

## Rape Fantasies as a Function of Exposure to Violent Sexual Stimuli<sup>1</sup>

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*Twenty-nine male students, classified on the basis of questionnaire responses as sexually force oriented or non-force oriented, were randomly assigned to exposure to rape or mutually-consenting versions of a slide-audio show. All subjects were then exposed to the same audio description of a rape read by a female. They were later asked to create their own fantasies. Penile tumescence and self-reports of arousal indicated that relatively high levels of sexual arousal were generated by all of the experimental stimuli. No differences in arousal during the exposure phase were found as a function of the manipulation in the content of the slide-audio show. Sexual arousal during the fantasy period, assessed by means of self-reports, indicated that those who had been classified as force oriented created more arousing fantasies after having been exposed to the rape version of the show, whereas those classified as non-force oriented created more arousing fantasies following the mutually-consenting version. Most significantly, those exposed to the rape version, irrespective of their sexual classification, created more violent sexual fantasies than those exposed to the mutually-consenting version. The possible role of such media-elicited fantasies in the development of antisocial attitudes and behavior is considered. Also discussed are ethical issues arising from implementing or failing to implement research in this area.*

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## INTRODUCTION

This paper will describe an experiment that is part of a series of studies focusing on the responses of nondeviants to rape stimuli. The impetus for this research program comes from two important areas of theory and research. The first is the work of Abel and his colleagues on developing objective assessment techniques for use in the treatment of rapists. The second area is the writings of feminists on the subject of sexual violence.

Abel *et al.* (1977) report clear differences between the sexual responsiveness of rapists and nonrapists to portrayals of sexual assault. Whereas rapists in their sample evidenced high levels of penile tumescence to audio-taped portrayals of both rape and consenting sexual acts, the nonrapist comparison group showed substantial sexual arousal to the mutually-consenting depictions only. These investigators therefore suggest that measures of sexual responsiveness to the depiction of rape relative to sexual arousal to consenting themes serve as indices of the "proclivity to rape." (See also Abel *et al.*, 1976, 1978; Barbaree *et al.*, 1979.) This methodology has received considerable acceptance and has recently been applied in the diagnosis and treatment of other sexual deviations such as pedophilia (Abel *et al.*, 1979).

While the finding that nonrapists are not very sexually aroused by certain rape depictions is supported by other research studies (Baron and Byrne, 1977; Malamuth *et al.*, 1980b), there is ample evidence that under certain disinhibitory conditions (Briddell *et al.*, 1978) or in response to particular types of rape themes similar to those typically found in pornography (Malamuth *et al.*, 1980b; Schmidt, 1975; Smith, 1976) nondeviants may evidence considerable sexual arousal to rape stimuli. What are the effects of being sexually stimulated by such violent themes? This issue is of particular importance in light of the continuous increase in sexually violent stimuli in the mass media over the past few years (Time, 1976, 1977; Malamuth and Spinner, 1980).

Feminist writers contend that rape themes within pornography constitute "hate literature" against women:

The pattern rarely changes in the porno culture—after a few preliminary skirmishes, women invite or demand further violation, begging male masters to rape them into more submission, torture, and violence. In this fantasy land, females wallow in physical abuse and degradation. It is a pattern of horror which we have seen in our examination of sex cases translated again and again into actual assault. (Gager and Schurr, 1976, p. 244)

The anti-female propaganda that permeates our nation's cultural output promotes a climate in which acts of sexual hostility directed against women are not only tolerated but ideologically encouraged. (Brownmiller, 1975, p. 444)

In images of erotic arousal, men and women learn well who is allowed to do what to whom. . . . feminists and their supporters should demand that materials depicting the bondage, mutilation or murder of women for no other purpose than sexual arousal be banned, whether the image is in a porno film or on a billboard. (Kostach, 1978, p. 6)

