

## CONSENSUS STATEMENTS

### Introduction

Workshop participants were given the charge of reaching some consensus regarding the effects of pornography on the public health of citizens, especially children and adolescents. The list of consensus statements that emerged was intended to provide a reasoned, rather than a partisan, summary of what social science can say with confidence about the effects of pornography. Each of the five consensus statements that follows relates to a circumscribed effect of pornography that is supported by directly relevant social science data and is tenable in light of demonstrated theory in related areas of inquiry.

There have been many claims other than those listed here regarding the effects of various forms of pornography. What are listed here are conclusions that have, in the opinion of the participants, been demonstrated with a required degree of social science accuracy. This is not to say that other purported effects of pornography have been examined and found to be false. Presently, however, the state of the evidence in this area appears to substantiate only the following limited conclusions.

### Consensus Statements

**Children and adolescents who participate  
in the production of pornography  
experience adverse, enduring effects.**

Involvement of children in the production of pornography is a form of sexual exploitation, victimizing vulnerable children and leaving them with the aftermath of this involvement. Sexual exploitation has been linked to a variety of adverse emotional, behavioral, and somatic consequences in children as well as adults who were exploited as children. Incidents of sexual exploitation are not easily put aside by a child, but instead appear to re-emerge as a variety of difficulties (for a review, see Finkelhor & Browne, 1986).

Several aspects of the process of sexual exploitation are theorized to be important contributors to the emergence of adverse effects. Finkelhor and Browne (1985) have theorized that these effects can be caused by several factors: traumatic sexualization, betrayal, powerlessness, and stigmatization. Traumatic sexualization is a result of the child being involved in, and rewarded for, developmentally inappropriate sexual behavior. This can produce an obsession with or aversion to sexuality, and may be seen behaviorally in childhood and/or adulthood as a preoccupation with sexual activity, sexual dysfunction, or phobic reactions to intimacy. Betrayal results from the child being manipulated by a trusted adult. Effects can be depression, dependency, mistrust, and hostility, and behavioral consequences can include isolation, vulnerability to other abuse, and conduct problems. Powerlessness results from a sense of vulnerability felt because of repeated invasion of the child's body and the inability of the child to stop the abuse. Effects include anxiety, fear, self-perception as a victim, and identification with the abuser. Behavioral consequences include somatic difficulties, sleep disturbances, school phobias, and delinquency. Finally, stigmatization can occur as a result of the child blaming his or herself for the abuse or being blamed for the sexual activity by the abuser, the child's family, or others. Effects of this process are thought to be guilt and lowered self-esteem. Possible behavioral consequences include isolation, drug use, criminal activity and self-destructive behavior.

Involvement with pornography does seem to have a place in the dynamics of sexually exploiting children. Pornography has been used by adults to teach children how to perform sexual acts and to legitimize the children's participation by showing pictures of other children who are "enjoying" the activity. In some cases involvement in the production of pornography has led to other sexual activity; in others, pornography involvement has followed sexual activity.

Since most children and adolescents involved with pornography are also involved in prostitution or other sexual activity with adults (Burgess et al., 1984), and since many come from homes where they experienced neglect and abuse (Silbert & Pines, 1984), the specific effects of involvement with pornography cannot be isolated cleanly. Involvement with pornography is one of many influences operating in the lives of these youth, and discussion of the effects of participation in the production of pornography must be understood in terms of the combined effect of this influence with previous negative life experiences. There is no reason to believe, however, that involvement with pornography is less traumatizing than other forms of sexual exploitation of children. There is even some suggestion that it may produce a unique form of trauma since the child knows that there is a permanent record of his or her participation.

Evidence about the role and effects of pornography in sexually exploiting children necessarily comes exclusively from clinical studies. Burgess et al. (1984) completed extensive interviews with 62 children referred by law enforcement agencies when their participation in sex and pornography rings was discovered. Although one of the most extensive investigations of its kind, the authors noted several possible limitations to the generalizability of the results of the interviews to all children involved in such activity. Most notably, the sample might not have been representative of all such children since only those referred by law enforcement agencies were interviewed and 14 children who could have participated were not permitted by their parents to do so. Also, the children's emotional and behavioral patterns may not reflect those found in children whose participation had not been disclosed.

Difficulties reported by the children as occurring during their association with the sex rings included somatic complaints, sleep disturbances, withdrawal from peer and adult contact, and acting-out behaviors. Disclosure of the children's involvement in the rings produced new symptoms in 49 of the children and caused the exacerbation and solidification of existing symptoms in many others. Data analysis indicated that those involved in a sex ring for more than one year and those involved in the production of pornography (34 children) were more likely to exhibit more severe symptomology. Unfortunately, the specific contribution that each of these two conditions made to the symptomology is unclear.

From structured interviews with hundreds of children, adolescents, and young adults, Silbert (1986) compiled a list of symptoms exhibited by those involved with pornography. Those involved with pornography at the time of the interview were seen as uncommunicative, withdrawn, inattentive, and fearful. Long-term consequences of those who had been involved earlier were characterized by the internalization of those behaviors. That is, the adolescent personalities of previously involved youth were best characterized as withdrawn, anxious, and paranoid. Only five of the subjects interviewed had previously disclosed their involvement with pornography. For the two whose disclosure met with support by those in their environment, a time of initial heightened turmoil was followed by a more healthy resolution. For the others who were met with disbelief or punitive reactions, the disclosure meant an exacerbation of their negative reactions.

In a contradictory report, Inciardi (1984) interviewed nine girls between the ages of 8 and 12 who were involved in prostitution and pornography and found few overt signs of disorder. All of the girls had been introduced into the sexual activity by parental figures, all of whom were already involved in prostitution or pornography. None of the girls' activities had been disclosed to law enforcement or social service

agencies, and their involvement in sexual activity was ongoing. Four of the girls reported that they did not use drugs, and Inciardi stated that the others' drug use did not seem to be directly related to their sexual activities.

While these findings are counter to the previously cited investigations and the more generally accepted notion of the grave impact of such activities on children, several aspects of the group of girls interviewed must be considered as possible factors producing these results. First, the sample was small and not necessarily representative of all girls in similar circumstances. The girls' parents encouraged their sexual activity and the appearance of the activity as more normal may have mitigated the effects reported by other children. Second, the girls were still quite young. As Inciardi noted, these girls had the same trouble expressing affect as do other children their age, and this limitation may have produced an underreporting of symptoms in the short interview used. Moreover, many effects of sexual exploitation may not appear until the occurrence of significant life events involving sexuality or intimacy (Gelinis, 1983). The lack of current symptoms, therefore, does not preclude later problems around dating, intimate relationships, or childbearing. Finally, the sexual activity had not been disclosed. Recalling that symptoms can increase in severity after disclosure (Burgess et al., 1984), there is the possibility that these girls may have presented (or may yet present) a different clinical picture after the possibly traumatic experience of disclosure.

