The Effects of Aggressive Pornography on Beliefs in Rape Myths: Individual Differences

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This experiment assessed the effects of media depictions that portray rape myths on men’s beliefs in such myths. The study was conducted in two separate sessions. At the orientation session, measures of personality, motivations, experience, and aggressive tendencies were administered to 307 males. In the experimental session, 145 of these men were first exposed to one of eight audiotaped versions of a passage. One of these portrayed the myth that rapist results in the victim’s sexual arousal. Later, subjects listened to a second passage depicting either nonconsenting or consenting sex. Their perceptions of the second portrayal and their beliefs in rape myths were then measured. The findings provided support for the hypothesis that media depictions suggesting that rape results in the victim’s arousal can contribute to men’s beliefs in a similar myth. Moreover, analysis of the mediating role of individual differences indicated that men with relatively higher inclinations to aggress against women are particularly likely to be affected by media depictions of rape myths. It is suggested that these data may be explained best on the basis of information retrieval processes. In addition, it was found that power motives were consistently related to greater beliefs in rape myths. © 1985 Academic Press, Inc.

The present experiment extends earlier studies (e.g., Malamuth & Check, 1980a, 1981) concerning the effects on beliefs about rape of mass

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media stimuli that fuse sexuality and aggression. It was designed to address primarily two goals. First, we sought to identify the specific type of media stimuli that increase beliefs in rape myths, while fully controlling for potential confounding variables. Second, we assessed individual differences in susceptibility to the influences of these media stimuli.

The importance of focusing on rape myths is evident in the writings of Burt (1978, 1980). She contends that beliefs in such myths (which she defines as prejudicial, stereotyped, or false beliefs about rape, rape victims, and rapists) play an important role in actually causing rape and other acts of violence against women. She hypothesized that such beliefs may be used as "Psychological releasers or neutralizers, allowing potential rapists to turn off social prohibitions against injuring or using others" (1978, p. 282). The view is reminiscent of Bandura's (1978) more general exposition of the cognitive mechanisms through which aggressive behavior is disinhibited (minimizing the seriousness of the consequences, blaming the victim, etc.). Support for Burt's contentions comes from research indicating that rapists believe in various rape myths to a greater degree than nonrapists and appear to use these to justify their assaults (Feild, 1978; Scully & Marolla, 1984; Wolfe & Baker, 1980). Additional support is provided by research (Agaton, 1983; Koss, Leonard, Beezley, & Oros, in press; Malamuth, 1983, 1984b) showing that relatively high beliefs in rape myths are predictive of male aggression against women measured both in laboratory and in naturalistic settings.

Various writers have asserted that myths about rape are portrayed frequently in the mass media and that these contribute to their acceptance by the audience and thereby indirectly affect the occurrence of actual violence against women (e.g., Brownmiller, 1975; Gager & Schurr, 1976; MacKinnon, 1984; Russell, 1975, 1984). Content analytic research provides some support for contentions about the relatively frequent portrayals of aggression against women within sexually explicit stimuli (Dietz & Evans, 1982; Malamuth & Spinner, 1980; Smith, 1976a; 1976b). Moreover, studies examining the specific content of such depictions indicate that these often involve rape myths, such as the portrayal that rape results in the victim's sexual arousal and leads to romance (Smith, 1976a, 1976b). It is important to note, however, that such messages are not limited to pornography and also occur in many other areas of the media. For example, a recent content analysis of sexual interactions in television soap operas (Lowry, Love, & Kirby, 1981) indicated that aggressive-sexual contact was the second most frequent type of sexual interaction (with erotic touching among unmarried persons being the most frequent). Similarly, a cover...
story in *Newsweek* magazine (1981) focused on the tremendous viewer attention that soap operas have attracted. Interviews with producers and actors from these shows suggested that rape has been portrayed as resulting in positive consequences (e.g., the *General Hospital* program showed rape leading to romance). Furthermore, these interviews suggested that some producers and actors believe that aggression against women attracts audiences, e.g., “The male population started watching us because we no longer were wimps. When a woman was wrong, we’d slap her down” (p. 65).

There exists some empirical research addressing the contention that certain media portrayals of sexual violence may contribute to beliefs in rape myths. Malamuth, Haber, and Feshbach (1980) and Malamuth and Check (1980a) found that exposure to a rape depiction suggesting that the victim showed signs of sexual arousal affected perceptions of a rape victim in a subsequent portrayal, in that the victim’s experience was judged as less negative or traumatic. A field experiment by Malamuth and Check (1981a) found that exposure to films portraying aggressive sexuality as having “positive” consequences increased male but not female subjects’ acceptance of interpersonal violence against women. There was similarly an effect that approached conventional levels of statistical significance that suggested that the films containing sexual violence increased males’ acceptance of rape myths. These data demonstrated in a nonlaboratory setting, not vulnerable to criticisms of laboratory artificiality and “demand characteristics,” that there can be relatively long-term antisocial effects of mass media stimuli that portray sexual violence as having “positive” consequences.

