the presence of a consenting partner with whom the participant was already sexually involved. In addition, results showed an increase in masturbation in a minority of the subjects (up to 30%) who already had a history of frequent masturbation.

Research for the Commission also studied the influence of erotica on "low-frequency" sexual activity such as homosexuality, anal sex, group sex, and sadomasochism. Studies with both short-term (one exposure) and a long-term exposure (4-week exposure) showed no evidence of increases in sexual activity immediately or within 6 months after exposure to materials that included depictions of these activities.

After reviewing the findings of these studies, the panel reached the following conclusion regarding the relationship between exposure to erotica and sexual arousal and sexual behavior: "The findings of the available research cast considerable doubt on the thesis that erotica is a determinant of either the extent or nature of individuals' habitual sexual behavior. Such behavioral effects as were observed were short-lived, and consisted virtually exclusively of transitory increase in masturbation or coitus among persons who habitually engage in these activities" (*President's Commission on Obscenity and Pornography*, 1970, p. 194).

C. The Radical Feminist Perspective

1. Explication of the Radical Feminist Perspective

Within the feminist movement there are a variety of perspectives on the subject of pornography that will not be discussed here. Instead, only the radical feminist position will be discussed and whenever the term feminist is used it will refer to this position and it should be kept in mind that it is by no means representative of the feminist community generally. Feminists such as Andrea Dworkin and Catharine MacKinnon, who have often referred to themselves as "radical feminists," have been particularly outspoken on this subject and have challenged both the conservative and liberal perspectives. According to this feminist theory, concepts such as good and evil should not only be considered as culturally determined, but also, human perception itself and knowledge are socially constructed and represent the interests of those "doing the construction." Our perception of good and bad, of women, and the act of sex between men and women is a product of social relations. Feminists therefore challenge the belief in objectivity in analyses of relations between men and women, scientific research, conception of desirable versus undesirable sexual behavior, or of social relation generally. All of these are perceived to be shaped by cultural values and norms.

Radical feminists view social relations in terms of power dynamics. In our society, men hold considerable power over women. Sex, these feminists contend, is the primary means by which men exert power over women. Through this unequal distribution of power, men have been able to force their notions of appropriate sexual relations between men and women as well as shape how women perceive themselves. Men "possess" and use women through the sexualization of intimate intrusion. Sexual access to women is a central feature of women's definition of inferior and of feminine. According to this feminist perspective, pornography is a form of "hate literature." It is visual and verbal intrusion, access, and possession of women by men. Because pornography plays a significant role in defining and hurting women, feminists argue that women should be able to claim damages resulting from pornography's harmful effects.

The feminist theory is critical of both moralist and liberal theories. Moralists' objections to pornography on the basis of its appeal to prurient interests differs radically from the feminists' concern on pornography's effects on women. Liberals' concerns for freedom of speech fail to recognize that men are the ones who control political speech and that women are often left "speechless" due to lack of access to means of power. The liberal view that all forms of speech should go unregulated does not recognize that the power men have over women to define them in pornography has silenced women's voices. As exemplified in the following quote, unlike the moralist and liberal theories, the feminist approach focuses on the effects of pornography on attitudes about women and various behaviors toward women, including but by no means limited to physical harms.

Pornography is a systematic practice of exploitation and subordination based on sex that differentially harms women.... The bigotry and contempt pornography promotes, with the acts of aggression it fosters, diminish opportunities for equality of rights in employment, education, property, public accommodations, and public services...." (Dworkin & MacKinnon, 1988, p. 33).

2. Research Supporting the Feminist Perspective

Some of the research testing the feminist theory has examined the effects of certain types of pornography on attitudes that justify violence toward women. These attitudes not only undermine viewer sensitivity to female victims of rape and violence, but also may increase discriminatory and sexually aggressive behavior. In addition to examining direct behavior effects, researchers

testing this perspective have examined widespread effects of pornography such as endorsement of limiting sex roles, beliefs in rape myths, and increased acceptance of violence and discrimination against women.

Neil Malamuth and his colleagues have conducted studies relevant to the feminists' contentions. They examined the effects of exposure to media sexual violence on attitudes and perceptions. Studies have generally taken the following form: Male subjects were either exposed to depictions of mutually consenting sex, rape in which the female victim eventually became aroused, or rape abhorred by the victim. Afterwards the subjects were shown a rape depiction and asked about their perception of the act and the victim. Results show that subjects exposed to the "positive" rape portrayal perceived the second rape as less negative and more normative than those first exposed to the other depictions. The effect of portrayal was particularly apparent in men with higher self-reported inclination to aggress against women. In addition, some research subjects asked men to report their beliefs about how women in general would react to being victimized by sexual violence. Those first exposed to a "positive rape portrayal" believed that a higher percentage of women would derive pleasure from being sexually assaulted.

