

Men's Likelihood of Sexual Aggression: The Influence of Alcohol, Sexual Arousal, and Violent Pornography

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Previous research findings have indicated that both alcohol intoxication and violent pornography exposure may contribute to increased sexual aggression by men. This study used an experimental paradigm to examine the effects of a moderate alcohol dose, alcohol-related beliefs, and victim response on men's self-reported likelihood of committing sexual aggression. A community sample of male social drinkers ($N = 84$) participated in an experiment in which they read an eroticized rape depiction after completing an alcohol administration protocol. The stimulus story varied whether the victim, who initially expressed unwillingness to engage in sexual activity, expressed pleasure or distress in response to the man physically forcing her to perform several explicit sex acts. A path analytic model illustrated that participants' self-reported likelihood of behaving like the sexual aggressor in the story was directly related to their own sexual arousal. Heightened sexual arousal was reported by participants who had consumed alcohol, those who read the victim-pleasure story, and those who believed that drinking women are sexually vulnerable. Results suggest that sexual arousal to violent pornography, as influenced by acute alcohol intoxication and other factors, may be an important component of men's perceptions of their own sexual aggression likelihood. *Aggr. Behav.* 32:581–589, 2006. © 2006 Wiley-Liss, Inc.

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INTRODUCTION

Studies of male sexual aggression towards women indicate that both alcohol consumption and pornography¹ exposure, particularly violent pornography exposure, may independently contribute to an increase in sexual aggression [Malamuth et al., 2000; Testa, 2002]. Because alcohol and sexuality are clearly linked in this society [Crowe and George, 1989; George and Stoner, 2000], it is important to understand how the two might combine synergistically to increase even further the likelihood of male sexual aggression towards women. In particular, alcohol's effects on men's sexual arousal to violent pornography may be a key element in probing this link. The current experiment evaluated the hypothesis that the eroticization of violence and the presence of alcohol, through their effects on sexual arousal, influence men's self-reported likelihood of committing sexual assault.

¹The term "pornography" in this paper refers to any sexually explicit material. The term "violent pornography" refers specifically to sexually explicit material that contains acts of violence perpetrated by a man against a woman.

Pornography, Sexual Aggression, and Sexual Arousal

Investigations of the relationship between pornography and sexual aggression typically have assessed three types of dependent variables: attitudes that support sexual aggression, such as rape myth acceptance; actual aggressive behavior, such as the administration of shocks towards another person; or attraction to sexual aggression, such as the self-reported likelihood of committing sexually aggressive acts [Malamuth et al., 2000; Seto et al., 2001]. In their meta-analysis of studies examining pornography's effects on attitudes supporting sexual aggression, Allen et al. [1995b] found that for experimental studies, there was a significant

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positive relationship between pornography exposure, particularly violent pornography exposure, and attitudes supportive of sexual aggression. Regarding aggressive behavior exhibited in the laboratory, Allen et al.'s [1995a] meta-analysis indicated that exposure to both non-violent and violent pornography increased aggressive laboratory behavior. For measures of attraction to sexual aggression, frequency of exposure to pornography in general, and violent rape pornography in particular, has been positively associated with self-reported likelihood of forced sex, rape, and sexual aggression [Boeringer, 1994; Check and Guloien, 1989; Demare et al., 1988, 1993]. In sum, the results from these three lines of studies consistently reveal a relationship between pornography exposure and sexual aggression supportive attitudes, aggressive behavior, and attraction to sexual aggression.