Although it is impossible to isolate the effects of participation in the production of pornography from the effects of the other forms of sexual exploitation that are often experienced by those involved in pornography, clinical evidence indicates almost unequivocally that the effects of such involvement are adverse and enduring. Whether or not we can generalize from the reported effects to all those involved in the production of pornography has not been shown, yet it is clear that harmful effects are experienced by many. While some evidence is available of minor effects when participation is encouraged by parental figures, this evidence is not overwhelming. In the end, it is fair to conclude that pornography plays a clear role in the sexual exploitation of children, and that this exploitation produces damaged children and adults.

**Prolonged use of pornography  
increases beliefs  
that less common sexual practices  
are more common.**

The basis for this conclusion comes mainly from the work of Zillmann and Bryant (1982) and the application of recent theoretically relevant findings from cognitive psychology research. The theme of this conclusion is that repeated exposure to pornography is likely to alter one's estimates of the frequency of people engaging in behaviors similar to those depicted. While there is only one direct experimental test of this premise, these results match other studies of human judgment processes using materials other than pornography as content. The research study can thus be seen as a demonstration that an observed, theoretically sound psychological mechanism appears to be operating when individuals are repeatedly exposed to pornography.

Zillmann and Bryant (1982) exposed a group of male and female undergraduates to varying amounts of pornographic films. The massive exposure group watched six different eight-minute sexually explicit films during each of six weekly sessions, the intermediate exposure group watched three erotic and three nonerotic films, and the no exposure group watched six nonerotic films. All of the erotic films contained only consenting heterosexual activities of fellatio, cunnilingus, coition, and anal intercourse.

Three weeks after the end of the film presentations the subjects completed several questionnaires, one of which asked them to estimate the percentages of adults in the United States that engaged in various common and uncommon sexual practices. Those in the intermediate and massive exposure groups, compared to the no exposure and no prior treatment groups, estimated that significantly higher numbers of adults engaged in fellatio, cunnilingus, and anal intercourse. Comparison with data from broadly based sexual surveys indicated that the estimates of the intermediate and massive exposure groups were actually more accurate than the no exposure and no prior treatment groups, which underestimated the prevalence of these behaviors. Of particular interest was the additional finding that estimates of the prevalence of group sex, sadomasochism, and bestiality were higher for the massively exposed group than the other groups, even though none of the pornographic material to which they were exposed included these types of activities. Those in the massive exposure groups significantly overestimated the reported prevalence of these activities.

This study indicated that those viewing intermediate or massive amounts of more commonly accepted pornography over a six-week period believed that these forms of sexual behavior occur more frequently in the general population than those with no exposure to pornography during the same time. Also, those who viewed more massive amounts of pornography believed that less common forms of sexual behavior which were not included in the materials seen also occur more frequently. In short, the perceptions of the subjects regarding the prevalence of sexual practices were affected by the amount of pornography that they viewed. However, the implications of this change in perception toward attitudes of tolerance for the material or the less common sexual practices were not and have not been investigated.

This single study would not be as convincing if its results were not so predictable in light of other research. Recent work in cognitive psychology has consistently found a set of processes that appear to drive human judgment under conditions of uncertainty (see Kahneman, Slovic & Tversky, 1982). When confronted with problems requiring estimates of the likelihood of an event occurring, people appear to perform a selective search of the outcomes of representative situations that they have encountered, and rely heavily on their recollection of the outcome of the most cognitively available incidents for representations. The availability of these cognitive reference points is influenced by the recency of a person's contact with the given material or the dramatic salience of the material.

Since pornography is a primary means by which many people (especially children and adolescents) learn about the sexual behavior of couples, and since there is seldom any corrective, more accurate information available, it is easy to see how this material can affect perceptions about how common certain behaviors are. Exposure could logically provide a heuristic of couple's sexual behavior in which less common acts are regular occurrences. Moreover, regular exposure could help to make these representations highly available as reference points. While more research is obviously required to gain a full picture of how repeated exposure to pornography affects perceptions, it presently appears that exposure to this content material operates in a way consistent with what would be expected.

**Pornography that portrays sexual aggression  
as pleasurable for the victim  
increases the acceptance of the use of coercion  
in sexual relations**

This statement is based on experimental findings, the fact that these findings are congruent with theoretical notions of attitude formation, and clinical reports from samples of sex offenders. None of the available data sources taken alone are sufficient to posit an effect of violent pornography of a particular type on attitudes. Taken together, however, there appears to be a convincingly clear picture of attitudes toward the acceptability of sexual coercion being substantially altered by exposure to particular types of violent pornography.

Since the 1970 Commission on Obscenity and Pornography, a number of researchers have explored the possibility of distinct effects related to exposure to violent pornography. These studies have been undertaken primarily because of the perceived increase in the availability of violent sexual materials (Malamuth & Spinner, 1980; Dietz & Evans, 1982) and the fact that the Commission only tangentially considered the possibility that these materials could exert an influence unique from erotic pornography. As part of this line of laboratory studies, attitudes have been investigated as possible factors potentially increasing or decreasing any behavioral effects produced by exposure to violent sexual materials. Attitudes in these studies have been measured using a variety of paper and pencil scales, with measures of the same type also used to gauge the individual's pre-existing, self-assessed "proclivity" toward rape. These investigations have been and continue to be classical, social psychological laboratory studies, almost exclusively using undergraduates as subjects and questionnaires or simulated tasks as outcome measures.

Two studies using this approach (Malamuth, Haber & Feshbach, 1980; Malamuth & Check, 1980) have shown that exposure to pornographic rape scenes in which the assault resulted in the female victim's sexual arousal altered males' assessments of a later rape depiction. These studies compared the effects of materials in which the victim was aroused by the attack, the victim abhorred the attack, or two people were involved in a mutually consenting act. Those viewing a scene in which the victim was aroused by the attack saw the victim of the later rape depiction as having suffered less.