These assertions would seem inconsistent with the research of the President's Commission on Obscenity and Pornography (1970), which concluded that there was no evidence of adverse effects of pornography. However, specific hypotheses regarding the effects of sexual violence have not yet been adequately tested. The studies conducted by the Commission, while providing highly valuable data in a previously neglected area of research, were generally limited in two respects: First, a distinction was not made between materials that merely depicted explicit sexual content and those involving violent and/or coercive-exploitative portrayals of sexual relationships. In fact, materials of the latter type were generally not employed in the Commission's studies. There were a few studies that included extreme sadomasochistic materials (e.g., Mann *et al.*, 1971) but not the type of violence that is common in today's pornography. Second, research related to the sexual violence issue was of a correlational nature involving retrospective reporting and seriously limiting the opportunity for establishing causal effects. Perhaps because of the difficulty in interpreting retrospective correlational data, it is not surprising that even among the Commission's research some contradictory findings emerged (Davis and Braucht, 1973).

On theoretical grounds, there is reason to be concerned about exposure to the fusion of sexuality and violence, particularly when relatively high levels of sexual arousal are stimulated. The limited research in this area indeed indicates that under certain conditions such exposure may have undesirable effects on perceptions of rape and on aggressive responses (Malamuth, 1978; Malamuth and Check, 1979; Malamuth *et al.*, 1980a; Donnerstein, 1980). One process that may occur is highlighted by research on homosexuality (Herman *et al.*, 1971, 1974). These investigators found that repeatedly exposing homosexuals to stimuli of nude females and instructing them to fantasize engaging in heterosexual behavior was sufficient, as indicated in self-reports and physiological measures, to modify their arousal patterns and in some cases affect heterosexual behavior outside the laboratory. These authors suggest that the extinction of avoidance tendencies and providing new fantasy material may have been responsible for the increased sexual arousal to heterosexual stimuli. Research on the treatment of sexual anxiety by extinction of avoidance tendencies similarly suggests that media exposure, whether or not accompanied by procedures designed to induce relaxation, significantly

affects sexual anxiety and behavioral patterns (Marshall, 1976; Wishnoff, 1978).

Such exposure-arousal-fantasy-behavior processes may operate when subjects are repeatedly presented with sexually violent stimuli. If the use of violence in sexual relations has been generally frowned upon, we would expect most individuals to possess strong inhibitory or avoidance tendencies vis-à-vis such acts. Exposure to sexually stimulating portrayals of sexual violence may under certain conditions alter these inhibitory factors, possibly as a function of masturbatory conditioning to such fantasies (Gagnon and Simon, 1973; Abramson and Mosher, 1979), thereby modifying arousal and/or fantasy responses.

The present experiment was designed to examine specifically whether exposures to rape stimuli affect sexual responsivity and/or sexual fantasies, processes that may mediate any attitudinal or behavioral changes. The possibility that any exposure effects might interact with subjects' existing orientation towards sexual coercion or their perception of normative standards was also examined.

## METHOD

### Subjects

Twenty-nine male undergraduate students at the University of Manitoba participated in both the questionnaire session and the exposure session. The exposure session followed the questionnaire session by several days.

To fulfill part of a requirement for introductory psychology courses, 96 males signed up for the questionnaire session. On the sign-up sheets, subjects were informed that this was a preliminary session in which they would be asked personal questions about sexual matters and that they would be given the opportunity of signing up for an additional session. At this first session, subjects were asked to fill out a rather lengthy questionnaire based upon that used by Goldstein *et al.* (1973).

### *Orientation Variable*

Embedded within varied questions dealing with many areas of sexual attitudes and behavior were a number of items specifically dealing with sexual coercion. Two of these asked the subjects to rate on a 4-point scale how attractive they found the idea of forcing someone or being forced to engage in sexual coercive acts. Subjects who indicated that they found

the idea of force somewhat or very attractive and/or indicated that they thought they might engage in coercive sexual acts were classified as force oriented.

