Violent Pornography and Self-Reported Likelihood of Sexual Aggression

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Two hundred twenty-two undergraduate males were administered an "attitudes survey" examining pornography use, attitudes, and self-reported likelihood of rape (LR) or using sexual force (LF). Nonviolent pornography was used by 81% of subjects within the last year, whereas 41 and 35% had used violent and sexually violent pornography, respectively. Twenty-seven percent of subjects indicated some hypothetical likelihood of raping or using sexual force against a woman. Discriminant function analysis revealed that use of sexually violent pornography and acceptance of interpersonal violence against women were uniquely associated with LF and LR. It is hypothesized that the specific fusion of sex and violence in some pornographic stimuli and in certain belief systems may produce a propensity to engage in sexually aggressive behavior. Results are interpreted in terms of Malamuth and Briere's (1986, *Journal of Social Issues,* **42,** 75–92) model of the effects of sexually violent media. © 1988 Academic Press, Inc.

Perhaps one of the most controversial areas of social psychology concerns the potential effects of sexually explicit media materials on sexual violence. Although the U.S. Commission on Obscenity and Pornography (1970) concluded that such stimuli had no known deleterious or antisocial effects,

early criticism of the Commission's report (e.g., Berkowitz, 1971; Cline, 1974; Dienstbier, 1977) stimulated a "new wave" of research in this area. Such research has generally modified the Commission's conclusions, suggesting, for example, that the effects of sexual arousal on subsequent behavior are related to the type of erotic materials used to induce such arousal. Specifically, it appears that early studies (including those summarized by the Commission) failed to include materials of a sexually violent or aggressive nature and did not examine the possibility that exposure to such stimuli could have specific effects on violence against women as opposed to aggression in general (Malamuth, 1984; Malamuth & Briere, 1986).

Recent research on the effects of aggressive-pornographic[1] media portrayals indicate that, contrary to earlier expectations, exposure to such materials may lead to men's increased acceptance of interpersonal violence against women (e.g., Demaré, 1985; Malamuth & Check, 1981a), more frequent violent sexual fantasies (Malamuth, 1981a), and a greater willingness to aggress against women in a laboratory setting (e.g., Donnerstein & Barrett, 1978; Malamuth, 1984). There is also evidence that exposure to sexually violent depictions may alter the recipient's perception of women and rape. Linz, Donnerstein, and Penrod (1984), for example, exposed subjects to a relatively large "dose" (approximately 2 hours per day for 5 days) of feature-length sexually violent films and found evidence of a desensitizing effect—subjects perceived the films to be less violent, less offensive, and less degrading to women by the last day of viewing. In addition, these subjects later rated the victim in a videotaped rape trial as less injured than did a control group of subjects who saw no such films.

Although the studies to date suggest reason for concern that sexually violent depictions may influence viewers' attitudes, perceptions, and, under certain circumstances, behavior toward women, the research falls short of predicting to what extent one's viewing of violent pornography might translate into a propensity to rape or commit other forms of sexual violence. In this regard, Malamuth and Briere (1986) hypothesize an "indirect" model of pornography effects. Specifically, sexually violent media and other social stimuli, in combination with person-specific variables (e.g., childhood experiences) are thought to produce rape-supportive cognitions and perceptions which, in the context of other phenomena (e.g., peer support), may generate sexually aggressive behaviors or proclivities. From this perspective, exposure to certain types of media stimuli

[1] The term "pornography" is used in its most general context in this paper, referring to sexually explicit materials which may or may not contain violence against women. This definition seeks to avoid current disagreements over where "erotica" ends and "pornography" begins.

may be viewed as a contributory, but perhaps not sufficient, condition in the development of sexual aggression.

Despite the possible importance of pornography in the study of sexual aggression, however, this variable has been poorly defined in the literature, especially in terms of discriminating between violent and nonviolent stimuli (Malamuth, Check, & Briere, 1986). Instead, researchers in this area typically rely on subjects' own notions of what constitutes "pornography," and do not address the relative presence or absence of violence, per se. Given the possible differential impact of violent versus nonviolent depictions on subsequent behavior, this ambiguity may limit the interpretability of nonspecific pornography effects studies.