In contrast to these studies, Malamuth, Reisin, and Spinner (1979) found no evidence of changes in perceptions or in attitudes following exposure to aggressive pornography. One of the differences between this study and the two experiments that did show significant effects on perceptions of rape concerns the content of the materials used. In the two experiments in which antisocial effects were found, the aggressive-pornographic stimuli were specifically selected because they explicitly depicted violence against women as having “positive” consequences (the woman becoming sexually aroused, falling in love with her assailant, etc.). Malamuth et al. (1979), on the other hand, used materials that generally did not show such “positive” outcomes. At least with respect to increased acceptance of “rape myths,” therefore, the antisocial effects may be limited to media stimuli depicting “positive” consequences of sexual aggression.² One of the central purposes of the present experiment was

² The effects investigated here concern a different process than the desensitizing effects of sexually violent media recently studied by Linz, Donnerstein, and Penrod (1984) and by Linz (1985). Here we are focusing on the potential impact on cognitions about rape of
to systematically assess the assertion that in the context of nonconsenting sex portrayals (i.e., aggressive pornography) varying whether the victim shows reactions of arousal vs disgust will affect subsequent beliefs in rape myths. It was hypothesized that a rape depiction that portrayed the myth that the victim became sexually aroused by the assault would result in higher beliefs in rape myths than a rape portrayal describing the victim’s abhorrence of the experience.

To control for the effects of exposure to the manipulation of a woman’s arousal vs disgust per se, this dimension was also varied in the context of consenting depictions. It was hypothesized that in this context it would not affect subsequent beliefs in rape myths. As a further control, the effects of exposure to the woman’s arousal vs disgust dimension within nonconsenting portrayals on later reactions to consenting sex were assessed. No effects were expected, i.e., the impact of this dimension was predicted to exclusively affect reactions to rape and similar acts of sexual violence. Such controls have been shown to be important by research revealing that the manipulation of the woman’s reaction dimension may have certain effects on subsequent physiological responses that are not limited to rape (Malamuth & Check, 1983).

In addition to extending earlier research by systematically examining the type of aggressive-sexual depiction that may affect beliefs in rape myths, the present study goes beyond previous work in this area in examining the potential mediating role of individual differences. As discussed by Roberts and Maccoby (1985), the emphasis on individual differences in susceptibility to media influences has been an important development in recent mass communication research. The variable selected in the present research was individual variability in inclinations to aggress against women. It was selected on the basis of research suggesting that men with higher inclinations to aggress against women may be more attracted to and more gratified by portrayals of violence against women (e.g., Malamuth et al., 1980) and by research on the effects of general media violence indicating that individuals with higher aggressive tendencies are more susceptible to the negative impact of media violence (for a review of these findings see Dorr & Kovaric, 1980, and for more recent data see Huesmann & Eron, 1983). It was hypothesized that males with higher inclinations to aggress against women will be more influenced by media portrayals of rape myths.

In order to classify males vis-à-vis their inclinations to aggress against women, subjects were asked to indicate the likelihood that they personally

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myths about sexual violence portrayed in the media. In contrast, the desensitizing process may lead to lessened sensitivity to rape due to a “numbing” impact of repeated exposure to violent media images. Further consideration of mediating processes is presented in the discussion section of the present article.
would rape if they could be assured of not being caught and punished. There are considerable data that provide support for the utility of such self-ratings as a measure of tendencies to aggress against women (for a review of these studies see Malamuth, 1981, 1984a). Since including all of the manipulated independent variables and the individual differences variable within the same analysis would have resulted in very small cell sizes and a number of empty cells in some cases, the data were analyzed in two phases. An initial analysis was performed without the individual differences variable. A second analysis was then performed that included the individual differences variable as well as those variables that in the first analysis were found to have significant effects.

In addition to assessing the impact of aggressive pornography on beliefs in rape myths with an experimental design (i.e., using random assignment), the present study also utilized correlational analyses to address the hypothesis that individuals who in the "real world" choose to expose themselves to higher levels of pornography are more accepting of rape myths. If such a correlation were found, it would clearly be insufficient to serve as a basis for inferring any causal connection. However, such a correlation would be consistent with the possibility that exposure to pornography in general (a portion of which is presumably sexually violent) may contribute to increased beliefs in rape myths. The potential contributory role of exposure to pornography on beliefs in rape myths was examined in the context of other possible contributors, including measures of personality, sexual motivation, sexual experience, and aggressive tendencies.

**METHOD**

*Overview of Design*

The experiment was conducted in two separate sessions, an orientation session and the actual experimental laboratory session. At the orientation session subjects filled out a number of questionnaires. The laboratory session consisted of two phases separated by about 10 min. In Phase 1 subjects were exposed to one of eight audiotaped pornographic passages (which varied on the dimensions described below). In Phase 2, subjects listened to a second pornographic passage which depicted either nonconsenting intercourse (referred to below the "rape criterion" depiction) or mutually consenting intercourse (referred to as the "consenting criterion" depiction). They then filled out a questionnaire assessing their perceptions of the second passage and their beliefs in rape myths.³

*Subjects*

Three hundred seven male introductory psychology students signed up for the orientation session of the experiment. After being presented with a description of the procedures and measures to be employed in the later laboratory session, 146 of these subjects also signed

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³ As part of this session, measures of sexual arousal to the depictions were also taken. Due to the unusual length that would have been necessary to report the results for the arousal and rape myths measures in the same article, these were separated into two papers. The results for the arousal measures were presented by Malamuth and Check (1983).
up for the laboratory phase of the experiment. In addition to being given credit for showing up at the orientation session, subjects who signed up for the laboratory phase of the experiment were given experimental credit for arriving at the laboratory, irrespective of whether or not they actually chose to participate. Of those who signed up for the laboratory session, only 1 subject decided not to participate after arriving at the laboratory. The remaining 145 subjects were randomly assigned to the various experimental conditions.

**Materials**

*Orientation questionnaire.* The orientation session involved the administration of a questionnaire which included four measures assessing personality, sexual motivation, sexual experience, and likelihood of rape reports.