Another study (Malamuth, Reisen & Spinner, 1979) failed to show similar effects regarding a later rape depiction, however. In this study, exposure to aggressive pornography films showed no effects on an immediate assessment of an interview with a rape victim or on attitude survey responses regarding the seriousness of rape obtained three weeks later. What is striking about this study, however, is that the materials used did not show the victim becoming aroused by the attack, but were instead merely pictures of sadomasochism and rape. Unwittingly, these researchers provided verification of one of the conditions of the other studies, testing for the presence of an effect using violent materials without depictions of victim arousal. The fact that there were no effects thus lends credence to the supposition that the portrayal of victim enjoyment or repulsion is an important determinant of any attitude effects produced by violent pornographic materials.

Another investigation using a slightly different methodology provides confirming evidence. Malamuth and Check (1981) compared three groups of male and female undergraduates regarding changes in their acceptance of rape myths (e.g., that women actually want to be attacked) and their attitudes toward the acceptability of violence in sexual relations (as measured using three scales developed by Burt, 1980) as the result of their exposure to violent sexual materials. Under the guise of examining the movie rating process, these researchers had one group of students see two movies showing a favorable victim response to rape and another group see two neutral movies without violent sexual content. Both groups saw the movies in a theater as part of a regularly scheduled film series rather than being exposed to them in a laboratory setting. Males, but not females, showed significantly higher acceptance of interpersonal violence and an increase in rape myths when tested several days later as part of an apparently unrelated general attitude survey given in class.

An interesting and important secondary finding of this study was that the greater proportion of the shift in attitudes in the group that was exposed to the materials showing the aroused victim was produced by individuals who reported a higher likelihood to rape. These researchers asked subjects to indicate the likelihood that they would rape a woman if it could be guaranteed that they would not be caught. This "likelihood to rape" (LR) scale had been used in previous research and shown to have adequate validity for distinguishing individuals with pre-existing favorable attitudes toward violent sexuality (see Malamuth, 1984, for a discussion of the development of this scale). Subjects scoring high on this scale were more likely to show attitude changes as the result of exposure to materials in which the victim showed arousal.

Whether the victim becomes aroused as the result of a violent sexual attack has also been shown to be a significant factor related to the arousal patterns of males.



As might be expected, nonrapists have shown higher arousal (as measured by penile tumescence) to depictions of consenting sex than rape. Convicted rapists, meanwhile, have shown high and about equal arousal to depictions of consenting sex and depictions of rape. However, rapists have also shown higher arousal to rape depictions that contained greater aggression than to rape depictions with less aggression (Abel, Barlow, Blanchard & Guild, 1977; Abel, Blanchard, Becker & Djenderedjian, 1978; Barbaree, Marshall & Lanthier, 1979; Abel, Becker & Skinner, 1980; Quinsey, Chaplin & Varney, 1981; Quinsey, Chaplin & Upfold, 1984).

An interesting further finding of this line of research is that the sexual arousal of nonrapists to rape depictions can be inhibited by previous exposure to depictions that clearly emphasize the victim's suffering and repulsion (Malmuth & Check, 1980; Malamuth, Heim & Feshbach, 1980). When nonrapists were presented with depictions that differed on the victim's reaction, their self reported arousal and arousal measured by penile tumescence to later rape depictions differed significantly. Those who originally viewed the repulsed victim showed lower arousal than those who viewed the aroused victim.

It is also worth noting that, judging from clinical reports, the perception of the victim as having been willing or eventually sexually aroused by their assault appears to be a common theme among sex offenders regarding incidents of sexual assault which they committed. Gager and Shurr (1976) and Clark and Lewis (1977) have reported that many rapists have justifications or excuses for their actions, and are often able to portray their actions as understandable in light of the situations in which they found themselves. Investigating this justification process further, Scully and Marolla (1984) interviewed 114 convicted, incarcerated rapists and found that a sizable proportion maintained that the victim enjoyed being raped, even in cases where considerable documented harm to the victim could be found. Obviously, these reports must be interpreted with a great deal of caution, especially given the retrospective, qualitative research designs used. Whether the theme of victim arousal is an indicator of a possibly socially acceptable post-hoc justification or an attitudinal precursor to action cannot be determined. These reports are worth noting here only because they show the consistency with which the theme of victim arousal arises as a key factor qualifying the vicious nature of sexual assault.

Finally, it is important to emphasize that the findings regarding the salience of victim arousal for sexual arousal and the demonstrated effect of this factor in altering attitudes toward rape corresponds to psychological theory. Relying on theories of judgmental processes (Higgins, Rholes & Jones, 1977; Wyer & Sroll, 1981; Kahneman, Slovic & Tversky, 1982), it is possible to see how perceptions of victim's reactions

could become highly influential in the formation of thinking patterns about the acceptability of sexual coercion. Presentation of sexual violence as a precipitant of victim arousal could either serve as the groundwork for a reorientation of sexual attitudes or as a reference belief that becomes influential in certain situations.

The first potential process of attitude reorientation is rather straightforward. Depictions of sexually coercive scenes have the capacity to be arousing to a variety of individuals, but this arousal sequence can be inhibited in many by the perception that such incidents are really more harmful than sexually arousing to the victim. The perceived outcome of any social action is a powerful factor in determining whether an individual might consider himself likely to engage in that behavior. As a result, portrayal of sexual coercion as producing positive outcomes (in the form of sexual satisfaction for both parties) could negate possible inhibitory influences and instead produce a powerful conditioned pairing of sexual aggressive content and sexual arousal. Once this pattern of arousal has been established repeatedly, it is likely that an individual will alter the inhibitory attitudes to justify the existence of the link between his own perceived behavior (his arousal) and his processing of sexually violent material. In short, he will begin to believe that women actually get enjoyment out of sexual victimization because it is consistent with his own newly acquired arousal patterns.

A second possibility is that the portrayal of victims becoming aroused as the result of sexually violent coercion serves as a reference point that is easily accessed when situations similar to the ones portrayed are depicted or occur. In this formulation, an individual uses this general rule about victim reaction as an economical way of assessing the likely outcome of a situation in which there are several possibilities of uncertain probability. The scenes of sexual victims receiving pleasure may serve as an available orientation point when judging sexually coercive situations. Regardless of the factual or logical accuracy, what has been seen can become something to be weighed in any formulation of the likely outcome of future events. This easily accessible piece of memory could thus become influential in the expression of attitudes about these situations.

The line of research on attitude change regarding the acceptability of sexual coercion is a convincing one when placed in its theoretical context. It is important to remain aware, however, that the observed attitude changes are generally restricted to exposure using depictions of sexually violent incidents in which the victim becomes aroused as a result of the attack. Attitude changes from exposure to violence or sexually explicit behavior alone are not consistently observed. In addition, the effects of such materials on women's attitudes is relatively unexplored, and the few studies

that do exist (e.g., Krafska, 1985) seem to point toward potentially different patterns of effects.