One possible mechanism underlying the link between violent pornography exposure and sexual aggression likelihood is sexual arousal. In regard to violent pornography, Malamuth and his colleagues have found a correlation between sexual arousal and men's self-reported likelihood of sexual assault, such that as sexual arousal increases, likelihood of sexual aggression also increases [Malamuth and Check, 1980; Malamuth et al., 1980b]. This effect may be specific to violent pornography, in that several studies have found that pre-exposure to depictions of rape increased sexual arousal to later depictions of rape, while prior exposure to consensual sex depictions did not [Malamuth and Check, 1980; Malamuth et al., 1980a; Marshall et al., 1991]. Moreover, studies comparing rapists to other men have fairly consistently found that rapists, on average, have a greater sexual response to non-consensual sex depictions than do non-offenders, indicating that sexual arousal to coercive stimuli may motivate some men towards sexually aggressive behavior [for a review, see Lalumiere et al., 2003]. Because sexual arousal to violent sexual stimuli predicts increased sexual aggression likelihood, discriminates between rapists and non-rapists, and plays a prominent role in models of sexual aggression [Barbaree and Marshall, 1991], a better understanding of factors that influence sexual arousal to violent pornography is warranted. We sought to extend previous research by examining three factors that may influence men's sexual response to violent pornography: a situational factor of acute alcohol intoxication, an attitudinal factor of alcohol-related beliefs, and a stimulus factor of victim response.

Acute Alcohol Intoxication

Acute alcohol intoxication is one situational factor predictive of male sexual response to pornography and men's sexual aggression likelihood [Crowe and George, 1989]. Research consistently reveals a psychological effect of alcohol on men's sexual arousal to sexually explicit stimuli, in that the belief that one has consumed alcohol (alcohol expectancy set) and beliefs about alcohol's effects (alcohol expectancies) facilitate men's sexual arousal, even in response to violent pornography [Bridgell et al., 1978; Crowe and George, 1989; George and Marlatt, 1986]. Although findings regarding the physiological effects of alcohol consumption on men's sexual arousal are inconsistent [George and Stoner, 2000], there is some evidence that when the expectation of alcohol is coupled with the actual ingestion of alcohol (as opposed to a placebo), men's sexual arousal to sexually explicit stimuli may be even further increased [Bridgell et al., 1978].

Experimental studies examining alcohol consumption, violent pornography, and sexual aggression likelihood have consistently found that intoxicated participants report a higher likelihood of sexual aggression after viewing violent pornography than do sober participants. Norris and Kerr [1993] found that intoxicated men rated themselves as more likely than sober men to behave like a male perpetrator in a violent pornographic rape depiction. Additionally, Norris et al. [2002] found that intoxicated men reported a greater likelihood of sexual aggression, although this relationship was indirect. Men who received alcohol perceived the male perpetrator's actions as less forceful and the female victim as experiencing more enjoyment than did sober men. The more enjoyment they perceived on the part of the victim, the greater their self-reported likelihood of behaving like the sexually aggressive male perpetrator in the pornographic stimulus. These findings are consistent with alcohol myopia and other cognitive disruption models of alcohol intoxication [Steele and Josephs, 1990; Taylor and Leonard, 1983], in that alcohol consumption may have impaired men's ability to focus on inhibitory cues, such as assailant violence and victim distress, thereby increasing their estimations of behaving like the depicted male perpetrator.

Alcohol-Related Beliefs

Through its presence in pornographic depictions, alcohol may also influence sexual arousal and sexual aggression likelihood by activating individually held

beliefs about alcohol's effects. For example, Norris and Kerr [1993] found that even for sober men, the presence of alcohol in violent pornography increased self-reported likelihood of sexual aggression. Additionally, Norris et al. [1999] found that men rated the victim of a pornographic rape as most disgusted with herself when she was portrayed as drinking alcohol, perhaps because of the societal stereotypes about drinking women. Research regarding perceptions of drinking women has indicated that, compared to their sober counterparts, drinking women are viewed by others as more sexually available and promiscuous and as targets for sexual aggression [George et al., 1988, 1995, 1997]. Such perceptions may create a self-fulfilling prophecy in which men who believe that drinking women are more sexually vulnerable also report a greater likelihood of committing sexual aggression against a drinking woman. Thus, in the present study we examined the effects of men's beliefs regarding drinking women's vulnerability to sexual aggression [Abbey et al., 1999] on their sexual arousal and sexual aggression likelihood after exposure to a violent pornographic stimulus in which the female character was drinking alcohol.

