

BASIC RESEARCH PROBLEMS

The Underlying Issues

Designing and executing research to isolate the unique effects that exposure to pornography may have on children and adolescents is a formidable task because of the methodological and ethical barriers inherent in doing such investigations. Exposure to pornography is only one of many interdependent factors potentially affecting a child, and attempting to isolate its unique effects forces the researcher to oversimplify the complex process of development. Moreover, conducting investigations regarding exposure to pornography while protecting subjects from potential harm creates a number of vexing ethical dilemmas. Given these constraints, it is not too surprising that the amount of directly relevant information that can be gathered from the social sciences regarding this question is limited.

It is important to note first that the effect on children of any particular influence like exposure to pornography is the result of many interacting factors. Most obviously, the effects of exposure are likely to differ depending on the age of the child. Because of new cognitive and social skills that develop as a child matures, the effect that an experience with pornography has at one age does not always correspond to the effect that it has at another. In addition, recently it has become clear that there is considerable variation between children in their proclivities for certain activities or susceptibility to particular influences. Children bring dispositional tendencies and early learning patterns into any interaction with the environment, and these may also produce wide variation in the impact that any particular influence or incident has on the child. Finally, exposure to pornography does not occur in a vacuum. Like any other factors that might influence child development, exposure to pornography is unlikely to exert an influence totally distinct from the setting and social context in which it is experienced. For example, a short exposure and subsequent discussion with a parent about the factual accuracy or value message of the material would in all likelihood have a quite different effect than repeated solitary exposure. How to test systematically the effects of exposure to pornography in the face of this myriad of potential influences is obviously quite a methodological challenge.

Even if one is willing to chip away systematically at these multiple interactions through circumscribed investigations, however, there are ethical constraints that inevitably limit the types of research designs that can be used. Because the exact short term effects on children of exposure to pornography are unknown, and because exposing youth to pornography for experimental purposes could conceivably produce actual ill effects, this tactic violates a basic moral sense of the limits of acceptable social scientific practice. The researcher, therefore, is caught in a *Catch-22* situation. It is impossible to know exactly what effects different types of materials might have on children without investigating the phenomenon systematically, but it is impossible to do the investigations as long as adverse effects are hypothesized. Moreover, showing an effect would guarantee that future investigations would be even further restricted, since there would then be proof of the risk.

Aside from the simple fact that showing pornography to children is a morally distasteful and at present an ethically unsupportable manipulation, the lack of clear knowledge or theory regarding expected long term outcomes of such exposure also presents an ethical difficulty. Even if it could be demonstrated that negative short-term effects could be controlled by debriefing, it would still be important to be able to assert that long term effects of a child's involvement in such research would be negligible. Because of the possible multiple interactions between exposure to pornography and other contextual and dispositional variables, however, it is impossible to predict what the ultimate effects of such exposure might be for a youth taking part in such research. Without adequate theory to guide an assessment of the risks of this research for children, investigators are unable to present a balanced (even if only theoretical) argument regarding methods to protect against ill effects. In the end, the individual risk factors predisposing children to various influences are too unclear, the potential negative outcomes are too diffuse, and the theory too sparse to protect children taking part in the direct research that would need to be done.

Because of these ethical constraints, we are unable to scientifically test many of the propositions related to the effects of pornography on children. Thus, the field of available data upon which any general conclusions can be based is bound to be of questionable scientific rigor. Instead of examining direct tests of hypotheses, we must extrapolate and speculate regarding the effects of pornography on children and adolescents from related research. There are three basic types of investigations—clinical, laboratory, and correlational—that are relevant in this effort, and each one has its advantages and limitations. It is useful to be aware of the qualities of each approach while considering the applicability of their findings to children and adolescents.

Clinical Studies

One source of information about the effects of pornography on children and adolescents are clinical studies involving youth who have come to the attention of juvenile justice or mental health agencies. These reports are valuable because they provide a glimpse at the casualties of youthful exposure to harmful influences. Unlike statistical analyses of patterns within large groups of subjects, clinical studies frame problems in human terms. Devastating subjective experiences do not become diluted by numbers representing differences between group averages.

The rich texture of clinical data is valuable for the development of theory, especially in an area like pornography where ethical considerations prohibit empirical investigations with larger, more representative samples. Clinical studies highlight relevant issues to be considered in any theoretical formulation and pose potential hypotheses regarding the mechanisms behind certain observed effects. Clinical accounts provide direction for more controlled investigations and promote theory that is linked to the subjective experiences of the practitioners and the youth involved.

Clinical studies are limited in value, however, when testing hypotheses and theories. Their greatest general limitation is the inability to isolate the specific effects of the variable being considered (such as exposure to pornography) from other potentially influential variables. Using clinical data alone, it is impossible to attribute a particular amount of an observed effect to a variable in question. For that matter, it is impossible to conclusively attribute any effect to a specific variable. In order to make such causal statements, it is necessary to compare the effects seen in a clinical sample with those seen in an appropriately matched control group. This cannot be accomplished through the use of clinical samples alone.