For reasons mentioned earlier, the effects of exposure to these materials on the attitudes of children and adolescents is an empirically open question. It is certainly reasonable to speculate, however, that the results of such exposure on less socially mature individuals with less real world experience to counteract any influences of this material would be equally (or more) powerful than those seen in college students. Attitude formation in childhood is a matter of exploration and "trying on" of potential world views. Being exposed to one in which sexual coercion produces positive results could likely influence adoption of attitudes condoning the use of sexual force as a reasonable alternative in intimate relationships.

**Acceptance of coercive sexuality  
appears to be related  
to sexual aggression**

This conclusion is based on primarily correlational (but some laboratory based and longitudinal) evidence of a link between attitudes indicating an acceptance of sexual coercion and the presence of sexually aggressive behavior patterns. The association between attitudes and behavior in this area is one of the most difficult to comment upon conclusively from social science evidence, but it is obviously a lynchpin of informed policy regarding the effects of exposure to pornography. At the present time, it appears that there is evidence that attitudes indicating acceptance of coercive sexuality are, along with a number of other variables, related to sexually aggressive behavior. While there is the possibility that these attitudes are causally related to the development of this behavior, it cannot be said presently that these attitudes are causally related to this behavior. Moreover, it is not clear that exposure to pornography is the most significant factor in the development of these attitudes. A review of the types of available evidence on this question should illustrate why this is a question that requires such cautious interpretation.

There are a limited number of ways that one can examine the relationship of certain attitudes to certain behaviors. First, people who have demonstrated a certain behavior can be assessed regarding their attitudes relative to other individuals who have not demonstrated the behavior. In the case of attitudes and behavior regarding

sexual aggression, this has mainly meant comparing the attitudes of rapists to those of nonrapists. An alternative strategy along this line has been to compare the attitudes of those who report having engaged in sexually coercive behavior to those who report no such involvement, regardless of whether such involvement resulted in an arrest. A second approach is to test whether these attitudes are related to specific expressions of aggression toward women in a controlled, laboratory setting. Third, and ideally, one can look at the development of attitudes and behaviors related to sexual aggression in the same individuals over time. In this way, the question of whether attitudes precede and/or help predict sexually aggressive behavior can be addressed.

The largest amount of information about the relationship of sexually coercive attitudes to sexually aggressive behavior has been collected using the first strategy; that of comparing the attitudes of groups with reported or demonstrated differences in behavior. As alluded to earlier, considerable clinical evidence exists that convicted rapists express beliefs that women are at least partially responsible for being raped or that a large number of women actually enjoy the experience (Gebhard, Gagnon, Pomeroy & Christensen, 1965; Gager & Schurr, 1976; Clark & Lewis, 1977; Wolf & Baker, 1980; Scully & Marolla, 1984). This difference is apparently not totally consistent, however, with some investigators reporting that rapists in their samples expressed views that were different from, but not dramatically at odds with, those expressed by convicted felons or members of the general population (Feild, 1978; Burt, 1978).

This lack of congruence of the above findings can probably be attributed to the different methodologies used in these investigations (qualitative analyses of interviews in the first set versus differences on questionnaires in the second set) and the effect of sample bias concerning the characteristics of incarcerated rapists. There is little reason to think that arrest for a sexual offense necessarily implies the presence of a homogeneous set of attitudes, and it is equally likely that such status implies a set of other social and personality characteristics (Koss & Leonard, 1984). Moreover, given the underreporting of sexual coercion, it is likely that any sample of normal subjects would be likely to contain a number of individuals who had engaged in some sexual aggression. As a result, differences in attitudes about the acceptability of sexual coercion could be masked in any examination of groups drawn with arrest as the primary selection criterion.

Other researchers, therefore, have looked at the relationship of attitudes about the acceptability of sexual coercion to self reported sexual aggression. Generally, these studies have administered scales assessing attitudes regarding rape myths or

sexual coercion to males (usually college students) and related these scores to either self reported likelihood to rape or self reported involvement in sexual aggression. A series of investigations (Malamuth, Haber & Feshbach, 1980; Malamuth, 1981; Tieger, 1981; Briere & Malamuth, 1983,) have shown a consistent relationship between a subject's attitudes toward the acceptability of the use of coercion in sexual relationships and the self reported likelihood to commit rape. These studies have thus demonstrated that the measures used to assess attitudes regarding acceptance of sexual coercion appear to have some validity when compared to another measure of an individual's overall view of the acceptability of sexual coercion.

Of more direct interest, however, are studies that have shown a relationship between attitudes about the acceptability of sexual coercion and self reported behavior regarding involvement in sexual aggression. For example, Koss, Leonard, Beezley & Oros (1985) found that attitudes toward sexual coercion and demographics provided a statistically significant model that predicted group membership between subjects classified as sexually assaultive, sexually abusive, sexually coercive, and sexually nonaggressive based on a sexual experiences survey. Similarly, Mosher & Anderson (1986) found significant correlations between components of a scale measuring what they termed a "macho" personality orientation (e.g., seeing danger as exciting or woman as submissive) and self reported activities of the use of force in sexual relations. Finally, in an elaborate test of several possible precursors to sexual aggression, Malamuth (1986) has shown that attitudes toward the acceptability of interpersonal violence toward women, hostility, and dominance interact with arousal variables and sexual experience variables to predict a subject's self reported sexual aggressiveness. Each measure alone did an unimpressive job of predicting the self reported activity, but a statistically significant model was constructed using the variables in an interactive fashion. Given the consistency of the results in these studies, it seems that favorable attitudes toward the use of sexual coercion are related to self reported likelihood of engaging in or having engaged in sexually aggressive behavior. As mentioned earlier, however, an unresolved issue is whether these attitudes led to different behavior patterns or whether the attitudes were adopted after the subject's behavior patterns were already established.