One study which did discriminate between types of sexually explicit material, however, correlated university males' exposure to violent and nonviolent pornography with their attitudes toward women and rape (Garcia, 1986). The author found that although consumption of nonviolent pornography did not correlate with such attitudes, there was a small association between violent pornography use and both traditional attitudes regarding women and greater "pro rape" beliefs. Unfortunately, this research utilized a simple correlational design (averaged rs) and did not relate pornography use to any measure of sexually violent proclivities or behaviors.

Another problem in research on sexually violent media involves, in fact, the covariation between subjects' endorsements of rape-supportive beliefs and their use of pornography. In the presence of a significant association between these two variables (e.g., Briere, Corne, Runtz, & Malamuth, 1984; Garcia, 1986), it is unclear whether a pornography effect may, in actuality, constitute a preexisting attitudes effect. For example, the current literature cannot rule out the possibility that sexually violent attitudes and beliefs might create interest both in pornography and in sexually violent behavior, such that any relationship found between pornography use and sexual violence would be spurious.

A study designed to address such covariation might compare the importance of attitude versus pornography variables in the statistical prediction of some concomitant measure of sexual violence. For example, one relatively conservative approach (Briere, in press) might be to examine the effects of each variable controlling for the effects of all others (the simultaneous least-squares method) or a test might be made of the incremental contribution of pornography use after the effects of rape-supportive attitudes had been established (the hierarchical least-squares method). Given Malamuth and Briere's model of indirect pornography effects, one would expect violent pornography use to be associated with sexual violence above and beyond rape-supportive attitude effects, since such pornography is hypothesized to impact on a variety of intermediate

variables including, but not limited to, attitudes and beliefs. If, however, pornography use is merely a correlate of rape-supportive attitudes, use of sexually violent materials would not make a unique contribution to the prediction of sexually violent behaviors or proclivities.

Given the concerns outlined above, the present study sought to address two issues. The first involved the accurate assessment of males' use of violent and nonviolent pornography. Emphasis was therefore placed on differentiating between these two types of materials. Moreover, because sexually violent pornography involves both themes that contain explicitly sexual content (e.g., rape and forced sexual acts) and themes that are more overtly aggressive or "sadistic" (e.g., bondage, whipping, or torture), and given the potentially different impacts of each, an attempt was made to differentiate between use of predominantly violent versus sexually violent pornographic materials.

Our second interest was to examine the association between use of these three forms of pornography (nonviolent, violent, and sexually violent) and measures of subjects' self-reported propensity to engage in sexual aggression. Based on the existing literature, we hypothesized that sexually violent pornography (SVP) use would be associated with self-reported likelihood of sexual violence, whereas use of nonviolent pornography (NVP) would not. The relationship between use of predominantly violent pornography (VP) and the criterion measure was less easily hypothesized. One might argue that this type of material is similar to completely nonsexual aggression (e.g., battery or assault), and thus less related to acts of rape and other seemingly sexual crimes. Previous research, however, has established a link between sexual arousal to nonsexual aggression and arousal to rape (e.g., Abel, Barlow, Blanchard, & Guild, 1977; Malamuth et al., 1986). These findings suggest that VP effects might lie somewhere between the anticipated nil effects of NVP and the hypothesized significant impact of SVP. Alternatively, a "feminist" analysis, stressing the violent, misogynist aspects of rape (e.g., Brownmiller, 1975; Burt, 1980), might predict that VP would be *most* associated with self-reported likelihood of sexual aggression.