Another study examined the effects of different portrayals in a "naturalistic" environment. In this study, male and female college students received free tickets to view feature-length films on two different evenings. Subjects were randomly assigned to one of two exposures. One group saw films that portrayed aggression against women in a positive light. The other group saw films that did not contain portrayals of aggression against women. The films used were R-rated, uncut, feature-length films.

A survey was administered to both the experimental and the control group a few days after viewing the films. The survey examined subjects' attitudes and beliefs with the following scales (1) Acceptance of Interpersonal Violence (AIV) against women (e.g. acceptance of sexual aggression and wife battering); (2) Rape Myth Acceptance (RMA) (e.g., the belief that women desire to be raped); and (3) Adversarial Sexual Beliefs (ASB) (e.g., the notion that women are sly and manipulating when out to attract a man). In addition, the survey measured irrelevant items in order to disguise the purpose of the survey. Subjects did not know that the survey was connected to the earlier phase of the research in which films had been viewed.

Male subjects exposed to "positive" portrayals of aggression against women showed a significant increase on the acceptance of violence against women scale (i.e.,

the AIV). There was a similar effect that approached significance on the Rape Myth Acceptance (RMA) scale. There were no effects on the ASB scale for men nor were there any significant effects on any of the scales for women. The results therefore showed that media messages that portray violence against women in a favorable light can affect men's attitudes about violence against women. These results were recently replicated by other investigators.

In another recent study conducted by Neil Malamuth and his associates, the investigators examined the association between sexual aggression against women and exposure to pornography. Researchers in an earlier study had developed a model that identified risk factors correlated with sexual aggression. In this follow-up study, the researchers conducted a series of risk analyses using these risk factors as well as the variable pornography consumption, which was operationally defined as the degree of exposure to sexually explicit magazines, the most widely consumed medium of the sexually explicit industry.

Results showed pornography consumption was significantly correlated with sexually aggressive behavior. However, further analyses conducted by these investigators indicated that for most men, this correlation could be due to the overlap between pornography consumption and other risk factors. Interestingly, however, the analyses also showed that for those men most at risk, the added factor of pornography consumption put them at even higher risk for sexually aggressive behavior. Additional results suggest that these findings are not consistent with a "general deviancy" explanation, which suggests that pornography consumption is simply an indicator of some general extremity or deviance. For example, the investigators also examined nonsexual aggression (e.g., yelling, hitting, in a nonsexual context). Using the same risk factors they found that pornography consumption did not increase risk for this type of aggression. However, they did find that alcohol consumption was a contributor to the risk for nonsexual aggression. Correspondingly, levels of alcohol consumption were not found to contribute to the risk for sexual aggression in the context of the other risk factors.

It is important to emphasize that these data do not enable any causal conclusions, but might only be useful as risk "markers" or indicators. However, they are consistent with some earlier experimental research showing that men who are at relatively high risk for sexual aggression are more likely to be attracted to and aroused by sexually violent media and may be more likely to be influenced by them. This bidirectional relationship (i.e., higher proclivity to aggress resulting in more expo-

sure to certain media, which in turn contributes to higher risk for aggression) is also consistent with some research on media violence, such as that recently reported by Brad Bushman. Furthermore, it provides support for assertions made some time ago by Neil Malamuth and Victoria Billings regarding the importance of certain differences in individuals' backgrounds, personality characteristics, cultural milieu, and situational factors as moderators of the impact of pornography. These writers had emphasized that studies focusing only on quantity of exposure (e.g., who consumes more or less pornography) may be an oversimplified approach. Sexually explicit media's degree of influence on a person may largely depend on how that exposure interacts with other influences. For example, people raised with little education about sexuality or in families where sex was treated as "taboo," may be more susceptible to the influences of explicit media than those reared with considerable education about sex. Those with other sources of sex information may more accurately assess the myths about women and sexuality portrayed in some pornography. However, those without much sex education might be more apt to use explicit media as a primary source of information. Similarly, the effects of exposure to pornography are likely to be moderated not only by the different types of pornography but also by individuals' circumstances. Important factors may include the availability of sexual partners, the types of social relationships a person is in, their personal thresholds for engaging in various behaviors (including coercive acts) and other important situational factors. Earlier laboratory research on the relationship between exposure to pornography and aggressive behavior also supports the emphasis on individual and situational moderators.