*Personality variables.* The Eysenck Personality Questionnaire (EPQ) was employed as a measure of personality traits (Eysenck, 1978). The EPQ yields scores on three personality dimensions: psychoticism, neuroticism, and extraversion as well as a lie scale. It is important to note that as Eysenck (1978) makes abundantly clear, these scales purport to reflect variables that stretch through the normal, nonpsychiatric population.

*Sexual motivations.* A recently developed measure (Nelson, 1979) was used to assess the function of or motivations for engaging in sexual acts. Respondents were asked to indicate the degree to which various feelings and sensations are important to them as motivation for engaging in sexual acts. Nelson (1979) provided data concerning the reliability and validity of this scale. While this scale yields scores on several functions of sexuality, the one of primary interest in the present investigation was the Power Function, which refers to the degree to which feelings of control over one’s partner or relinquishing control motivate sexuality (I enjoy the feeling of having someone in my grasp; I enjoy the conquest, etc.). A second function which was also examined in the present research was the Love and Affection scale, which refers to needs to receive and share affection and intimacy with others (e.g., sex is the way that I show I really care about someone).

*Sexual experience.* The Sexual Behavior Inventory (SBI; Bentler, 1968) was employed to assess sexual experience in conventional heterosexual acts. Subjects indicated whether they had engaged in various sexual behaviors varying in degree of intimacy (kissing, fondling of breasts, intercourse, etc.).

*Likelihood of raping.* Subjects’ self-perceptions regarding the possibility that they personally might rape were also assessed in the orientation phase of the research. Participants indicated on a 6-point scale ranging from not at all likely to very likely whether they would rape if they could be assured that they would not be caught and punished.

Also included in the questionnaire administered to subjects during the orientation phase were a number of items asking demographic information and reactions to and participation in various sexual acts (group sex, homosexual acts, forced sex, etc.). These background items were used to determine whether there were any differences between volunteers and nonvolunteers for the laboratory session of the research.

**Stories (Experimental Variables)**

*Phase I depictions.* Each of the eight versions of the audiotaped stories was about 1000 words, and was presented at a speed of about 200 words per minute. The content of these depictions was systematically manipulated in a fully crossed factorial design, along the dimensions of consent (woman’s consent vs nonconsent), pain (woman’s pain vs no pain), and outcome (woman’s arousal vs disgust). These materials are identical to those used by Malamuth and Check (1980b), who presented data validating the intended manipulations as well as a more detailed description of their content. It is important to note that the consenting versions of the stories portrayed the man and the woman in relatively equal “power” roles without any suggestion of domination of one person over the other.
Phase 2 depictions. The Phase 2 stories were very similar in length to those of Phase 1. In the nonconsenting (i.e., rape) depiction, a man secretly followed a woman from a disco, broke into her apartment, and forcibly raped her. In the consenting story, a man and a woman had mutually consenting intercourse in the man’s apartment. A validation of written versions of these stories was conducted with 17 male and female undergraduate raters. It was found that, as intended, the woman was perceived as clearly less willing and experiencing more pain and less pleasure in the nonconsenting than in the consenting depiction (all p’s < .0001). Moreover, the two stories were perceived as equally sexually explicit, realistic, and well written.

Perceptions of the Phase 2 stories. After the second-phase exposure, subjects were asked to indicate their perceptions of the Phase 2 story in terms of the woman’s trauma, willingness, pleasure, and pain. Trauma was assessed on a scale ranging from 1 (not at all) to 5 (very). The other three descriptors were assessed on 9-point scales ranging from not at all to extremely. These perceptions constituted one of the measures of beliefs in myths about rape. While this measure concerned perceptions of a specific rape victim’s experience, the rape myths measure described below focused on beliefs about women in general.

General beliefs in rape myths. Following the items asking perceptions of the Phase 2 story were a number of questions concerning subjects’ beliefs about the percentage of women who would enjoy various acts. Embedded in these items (in order to disguise their purpose) were two items intended to assess beliefs in rape myths. Subjects were asked their beliefs about the percentage of women, if any, who would derive some pleasure from being forced into sexual acts and about the percentage who would derive pleasure from being raped. Subjects were asked to indicate their responses on an 11-point scale from 0 to 100%.

Postexperimental Questionnaire

At the end of the experiment, subjects filled out a postexperimental questionnaire. This measure included an item inquiring how often subjects read magazines such as Penthouse or Playboy. They were asked to indicate their responses on a scale ranging from 1 (never) to 7 (very frequently). While this was not intended to be a comprehensive survey of experiences with pornography, it was felt that frequency of exposure to the two best-selling erotic magazines would provide some index of subjects’ exposure levels. Also included were questions designed to assess whether subjects were aware of the key experimental hypotheses (e.g., effects of victim’s reactions on beliefs in rape myths). Two independent raters agreed that none of the subjects indicated awareness of these hypotheses.

Procedure

Orientation session. The orientation sessions were held in large groups. Subjects first filled out the orientation questionnaire and were then given a sheet explaining the procedures to be employed in the experiment proper. Subjects then decided whether or not to sign up for the experiment.

Experimental procedure. The experiment proper was conducted at a later date following the orientation phase, generally within 1 week. The subject was given credit for experimental participation upon arriving at the laboratory. The experiment was conducted using two male and two female experimenters. The subject was escorted to a soundproof room, where he first listened to one of the eight versions of the first passage and then to either

* Ethical questions may be raised regarding even asking questions of this nature. Unfortunately, there does not seem to be any other means of assessing beliefs in such myths. The use of debriefing procedures described later (see Footnote 5) appear to counteract the negative effects that may result from the use of inquiries of this nature.
the rape criterion or the consenting criterion depictions. These stories were presented on a tape recorder by a male voice. There was a 10-min musical interlude between the two stories.