METHOD

Two hundred twenty-two male undergraduate students were randomly selected from an introductory psychology subject pool and administered an "attitudes survey." This questionnaire consisted of 175 items tapping sexual and social attitudes, beliefs, perceptions, and behaviors. In addition to items pertaining to use of sexually violent, predominantly violent, and nonviolent pornography, scales developed by Burt (1980) assessing rape-myth acceptance (RMA), acceptance of interpersonal violence against women (AIV), and adversarial sexual beliefs (ASB) were included. These scales have been shown in a number of studies to relate to subjects' self-reports of both a likelihood of violence against women and actual instances of sexual aggression (e.g., Briere, 1987; Briere et al., 1984; Malamuth, 1981a,

1981b, Malamuth et al., 1986). Also present were the short form of Spence and Helmreich's (1978) Attitudes toward Women Scale (AWS), and two items measuring self-reported likelihood of rape (LR) and of using sexual force (LF). The latter two variables were derived from a question which stated "If you could be assured that no one would know and that you could in no way be punished for engaging in the following acts, how likely, if at all, would you be to commit such acts as . . . ." Embedded within distractor items such as "oral sex" and "group sex" were the two variables of interest: "rape," and "forcing a woman to do something sexual that she didn't really want to do," each rated on a 5-point scale ranging from "not at all likely" to "very likely." The LR item has been related to a variety of attitudinal, physiological, and behavioral indices of actual sexual aggression (e.g., Briere & Malamuth, 1983; Malamuth, 1981a, 1981b; Malamuth & Check, 1983; Tieger, 1981), leading Malamuth (1984) to argue for its construct validity as a measure of relative propensity to rape. The LF item has been used successfully to identify males hypothetically prone to sexual aggression who nevertheless indicate no likelihood of raping (Briere & Malamuth, 1983).

Subjects' use of pornography was assessed by their responses to the question "In the last year, how often have you used sexually explicit or pornographic materials (e.g., books, magazines, films, videotapes) that depicted . . . ." Following this question were 11 different acts, each rated on a 7-point scale ranging from "never" to "daily." Embedded within distractor items such as "group sex" and "female homosexual acts" were those acts used in the present study to identify three categories of pornography: explicitly sexually violent (SVP), represented by the higher frequency of two acts, (a) "a man forcing a woman to perform a sexual act against her will" or (b) "rape of a woman (or women) by a man (or many men)"; violent (VP), represented by the highest frequency of three acts; (a) "bondage of women," (b) "torture or mutilation of women," or (c) "whipping, spanking, or beating of women"; and nonviolent (NVP), represented by the frequency of the final item, "mutually consenting sex between a man and a women (not involving any of the above themes)."[2]

Statistical analysis proceeded in three stages. In the first stage, the distributions of the pornography frequency data were examined for evidence of extremely positive or negative skew. In the event of significant departure from normality, a procedure recommended by Tabachnick and Fidell (1983) was employed: for positive skew a log 10 transformation was applied, whereas negatively skewed distributions were first "reflexed" (reversed) to a positive skew, then subjected to a log 10 transformation. The second stage involved converting subjects' LR and LF scores into one of three categories of increasing sexual violence, as per Briere and Malamuth (1983): (1) no future likelihood of force or rape (LF$^-$/LR$^-$), (2) some future likelihood of force but not rape (LF$^+$/LR$^-$), or (3) some future likelihood of both force and rape (LF$^+$/LR$^+$). Although a fourth combination of LF and LR was also possible (LF$^-$/LR$^+$), this category was eliminated given the counterintuitive notion of considering rape but not sexual force (Briere & Malamuth, 1983). The final stage of analysis involved using the Burt (1980) and Spence and Helmreich (1978) attitude scales (RMA, AIV, ASB, AWS) and the transformed pornography categories (SVP, VP, NVP) to discriminate between the three levels of willingness to commit sexual violence. Two separate discriminant function analyses were planned for this last stage: first, a simultaneous analysis

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[2] Although NVP was easily defined as depictions of "consenting" sexual contact, it was felt that SVP and VP, being more complex stimuli, might require more than one type of act to adequately tap their presence. In both cases, the act with the highest frequency was used to represent the relevant pornography category, since summing the options within a category might produce an inflated value. For example, exposure to a portrayal involving torture, bondage, and whipping is nevertheless a single, albeit complex, event—not three, as would be indicated by a summative measure of violent pornography.

