

FUTURE RESEARCH AGENDA

As indicated by the previous statements, social science has provided conclusive evidence about only a few of the possible effects of pornography on children, adolescents, and adults. Much remains unknown. If researchers are to make a substantial contribution to future policy decisions in this area, exploratory applied studies about the effects of pornography in everyday life and laboratory studies clarifying the theoretical mechanisms related to exposure must be done.

The fact that much still needs to be done in this area is not too surprising. For one thing, research into the effects of pornography has occurred primarily over only the past 15 years. Several questions, such as the effects of prolonged exposure or the effects of sexually violent materials, have only very recently been investigated. In addition, numerous related studies, rather than any one dispositive study, must be pursued. Many questions in this area cannot be addressed directly because of ethical constraints, and investigations of a somewhat tangential nature must be done instead. Converging evidence from many tangential studies using different methodologies must then be related before conclusive statements can be made confidently.

Delineating which studies should be undertaken was the task of a second consensus session of the Workshop, and a far-reaching agenda for future research was devised. Time constraints prohibited the development of specific research designs, but selected areas that require more investigation were isolated. It is hoped that researchers will use this formulation of needed research as a set of general guideposts in designing specific research questions and approaches.

The agenda laid out here requires both field and laboratory studies, and there is considerable advantage to pursuing questions in this area using both strategies simultaneously. Certain leads that have come from laboratory investigations (e.g., the distinct effects of violent sexual material) now need to be examined in more realistic settings. Conversely, certain real world phenomenon of interest (e.g., habituation to exposure) must be fleshed out theoretically by systematic laboratory investigations. Overall, this area of inquiry is in an ideal position to advance if methods are tailored to existing questions rather than vice versa and an active exchange is fostered between laboratory and field researchers.

The extent to which any of this research agenda can be accomplished will depend on the willingness of private foundations and various government agencies to provide funding. A number of the proposed investigations (particularly longitudinal studies and those that require large numbers of paid subjects) could be quite expensive. Given the clear need for more information on this topic, however, the amount of funding provided for research will reflect the priority that society places on addressing the effects of pornography.

Definitional Issues

The term pornography has been used in so many ways that its meaning has become increasingly ambiguous. Researchers and policy makers alike may be thinking of a wide range of materials when trying to speak in common terms regarding pornography. The inevitable confusion resulting from these differing interpretations hampers the design and interpretation of social science research as well as the application of knowledge to policy.

More descriptive studies regarding the existing types and prevalence of certain materials and survey research regarding people's implicit categorizations of pornography are needed. This information is central to the development of a usable typology of pornographic materials to guide research and discussion. Standard descriptive terms for the various types of pornography that take into account the levels of sexual explicitness, violence, and types of participants would be a starting place in this effort. A subsequent, more involved approach would be to develop dimensions or axes along which different types of materials could be characterized in a multivariate fashion. Regardless of the exact form such a typology takes, however, it is essential that it both reflects the range of materials found in the marketplace and has theoretical relevance to social scientists and policy specialists.

Clear definitional boundaries are particularly needed across the range of sexual activities between completely mutually consenting sexual activity and rape. The fact that depictions of rape seem to have particularly powerful effects in controlled research studies and the problems with estimating the incidence of rape both highlight the need to focus on this content area in efforts at definition. Questions such as the extent to which certain activities (e.g., expecting sex as part of an unequal status relationship) fit the definition of coercion need to be discussed and debated.

Production, Distribution, and Consumption of Pornography

More accurate information regarding the production, distribution, and consumption of pornography is needed to focus research onto topics of real world relevance and to target prevention and intervention programs. Currently, information regarding the amount of various types of pornography being produced and used is sparse and often contradictory. Widely varying estimates can be found about the amount of production, the numbers of children and adults involved in production, and the number of consumers. Patterns of use are not any clearer, and accurate information about the extent to which certain types of pornography are used by different groups of children, adolescents, and adults is needed.

Information regarding typical consumption patterns of children, adolescents, and adults is particularly critical to future theoretical and applied research. Of most concern are the effects resulting from long term, repeated exposure occurring in contexts that promote unfavorable reactions in children, adolescents, or adults. Knowing how much is too much or what conditions are critical to changes in attitudes or behavior are questions that cannot be posed meaningfully until the parameters of current patterns of use are clarified. Descriptive studies in this area should provide information about the most popular type of pornography among different age groups, the reasons for its popularity, the amount that it and other forms of pornography are viewed, and the environment and context in which it is viewed.