After hearing the second story, the subject filled out the questionnaire asking perceptions of the second story and beliefs regarding women’s reactions to sexual violence. He then filled out the postexperimental questionnaire, was brought a debriefing sheet, and then left the experiment. The debriefing sheet thanked the subject for his participation and stressed the importance of the research. The debriefing given to subjects who heard rape depictions stressed the true violent nature of rape and presented several points designed to dispel rape myths.5

RESULTS

Volunteers vs Nonvolunteers

An initial analysis was conducted comparing the orientation data of the 146 subjects who volunteered for the laboratory phase of the experiment versus the data of the 161 subjects who came to the orientation session but chose not to participate in the laboratory phase. This analysis indicated that volunteers did not differ from nonvolunteers on any of the predictor measures assessing personality, sexual motivations, or sexual experience, nor on the EPQ lie scale. However, analyses of the items inquiring about sexual history and reactions to and experiences with various sexual behaviors revealed differences between the two groups: Volunteers were more oriented toward unconventional sexual activities and more force oriented. With respect to unconventional sexual activities, volunteers relative to nonvolunteers were more likely to have thought of male homosexual acts (p < .02), to have found the idea of such acts more attractive (p < .01), and to indicate a greater likelihood of engaging in such acts in the future (p < .02). Volunteers also indicated a greater likelihood of engaging in the future in anal intercourse (p < .01) and group sex (p < .01). They also reported that they find the idea of watching lesbian acts more attractive (p < .002) and that they have thought about such acts more frequently (p < .03). Finally, volunteers were less likely to have tried conventional intercourse (p < .003) and were nonsignificantly less likely to have thought about it (p < .07).6

5 Assessments of the effectiveness of such debriefings were recently conducted by Malamuth and Check (1984) and Check and Malamuth (1984) about a week following exposure to the type of materials used in the present experiment. Subjects were unaware of the relationship between this assessment and the earlier exposure. The results showed that subjects who were exposed to rape portrayals and given a relevant debriefing were less inclined to accept certain rape myths than control subjects. Similar findings were obtained by Donnerstein and Berkowitz (1981), Donnerstein (1984), and Linz (1985) in assessments several months after exposure to sexual violence.

6 At first glance, there appears to be some inconsistency with regards to differences between volunteers and nonvolunteers in the data obtained with the SBI as compared to the question concerning sexual intercourse on the demographic and sexual history questionnaire. The former measure did not show significant differences whereas the latter did.
With respect to forced sexuality, volunteers were more likely to have thought of forcing a woman into sexual acts ($p < .01$) and found the idea of forcing a female more attractive ($p < .02$) than nonvolunteers. Also, there were differences that approached conventional levels of statistical significance, with volunteers indicating greater likelihood of raping ($p < .06$) and feeling less disgusted about forcing a female ($p < .08$) than nonvolunteers.

In summarizing the differences between volunteers and nonvolunteers, it appears that the latter group was more favorably oriented toward unconventional sexual activities and toward the use of force in sexual relations. On the other hand, volunteers were less experienced in conventional intercourse. These differences are in keeping with other studies using genital measures to assess sexual responses that have also shown differences between volunteers and nonvolunteers (e.g., Farkas, Sine, & Evans, 1978).

**Experimental Effects**

Analyses were first conducted using $2 \times 2 \times 2$ (Consent) $\times$ (Pain) $\times$ (Outcome) $\times$ (Content of Phase 2 Story) $\times$ (Sex of Experimenter) ANOVAs. To reiterate, the dependent variables for these analyses were the items asking perceptions of the Phase 2 story and beliefs in rape myths.

**Perceptions of the Phase 2 story.** The analyses of the perceptions of the Phase 2 story yielded the rather obvious effect of Consent of Phase 2 Story, indicating that subjects who heard the nonconsenting story in Phase 2, relative to those who heard the mutually consenting story, perceived that the woman in the Phase 2 story experienced more trauma, less pleasure, and more pain, and was also less willing (all $p$'s < .0001).

Although there were no overall ANOVA effects of the Phase 1 exposure variables (consent, pain, and outcome) on subsequent perceptions of the Phase 2 story, it was of interest to test the replicability of the effect found by Malamuth and Check (1980a). They reported that exposing subjects to a rape depiction which varied whether the victim was portrayed as aroused or abhorred by the assault affected subjects' perceptions of the victim's experience in a subsequent rape portrayal. A planned comparison was conducted on the present data, comparing the conditions equivalent to those used by Malamuth and Check. This comparison

Examination of overall means on the SBI shows that on this measure as well volunteers indicated nonsignificantly less sexual experience than nonvolunteers. The lack of significance may be due to the wider range of conventional sexual acts assessed as compared with inquiring only about intercourse. To examine this explanation directly, the specific item on the SBI inquiring about heterosexual intercourse was analyzed separately. Results indeed showed that fewer volunteers than volunteers reported having engaged in intercourse ($p < .004$).
revealed that, as expected, subjects who had earlier heard the nonconsenting woman’s arousal depictions perceived more victim pleasure in the rape criterion depiction ($M = 3.33$) than did subjects who had earlier heard the nonconsenting woman’s disgust depictions ($M = 2.0$, $t(109) = 1.9$, $p < .03$, one tailed). This perception of greater rape victim pleasure was also associated with a tendency to perceive less victim trauma (as in the study of Malamuth & Check, 1980), but the comparison on the trauma item was not significant. Moreover, as expected, this effect of earlier (Phase 1) exposure to the nonconsenting woman’s arousal vs the nonconsenting woman’s disgust depiction on subsequent perceptions was specific to manipulations within the rape portrayals of Phase 1 on reactions to the rape criterion portrayal. That is, prior exposure had no effect on any subsequent perceptions of the Phase 2 consenting depiction, nor were there any effects of manipulations within the Phase 1 consenting conditions on either Phase 2 portrayals (all $t$’s $< 1.0$).