TABLE 1

FREQUENCY DISTRIBUTIONS OF LF AND LR FOR THREE LIKELIHOOD
OF FORCE AND/OR RAPE GROUPS

Score[a]	LF$^-$/LR^{-b}		LF$^+$/LR^{-c}		LF$^+$/LR^{+d}	
	LF	LR	LF	LR	LF	LR
1	150	150	0	33	0	0
2	0	0	20	0	3	3
3	0	0	12	0	7	8
4	0	0	1	0	3	3
5	0	0	0	0	2	1
Total	150	150	33	33	15	15

[a] A score of 1 indicates no likelihood; a score of 5 indicates very high likelihood.
[b] Subjects reporting no likelihood of force or rape.
[c] Subjects reporting some likelihood of force but not rape.
[d] Subjects reporting some likelihood of both force and rape.

of all attitude and pornography variables to assess the unique contributions of each to a discrimination among levels of potential sexual aggression, and second, a hierarchical entry procedure entering the attitudinal variables first, then assessing the additional discriminatory power afforded by each of the pornography variables.

RESULTS

Seventeen of the 222 subjects in this study failed to complete the entire questionnaire, and thus were omitted from subsequent analyses. Of the 205 remaining subjects, 150 (73%) were classified as LF$^-$/LR$^-$, 33 (16%) as LF$^+$/LR$^-$, and 15 (7.5%) as LF$^+$/LR$^+$. Seven subjects (3.5%) indicated some likelihood of rape but not force (LF$^-$/LR$^+$) and were eliminated from further analysis. Frequency distributions of LF and LR for the remaining three groups appear in Table 1.

As had been anticipated, frequency distributions for the pornography variables were highly skewed—positively for SVP and VP, and negatively for NVP. Even after intervals in each scale were collapsed to three broader levels (1 = "never," 2 = "1–2 times," 3 = "more often"), skewness was 1.15, 0.95, and −0.64, respectively. Log 10 transformations reduced this skewness by an average of 0.28. As shown in Table 2, 81% of subjects had used nonviolent pornography in the past year, as compared to 41% and 35% for predominantly violent and sexually violent pornography, respectively. Users of one type of pornography were also more likely to use the remaining types as well, as indicated by the correlations between NVP and SVP ($r = .31$), NVP and VP ($r = .35$), and SVP and VP ($r = .57$), all of which were significant at $p < .001$ (see Table 3).

TABLE 2
FREQUENCY DISTRIBUTIONS FOR THREE[a] TYPES OF PORNOGRAPHY USE

Frequency of use during last year	SVP		VP		NVP	
	f	%	f	%	f	%
Never	129	65	117	59	38	19
1–2 times	43	22	56	28	58	29
More often	26	13	25	13	102	52
Total	198	100	198	100	198	100

[a] SVP, sexually violent pornography; VP, violent pornography; NVP, nonviolent pornography.

Discriminant Function Analyses

Simultaneous analysis. When all attitude and pornography variables were entered into the discriminant equation simultaneously, one significant function resulted, $R_c = .453$, χ^2 (14) $= 46.26$, $p < .0001$. As shown in Table 4, both the discriminant structure coefficients and the univariate F tests indicate that attitudes (AWS, RMA, AIV, ASB) and pornography use (SVP, VP, NVP) discriminated among levels of potential sexual aggression. Inspection of the standardized discriminant function coefficients, however, reveals that only one attitude scale (AIV) and one type of pornography use (SVP) made unique contributions to the discriminant equation. Analysis of the group centroids indicated that the attitudinal and pornographic variables could not discriminate between LF^-/LR^- and LF^+/LR^- ($F(7, 189) = 1.15$, ns), but that LF^+/LR^+ subjects scored

TABLE 3
INTERCORRELATION OF ATTITUDE AND SELF-REPORTED PORNOGRAPHY USE VARIABLES[a]

	RMA	AIV	ASB	AWS	SVP[1]	VP[2]	NVP[3]
RMA	1.0	**.59**	**.55**	**−.54**	.05	.06	.08
AIV		1.0	**.39**	**−.40**	.03	.07	−.03
ASB			1.0	**−.45**	.05	.12	−.06
AWS				1.0	−.01	−.09	−.04
SVP					1.0	**.57**	**−.31**
VP						1.0	**−.36**
NVP							1.0

Note. Boldface correlations are significant at $p \leq .01$ (one-tailed test).