Developmental Patterns

Research has indicated that individuals have different patterns of reaction to sexual and aggressive material. Abel and his colleagues, for instance, have shown that rapists are aroused by aggressive material more often than nonrapists, and that pedophiles are aroused by sexual material involving children. Exactly how these arousal patterns develop, however, is still rather unclear. We are unaware of, and need to know more about, the timing and mechanism of this area of development.

There needs to be careful longitudinal research on the role of early development and of later experience in the shaping and changing of these patterns. There is little doubt that pornography has different effects on different people and that a majority of sex offenders make regular use of these materials. The next problem to address is the one regarding how these patterns of use and sexual arousal are intertwined in the developmental process.

Related to these developmental questions are other important questions about propensity to commit sexual aggression and the role of pornography in activating that propensity. Malamuth, Check, and Briere (1986), for example, found that some college students' arousal to scenes of aggression was similar to the arousal observed in rapists, but these students did not report engaging in any sexually coercive behavior. If arousal patterns develop early and if certain patterns would seem to place an individual at risk for being sexually coercive, it is important to also explore the reasons why some individuals who would seem to be at risk do not exhibit sexually coercive behavior. The way that sex education can affect development and sexual expression should be investigated as part of this effort. This information would have direct applicability to the prevention and treatment of sexually coercive behavior as well as theoretical relevance to the understanding of the mitigation of arousal.

Increased general theoretical work on the link between sexual and aggressive behavior would also be of value in providing a larger framework for these focused studies. Several theories have been proposed that link sexual and aggressive behavior (e.g., Barclay, 1971). Questions remain, however, about whether aggression enhances sexual desire or sexual arousal in anyone, everyone, or some particular set of people. A clearer understanding of any link between these two general energies or behaviors would provide a structure that could facilitate the interpretation of specific findings about effects of exposure to sexually aggressive materials and arousal patterns.

Stability of Observed Changes

Further laboratory research is warranted to replicate and extend the existing lines of investigation on the effects of pornography on perceptions, attitudes, and behaviors. Replication of previous studies would add credence to (or call into question) earlier findings and clarify the potential for generalizing from these results. Most directly, inclusion of subjects from segments of the population that have not been closely examined (e.g., women, nonstudents of college age, those older and younger than college

age) in replication studies would be important steps in determining how far we can extend the findings of earlier research.

Also, the duration of behavioral and attitudinal changes seen in the laboratory needs to be more clearly determined. Almost all of the investigations done to date have been concerned with immediate changes, and the susceptibility of any of these changes to mitigating life influences over time is still basically unknown. Although presenting many ethically thorny issues, this question is central to knowing how much significance should be given to the series of present findings. If these effects appear to be rather stable, the issue of the effects of pornography takes on increased social importance; the effects become more than just the short-term results of a clever research design manipulation.

The effects of nonviolent sexually explicit pornography is another question that laboratory studies should continue to investigate. While the behavioral effects immediately following sexually violent pornography have been consistent, those following nonviolent sexual films have not been consistent. Further investigation in this area could contribute to the development of theory about the aspects of the pornographic presentation or viewing context that interact to produce harmful effects.

Habituation

Research by Zillmann and others has indicated that those who watch pornography on a regular basis in a laboratory setting eventually become less aroused when they see it; they become "habituated" to the pornography. This habituation, however, appears to be limited to only the type of pornography that they have been watching. Subjects' arousal returns to earlier levels when they watch a new type of pornography.

This phenomenon has been investigated in only a few studies, but it should be analyzed further because of its potential importance for our understanding of long term use of pornography. It is possible that this mechanism is an important aspect of a process by which certain individuals become interested in more deviant forms of pornography. If regular users do tire of particular types of pornography, they may be more inclined to seek out more uncommon pornography in order to maintain enjoyable levels of arousal. One of the implications of this hypothesized process could therefore be that the ready availability of pornography could habituate users on a grand scale, contributing to an increasing spiral in the deviance portrayed in new pornographic ma-

terials. On the other hand, habituation may make many individuals use pornography selectively or not use pornography extensively because of the awareness that its effects are short-lived. More deviant forms of pornography may just not be that intrinsically arousing and patterns of use may be altered to accommodate to the phenomenon of habituation. Regular users may seek intermittent exposure to the same type of material in order to achieve acceptable arousal.

Presently, we do not know how habituation works to promote different patterns of preference or use. In order to gain a fuller picture, more laboratory studies of the limits and mechanisms of habituation in different populations will have to be conducted. At the same time, it will be important to conduct field-based research of extensive users, focusing on how habituation affects selection of different types of pornography and the schedule of exposure.