*Analyses with likelihood of raping.* In order to determine the mediating effects of subjects’ individual characteristics on the impact of the manipulated variables, subjects’ reported likelihood of raping (LR) was included as an independent variable in the analyses. On the basis of the orientation questionnaire, subjects who indicated that there was no likelihood that they would rape (i.e., a response of 1 on the 6-point questionnaire) were classified as low likelihood of raping (i.e., low LR, $n = 86$). Those who responded 2 or higher (indicating some likelihood of raping) were classified as high likelihood of raping (i.e., high LR, $n = 59$). This distribution is similar to that of previous studies (Briere & Malamuth, 1983; Check & Malamuth, 1983; Malamuth, 1981; Malamuth & Check, 1980a; Malamuth et al., 1979, 1980; Tieger, 1981).

After subjects were classified as either low LR or high LR, the perceptions of the Phase 2 story were reanalyzed using likelihood of raping as an independent variable. As noted earlier, the addition of LR as an independent variable resulted in very small cell sizes, and a number of empty cells. Therefore, since the pain and sex of experimenter independent variables generally had few effects in any of the analyses, the data were collapsed across these variables in order to increase the cell sizes. Perceptions of the Phase 2 story were then analyzed with 2 (Consent) $\times$ 2 (Outcome) $\times$ 2 (Phase 2 Story) $\times$ 2 (Likelihood of Raping) ANOVAs. This analysis yielded the same effects of Phase 2 story as reported earlier but no additional effects. Moreover, the previously noted planned comparison effect on perceptions of the rape victim’s pleasure was similar for both low and high LR subjects.

The use of the LR independent variable resulted in some inequality of cell sizes. Therefore, all analyses were adjusted for unequal $n$’s using Overall and Spiegel’s (1969) Method 1 which assesses each effect after adjusting for its relationship to all other effects.
**General Beliefs in Rape Myths**

As noted previously, after indicating their perceptions of the Phase 2 story, subjects were asked what percentage of women in general they thought would (a) enjoy being raped and (b) enjoy being forced to do something sexual that they did not want to do. These two "rape myth" items were analyzed with 2 (Consent) \(\times\) 2 (Pain) \(\times\) 2 (Outcome) \(\times\) 2 (Sex of Experimenter) \(\times\) 2 (Phase 2 Story) ANOVAs.

These analyses yielded a Consent \(\times\) Outcome interaction, on both the enjoyment of rape item, \(F(1, 109) = 4.46, p < .04\), and the enjoyment of being forced item, \(F(1, 109) = 4.54, p < .04\). This interaction is depicted in Fig. 1. As can be seen from the figure, subjects who in Phase 1 were exposed to a nonconsenting woman's arousal depiction subsequently believed that a greater percentage of women would both enjoy being raped and enjoy being forced to do something sexual than subjects who were exposed to a nonconsenting woman’s disgust depiction. Follow-up simple effects tests (Keppel, 1973) revealed that this difference between the arousal vs disgust nonconsenting conditions was significant for both the enjoyment of rape item, \(t(109) = 2.30, p < .02\), one tailed, and the enjoyment of being forced item \(t(109) = 2.14, p < .02\), one tailed. As expected, in the consenting conditions, there was no significant differences.

It should be noted that there was also a Consent \(\times\) Outcome \(\times\) Sex of Experimenter interaction effect on both the enjoyment of rape item,

![Graph 1](image1.png)

![Graph 2](image2.png)

**Fig. 1.** Beliefs about the percentage of women who would enjoy being raped or being forced into sexual acts as a function of exposure to depictions varied along the consent (nonconsenting vs consenting sex) and outcome (woman's disgust vs arousal) dimensions.
$F(1, 109) = 4.51, p < .04$, and the enjoyment of being forced item, $F(1, 109) = 4.51, p < .04$. This interaction was probed by examining the mean differences between the woman's arousal and the woman's disgust conditions within each of the four Consent × Sex of Experimenter cells. It was found that within the nonconsenting conditions, the differences on both items were in the same direction as depicted in Fig. 1 for the male and female experimenters alike but smaller in magnitude for the female experimenters. In the consenting conditions, there was a slight reversal across sex of experimenter in terms of the differences between the arousal and disgust outcome conditions. Nonetheless, the differences in the consenting conditions were not significant for either item, as was the case for the means illustrated in Fig. 1 (all r's < 1.5).

The only other effect on the rape myth items was a Pain × Outcome × Sex of Experimenter × Phase 2 Story interaction effect, which was significant on both the enjoyment of rape item, $F(1, 109) = 4.92, p < .03$, and the enjoyment of being forced item, $F(1, 109) = 4.12, p < .05$. This effect, however, was not germane to the issues discussed here, nor did it in any way limit the generalizability of the results described. Therefore, for the sake of brevity, this effect will not be discussed.