[a] RMA, Rape-Myth Acceptance; AIV, Acceptance of Interpersonal Violence against women; ASB, Adversarial Sexual Beliefs; AWS, Attitudes toward Women Scale; SVP, sexually violent pornography use; VP, violent pornography use; NVP, nonviolent pornography use (reversed; therefore the sign is the opposite of the true relationship).

TABLE 4

MEANS AND STATISTICAL SIGNIFICANCE OF PREDICTOR VARIABLES FOR THREE LEVELS OF LIKELIHOOD OF FORCE AND/OR RAPE

Variable	Means[a]			$F(2, 195)$	p	c_{str}[b]	c_{sta}[c]
	LF^-/LR^-	LF^+/LR^-	LF^+/LR^+				
RMA	45.0^a	49.5^b	57.3^a	7.01	.0011	**.523**	.052
AIV	16.2^a	17.6^b	22.9^{ab}	10.89	.0001	**.656**	**.471**
ASB	30.8^a	32.2^b	37.9^a	5.84	.0034	**.479**	.135
AWS	31.3^a	29.9^b	25.6^a	5.45	.0048	**-.466**	-.202
SVP^d	0.10^a	0.16^b	0.33^a	12.21	.0001	**.696**	**.662**
VP^e	0.13^a	0.16^b	0.27^a	4.35	.0147	**.415**	-.111
NVP^f	0.20^a	0.14^b	0.06^a	4.30	.0149	**-.402**	-.224
centroids	-0.22	0.26	1.65				

^{a} Means sharing a common superscript are different at $p < .05$ (Scheffe).
^{b} Discriminant function structure coefficients, considered meaningful (boldface) at $c \geqslant .35$.
^{c} Discriminant function standardized coefficients, considered meaningful (boldface) at $c \geqslant .35$.
^{d} Sexually violent pornography use, log 10 transformed.
^{e} Violent pornography use, log 10 transformed.
^{f} Nonviolent pornography use, reversed and log 10 transformed.

TABLE 5

DISCRIMINANT FUNCTION COEFFICIENTS AND STEP 2 Fs TO ENTER

FOR HIERARCHICAL ANALYSIS

Variable	$c_{str}{}^{a}$	$c_{sta}{}^{b}$	F to enter^{c}	p
RMA	.532	.005	—	—
AIV	.672	.507	—	—
ASB	.491	.163	—	—
AWS	−.477	−.189	—	—
SVP	.711	.684	—	—
VP	—	—	0.049	ns
NVP	—	—	1.109	ns

^{a} Discriminant function structure coefficients. considered meaningful (boldface) at $c >$ .35.

^{b} Discriminant function standardized coefficients, considered meaningful (boldface) at c $> .35$.

^{c} Fs to enter for variables before step 3.

higher on the function than did LF^{+}/LR^{-} subjects ($F(7, 189) = 2.91$, $p < .007$) or LF^{-}/LR^{-} subjects ($F(7, 189) = 6.61$, $p < .0001$).