Victim Response

Research has shown that the response of the female character during the pornographic rape depiction is another key situational element predictive of men's sexual arousal and aggression responses [Malamuth and Check, 1980; Malamuth et al., 1980a,b]. These studies have found that sexual arousal to pornographic depictions of rape and subsequent sexual aggression likelihood were greater when the rape victim was portrayed as experiencing sexual arousal during the rape (as is typical of rape portrayals in pornography) rather than disgust. Alcohol intoxication has been shown to influence perceptions of the victim's response, with intoxicated men viewing the distressed victim as less disgusted with the perpetrator than did sober men [Norris et al., 1999]. Due to alcohol myopia effects [Steele and Josephs, 1990], intoxicated men presented with a rape victim experiencing pleasure may focus their attention to the salient cues of her arousal rather than other cues, such as the perpetrator's use of violence. As a result of this focusing effect, these men may report greater sexual arousal and higher sexual aggression likelihood than sober men or men presented with a distressed victim.

Study Overview and Hypotheses

The present study used experimental methodology to examine the potential role of sexual arousal in the relationship between pornography exposure and likelihood of sexual aggression. We limited our focus to the role of violent pornography on men's sexual aggression likelihood, given that this type of pornography has shown the strongest relationship to estimates of sexual aggression likelihood [Boeringer, 1994; Demare et al., 1988, 1993]. Because of our interest in understanding alcohol's impact on this process, we also examined the effects of alcohol consumption and alcohol-related beliefs on men's sexual arousal to a violent pornographic rape depiction in which the drinking victim expressed either pleasure or distress, as well as their subsequent self-reported likelihood of committing sexual aggression similar to that described in the pornographic stimulus.

A path analytic approach was used to examine the links between victim response, alcohol consumption, beliefs about drinking women's sexual vulnerability, self-reported sexual arousal, and participants' self-reported likelihood of sexual aggression. The proposed model (see Fig. 1) hypothesizes that intoxicated men would report greater sexual arousal to violent pornography and a higher likelihood of sexual aggression than sober men. We also anticipated that participants would report greater sexual arousal when the rape victim was portrayed as experiencing pleasure rather than disgust, and that this effect would be exacerbated for intoxicated men. Additionally, we hypothesized that as participants' sexual arousal increased, so would their self-

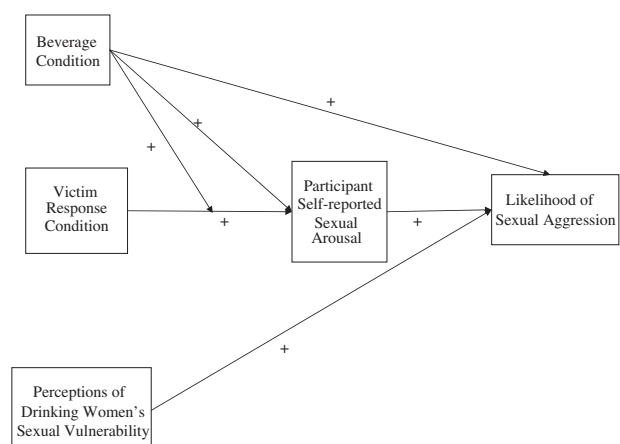


Fig. 1. Hypothesized model relating beverage condition, victim response condition, and beliefs about drinking women's sexual vulnerability to participants' self-reported sexual arousal and likelihood of sexual aggression.

reported likelihood of engaging in sexual aggression similar to that depicted in the pornographic rape scenario. Finally, we hypothesized that men who more strongly believed that drinking women are targets for sexually aggressive advances would report a higher likelihood of behaving like the male perpetrator in an eroticized rape of an intoxicated victim than would men without such beliefs.