**Analyses with LR.** As with the perceptions of the Phase 2 story, supplemental analyses were conducted on beliefs in rape myths using LR ratings as an independent variable. These analyses employed 2 (Consent) × 2 (Outcome) × 2 (Phase 2 Story) × 2 (Likelihood of Raping) ANOVAs. The analyses yielded the same Consent × Outcome interaction depicted in Fig. 1. There was also a main effect of LR on both the enjoyment of rape item, $F(1, 125) = 40.3, p < .0001$, and the enjoyment of being forced item, $F(1, 125) = 22.9, p < .0001$. High LR subjects believed that almost four times as many women would enjoy being raped as did low LR subjects (means 24.7 and 6.63%, respectively). As well, high LR subjects believed that almost three times as many women would enjoy forced sex as did low LR subjects (means 27.6 and 11.8%, respectively).

To assess the possibility that there may have been differences in the degree to which high vs low LR subjects were affected by the earlier exposure, simple effects tests were conducted for these groups separately. These tests revealed that the Consent × Outcome interaction was significant for high LR subjects only, on both the women enjoy rape item, $F(1, 125) = 7.5, p < .007$, and the women enjoy forced sex item, $F(1, 125) = 5.8, p < .02$ (see upper panels of Fig. 2.) Follow-up analyses showed that, as expected, high LR subjects who had earlier been exposed to the nonconsenting woman's arousal depictions believed that more women would enjoy being raped ($M = 36.9\%$) and forced into sexual acts ($M = 38.5\%$) than high LR subjects who had earlier heard the nonconsenting woman's disgust depictions (women enjoy rape $M = 20.0\%$, women
enjoy forced sex $M = 18.7\%$, $t(125) = 2.7$, $p < .004$, one tailed, $t(125) = 2.7$, $p < .004$, one tailed, respectively). Again, prior exposure to woman’s arousal vs woman’s disgust within the context of the consenting depictions had no significant effect on beliefs in rape myths for these high LR subjects. Finally, for low LR subjects the pattern of means was similar to that of high LR subjects (see lower panels of Fig. 2), but none of the differences between means were significant for either of the two rape myth items.

Additional comparisons were performed using the consenting exposure to assess whether the nonconsenting woman’s arousal depiction increased beliefs in rape myths or whether the nonconsenting victim abhorrence portrayal may have decreased such beliefs. As expected on the basis of earlier data, it was found that high LR subjects’ beliefs that women enjoy rape were significantly higher following exposure to the nonconsenting woman’s arousal condition than after the consenting woman’s arousal condition ($M = 36.9\%$ vs $M = 17.7\%$, respectively), $t(125) = 2.96$, $p < .002$, one tailed. This comparison was also significant for the women enjoy force item ($M = 38.5\%$ vs $M = 24.6\%$, respectively), $t(125) = 1.82$, $p < .05$, one tailed). However, none of the comparisons between the nonconsenting woman’s disgust and the consenting conditions were significant. Thus, in keeping with earlier research, it appears that depictions of rape victims as sexually aroused may increase rape myth reports but
exposure to rape portrayals describing the victim’s disgust has not been found to reduce such reports.

CORRELATIONAL ANALYSES

The independent variables used in predicting the Phase 2 dependent variables were the predictors assessed in the orientation session, and the item assessing frequency of exposure to pornography. To reiterate, these orientation predictors included measures of personality (psychoticism, neuroticism, and extraversion-introversion), sexual motivations (love and affection motivation, and power motivation), sexual experience, and LR ratings. The dependent variables included both perceptions of the Phase 2 stories and general beliefs in rape myths.

Predictors of Perceptions

To simplify analysis, perceptions of the Phase 2 depictions were factor analyzed, using principal factors analysis. This analysis yielded only one factor with eigenvalue greater than 1.0, which accounted for 76% of the variance. The loadings for this factor were +.88 for woman’s willingness, +.91 for woman’s pleasure, −.83 for woman’s pain, and −.67 for woman’s trauma. This factor clearly reflected the degree to which perceptions of the woman’s experience were positive (high scores) or negative (low scores). Factor scores were then calculated for this factor and correlated (using simple correlation and regression analyses) with the orientation measures and pornography usage in order to predict perceptions of the Phase 2 rape and consenting depictions.

For the rape criterion depiction, perceptions that the woman’s experience was relatively positive were associated with LR reports $r(63) = .32, p < .01$ and power motivation, $r(63) = .26, p < .04$, and inversely correlated with love and affection motivation, $r(63) = −.25, p < .05$, and sexual experience, $r(63) = −.35, p < .01$. The regression analysis yielded a multiple $R(3, 61) = .52, p < .01$, accounting for 27% of the variance. The variables which independently contributed significantly to the multiple $R$ were psychoticism$^8$ ($B = .32, p < .01$), power motivation ($B = .23, p < .05$), and sexual experience ($B = −.30, p < .01$).

With respect to the consenting Phase 2 depiction, psychoticism was associated with the perception that the woman’s experience was a negative one, $r(56) = −.37, p < .01$, while extroversion tended to be associated with the perception that the woman’s experience was positive, $r(56) = .25, p < .06$. In the regression analysis, extroversion-introversion did not add significantly after psychoticism was in the equation.