Documentation of Natural Changes

Researchers should also attempt to capitalize on naturally occurring changes in viewing patterns or availability of pornography to assess simultaneous changes in potentially linked phenomena such as sexual assault or attitudes. Retrospective correlational studies of social indicators that have been done in this area are generally marred by their inability to rule out the possibility of mediating factors being responsible for observed associations. Examination of changes in the frequency of events in a small region over a time period during which the availability of pornography clearly increased at a particular point would make a stronger test of any association. For example, examination of behavior or attitude changes corresponding to the availability of cable television carrying pornographic movies would give more exact information than is presently available.

These studies could possibly use a variety of quasi-experimental methodologies, such as interrupted time series analyses or repeated observations of selected groups. What must be done in every case, however, is to anticipate a change in order to gain adequate baseline data before the level of availability increases or decreases. Such foresight and planning is necessary to add to the presently limited set of correlational studies on social indicators.

Attitude Research

The present body of studies on the effects of pornography on perceptions and attitudes warrant more elaborate investigation. We presently know that certain perceptions and attitudes toward sexual coercion can be altered in a laboratory setting by exposure to specific types of materials. It would be worthwhile to determine what other perceptions and attitudes might be affected by exposure and how the development of affected attitudes is linked to behavior.

The concern with attitudes toward sexual coercion has been primed by the relevance of this attitude formation process to our understanding of the subjugation of women and the etiology of sexual aggression. There is the possibility, however, that exposure to pornography also has an effect on the formation of other attitudes of interest. Attitudes toward such things as traditional family values or the attractiveness of one's partner (see, e.g., Zillmann, in press) may also be affected by repeated exposure, and changes in attitudes like these would be important to know about in order to assess the long term effects of viewing pornography on the quality of interpersonal relationships.

Of equal or even more importance, however, is the need to conduct longitudinal investigations regarding the development and influence of attitudes on sexual behavior. Longitudinal studies, similar to Ageton's (1983), that chart attitudinal changes in adolescents and adults over time, discuss any relationships of these attitudes and contact with pornography, and note any predictive value that these attitudes have regarding sexual behavior are critical. These studies will provide solid, rather than circumstantial, evidence about the effects of pornography on the development of attitudes toward sexuality and aggression and the effects of these attitudes on behavior. Such investigations would also allow for an understanding of the influence of certain contextual factors related to the effects of pornography on attitudes and behavior, such as whether the pornography is viewed alone or with others or how family interactions affect interpretation of this material. Without such investigations of the same people over time, researchers will only be able to continue speculating about the clarity and power of the relationships between pornography exposure, attitude formation, and behavioral expression.

Finally, continued research into the use of erotic stimuli for clinical purposes should be done. Clinical reports have indicated that pornography can be valuable in

treating sexual dysfunction or phobic reactions to sexual activity. In addition, research by Ceniti and Malamuth (1984) found that repeated exposure to violent or nonviolent sexual material lowered the arousal to rape scenes in a group of males who had been aroused by such material earlier. Possible uses that may be made of pornography in clinical settings, including the use of pornography to alter deviant sexual arousal patterns, may have much to offer in the treatment of those individuals who pose considerable threat to the community because of their sexual interests and behavior patterns.

Summary

Judging from the above agenda, researchers have a sizable challenge ahead of them in filling the gaps of existing knowledge regarding the effects of pornography. The research agenda laid out above, however, is not only extensive, but also one that will require work by investigators of different interests and methodological orientations. No one approach or disciplinary perspective will be able to provide the breadth of information required as background for a reasoned judgment on this issue.

A final point that is worth remembering regarding future research is that this line of inquiry really is in the initial stages of development, where much still needs to be described and conceptualized. As a result, researchers must be open to new ways of thinking about variables to be investigated. Particularly, thought must be given to the dimensions of pornography or the conditions of exposure that might be influential in producing harmful effects. As shown by the recent research with violent pornography and victim arousal, there may be specific qualities of presentations that are salient but not immediately evident if one is concerned only with the amount of graphic content presented.

The aspects of pornography that precipitate moral concern may not be the same aspects that are most influential in producing harmful effects, and investigators must keep this in mind in their initial choice of variables and designs. Researchers will do the most service to informed debate on this topic by searching for those dimensions of presentations and the processes of influence that are the most theoretically meaningful, rather than trying to prove or disprove the effects of particular types of offensive material. At this point, the aim must be one of building theory, and the applicability of a good theory will become obvious.