Hierarchical analysis. Hierarchical discriminant analysis began with the simultaneous entry of the four attitude variables, after which the three pornography variables were allowed to complete for stepwise entry (given a minimum F to enter of 1.5). Entry of the attitude variable set (step 1) resulted in a significant discriminant equation, $F(8, 384) = 3.23$, $p < .0014$. At this point (prior to step 2), the Fs to enter for the three pornographic variables were as follows: SVP, $F(1, 190) = 9.72$, $p <$ .001; NVP, $F(1, 190) = 3.70$, ns; and VP, $F(1, 190) = 2.57$, ns. At step 2 SVP was entered, after which the Fs to enter for the remaining two pornography variables dropped below 1.5. The final discriminant function, containing the four attitude scales and the SVP variable, was highly significant, $R_{c} = .445$, $\chi^{2}(10) = 43.84$, $p < .0001$. Examination of the standardized and structure coefficients reveals that although all four attitude scales and SVP were meaningful discriminators of likelihood of sexual aggression, only AIV and SVP made unique contributions (see Table 5).

DISCUSSION

The findings of the present study may be divided into two areas: (1) the frequency of university males' self-reported likelihood of sexual aggression and the extent of their use of pornography, and (2) the relative importance of subjects' attitudes and recent use of three forms of pornography in discriminating self-reported willingness to rape and/or use sexual force.

Likelihood of Sexual Aggression and Use of Pornography

The current findings are in agreement with similar studies reporting that many university males, given a hypothetical absence of penality, express some willingness to rape or sexually aggress against a women. Interestingly, the combined frequencies of LF and LR in the present study were approximately half the magnitude (27% vs 60%) of those reported by Briere and Malamuth (1983), even though the samples were drawn from universities of generally equivalent undergraduate stature within the same city. Data available to the authors, however, indicate that despite roughly equivalent SES, the current sample includes subjects of a younger age and lesser sexual experience, the latter of which has been tied to lower self-reported sexual aggression in at least one study (Kanin, 1957). It should be noted, however, that despite the lower level of self-reported LR and LF in the present study, the relationship between these variables—and their association with the attitude variables—appears highly similar to other data in this area (e.g., Briere & Malamuth, 1983; Malamuth, 1981a, 1981b).

Results from the present study suggest that pornographic materials, both violent and nonviolent, are widely used among university males. More than three quarters of the current sample reported using nonviolent, sexually explicit materials within the last year, and nearly half used some form of pornography depicting violence against women. Use of one type of pornography was also associated with use of other forms, especially in the case of SVP and VP.

Discriminating Likelihood of Sexual Aggression

The results of both the simultaneous and hierarchical discriminant analyses suggest that self-reported likelihood of sexual aggression is a partial function of conservative and rape-supportive attitudes and use of pornographic materials. The finding vis-à-vis attitudes was not unexpected, given other data in this area, although the contribution of conservative attitudes toward women is a newer finding. Interestingly, although the discriminant structure coefficients, which examine the correlation of each variable with the entire discriminant function, suggest that all attitude variables were meaningful discriminators, the standardized discriminant coefficients indicate a more specific relationship. The latter, which portray the effects of each variable controlling for the effects of every other variable in the equation, indicate that only acceptance of interpersonal violence (AIV) made a unique contribution to attitudinal discrimination. Thus, it appears that conservative attitudes toward women, adversarial sexual beliefs, and rape-myth acceptance may allow discrimination between

levels of LR/LF only to the extent that they covary with acceptance of interpersonal violence against women.

Perhaps the most significant finding in the present study, however, is the differential contributions of various types of pornography use in discriminating self-reported likelihood of sexual violence. Although all three types of pornography use correlated with the significant discriminant function (as indicated by the structure coefficients), both the standardized coefficients and the hierarchical results indicated that only sexually violent pornography use made a unique contribution. In other words, although predominantly violent and nonviolent pornography use correlate, to some extent, with likelihood of sexual aggression, this relationship may be an artifact of their correlations with use of sexually violent materials. Such data suggest a specific effect of sexually violent pornography that does not occur for either predominantly violent or strictly sexual depictions.