$^8$ While the psychoticism variable was not significant in the simple correlational analyses, it did contribute significantly in the regression analyses.
Predictors of General Beliefs in Rape Myths

The two items asking subjects' beliefs about the percentage of women who would enjoy being raped and being forced were highly correlated, \( r(139) = .78, p < .0001 \). Therefore, these two items were summed to form a single composite reflecting the degree to which subjects believed the myth that women enjoy sexual violence. This measure was then correlated with the orientation predictor measures, as before. This analysis indicated that the belief in the sexual violence myth was associated with LR, \( r(121) = .55, p < .0001 \), power motivation, \( r(121) = .29, p < .001 \), and frequency of exposure to pornography, \( r(121) = .29, p < .001 \). The regression analysis yielded a multiple \( R(2, 120) = .57, p < .0001 \), accounting for 33% of the variance. The variables which independently significantly contributed to the regression equation were likelihood of raping \( (B = .51, p < .0001) \), and exposure to pornography \( (B = .17, p < .05) \).

DISCUSSION

Experimental Effects

On the whole, the findings strongly support the hypothesis that a depiction portraying the myth that a rape victim becomes sexually aroused increases males' beliefs in such a rape myth. When the effects of the dimension of the rape victim's arousal vs disgust were tested on a dependent measure assessing subjects' perceptions of another rape portrayal, the findings were in the predicted direction but generally weak; they were statistically significant only when a planned comparison was made for one of the items assessed (i.e., victim pleasure; note that this item corresponds most closely to the myth portrayed in the nonconsenting woman's arousal depiction). However, when the dependent measures were general beliefs about victims of rape and sexual aggression, the findings were very clearly supportive of the hypothesis. Furthermore, as predicted, the increased belief that women derive pleasure from victimization was specific to the nonconsenting woman's arousal portrayal and did not occur when the arousal vs abhorrence manipulation was made within consenting depictions nor were there effects on subsequent reactions to a consenting depiction. These data therefore extend earlier findings (Malamuth & Check, 1980a, 1981; Malamuth et al., 1980) indicating that exposure to aggressive-sexual media suggesting that aggression against women results in "positive" consequences may contribute to males' acceptance of rape myths and/or of violence against women. These data are consistent with the general view that exposure to media portrayals may "cultivate" perceptions and beliefs about the "real" world (e.g., Gerbner et al., 1977).
In addition, the present data suggest that men who have relatively higher inclinations to aggress against women are particularly likely to be affected by exposure to aggressive pornography that portrays rape myths. The results indicated a general effect of exposure to the nonconsenting, woman’s arousal portrayal on males’ beliefs that women enjoy forced sex and rape. Although the pattern of the data was similar for low and high LR subjects (and therefore there was not a significant interaction with the LR variable in the overall analysis), specific comparisons showed that it was only the high LR subjects who were significantly affected. These results are consistent with studies on media violence in nonsexual situations that report that individuals with higher aggressive tendencies are more susceptible to the negative impact of such media (Dorr & Kovaric, 1980).

**Correlational Findings**

Correlational analyses revealed that a number of variables were associated with the perception that a rape victim’s experience (in the rape criterion depiction) was relatively more positive. Specifically, higher LR ratings and higher scores on power as a motivation for sexual acts but less sexual experience and lower scores on love and affection as motivation for sex were associated with higher perceptions that the rape experience was positive. In a regression analysis, it was found that higher psychoticism, higher power motivation, and lower sexual experience independently contributed to the multiple R that accounted for 27% of the variance of perceptions of the rape victim’s experience as positive.

When examining subjects’ beliefs that women in general enjoy sexual violence, it was found that greater beliefs in these myths were associated with higher LR ratings, power motivation for sexuality, and higher levels of exposure to pornography. In the regression analyses, LR ratings and exposure to pornography independently contributed to the equation which accounted for 33% of the variance in rape myth beliefs.

The general pattern of measures found to relate to beliefs in rape myths is very consistent with that found to relate to sexual arousal to rape depictions (Malamuth & Check, 1983). Further, the two measures that were most consistently associated with beliefs in rape myths, both with perceptions of the victim in the rape criterion depiction and with perceptions of women generally, were LR ratings and power motivation. These are the same measures consistently shown to relate to sexual arousal to rape depictions. These data point to the need for the development of a theoretical model that would attempt to specify the relationships and common causes among various responses (arousal, beliefs, motivations, etc.) bearing upon aggression against women.

While the association found between higher levels of exposure to pornography and beliefs that women enjoy sexual violence is consistent with
the possibility that in “naturalistic” settings men are influenced by exposure to rape myths within pornography, any conclusions regarding the reliability of and basis for this correlation must await future research. It should be noted, however, that recent research regarding the effects of nonaggressive pornography has yielded mixed conclusions. Zillmann and Bryant (1984) found that repeated exposure to such pornography over a period of 9 weeks increased males’ callousness toward women and reduced the severity of their punishment of a rapist in a simulated trial. Linz (1985), on the other hand, did not find similar effects of nonaggressive pornography.

**Mediating Processes**

It is important that future research analyze the mediating processes responsible for the effects found in this and earlier studies. There appear to be three types of processes or explanations that may be relevant. The first is that the effects found were not due to any change in subjects’ beliefs or perceptions but to a greater willingness to report a belief that may be judged as socially inappropriate (e.g., that women “enjoy” being raped). Such a change in willingness to report may have been due to disinhibitory (Bandura, 1973) or demand characteristics (Orne, 1965) effects. The former would suggest that when subjects were presented with a pornographic portrayal that implied victim arousal, they became less concerned about the adverse consequences, such as the experimenter’s disapproval, of expressing a rape myth. The latter explanation would contend that subjects were merely responding in accordance with the experimenter’s perceived expectations. The anonymity of subjects’ responses (i.e., no names were indicated and questionnaires were administered in relatively large groups) would argue against any fear of consequences by subjects, but the present design cannot fully rule out the possibility of disinhibitory effects. Similarly, the postexperimental questionnaire data indicating no subject awareness of the hypotheses weakens the “demand characteristics” explanation. Moreover, effects similar to that of the present experiment found in one of the earlier studies in this line of investigation (i.e., Malamuth & Check, 1981) are extremely unlikely to have been caused by a demand characteristic process.