Of the 29 subjects participating in both sessions, 13 were classified as force oriented. Of the 67 subjects who had participated in the questionnaire session but did not sign up for the exposure session, 23 were similarly classified. An analysis of the frequency of such classification for those who did or did not sign up for the second session yielded a nonsignificant value  $\chi^2(1) = 0.55$ . This suggests that at least on the force orientation dimension those in the exposure session were quite representative of subjects participating in the earlier questionnaire phase.

### Design

A 2 X 2 X 2 X 2 fully crossed factorial design based on the variables of sexual orientation (force vs. non-force oriented), exposure (rape vs. mutually-consenting), instructions (normative vs. no instructions), and sex of experimenter (male vs. female) was employed. While, as indicated, the sexual orientation was determined on the basis of questionnaire responses, subjects were randomly assigned to each of the levels of the other independent variables.

### Experimental Materials

#### *Slide-Audio Show*

This presentation lasted 2 minutes and 10 seconds. It consisted of 16 slides narrated by a male voice. It was presented on a Singer Caramate 3300 unit which enables coordination of slides and audio stimuli (signals are placed on the cassette tape so as to automatically change slides at predetermined intervals). This mode of presentation allows the experimenter to utilize visual as well as auditory stimuli specifically suited for experimental purposes without the difficulties involved in constructing videotapes.

The show was created on the basis of a recent issue of a popular male-oriented erotica magazine. Within the portion of the magazine used, pictorials and a narrative describing a rape were presented. The male in the story finds an attractive woman on a deserted road. When the man approaches the woman, she faints from fear. He ties her up and forcibly undresses her. She is later depicted as participating in sexual acts without additional coercion, with the implication that she is enjoying the experience.

Except for the manipulation noted below, the narrative and pictorials used in the experiment were very similar to those originally appearing within the magazine.

The experimental manipulation of the exposure variable was made at about 1 minute and 30 seconds of the presentation. This occurred following the 11th slide. In the rape exposure condition, the 12th slide depicted the woman's hands being tied by the man and the accompanying narrative stated:

You take her into the car. Though this experience is new to you, there is a temptation too powerful to resist. When she awakens, you tell her she had better do exactly as you say or she'll be very sorry. With terrified eyes she agrees. She is undressed and she is willing to succumb to whatever you want. You kiss her and she returns the kiss.

In the mutually-consenting exposure condition, the 12th slide depicted the woman lying in the car while the man looked at her. Since no indication of any coercion had appeared up on this point, it was feasible to include the following narrative:

You take her into the car and when she awakens you tell her that it's all right, that she is safe and that no one will do her any harm. She seems to like you and you begin to kiss. You begin to undress. She wants to be with you. She's kissing you.

Except for these differences in the 12th slide and the accompanying descriptions, the two versions of this presentation were identical. Following the 12th slides there were portrayals of the man and woman in sexual acts, although there was only implied, but no explicit depiction of, intercourse.

### *Rape-Audio Presentation*

This presentation also lasted 2 minutes and 10 seconds, but was read by a female rather than a male voice. It was the audio description of a rape (without accompanying pictorials) used by Briddell *et al.* (1978). It is based upon and is nearly identical to that appearing in Abel *et al.* (1977). An armed rapist is described victimizing a woman who clearly abhors the assault.

### *Instructions Variable*

A manipulation was made in the written instructions given to subjects. In the normative instruction condition, the following statement appeared:

The sexual stimuli used in this study were selected because they were found in previous studies to be quite appealing and sexually arousing to many people.

No similar statement was included in the no-instruction condition.

## Assessment Instruments

### *Responses to Experimental Stimuli*

Penile tumescence was monitored by the use of a mercury-in-rubber strain gauge (Parks Electronics Laboratory, Beaverton, Oregon), a device recommended in recent analyses of differing measuring instruments (Laws, 1977; Rosen and Keefe, 1978). Subjective arousal to the experimental stimuli was assessed by means of a lever connected to a variable resistance potentiometer (Wincze *et al.*, 1977; Farkas *et al.*, 1979). The lever could be moved along a 10-interval scale ranging from 0% to 100%. The output of both devices was amplified and recorded on a polygraph.