Another bit of evidence that bears on the relationship of attitudes and behavior regarding sexual aggression comes from laboratory studies that have examined the behavioral effects of exposure to sexually violent materials. Malamuth (1983) administered both the Rape Myth Acceptance Scale and the Attitude toward Interpersonal Violence Scale (Burt, 1978) and measured the sexual arousal to a rape depiction in a group of 42 male undergraduates. He later tested the aggressive behavior of these

males (using an aversive noise task) toward a female confederate as part of an independent experiment ostensibly related to ESP transmission. In the later phase of the experiment, subjects were angered deliberately by the confederate in order to precipitate aggression. Structural modeling of the results showed that a model predicting separate contributions for both arousal and attitudes best reflected the regularities seen in the data. Taken together, arousal and attitude scores accounted for 43% of the variance in the aggression measure. Malamuth and Check (1982) report that these results have been replicated and that a General Attitude toward Violence scale did not contribute significantly to the overall solution, leading these investigators to posit that attitudes specific to the use of coercion with women accounts for the observed laboratory aggression.

Another study that has shown an association between attitudes about the acceptability of violence toward women and the expression of aggressive behavior in a laboratory has been done by Donnerstein (reported in Malamuth & Donnerstein, 1984). In this investigation, male undergraduates were a.) either angered or treated in a neutral manner by a female accomplice, b.) exposed to either erotic, aggressive, or sexually violent films, c.) tested for their attitudes regarding their willingness to use force in sexual relations, their willingness to commit rape if they would not get caught, and their acceptance of rape myths (using the Rape Myth Acceptance scale), and d.) finally given the opportunity to aggress against the female confederate in a laboratory task involving the administration of shock to promote learning. Both attitudes and aggressive behavior were shown to be most affected by the exposure to the sexually violent film, less affected by the aggressive film, and least affected by the solely erotic film. This investigation demonstrated that similar effects for attitudes and behavior appear to occur from exposure to films of a sexual and violent nature.

Up to this point, evidence has been presented that attitudes about the acceptability of sexual coercion appear to be rather prevalent in individuals who have either been convicted of rape or admit to incidents of sexual aggression, and that these attitudes appear to be positively related to statements about the likelihood of engaging in rape and the expression of aggressive behavior toward women in a laboratory setting. What is missing from this picture is clear evidence that these attitudes cause the behaviors of interest. In order to be confident that attitudes are precursors rather than results of sexually aggressive behaviors, we would have to see the development of these attitudes precede the expression of these behaviors in the same individuals.

Longitudinal research on this issue is sparse, however, and offers little in the way of clarification of this critical issue. In a study done by Alder (1985), attitudes legitimizing sexual aggression toward women were found to be one of three factors

(including presence of sexually aggressive friends and service in Vietnam) that significantly predicted self reported sexual aggression. These data were taken from a longitudinal study of 239 randomly sampled youth in one county in the Pacific Northwest, but the data linking attitudes and self reported aggression were all taken at the last sampling time when the subjects were 31 years old. Although this study is from a longitudinal investigation, the results regarding the relationship of attitudes and behavior are contemporaneous. As a result, it must be stated that these findings only show that attitudes and behavior tend to coexist; a verification of earlier research but not a causal finding.

The only study that appears to have been able to actually assess the relationship of attitudes and naturalistic sexual aggression over time is that of Ageton (1983). Using several hundred youth from the National Youth Survey of self reported delinquency, Ageton isolated a sample of males who reported incidents of sexual aggression and analyzed responses to particular questions regarding sexual attitudes and behavior over the five year time frame of data collection. In these analyses, involvement in a delinquent peer group appeared consistently as the most powerful factor related to reported sexual aggression. In one analysis in which previous attitudes, behaviors, and reported group involvement were tested for their ability to discriminate later sexually assaultive behavior, attitudes toward rape and acceptance of interpersonal violence toward women did emerge as a statistically significant addition to the discriminant function. In other words, presence of these attitudes did appear somewhat related to the expression of sexually aggressive behavior two years later.

It is important to note, however, how marginally distinctive the contribution of this attitude factor really was. Involvement with delinquent peers alone was able to account for 76% of the variance in the self reported later sexual aggression, and inclusion of the three other factors (of which attitudes was one) accounted for an additional 1% of the variance. As Ageton (1983, p.119) was forced to conclude...

"The idea that sexual-assault offenders are influenced strongly by stereotypic views of rape and sexual assault, traditional sex-role attitudes, and liberal beliefs about the use of violence was not borne out in these analyses. None of these variables consistently differentiated the offenders and the nonoffenders in the annual comparisons. Furthermore, in the initial discriminant analyses, only the measure of rape attitudes contributed to the separation of the groups. Clearly it is not a critical factor, however, since its absence in the discriminant analysis involving just delinquency variables had little effect on the accuracy of

the classification. Although we do not deny that the constellation of beliefs about male and female roles, behavior, and sexuality may influence sexual acts, the data do not indicate that such attitudes play a major role in predicting sexual assault."

In the end, the clarity of the causal link between pre-existing attitudes and later sexual aggression has yet to be demonstrated.

The fact that this direct link has not yet been demonstrated can be seen as at least partially the result of the difficulty isolating the effects of attitudes clearly in any longitudinal or cross-sectional research design. In the Ageton study, for example, it is very difficult to determine where the effect for peer association ends and the one for attitude begins. Attitudes are obviously related to one's choice of friends in an intricate fashion, and disentangling these two constructs is difficult within one study. There is some longitudinal evidence from related areas that attitudes can be important interactive variables combining with identification with television characters in producing peer-related aggression in children (e.g., Huesmann, Eron, Klein, Brice, & Fischer, 1983) or with personality and behavioral characteristics in producing anti-social behavior in adolescents (e.g., Jessor & Jessor, 1977). However, in these cases, as in the case of the effects of pornography, the independent effect of attitudes has not been shown to be large or direct.

Although there is an association between acceptance of coercive sexuality and sexual aggression, the difficulty comes when we attempt to assign a strict causal interpretation to this association. From one perspective, it is quite logical that favorable attitudes toward sexual coercion should be more prevalent in individuals judged to be more sexually aggressive if we expect one's attitudes to be consistent with one's behavior. At present, however, it cannot be stated conclusively that attitudes favorable to sexual coercion produce sexual aggressiveness. These two appear together, and the exact mechanisms of causation and strength of relationship between them has yet to be determined.

**In laboratory studies  
measuring short term effects,  
exposure to violent pornography  
increases punitive behavior toward women**

An increase in aggressive behavior toward women has been proposed often as one like-



ly effect of exposure to pornography, but there does not seem to be sufficient scientific support for a generalized statement regarding the presence of this effect. There is no paucity of hypotheses about how exposure to pornography and aggression against women may be related. For example, men predisposed to aggression who are aroused by pornography may translate this increased arousal into targeted aggression; attitudes or restraints toward aggression might be changed in pornography viewers, increasing the chance that they would act aggressively; or, certain behaviors of the film victims (e.g., saying "no") might take on cue properties for aggression, promoting aggressive behavior in men toward women who display these behaviors. The limited statement above, however, reflects the circumscribed links between exposure to pornography and aggression toward women that have been scientifically demonstrated.