III. GENDER DIFFERENCES IN PORNOGRAPHY CONSUMPTION

Although the research findings illustrated above do not reveal a general consensus about the effects of pornography, one thing that is apparent is that there are large sex differences in the consumption of different types of sexually explicit media. Evolutionary psychology provides an explanation for such sex differences based on the evolved sexual strategies that were naturally selected in ancestral environments. Although evolutionary approaches emphasize the possible interactive role of socialization differences as well, as emphasized below, explanations based on socialization or cultural differences alone must be better developed if they are to attempt to account for the observed differences.

A. What Is Evolutionary Psychology?

Evolutionary psychology is a growing scientific discipline that applies current knowledge of evolutionary processes to understand the human mind and behavior. Charles Darwin's evolutionary theory postulates that living organisms are formed by natural selection. Through evolution, a continuous process of differential reproductive success (or fitness), certain design differences are passed on to subsequent generations.

The evolutionary paradigm allows one to understand features of the human mind that are not likely to be understood without asking the question, Why would that design have been selected rather than the other one? Adaptations are characteristics that were naturally selected in the evolutionary history of our species because they contributed to fitness. Because a behavior may have been adaptive in evolutionary environments and thus contributed to the current structure of the mind, this does not indicate that such a behavior contributes to reproductive success in current environments. Further, this does not suggest that the behavior is desirable, moral, or inevitable.

A comprehensive theory needs to incorporate the "design" of the mind, as formed by evolutionary processes, and its interaction with the physical and social environment, including the cultures created by human minds. According to evolutionary psychology, to understand the human mind today it is essential to analyze the "mental organs" or psychological mechanisms (i.e., information processing algorithms or decision rules) which evolved in ancestral environments and which have been inherited by us today. These mechanisms are a part of all of us and guide our emotions, thoughts, and behaviors. They process relevant environmental information and can result in highly flexible behavior which is responsive to environmental variability. It is therefore important to realize the psychologically relevant traits that we inherit are not behaviors per se, but the mental organs which can result in various behaviors.

The mind is composed of many "domain specific" psychological mechanisms rather than general mechanisms relevant to many domains. While the mind was designed by natural selection processes operating in ancestral environments to promote fitness, people are not presumed to consciously strive to achieve the goal of fitness. In other words, people do not consciously "choose" their actions in order to promote fitness. Rather, the types of mind mechanisms which evolved in ancestral environments and which can be "activated"

in current environments were naturally selected because in those earlier environments they had fitnessfavoring consequences.

B. Understanding Sex Differences Within the Evolutionary Paradigm

As David Buss has emphasized, unlike other sex differences theories, evolutionary metatheory provides a framework of testable predictions allowing one to predict when gender differences are or are not expected, the direction of the differences, and why these differences are predicted. Males and females are expected to have the same psychological mechanisms in those domains where natural selection has favored the same solutions to adaptive problems for all humans. In some domains however, males and females faced different problems in evolutionary history. Therefore, different mechanisms to solve these problems evolved between the sexes.

Sexuality is predicted to be one of the domains for which there exists sex differences in evolved mechanisms. In this domain, the differing natural selection processes for males and females resulted in differing sexual strategies for males and females. As Robert Trivers noted in his now classic article, different mating strategies among males and females may be traced to the minimum parental investment required to produce an offspring. In humans, females require more parental investment to produce offspring than do males (e.g., 9 months vs. 9 minutes). Carefully selecting a mate with successful characteristics, who will play a significant role in the raising of the offspring, is a better investment for female reproductive success than seeking sex with a large number of males. In comparison, males' reproductive success may be relatively correlated with having intercourse with a larger number of fertile partners since in ancestral environments contraceptive devices were not available, and the upper limit for males siring offspring is in the thousands. Even totally uninvited sex may therefore have favorable reproductive consequences under some circumstances.

As noted by Bruce Ellis and Don Symons and more recently elaborated on by Neil Malamuth, the consumption of sexually explicit media, appears to be the result of inherited evolved sexuality mechanisms interacting with environmental factors. Differences in the types of sexually explicit media heavily consumed by males and females is reflective of differences in their sexual strategies. While males consume sexually explicit media containing elements related to short-term mating strategy,

females consume media that reflect the relatively longterm aspect of their mating strategy.