Clinical studies have another problem resulting from their focus only on youth with identified problems. The effects of the circumstances that form the basis for the identification (e.g., sexual abuse) cannot be separated accurately from the effects of the discovery of those circumstances. For instance, it is impossible to tell with any rigor how much of the distress shown by a child in therapy results from actual participation in pornography and how much is precipitated by the reactions of others such as parents, friends, and teachers to the discovery of the child's involvement. For example, Burgess, Hartman, MacCausland and Powers (1984) found that behavioral problems of some children involved in sex and pornography rings increased after their participation was discovered. The identification process itself provides an influence on behavior that is very difficult to gauge.

Perhaps the most subtle problem with clinical reports is the inevitable tendency

for individuals who report on clinical phenomenon to interpret and report their observations in a way that supports their beliefs about the phenomenon in question. Those writing clinical reports have beliefs that necessarily influence the general approach taken to the subject matter, the types of questions asked, and the interpretations of the results. The lack of a broadly accepted method in this area is both a strength and a weakness. It allows for insightful and broad analyses and condones bias at the same time, often resulting in contradictory findings and conclusions that produce more careful debate than resolution. Clinical reports thus often illustrate, but rarely irrefutably substantiate, different perspectives on a question.

All of these concerns make it troublesome to rely solely upon clinical reports to gain a clear picture of the potential problems connected with exposure to or involvement in pornography for children and adolescents in general. Children who have run away from home and are encouraged to produce pornography by being shown pornographic pictures do not necessarily represent all children, and their reactions to being shown pornography do not necessarily represent the inevitable response of children to exposure. Similarly, the effects on delinquent youth of viewing pornography do not necessarily mirror those of nondelinquent youth. The reactions of these select samples to participation in or exposure to pornography may differ significantly from those of children from less troubled backgrounds.

It is important, therefore, to remember the values and limits of clinical research as the literature in this area is reviewed. Rather than interpreting clinical accounts as proof, we should instead view them as rich reminders of how devastating certain influences can be to victimized children. In addition, they can clearly point toward the issues that must be addressed more rigorously and make us feel why it is so important to pursue those investigations.

Laboratory Studies

Laboratory research provides another source of potentially valuable information about the effects of exposure to pornography. Using controlled settings and consistent materials, this type of research can systematically test for individual differences produced by altering either the types of pornographic materials seen or the conditions under which they are seen. The attraction of this approach is that it is "scientific" in the sense that hypotheses can be directly tested and findings can be amassed to support global theories. The drawback of such an approach is its inherent artificiality; phenomena in the lab are not always what they may be in the real world.

The advantages of this approach for increasing our understanding of the effects of exposure to pornography are considerable. First, it allows for control over the types and amount of materials seen. As a result, the effects of sexually explicit materials can be compared to the effects of sexually violent materials or the effects of single exposures can be compared to those obtained with repeated exposures. Second, this approach allows for control over possible extraneous variables that might affect the results, allowing heightened confidence that any observed differences were caused by the factors that were manipulated. For instance, individuals can be randomly assigned to different conditions of exposure to control for self-selection factors, or anger levels can be manipulated before testings for the display of an outcome behavior of interest. Third, it promotes the systematic construction of theory regarding the mechanisms by which any effects resulting from exposure occur. Results from one series of experiments can be further refined in later studies until a clearer picture emerges. Laboratory aggression against women in these studies, for example, has been shown to be affected by the content of sexually violent materials, thus promoting a theory of a synergistic effect between the presentation of violence and sex in promoting targeted aggression against women.

There are also many limitations of laboratory approaches applied to studies of exposure to pornography. First, as mentioned earlier, there is the nagging question of whether the results obtained in the lab actually reflect the world as it is outside of the lab. The vast majority of lab studies in this area use college students as subjects, create manipulations that are usually contrived and less complex than the influences occurring in real life, and produce effects that are only analogues of the actual behaviors of interest. Regarding pornography, the concern about the applicability to the everyday world centers on whether the attitudes and behaviors of college students regarding sex are adequately representative of the general population, whether the types and patterns of exposure in the lab are comparable to regular or sporadic pornography use, and whether the short term effects produced can be interpreted as having any substantial relationship to behavior patterns outside the lab. There is a particular related concern that those individuals who volunteer for laboratory studies (especially those studies involving penile tumescence measures) may not be representative of the general pool of potential subjects, possibly being more sexually liberal and having more varied sexual experiences (e.g., Malamuth & Check, 1983).