Testing for this effect in a natural setting is clearly impossible. It would be unethical to expose persons to pornography and then observe their level of aggression toward those encountered outside of the laboratory. A series of investigations have been done in the laboratory, however, that examined this effect in analogue situations. The first experiments found that sexually aggressive films caused more punitive behavior than sexual nonaggressive films. Further investigations indicated that the outcome depicted in the sexually aggressive films created different levels of punitive behavior. In order to tease apart the effects that the aggressive and sexual themes of the films had, investigations into the effects of nonsexual aggressive films were then pursued.

Aggression in recent laboratory studies is usually represented by the "Buss paradigm" (Buss, 1961). Subjects are told that they and a second subject (actually a confederate of the experimenter) will be involved in a learning experiment. After exposure to the pornographic material, the subject is instructed to choose and administer one of several possible levels of shock or aversive noise when the confederate (who is out of the sight of the subject) makes an incorrect answer. Higher levels of shock are taken to represent higher levels of punitiveness or aggressiveness. In some experiments, the confederate angers the subject before exposure to the pornography by the reacting derisively to an opinion expressed by the subject.

This paradigm as an analogue for aggression outside of the laboratory has been criticized on several grounds. The most general criticism has been that the lab task is not an appropriate representation of aggression. However, there has been some (albeit circuitous) evidence for behavior in the Buss paradigm as an adequate analogue of sexual aggression: Subjects who report higher levels of sexually coercive behaviors also score higher on scales designed to measure beliefs in rape myths and acceptance of sexually coercive behavior (e.g., Briere & Malamuth, 1983; Tieger, 1981), and subjects scoring higher on these scales have provided higher levels of shock in the Buss

paradigm (Malamuth, 1983). These results indicate that there may be a link between aggression on the Buss paradigm and reported likelihood to act in a sexually coercive manner. How well this lab task and actual aggression, rather than attitudes, are related is still an open question.

Two other criticisms regarding this design are common to many lab studies. The first is that the subjects provide shocks because they believe that the experimenter wants them to do so. The assumed effect of this belief is that the subjects appear more aggressive in the laboratory than they are outside. A final criticism is that the responses allowed the subject are more limited than, and not representative of, those that are available outside of the laboratory. Some experimenters allow other responses (such as rewarding the other person), yet even then the subject's choices are unrealistically constrained. While these two criticisms may be valid when generalizing from behavior within to that outside of the laboratory, they do not appear to account for differences between groups within the laboratory (see Krafska, 1985, for a more detailed critique).

Several studies have used this general approach to aggression research to examine the effects of sexually aggressive films, nonsexual aggressive films, and sexual nonaggressive films on laboratory behavior. In the first of two experiments, Donnerstein and Berkowitz (1981) first had a male or female confederate anger a male undergraduate, and then showed these subjects a film of either a neutral talk show, an erotic nonaggressive scene, a sexually aggressive scene in which the female finally enjoys being aggressed against, or the same sexually aggressive scene with the woman continuing to abhor the aggression she experiences. Immediately after the films, the subjects administered shocks or rewards to the confederate who had angered them earlier.

The amount of punitive behavior exhibited by those paired with a male confederate did not change significantly regardless of the type of film seen. Those paired with a female confederate, however, provided more punishment after viewing either of the sexually aggressive films compared to the erotic or the neutral film, even though the erotic and sexually aggressive films were equally arousing. There was no difference in punitive levels between those viewing the erotic film and the neutral film. The results paralleled an earlier study by Donnerstein (1980).

This experiment showed that punitive behavior is increased in angered subjects after watching sexually aggressive films. The authors concluded that it was the modeling effects of the association of the female confederate with the female victim in the film, rather than heightened arousal, that caused aggression against the female and not the male confederate. This conclusion is strengthened by an earlier study by Donnerstein and Hallam (1978) in which nonsexual violent films that consisted of male

to male violence caused more punitive behavior toward male than female confederates. The authors also concluded that the aggression depicted in the film lowered the subjects' inhibitions against aggressive responses. Since the erotic nonaggressive film did not show the aggression toward a female, it did not lower inhibitions and therefore did not increase punitive responses after viewing.

The finding of no difference in punitive behavior for the different types of sexually aggressive films did not seem logical to these investigators. Previous attitude research (see Malamuth, 1984) had shown a differential effect for depictions in which the victim was aroused versus those in which the victim was not aroused, and it seemed that this factor might also be influential in experiments with punitive behavior as an outcome. A second study was thus undertaken to explore this possibility further. The procedures were the same as in the first experiment, except that all of the confederates in this experiment were female and only half of the subjects were angered. This allowed for a test of the interaction between the anger manipulation and the type of film seen. As before, the neutral and erotic films were followed by similar levels of punishment. Those previously angered provided significantly higher punishment following both sexually aggressive films, while those not previously angered provided significantly higher punishment only to the sexually aggressive film in which the woman portrayed a positive outcome.

However, this experiment also showed that the outcome of the sexually aggressive films (i.e., whether the victim is aroused) interacts with the emotional state of the viewer in the production of punitive behavior. For angered subjects, both sexually violent films had the same (increased) effect on punitive behavior. For the non-angered subjects, only the film with the aroused subject resulted in higher punitive behavior. The authors concluded that all those watching the sexually aggressive film with the aroused victim had their inhibitions lowered by seeing the males' sexually aggressive behavior in the film eventually result in a positive outcome for both the attacker and the victim. The aggression of those watching the aggressive film with the repulsed victim, however, was affected by their previous angering. Those who were previously angered were predisposed to hurt someone and consequently reacted to the pain cues of the victim with heightened aggression; those who had not been angered did not react to the pain cues of the victim, nor were they less inhibited since the outcome of the film indicated a negative outcome of the male's aggression. An untested implication of this conclusion may be that those who find the negative outcome of these films (i.e., a victim's pain) to be pleasurable would be more aggressive following the film.