A second type of explanation would suggest that some new information contained in the nonconsenting woman’s arousal depiction changed subjects’ perceptions of women’s reactions to sexual violence. Such an explanation appears unlikely in the present experiment. It is doubtful that any of the subjects had not previously encountered the type of myth portrayed in the woman’s arousal version of the rape depiction. Furthermore, no arguments or factual information relevant to changing attitudes were presented.

A third, and the most compelling, explanation is not based on the acquisition of new information or ideas but on the processing of information
and its retrieval from memory. Particularly relevant is the growing body of research on "priming effects" (Berkowitz, 1984; Higgins, Rholes, & Jones, 1977; Higgins & King, 1981; Wyer & Carlston, 1979, 1980; Wyer & Srull, 1980, 1981). According to this model, when subjects are faced with a judgment they do not perform a complete search of memory for all relevant information. Instead, they sample only a subset of the relevant information that is most easily accessible in memory, and given that the implications of the information are sufficiently consistent, they may base their judgments on these implications only. (For a similar proposition see research on the "availability heuristic" by Tversky & Kahneman, 1973.) One of the factors shown to affect accessibility in memory is the recency with which the concept has been used in the past. Exposure to a media communication may make certain cognitions more easily accessible in memory due to the activation (or priming) of these cognitions in the course of processing the information contained in the communication. The primed cognitions may then be used in making subsequent judgments. Thus in the present experiment, exposure to a portrayal of a rape resulting in the victim's arousal may have primed cognitions relevant to such a rape myth. These cognitions may have been used in subsequent inferences (e.g., in judging the frequency of women's "pleasurable" reactions to being raped).

It may be argued that priming based on fictitious stories is unlikely to affect judgments about events in the "real" world. However, there is considerable evidence suggesting that even when subjects are clearly aware of the fictional nature of ideas or information, the greater accessibility of these cognitions in memory may have a significant impact on their "real" world judgments (e.g., Carroll, 1978).

A priming explanation may help account for the stronger effects obtained when subjects judged women's reactions to rape in general as compared to when they judged the reactions of the victim in the rape criterion portrayal. Priming effects are more likely to occur with relatively ambiguous than with unambiguous judgments (Wyer & Srull, 1980, 1981). Since some specific information about the victim's reactions was provided in the rape criterion portrayal, this situation would appear to be less ambiguous than when judging women's reactions in general. Also relevant to this point is recent research on social stereotyping (e.g., Ginosar & Troppe, 1981; Locksley, Hepburn, & Ortiz, 1982). It indicates that stereotyping is less likely when individuating target case information, even in minimal amounts, is available (as in the rape criterion portrayal) as compared to when judgments of groups in general are made without individuating information.

Another central aspect of the present data that fits well within a priming theory are the findings that high LR subjects' judgments regarding women's reactions to rape tended to be more affected than those of low LR
subjects by exposure to the rape–victim arousal portrayal. Theory and research on priming effects (e.g., Wyer & Hartwick, 1981) suggest that a communication is more likely to affect attitudes when the audience’s existing beliefs are consistent with the information contained in the communication. The data of the present experiment and previous research (e.g., Malamuth, 1981) show clearly that the beliefs of high LR subjects are much more in keeping with the myth portrayed in the rape–arousal communication than those of low LR subjects.

A priming explanation would also predict that exposure to the rape–woman’s abhorrence depiction should result in reduced perceptions of rape victims’ “pleasure.” Examining the means for beliefs in rape myths suggests some tendency in this direction, i.e., the means following exposure to the nonconsenting woman’s disgust conditions generally tend to be lower than following exposure to the other conditions. The lack of statistical significance for these comparisons in the present and previous research may be due to at least two factors. First, while the nonconsenting abhorrence depiction described some victim suffering, the nature of the description did not emphasize such reactions beyond what might be expected in a “typical” rape account. Second, a “floor” effect may have restricted the potential impact of the rape–abhorrence portrayal. Those who according to a priming explanation would be most likely to be affected by virtue of their preexisting beliefs (i.e., low LR subjects), indicated rape myth beliefs that were close to “floor” levels.

In general, then, the priming research literature appears to provide a much needed theoretical framework for explaining the present and some earlier findings in this line of investigation. The next important step in future research is to design experiments specifically testing the predictions of the priming explanation. Such research could systematically vary dimensions such as the nature of the cognitions primed, whether subjects are asked to make intermediary inferences, the time interval between exposure and assessment, and the ambiguity of the situations judged. In addition, it is important to consider the arousal-generating effects of exposure to aggressive pornography. Recent research suggests that the impact of aggressive-pornographic depictions on laboratory aggression against women exceeds the impact of depictions that portray aggression against women in a nonsexual context (Donnerstein, 1984; Donnerstein & Berkowitz, 1981). One reason for this may be the sexually arousing properties of aggressive pornography, particularly for high LR subjects (Malamuth & Check, 1983). It has been suggested that emotional reactions can prime cognitions affecting judgments and that such reactions can act as internal “noise” that prevent the audience from thinking up arguments to counter the message of a communication (Wyer & Carlston, 1979). The sexual arousal elicited by aggressive pornography may therefore play some role in affecting the extent to which priming effects occur.
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