AIV and SVP: The Fusion of Sex and Violence

The unique importance of acceptance of interpersonal violence and use of sexually violent pornography in the current discriminant results is intriguing in that they both contain themes involving a combination of sex and violence. As noted by Briere, Malamuth, and Check (1985), the AIV scale consists of several orthogonal components, the largest of which they name "women enjoy sexual violence" (p. 339). Specifically, the AIV includes items such as "being roughed up is sexually stimulating to many women" and "sometimes the only way a man can get a cold woman turned on is to use force," concepts not well represented in Burt's other scales (ASB, RMA) or the AWS. Similarly, sexually violent pornography can be discriminated from predominantly violent and non-violent pornography by the former's fusion of sexual and violent stimuli (Malamuth, 1984). Given the specific power of AIV and SVP to predict likelihood of sexual aggression, the present authors suggest that it is the unique combination of support for sex and aggression in some pornographic stimuli and certain attitudes that produces a proclivity toward sexual violence, a tendency that may interact with other relevant variables (e.g., peer support for violence) to result in actual sexual aggression (Malamuth, 1984; Malamuth & Briere, 1986).

Finally, the hierarchical analysis reported in the present study suggests that pornography use is not primarily the result of preexisting rape-supportive attitudes, since SVP made a meaningful contribution to discrimination even after attitude effects were held constant. Further, the simultaneous discriminant results reveal large and relatively equal standardized coefficients for AIV and SVP, indicating that each is a good discriminator independent of the other. Such data offer partial support for Malamuth and Briere's (1986) multifactor model of the etiology of

sexual violence by suggesting, for example, two separate "routes" to self-reported likelihood of sexual aggression (attitudes and pornography), and by providing further evidence for the hypothesis that the specific fusion of sex and violence may contribute to sexual aggression.

In the absence of a causal analysis, however, the current data do not directly support or disconfirm the assertion of the Malamuth and Briere model that rape-supportive attitudes are partially the result of exposure to pornography and other social phenomena, although it should be noted that, unlike Garcia (1986) and Briere et al. (1984), simple correlation analysis in the present study did not reveal significant associations between attitudes and pornography per se. These findings are also constrained by the possibility that the youth and low sexual experience of the current sample may have decreased the overall amount of self-reported likelihood of sexual violence, relative to other university samples. Finally, the correlational nature of the current data obviously precludes any concrete conclusions regarding the causal antecedents of sexual violence. In this regard, further research in this area might (a) use causal modeling or path analytic procedures to examine the directional relationship between sexually violent pornography use, rape-supportive attitudes, and sexual violence, with special attention to intermediate variables that might moderate these relationships, and (b) use as criterion variables additional indices of sexual aggression (e.g., self-reports of past behavior), since recent research (Malamuth, in press) suggests that sexual aggression is a multidimensional phenomenon which may be best studied with several different measures.

In conclusion, data from the current investigation indicate that (a) both nonviolent and violent pornographic materials were commonly used by at least one sample of university males, and (b) males' use of sexually violent pornography was specifically associated with self-reported hypothetical likelihood of engaging in sexual aggression against women. Along with the data on sexually violent attitudes, these findings emphasize the possible social component of sexual violence, and suggest that, to the extent that LF/LR measures approximate actual sexual aggression, certain forms of pornographic stimuli may have specific antisocial effects.

REFERENCES

Abel, G. G., Barlow, D. H., Blanchard, E., & Guild, D. (1977). The components of rapists' sexual arousal. *Archives of General Psychiatry, 34,* 895–903.

Berkowitz, L. (1971, May). Sex and violence: We can't have it both ways. *Psychology Today,* pp. 14–23.

Briere, J. (in press). Controlling for family variables in abuse effects research: A critique of the "partialling" approach. *Journal of Interpersonal Violence.*

Briere, J. (1987). Predicting likelihood of battering: Attitudes and childhood experiences. *Journal of Research in Personality, 21,* 61–69.

Briere, J., Corne, S., Runtz, M., & Malamuth, N. M. (1984). *The Rape Arousal Inventory: Predicting actual and potential sexual aggression in a university population.* Paper presented at the Annual Meeting of the American Psychological Association, Toronto.

Briere, J., & Malamuth, N. M. (1983). Self-reported likelihood of sexually aggressive behavior: Attitudinal versus sexual explanations. *Journal of Research in Personality,* **17,** 315–323.