In two later studies, Donnerstein (1983, 1984) investigated the unique effects of the aggressive and sexual components of sexually aggressive films using a nonsexual aggressive film, a sexually aggressive film, an erotic nonaggressive film, and a neu-

tral film. As had been shown earlier, with male confederates, the type of film did not affect the intensity of the shocks that previously angered male undergraduates delivered. The levels of shock intensity delivered to the female confederates were similar following the neutral and nonaggressive erotic films, were significantly higher following the nonsexual aggressive film, and were highest following the sexually aggressive film. The study shed light on the role of arousal in producing laboratory aggression. The nonsexual aggressive film was less arousing than either of the sexual films, but produced aggressive behavior. The highest level of aggressive behavior, however, was produced by the sexually aggressive film. Arousal, therefore, did not appear to be a necessary condition for the production of aggression, but when paired with exposure to aggression (as in the sexually aggressive film), the arousal appeared to add significantly to the level of lab aggression produced.

As a group, these studies consistently indicate a relationship between type of film and the intensity of shocks delivered immediately after the film is viewed. Films that contain aggression or sexual aggression are associated with higher levels of shock to a confederate of the same sex as the person aggressed against in the film. These results consistently show that nonaggressive sexual films are associated with similar levels of shock as nonsexual-nonaggressive neutral films.

It should be noted, however, that the findings about sexual nonaggressive films in these studies are not consistent with earlier studies where previously angered subjects reacted punitively following sexually explicit, nonaggressive films (e.g., Meyer, 1972; Jaffe, Malamuth, Feingold & Feshbach, 1974; Donnerstein & Barrett, 1978; Donnerstein & Hallam, 1978). Donnerstein and Hallam (1978), however, found that male subjects rated erotic films chosen for their nonaggressive content as 2.5 on a 5-point aggression scale. This suggested that the subjugation of the women in the film may have been interpreted as aggression, facilitating later aggression from the subjects. It may be, then, that the perceived aggressive content of the nonaggressive erotic films was varied across these studies, thus producing contradictory results.

Other studies have investigated the effects of variables that might mitigate the effects that sexually aggressive films have on punitive behavior, and the length of the effects that sexually aggressive films may have on punitive behavior. Malamuth (1978), for example, had male undergraduates read passages containing either aggressive pornography, nonaggressive pornography, or neutral stimuli. After being angered by a female confederate, subjects were given the chance to aggress against her using electric shocks. Before delivering the shocks, half of the subjects read a passage designed to make them more self-conscious about delivering the shocks (an inhibiting communication), while the other half read a passage suggesting that it was permissible to give as strong shocks as they wished (a disinhibiting communication). Shock intensities delivered were similar for all males who read the inhibiting communication,

regardless of the pornographic passage read. More intense shocks were given following the aggressive than the nonaggressive pornography in the group who read the disinhibiting communication. In contrast to other studies, however, the levels of shock intensity given after the neutral film were between those of the two pornographic films, and were not significantly different from either. Malamuth offered no explanation for this conflicting result, but did state that the results indicated that internal states or external situational variables can have a significant effect on behavior following exposure to pornography.

One important influence may be previous exposure to pornography. As part of a larger project, Zillmann and Bryant (1984) assigned male and female undergraduates to see varying amounts of nonaggressive pornography one day a week for six weeks. At the end of the exposure period, members of each group saw one 8 minute film of either nonaggressive sexually explicit material, sadomasochistic material, bestiality, or were included as a no-exposure control subject. Subjects were then allowed the opportunity to inflict pain via a blood pressure check, upon a confederate who had just inflicted pain upon them in the same way. Those watching the sadomasochistic and bestiality material inflicted more pain than those watching the erotic material, who inflicted more pain than those in the no-exposure control group. However, for those with the massive previous exposure to nonaggressive pornography there was no difference in aggression across the four final stimulus conditions. It appeared that the prior exposure mitigated the effects of viewing the final films.

Malamuth and Ceniti (1986) investigated the length of these behavioral effects. They exposed male undergraduates to either sexually aggressive pornography, nonaggressive pornography, or a control condition of no exposure. Each of the exposure subjects saw two full-length films each week for three weeks, and were then given two book chapters portraying sexual activity to read during the fourth week. One week after the exposure period the subjects were involved in an ostensibly separate experiment purporting to measure the effects of punishment on an ESP task. The results indicated that there were no significant differences in punitive behavior related to type of film exposure.

These findings may indicate that the behavioral effects found by Donnerstein following sexually aggressive films do not last for a week. However, study differences regarding type of learning task presented to induce aggressive behavior may also explain the differences in results. While Donnerstein's experiments involved the confederate learning material independently of the subject, Malamuth and Ceniti had the subject "send" the message to the confederate. A lack of punitive behavior on the part of the subject may have been at least partially influenced by doubt that he had been successful in his part of the task. Also, Malamuth and Ceniti did not question the

no exposure control group about any sexually aggressive or erotic films that they saw on their own during the exposure phase of the experiment, and the overall film viewing of the three groups may have actually been quite similar even though the experimental exposure conditions were different. Because of these differences, it is difficult to draw conclusions about the length of any effect on behavior produced by these experimental manipulations. At present, it is known that these effects can be produced in the lab, but how long they last is still in question.

In summary, published studies have consistently indicated that punitive behavior can be produced within the confines of the laboratory by the viewing of sexually aggressive and aggressive films. This observed pattern of results fits well with previously tested psychological theory concerning the effects of modeling, with heightened aggressive behavior seen following the modeling of such behavior in films. The more closely the confederate in the experiment is aligned with the victim in the aggressive film, the more aggressive the behavior toward the confederate is. Of equal interest is the fact that arousal also appears to be an influential element in producing this behavior, having both a separate and combined influence with modeling. Sexual aggressive films produce more aggression than do less arousing nonsexual aggressive films. In addition, previously angered subjects (i.e., more aroused) show more aggressive behavior than nonangered subjects.

Several questions about the widespread nature of this phenomenon remain. For example, the relative effects of modeling and arousal across individuals has yet to be explored. Also, the duration of these effects for producing aggressive behavior is unknown and it is important to remember that only immediate effects have been shown. Similarly, the effects on behavior outside of the laboratory, where behavioral choices are much more varied and where there are additional inhibiting and facilitating factors on behavior, are unknown.

On one hand, these data could be viewed with concern, since they show changes from little exposure; after one exposure to a sexually violent film, men are more aggressive to women. On the other hand, there is no evidence that those viewing sexually aggressive films under more normal circumstances have become more aggressive immediately after the films are viewed. Reports of this causal relationship being a noticeable one in the real world have not emerged consistently (Byrne & Kelly, 1984). In sum, these experiments should heighten concern that aggressive behavior toward women may be increased by viewing aggressive and sexually aggressive films, but presently this effect has only been seen in controlled and potentially artificial laboratory settings.