METHOD

Participants

Male social drinkers ($N = 84$) between the ages of 21 and 45 were recruited through local newspaper advertisements in a large West Coast city. Callers were told that two separate studies (one involving questionnaires and paying \$10, one involving alcohol administration and paying \$25) of alcohol's effects on male–female interactions were being conducted. The experiment was described as two separate studies to decrease the likelihood that responses to questionnaires would influence responses to the dependent measures and to allow participants a greater sense of freedom to withdraw if they did not wish to participate in the second part of the study. Callers were also told that returning a follow-up questionnaire 3 weeks later would result in a final \$5 payment. Interested callers were screened to establish that they were free of health problems that would contraindicate alcohol consumption. Heavy drinkers (more than 35 drinks per week), abstainers (less than one drink per week), and those with a history of alcohol abuse were excluded from the study. Participants' mean (SD) age was 27.1 (5.3) years. Most (84.1%) identified themselves as European American/White, 3.7% as Asian/Pacific Islander, and the remaining 12.2% as African American/Black, Latino/Hispanic, Native American/American Indian, or other.

Design Overview

The study employed a 2×2 experimental design, crossing beverage condition (alcohol vs. control) with rape victim response (pleasure vs. distress). The target peak breath alcohol concentration (BAC) for participants who received alcohol was .07% (approximately 4–5 drinks). Rape victim response was manipulated through the use of a stimulus story that described an eroticized, violent rape in which the victim was portrayed as experiencing either pleasure or distress throughout the course of the rape. Dependent measures consisted of questionnaires in

which participants rated the amount of sexual arousal they experienced while reading the story, as well as their likelihood of behaving like the male perpetrator in the story.

Procedure

Upon arrival, a male experimenter checked the participant's identification for age and administered a breath analysis to ensure a BAC of 0% using an Intoxilyzer 5000 (CMI Inc., Owensboro, KY). Each participant provided informed consent for the questionnaire and experimental portions of the study separately. After completing the computerized questionnaire session, the participant was randomly assigned to either the alcohol condition or the control condition. Standard double-blind procedures were employed. Each participant was weighed to determine the amount of 100 proof vodka and tonic needed to achieve a BAC of .07% (dosage = .70 g alcohol/kg body weight). For the drinks containing alcohol, the vodka was mixed in a 1:5 ratio with tonic. Control participants were also weighed and subsequently drank a volume of pure tonic equivalent to what they would have received in the alcohol condition.

The male bartender poured three chilled drinks, the content of which was matched to the assigned experimental condition. The participant then had 3 min to consume each drink. After the last drink, the participant rinsed his mouth with water to reduce any residual alcohol fumes. During the absorption period, breathalyzer tests were conducted at 4-min intervals. Once the participant's BAC had reached the criterion point of .046%, the participant was given a computerized story to read and dependent measures to complete. If the participant's BAC did not reach .046% within 40 min, he was dropped from the study. The criterion of .046% was chosen to ensure that participants were still on the ascending limb of the blood alcohol level curve while reading the story and answering the dependent measures.

After an alcohol participant completed the study, the next participant was a control participant who was "yoked" to the alcohol participant. That is, although the control participant did not receive any alcohol, during the absorption period he was given the same number of breathalyzer tests at the same time intervals as his fellow alcohol participant. This type of yoking procedure ensured that any differences between the control and alcohol conditions were not due to differences in number of breathalyzer tests or time spent waiting between the

alcohol administration and stimulus administration phases of the experiment [Giancola and Zeichner, 1997].

After the beverage administration procedure, the participant received computerized instructions, read the stimulus story, and completed the dependent measures in private. Upon completion, the experimenter debriefed and paid the participant. Participants who had received alcohol were not released until their BAC fell below .03%.

Materials

Stimulus story. A stimulus story of approximately 1,600 words was employed. An initial dialogue occurred between the male and female characters during which it was established that each had consumed three–four glasses of wine. The male character then began to make sexual advances toward the female character. She expressed reluctance and confusion. His advances escalated while she initially resisted verbally and physically. After the first explicitly described sex act, the female character was described as experiencing either pleasure or distress, depending on the victim response condition, in response to the male character forcing her to perform several explicitly described sex acts.