### *Fantasy Phase*

Subjects were asked to report their fantasies on a questionnaire based on that employed by Briddell *et al.* (1978). Subjects first indicated their sexual arousal on a scale ranging from 0% (not sexually aroused) to 100% (extremely sexually aroused). They were then asked a series of questions in which they were to describe as explicitly as possible what they had thought about during the fantasy phase.

## Procedure

Upon arriving at the laboratory for the exposure session, the subject was greeted by the male or female experimenter dressed in a lab coat. Undergraduate students in their early 20s acted in the capacity of experiments. The experimenter first signed the subject's experimental credit card, then escorted him to a soundproof room in which were the written instructions. From this point on there was usually no further interaction between the experimenter and the subject, although an intercom was available in case communication was necessary.

The instructions indicated that this study was part of a general program aimed at developing physiological measures for different affective states, with particular attention in this phase of the research to assessing sexual arousal. The subject was instructed on the use of the penile tumescence band and the self-report lever. The manipulation of normative information about the sexual stimuli's appeal was presented near the end of the instructions.

Once the experimenter in the adjoining room determined that the subject had placed the tumescence band on and a stable baseline had been achieved, he/she turned the switch to activate the Caramate unit. A speaker in the experimenter's room enabled the monitoring of the differing stimuli presented to subjects.

The presentation began with approximately 30 seconds of music, followed by three slides at intervals of 15 seconds each. These slides showed partially nude and fully nude women in varied sexual positions. The primary purpose of these stimuli was to generate some level of sexual arousal, in light of research data (Kolarsky and Madlafousek, 1977) suggesting that stimulation levels are better differentiated if presented following the elicitation of arousal rather than being presented immediately following the first baseline period. Additionally, these stimuli were intended to strengthen the credibility of the experimental instructions that a variety of stimuli were to be included by insuring that at the onset all subjects viewed nonviolent stimuli.

Two minutes of music followed these slides. Subjects were then presented with either the rape or mutually-consenting version of the slide-audio show. Four minutes and 30 seconds of music followed this show. At this time, all subjects' penile tumescence levels had returned to baseline levels. All subjects were then presented with the rape-audio presentation. Following this presentation, a male voice instructed subjects to try and reach as high a level of sexual arousal as possible by fantasizing about whatever they would like but without any direct stimulation of the penis. They were told that once they had engaged in a fantasy they were to go across the room and complete the questionnaire within an envelope.

Before leaving the experiment, subjects read a form thanking them for participating, encouraging any comments about the experiment, and emphasizing that actual acts of sexual violence are a terrible crime.

### *Data Reduction*

Penile tumescence and subjective arousal were computed on the basis of the maximum positive deflection from baseline immediately preceding the onset of a story. A comparison between this approach and that of computing the area under the curve has shown that the two procedures yield very similar results (Abel *et al.*, 1980).



## RESULTS AND DISCUSSION

### Sexual Arousal to Experimental Stimuli

Two (Exposure) by two (Orientation) by two (Instructions) by two (Experimenter) analyses of variance<sup>3</sup> performed on penile tumescence and subjective arousal levels did not yield significant effects either in response to the slide-audio show or the rape-audio presentation. In general, relatively high arousal was stimulated by both versions of the slide-audio show (a subjective mean rating of 43%) and by the rape-audio tape (mean rating of 42%).

With respect to the slide-audio show, these data suggest that within the context of explicit sexual stimuli the manipulation of the woman's consent alone does not significantly affect nondeviants' arousal. These results are consistent with earlier findings showing that while arousal levels may be strongly inhibited by such elements as an emphasis on the rape victim's abhorrence, certain rape portrayals stimulate relatively high sexual arousal in nondeviants (Malamuth *et al.*, 1980b; Malamuth and Check, 1979; Schmidt, 1975; Farkas, 1979).