Briere, J., Malamuth, N. M., & Check, J. V. P. (1985). Sexuality and rape-supportive beliefs. *International Journal of Women's Studies,* **8,** 398–403.

Brownmiller, S. (1975). *Against our will: Men, women, and rape.* New York: Simon and Schuster.

Burt, M. R. (1980). Cultural myths and support for rape. *Journal of Personality and Social Psychology,* **38,** 217–230.

Cline, V. B. (1974). Another view: Pornography effects, the state of the art. In V. B. Cline (Eds.), *Where do you draw the line?* Provo, UT: Brigham Young Univ. Press.

Demaré, D. (1985). *The effects of erotic and sexually violent mass media on attitudes toward women and rape.* Unpublished manuscript, University of Winnipeg, Winnipeg, Manitoba.

Dienstbier, R. A. (1977). Sex and violence: Can research have it both ways? *Journal of Communication,* **27,** 176–180.

Donnerstein, E., & Barrett, G. (1978). Effects of erotic stimuli on male aggression toward females. *Journal of Personality and Social Psychology,* **36,** 180–188.

Garcia, L. T. (1986). Exposure to pornography and attitudes about women and rape: A correlational study. *Journal of Sex Research,* **22,** 378–385.

Kanin, E. J. (1957). The examination of sexual aggression as a response to sexual frustration. *Journal of Marriage and the Family,* **63,** 177–204.

Linz, D., Donnerstein, E., & Penrod, S. (1984). The effects of multiple exposures to filmed violence against women. *Journal of Communication,* **34,** 130–147.

Malamuth, N. M. (1981a). Rape proclivity among males. *Journal of Social Issues,* **37,** 138–157.

Malamuth, N. M. (1981b). Rape fantasies as a function of exposure to violent sexual stimuli. *Archives of Sexual Behavior,* **10,** 33–47.

Malamuth, N. M. (1984). Aggression against women: Cultural and individual causes. In N. M. Malamuth and E. Donnerstein (Eds.), *Pornography and sexual aggression.* New York: Academic Press.

Malamuth, N. M. (in press). A multidimensional approach to sexual aggression: Combining measures of past behavior and present likelihood. In R. A. Prentke & V. L. Quinsey (Eds.), *Sexual aggression: Current perspectives* (special issue), *Annals of the New York Academy of Sciences.* New York: New York Academy of Sciences.

Malamuth, N. M., & Briere, J. (1986). Sexual violence in the media: Indirect effects on aggression against women. *Journal of Social Issues,* **42,** 75–92.

Malamuth, N. M., & Check, J. V. P. (1981a). *The effects of exposure to aggressive pornography: Rape proclivity, sexual arousal and beliefs in rape myths.* Paper presented at the Annual Meeting of the American Psychological Association, Los Angeles.

Malamuth, N. M., & Check, J. V. P. (1981b). The effects of mass media exposure on acceptance of violence against women: A field experiment. *Journal of Research in Personality,* **15,** 436–446.

Malamuth, N. M., & Check, J. V. P. (1983). Sexual arousal to rape depictions: Individual differences. *Journal of Abnormal Psychology,* **92,** 55–67.

Malamuth, N. M., Check, J. V. P., & Briere, J. (1986). Sexual arousal in response to aggression: Ideological, aggressive, and sexual correlates. *Journal of Personality and Social Psychology,* **50,** 330–340.

Spence, J. T., & Helmreich, R. (1978). *Masculinity and femininity: Their psychological dimensions, correlates, and antecedents.* Austin: Univ. of Texas Press.

Tabachnick, B. S., & Fidell, L. S. (1983). *Using multivariate statistics.* New York: Harper & Row.

Tieger, T. (1981). Self-reported likelihood of raping and the social perception of rape. *Journal of Research in Personality, 15,* 147–158.

United States Commission on Obscenity and Pornography (1970). *The report of the commission on obscenity and pornography.* New York: Bantam Books.