In current environments, the expression of sexual strategies is expected to be moderated by their interaction with other mechanisms that place limitations on sexuality mechanisms. Some constraints faced by males, including the fear of venereal diseases, reputation damage, or rejection by females, a need to find a suitable compromise with female sexual strategy in order to attract and retain a desired woman, competition and threats from other men, and/or limited resources, may result in fewer sexual encounters with fertile women. Although sexual behavior may be constrained by certain mechanisms, attraction to sexually explicit media is not constrained to the same degree by compromises imposed by other mechanisms. As well, it should be noted that males' and females' choices of long-term opposite-sex partners (e.g., marital partners) are not exclusively based on sexuality mechanisms alone but reflect the powerful influence of many other mechanisms (e.g., attachment, friendship, etc.). It is therefore not surprising that males and females have actually been found to be very similar in their criteria for choosing long-term partners while differing in the inclination to and criteria used for short-term sexual partners.

C. Sexually Explicit Media and Gender Differences

Survey studies conducted over the past 4 decades consistently show large gender differences in the uses of and gratifications derived from sexual media. Table 1 summarizes the findings of these studies and various related gender differences documented by other researchers and presents a summary of an evolutionary-based model's explanations for these differences.

D. Adaptive Evolutionary Problems and the Content of Sexual Media

Another source of information about the relevance of the evolutionary analysis to understanding gender differences in consumption of pornography is revealed in examining the correspondence between the content of sex strategies and the recurring formulas of sexually explicit media. In a recent article by Neil Malamuth it was concluded that there is an excellent fit between the content of today's sexually explicit media geared primarily to male consumers and the major adaptive problems that according to evolutionary psychologists led to the evolution of a male short-term sexual strategy.

For example, the adaptive problems underlying such a male strategy included how to gain sexual access to as many fertile females as possible while minimizing the commitment and investment in any single woman. Today's sexually explicit media geared to males portray primarily casual sex with numerous, accessible women who display fertility cues through their age, body shape, and so on.

Similarly, this analysis also showed very clear correspondence between the content of female-oriented sexual media (i.e., romance novels) and the adaptive problems that led to an evolved female long-term sexual strategy. Females' adaptive problems included identifying and securing commitment from a man who had the ability (e.g., relatively high status) and willingness to successfully invest in her and their offspring. In addition, a man who could provide physical protection particularly during the period of increased vulnerability associated with pregnancy and child rearing was also an important characteristic for females' mates. Finally, it was important to solve the problem of identifying a man who possessed good parental abilities and skill. Men with such attributes as kindness and sensitivity, potentially possessed these abilities. Content analyses of the very large media industry of romance novels (in which there is considerable portrayal of sexuality) show that they typically portray a woman securing a relationship with a high-status, physically protective male who also possessed parenting skills and the ability and willingness to invest time in a single female and her offspring.

E. Cultural Socialization as an Explanation for Gender Differences

The gender differences described here are often explained by the socialization of our cultural roles and institutions that create differing social environments for females and males. These environments could include messages from parents, peers, media, and other cultural institutions, including messages about the dangers inherent for girls in sexuality. They could also include cultural barriers, such as laws and norms that channel males and females into differing careers, lifestyles, or behavioral patterns. Although such cultural factors are obviously important in explaining many gender differences and may indeed have considerable relevance to explaining differences in consumption of pornography and other sexual media, such a model would need to consider the reasons that certain roles, norms, and laws emerge or are enacted. Using culture to explain may

TABLE I

Summary of Sex Differences in Reactions to Sexually Explicit Media and Evolutionary Model's Explanation

(1) Sex Differences in Content That Is Appealing

In comparison to women, men consume more regularly, are more sexually aroused by, have more favorable attitudes, and react with less negative affect to portrayals featuring nudity of the opposite sex and/or sexual acts devoid of relationship context. Such differences have consistently been found in survey studies focusing on various media, including magazines, movies and on the computer internet and in laboratory studies presenting subjects with stimuli. In contrast, men are less likely than women to consume sexually explicit media that emphasize "sexual communion" and romance.

Evolutionary Model's Explanation: In general, the underlying algorithms for male and female sexual strategies differ. Male algorithms are designed to be less selective and cautious in short-term mating opportunities and to prime more frequent short-term acts (i.e., the threshold is lower for eliciting behavior). Consequently, the availability of an attractive nude female displaying sexual availability may constitute a sufficient condition to activate an "associative network" of responses (e.g., arousal, attitudes, positive affect) designed to elicit "approach" responses likely to lead to sexual acts. Female algorithms are designed to be more cautious in short-term mating situations and to evaluate more carefully the desirability of their potential mate. The availability of an attractive nude male displaying sexual availability is less likely to constitute a sufficient condition to elicit sexual behavior and may be "counteracted" by mechanisms designed to "put the brakes" (e.g., negative affect). Added "contextual" information, such as the desirability of the man and his trustworthiness, her familiarity with him, and his desire and other feelings for the woman, are important ingredients contributing to women's arousal and comfort levels. It is possible to provide such contextual information in portraying a "casual" sexual encounter.