Moreover, the levels of sexual responsiveness generated by the rape-audio tape suggest that even a rape that emphasizes the victim's abhorrence may under certain conditions stimulate high sexual arousal levels. In the present experiment, a rape depiction virtually identical to that used by Abel *et al.* (1977) but read by a female rather than a male was found to generate considerable sexual responsiveness. Highly similar results have been recently reported by Farkas (1969). The present experiment and that of Farkas share two elements that distinguish these studies from previous research reporting differences between nonrapists' arousal to rape and mutually-consenting depictions. First, the audio-tapes were read by a female rather than a male. Second, this study and that of Farkas were conducted in settings other than those designed to treat or incarcerate rapists. Even those previous studies that examined the responses of college students (e.g., Barbaree *et al.*, 1979) were in treatment or jail settings. Future research

<sup>3</sup>An exact least squares analysis was performed in order to account for unequal sample sizes, using Overall *et al.*'s (1975) Method I, which assesses each effect after adjusting for its relationship to all other effects.

should systematically examine the potential role of these two variables in affecting sexual responsiveness to rape depictions, for these variables may affect the ability of the procedure developed by Abel *et al.* (1977) to discriminate between the responses of deviants and those of nondeviants, and may lead to a substantial number of "false positives" under certain conditions.

## Sexual Fantasies

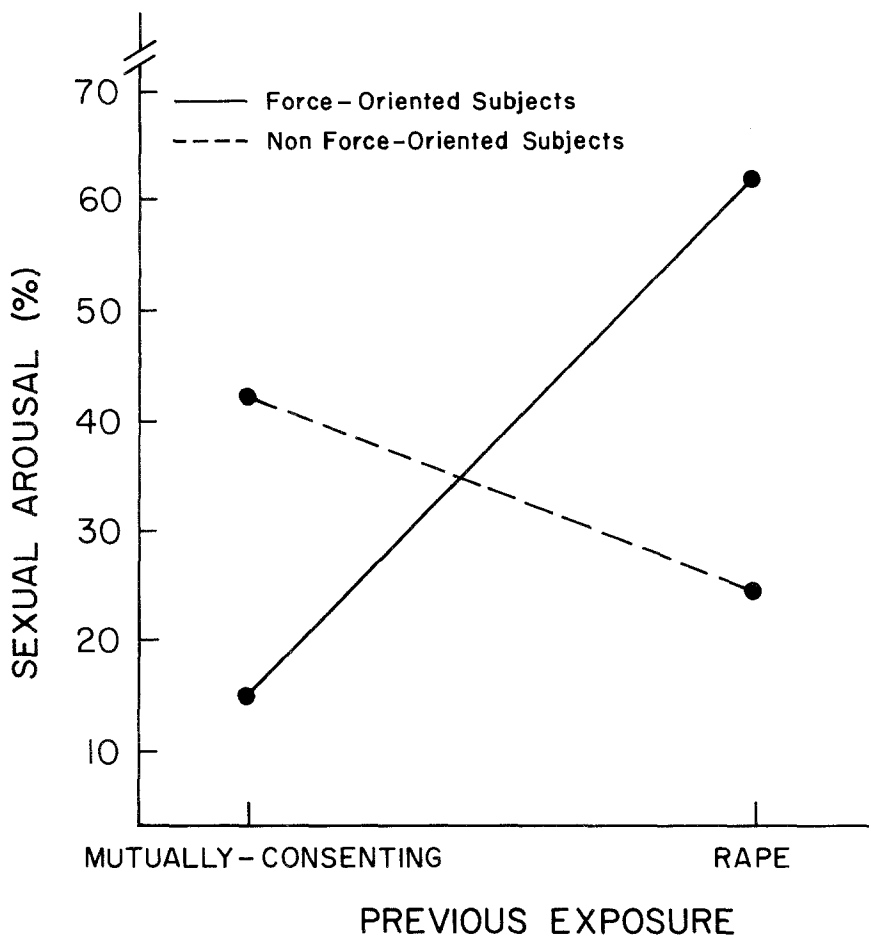
### *Arousal*

Two subjects did not engage in fantasizing. An analysis of variance<sup>3</sup> performed on the levels of sexual arousal reported by the remaining 27 subjects yielded an interaction between the exposure and orientation variables,  $F(1, 12) = 9.75, p < 0.009$ . The mean data presented in Fig. 1 indicate that whereas subjects classified as reflecting a force sexual orientation created more arousing fantasies after exposure to the rape as compared with the mutually-consenting version of the slide-audio show, the opposite pattern occurred for those possessing a non-force orientation, i.e., they created more arousing fantasies following exposure to the mutually-consenting as compared with the rape version.