Second, laboratory studies operate primarily from a hypothesis testing model. In this approach, demonstration of differences between groups exposed to different treatments is taken as evidence that the manipulation has been sufficiently powerful to rule out the possibility that the observed group differences were produced merely

by chance. A lack of differences is taken to mean that the manipulation did not have an effect substantially greater than what might have resulted from random fluctuations, but it does not necessarily rule out the possibility that there might be an effect under slightly different circumstances. Thus, this model for experimentation nearly guarantees that only significant results will be reported in the literature, since "no effect" is an inconclusive statement. As a result, it is difficult to know how many studies were done that were unable to produce any observed result. This generally unavailable information is important because the presence of a large number of these unreported results may indicate that the regularity and strength of a particular effect is really rather low even though it has been reported to have occurred under controlled conditions (Rosenthal, 1978). This drawback makes it impossible to merely compare the number of published studies showing a particular effect and those not showing the effect, when assessing whether the effect exists.

In a related vein, it is difficult to judge whether the strength of an effect that will produce statistically significant group differences in a controlled study reflects a difference that is of significant magnitude in the real world. A difference of 2.5 on a 7-point rating scale completed by a large number of college students, for instance, may produce a highly statistically significant effect in a controlled study. Whether this difference really translates into an attitude difference of noticeable proportions in the real world, however, is another question. In short, lab studies offer the opportunity to construct theory but can only rarely test how well that theory goes beyond the controlled setting of the lab.

Correlational Studies

The third type of social scientific evidence commonly considered when attempting to assess the effects of pornography is that examining relationships between or changes in social indicators. This strategy usually involves examining the correlation between two indicators under different conditions (e.g., the incidence of rape and the distribution of sexually oriented magazines in different states) or changes in the frequency or magnitude of an indicator over a given time period (e.g., changes in rape rates after a loosening of the restrictions on pornography). Examinations of social indicators are particularly useful for generating hypotheses about how people might be acting or for predicting how a social system might operate.

Because of their general nature, investigations using these designs are open to several problems. The major problem is their limited capacity to control for the numerous variables that may be contributing to any observed correlation or shift. For

example, a shift in demographic composition or reporting practices over time can affect the relationships seen in aggregate population data, or other unmeasured variables can be mediating a relationship between the two variables being examined. These influences may cause the change in one variable to be mistakenly attributed to a second variable. Researchers attempt to guard against these influences by examining changes in other variables that might be logical causes of the observed changes, but it is always an open question whether enough of these extraneous factors have been considered or if the researcher has examined the right ones. Somewhat like clinical studies, correlational research offers us a glimpse of the real world, but at an aggregate level that is highly dependent upon the measures chosen.

Studies of this sort also come under considerable criticism regarding the accuracy with which the social indicators chosen actually reflect the particular theoretical notion in question. Variables are usually taken from existing data bases and are assumed to be reasonable proxies for more abstract notions. The number of "adults only" movie theaters in an area, for example, might be used as an indicator of a community's acceptance of pornography, or salary differential between sexes might be used as an indicator of the status of women. How well these measures actually capture the concept under consideration, however, is often debatable, and there is often the real possibility that different results would have been obtained using different indicators.

Finally, interpretation problems arise with studies of social indicators. It is often difficult to keep in mind that associations seen in aggregate data may or may not reflect processes operating within or among individuals. For example, although the availability of sexually explicit materials may be correlated with the incidence of rape in particular areas (Baron & Straus, 1984), this association does not mean that the same individuals are accounting for both rates. This observed relationship could be present even if two totally nonoverlapping groups of individuals were accounting for each indicator. As a result, investigations of this sort that rely on aggregate data provide no conclusive information about the extent of the relationship of the variables of interest in the individuals who compose the groups examined.

In the end, the best that can be offered are demonstrations of an observed correlation, but no real information about whether the results indicate a causal relationship. Because of the open-ended nature of the arguments that can usually be raised against any observed correlation, studies of this sort are usually viewed as adjunct sources of support for particular arguments or as indicators of potentially fruitful places to begin more controlled studies.

Summary

Given the problems with each of these approaches to research, one might be left with the impression that all social science data is flawed to the point of being unconvincing to the discerning reader. This interpretation, however, would be overly harsh. Instead, what should be taken from this critical review is the simple idea that no one study or set of findings using only one method should be taken as definitive. While certain questions are best suited to particular forms of investigation, one piece of evidence standing alone or without considerable theoretical support should be viewed with skepticism.

When more than one approach is used to investigate the same specific question or hypothesis and consistent findings emerge, however, it is evident that something has been found that warrants consideration by policymakers and researchers alike. There are ways that each method outlined above compensates for the inadequacies of the other methods and consistent findings therefore argue for little likelihood that the particular approach taken has skewed the results in a particular way. Each of the above methods has been used in examining the effects of pornography, and an assessment of what this evidence ultimately says requires a careful weighing of the methods used and the consistency of findings across different methods. There are some statements that can be made with scientific confidence because they are validly demonstrated and/or theoretically sound.