(2) Sex Differences in Reactions to Novelty

Men become more aroused sexually than women by films showing novelty consisting of different actors but less aroused by the same actors performing different acts.

Evolutionary Model's Explanation: Novelty of sexual partners is a more powerful stimulant to male sexual strategy, since the opportunity to mate with a larger number of partners was more likely in ancestral environments to have contributed to male reproductive success than to female reproductive success.

(3) Sex Differences in Reactions to Form

Men are generally more aroused than women by visual portrayals, even when content has been "controlled" for. Women are much more likely to be the consumers of stories (e.g., novels) that incorporate sexuality within a much broader context than magazines or movies featuring visual sexual displays.

Evolutionary Model's Explanation: Men's evolved strategies prime them to be more visually attracted and aroused sexually, since such a "medium of communication" is likely to occur with many persons, including strangers (e.g., seeing from a distance) and to elicit sexual arousal frequently, resulting in greater likelihood of short-term mating. Women's arousal mechanisms, in contrast, are designed to be less likely to be easily aroused simply by the sight of an attractive stranger since that might prime women to "careless" decisions regarding sex.

(4) Sex Differences Functions and Approach/Avoidance Behavior

Men are more likely to seek out opportunities to be exposed to sexually explicit media, even when alone or with a same sex friend. They are more likely to use such stimuli as an end for themselves, reporting purposes such as "seeing great bodies," "releasing sexual frustrations," and as a stimulant for masturbation. Women are less likely to volunteer for studies involving sexually explicit media, regardless of whether they are described as hard- or soft-core. Among men, there do not appear to be differences between those who volunteer for erotica studies as compared to those who volunteer for nonsexual studies. In women, in comparison to those volunteering for non-sexual studies, volunteers for erotica research are more erotophilic (i.e., they have more favorable reactions to sexually explicit media) and have less negative affect to sexual films. Even when levels of sexual arousal in response to a sexual film are the same among men and women, men are much more likely than women to indicate that they would participate in a similar experiment in the future.

Evolutionary Model's Explanation: Female sexual strategy results in greater caution in placing oneself in sexual situations. Mediated by the "associative network" of responses and their underlying algorithms, females are more likely to avoid situations involving the display of sex per se. Men's sexual strategy makes them more responsive to sexual display that is not contextualized. Therefore, becoming sexually aroused can be gratifying even in a context that does not stimulate other feelings connecting the experience to a desire for another person. Such experiences are more likely to elicit negative affect in females when presented in a potentially "unsuitable" context.

move the level of analysis from the individual to that of the group but it is not an adequate endpoint of an explanatory model. It does not address the question of why humans have recurrently developed certain types of cultures, including ones in which the social environments differ for males and females.

Also, there are close similarities between findings in the area of gender differences in sexually explicit media and data in other areas (e.g., self-generated sexual fantasies, visits to strip shows, fetishes, sexual jealousy, etc.) that seem to provide a wealth of data on gender dimorphism in sexuality mechanisms. Whether informed by an evolutionary paradigm or not, researchers arguing against sexual dimorphism need to provide a comprehensive model that explains such consistent findings across various domains.

F. The Evolutionary Approach and Effects of Exposure

Evolutionary-based perspectives can provide a framework for integrating the other perspectives on pornography and they can provide us with a relatively clear model regarding the functions of sexually explicit media (e.g., Why do they exist in content and form?) but they do not necessarily provide clear predictions regarding the effects of exposure to sexually explicit media. Some evolutionary-based models may argue that the desire for various types of male-oriented pornography and female-oriented romance novels is simply a reflection of sexuality mechanisms in males and females; therefore, exposure to pornography has no significant impact on subsequent responses. Others may argue that even when understood as reflecting sexuality mechanisms, the content of such media exposure can have powerful effects. Our mechanisms for discriminating fantasy versus reality may not be sufficiently sharp to totally avoid any long-term impact of exposure on our feelings, thoughts, and behavior.

Also See the Following Articles

EVOLUTIONARY FACTORS • GENDER STUDIES • SEXUAL ASSAULT • TELEVISION PROGRAMMING AND VIOLENCE • WOMEN, VIOLENCE AGAINST

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