### *Content*

The content of subjects' fantasies was rated by two judges, "blind" to the experimental conditions, as to whether they contained themes of rape and sexual coercion. There was 100% agreement between the raters in designating five fantasies as sexually violent. All of these five individuals were in the rape exposure condition (as compared to nine subjects in this condition and 13 subjects in the mutually-consenting exposure whose fantasies did not contain sexual violence). Analysis of these frequency data by Fisher's Exact Probability Test (Siegel, 1956) yielded a significant effect,  $p = 0.025$ . The frequency of sexually violent fantasies was not found to relate significantly to any of the other independent variables.

Further examination of the content of the five violent fantasies indicated that three subjects used in some fashion the content of the rape-audio tape, one fantasized that he was the rapist in both the slide-audio show and the rape tape, and one subject described fantasizing about "forcing a beautiful girl to have intercourse" without direct mention of the experimental stimuli. It is interesting to note that while the content of the



**Fig. 1.** Reported sexual arousal to fantasies as a function of earlier exposure and sexual orientation.

rape tape was mentioned as the basis for four fantasies, variations not found in the tape such as forced fellatio were also described. Sexual arousal levels reported in response to the violent fantasies were high ( $\bar{X} = 51\%$ ), even for the two subjects who had been classified as non-force oriented ( $\bar{X} = 47.5\%$ ).

Taken together, the arousal and content data during the fantasy period suggest that exposures to rape stimuli may stimulate in some subjects arousing rape fantasies. It is not possible to determine from the present design whether exposure to the rape version of the slide-audio show alone may have had a similar impact or whether it is the repetition of violent

themes that is critical. The fact that the content of the violent fantasies was primarily related to the rape-audio tape, a stimulus to which all subjects had been exposed, suggests that the repetitive presentation of rape may have been responsible for the effect observed.

The possibility that violent fantasies may be stimulated by mass media exposures merits some concern (Malamuth, 1978). To the extent that such fantasies persist beyond the confines of the laboratory, they may contribute to deviant behaviors. It has been suggested (McGuire *et al.*, 1965) that masturbation to a fantasy may play an important role in the formation and shaping of sexually deviant behaviors. In fact, many treatment approaches have been specifically designed to alter deviant sexual fantasies as a means of modifying deviant behavior (Bentler, 1968; Brownell *et al.*, 1977; Davison, 1968; Marshall, 1973; Marshall and Barbaree, 1978; Mees, 1966), although it is clear that there is no simple relationship between fantasies and sexual behavior, and it is certainly possible that the presence of rape fantasies will not affect other responses (Barlow, 1974; Malamuth *et al.*, 1977). However, in keeping with the possibility that violent sexual fantasies may have undesirable effects is the consistent finding that sexual responsiveness to sexual violence is associated in college students with a callous attitude towards rape and rape victims and with a self-reported possibility of raping (Malamuth *et al.*, 1980a; Malamuth and Check, 1979; Malamuth *et al.*, 1979; Tieger, 1979).

Future research should examine the specific conditions under which fantasy and arousal patterns are altered by exposure to sexually violent stimuli as well as the consequences of such changes for rape-related attitudes and behavior. Ethical concerns may, however, limit this type of research, although the widespread availability of such mass-media stimuli argues for further empirical research within the boundaries imposed by ethical considerations. If repeated exposures to these stimuli may indeed contribute to the development of antisocial attitudes and behavior, ethical questions may also be raised about failing to examine this possibility adequately.

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