### Summary of Consensus Statements

The preceding statements reflect what the Workshop participants believe can confidently be said regarding the effects of pornography. Pornography has been consistently linked to changes in some perceptions, attitudes, and behaviors. These links, however, are circumscribed, few in number, and generally laboratory-based. To say that this means that any observed effects are artifactual, however, would be an error. Pornography does have effects; it is just not yet known how widespread or powerful they really are. There is a clear lack of extensive knowledge or unifying theory, and global statements about the effect of exposure to pornography have not yet been substantiated. Currently we have bits of knowledge about the effects of pornography; future research is required to unite these bits into a more comprehensive statement.

While convincing evidence exists about the effects of pornography on perceptions, attitudes, and behavior, it is important to remember that the relationships between measured perceptions, attitudes, and behaviors themselves are unclear. They are not necessarily linked in a straight causal pathway. For instance, while it is a common belief that attitude changes lead to behavioral changes, research has consistently shown otherwise. Behaviors are as likely to influence attitudes as attitudes are to influence behavior. As a consequence, conclusive statements about the extent to which attitude or perceptual changes brought about by pornography are ever reflected in changed behavior are not currently possible. This absence of clear information does not argue for dismissal of the hypotheses that perceptions about the frequency of uncommon acts influences attitudes or that attitudes toward sexual coercion promote sexually coercive behavior; it only argues that there is not a clear causal link yet demonstrated. Indeed, the evidence of the coexistence of the very attitudes that are shown to be affected by sexually violent pornography and self-reported or verified sexual aggression is an association that warrants concern and continued investigation.

There is substantiation for the basic concern that sexually violent material has more consistent and marked effects than nonviolent erotic pornography. Attitudes condoning sexual coercion have been fostered by materials combining sex and violence, particularly those in which sexual assault eventually produces arousal in the victim. Increases in punitive behavior toward women in a laboratory setting have also

been observed after exposure to sexually violent material. Although the findings regarding the unique effects contributed by the violent and the erotic material have not been fully elaborated, their combination has repeatedly brought about attitudes and behaviors which are considered to be antithetical to the aspirations of our society.

There is clear evidence that youth involved in the production of pornography are adversely affected by their participation. It is unreasonable and contrary to reported experience to think that such sexual victimization will not leave its mark on these children as they attempt to forge a social image of themselves. Programs to stop the production of child pornography and to intervene with the children involved in its production are clearly needed to forestall these consequences.

#### Summary of Effects on Children

As has been noted throughout this report, because of ethical concerns it is impossible to directly test for effects of pornography on children and adolescents. As a result, research on effects of exposure has been done almost exclusively on college students in late adolescence. Estimating the extent to which these effects can be generalized to children and young adolescents is a complex process, requiring interpretation and integration of knowledge regarding child development. This task is beyond the scope of this section, but a few caveats could be helpful.

As children mature they develop new cognitive and emotional skills, and their interests shift. As a result of these changes in basic understanding and orientations, the message that an 8- or 12- or 16-year-old would get from a certain pornographic movie may be quite different from that of an 18-year-old. In addition, relationships to family and peers undergo considerable change in the ten years between 8 and 18, meaning that the mediating factors on any effects will also shift during this developmental period. Finally, there is the likelihood of a "cohort effect" interacting with normal patterns of development. Growing up in the 80's is different than growing up in the 60's, and sociohistorical changes can affect the rates of many things from juvenile crime to views of interpersonal relationships.

These simultaneously changing factors make it extremely difficult to predict the exact effects of particular influences on children. Reasonable prediction can really only be done regarding influences that would be so powerful as to exert marked negative or positive effects in spite of shifts in other influences. Repeated physical



abuse of a child, for example, could clearly be stated to produce significant negative effects regardless of shifts in other factors in the child's life. It is likely, however, that exposure to pornography is in that vast grey area of influences that will probably not be shown to act so strongly as to be consistently harmful independent of changes in the child and the social situation.

There are certain changes in the child, however, that are rather predictable and probably important in mediating the effects of exposure to pornography. Many developmental psychologists believe that around the age of 12 or 13, children acquire many of the basic thinking processes that they will use, with refinements brought about through experience, throughout the rest of their lives (e.g., Colby, Kohlberg, Gibbs & Leiberian, 1983). Usually by this age, children are able to understand social causation and the idea of reciprocity in interpersonal and social relationships. If this is the case, one might expect that the effects of pornography on those 12 years or older would be generally similar in quality to those seen in 18-year-olds.

A host of other factors, however, could magnify or reduce these effects. For example, it is possible that the effects could be magnified in those who are 12 years old since they do not have the number of life experiences against which they can compare the contents of pornography in order to determine its accuracy. On the other hand, young adolescents may not be as interested in the sexual activity of the pornography as older adolescents, and their resulting lowered attention may reduce the effects of viewing the pornography. Unfortunately, the exact direction or magnitude of differences resulting from factors such as these between young and old adolescents is largely a matter of speculation. What does seem worthwhile speculating further upon and investigating, however, is the general question of the effects of cognitive level and an adolescent's attributional framework regarding social relationships as mediators that increase or decrease susceptibility to pornography exposure.

Speculating about the effects on children less than 12 years of age is even more of a problem. Younger children think in a qualitatively different manner from those on whom research regarding the effects of pornography are done. In addition, the focus of interest may be quite different in those who have not completed the emotional and physical changes that accompany puberty. The fear of some is that the sexual and emotional patterns to be followed by these children when they are grown will be "imprinted" on them by seeing pornography at a younger age. Others believe that young children are less affected since they do not have the cognitive or emotional capacities needed to comprehend the messages of much pornographic material. Again, though, we really do not know which of these statements is more accurate, and each of them may be accurate for specific individual children.

A final factor that makes extrapolation of these results to children troublesome is that the susceptibility of children to a variety of influences has been shown to vary widely. Children bring individual temperments and adaptive skills to situations, and the predictability of how particular influences will affect a child is lower than we might expect. Children are amazingly resilient to a number of influences, and the exact causes of this resilience are not clear (Kagan, 1985).

In the end, then, it is really rather difficult to say much definitive about the possible effects of exposure to pornography on children. The direct research is not present, and probably never will be. There are reasons to believe that the effects seen in older adolescents would probably generalize to younger adolescents as well, but we know little about the possible mediators of these effects that may be different in younger adolescents. Finally, effects on younger children are very difficult to determine, given their malleable and adaptive natures.