Pretest measures. Participants completed a demographics questionnaire that assessed age, ethnicity, and other pertinent information. In addition, they completed the Alcohol Expectancies Regarding Sex, Aggression, and Sexual Vulnerability Questionnaire [Abbey et al., 1999] that consisted of 75 items answered on a 5-point scale (1 = “not at all” to 5 = “very much”). Because of our interest in men’s perception of intoxicated women’s vulnerability to sexual aggression, we focused only on this particular subscale. This subscale consisted of six items relating to women’s vulnerability to sexual coercion when drinking ($M = 3.55$, $SD = .72$, $\alpha = .88$), such as “when drinking alcohol, women are likely to be forced by their date to have sex”.

Dependent measures. After reading the stimulus story, participants completed six items that assessed their sexual arousal to the story. These items included: “How sexually aroused do you feel?”; “How much do you have an erection?”; “How much do you feel warm throughout your body?”; “How much do you feel warm specifically throughout your genitals?”; “How much do you feel a tingling or throbbing sensation in your genitals?”; and “How much do you feel any other genital sensations?” All items were rated on 7-point scales

(1 = “not at all” to 7 = “extremely”). Principal components factor analysis with varimax rotation was conducted, with one factor emerging. All six sexual arousal items loaded onto this factor. Thus, a participant sexual arousal scale was computed, consisting of these six items ($M = 2.98$, $SD = 1.62$; $\alpha = .96$). Additionally, one individual item, how much the participant would behave like the male character in the story, was used as a measure of the likelihood of committing sexual aggression ($M = 1.34$, $SD = .65$). Prior research has shown that self-reported rape likelihood is significantly correlated with other measures indicative of actual increased rape likelihood, such as the belief that women enjoy being sexually assaulted [Malamuth et al., 1980a,b].

Manipulation checks. In order to confirm the victim response manipulation, participants were asked to rate the female character’s sexual interest on a 7-point scale (1 = “not at all” to 7 = “extremely”). Additionally, before the final debriefing, participants were asked to complete a questionnaire to ascertain whether they were aware of hypotheses and/or manipulations. Based on the results, none of the participants were dropped from these analyses due to manipulation failures. However, two of the participants did not reach the criterion BAL within the designated timeframe and were consequently dropped from the study. Thus, the final sample size was 82.

RESULTS

Preliminary Analyses

A one-way ANOVA on achieved BACs demonstrated that those in the alcohol condition were significantly different from those in the control condition ($F(1,80) = 1,291.11$, $P < .001$; alcohol $M = .066$, $SD = .012$; control $M = .000$, $SD = .000$). Additionally, a one-way ANOVA on perceptions of the female character’s sexual interest showed that participants in the pleasure condition perceived significantly more sexual interest on the part of the victim than did participants in the distress condition ($F(1,80) = 67.15$, $P < .001$; pleasure $M = 3.14$, $SD = .94$; distress $M = 1.70$, $SD = .63$).

Path Analysis

To test our hypotheses, path analysis using multiple regression analyses was used following the procedures recommended by Cohen et al. [2003]. The full model consisted of two regression equations

in which each dependent variable was regressed on all variables to its left in the model. For example, in the first step, participant self-reported sexual arousal was regressed on the hypothesized predictors of beverage condition, victim response, and beliefs about drinking women's vulnerability to sexual aggression. The second step of the regression equation included all possible two-way interactions between beverage condition, victim response, and beliefs about women's vulnerability when drinking, while the third step of the regression equation included the three-way interaction of these variables. However, because none of these interactions were significant, they were not included in the final model.

Participant sexual arousal. Table I presents a summary of the multiple regression analyses. For participant sexual arousal, the regression equation was significant, predicting approximately 22% of the variance, $R^2_{cha} = .217$, $P < .001$. As hypothesized, beverage condition predicted participant sexual arousal, $\beta = .252$, $P < .05$, with intoxicated participants reporting greater sexual arousal than sober participants. Victim response condition also predicted participant sexual arousal as expected, $\beta = .258$, $P < .05$, with the direction of the beta weight indicating that when the victim experienced pleasure, participants were more likely to feel sexually aroused. Additionally, participants' beliefs about women's vulnerability to sexual aggression while drinking significantly predicted participants' sexual arousal after reading the vignette, $\beta = .262$, $P < .05$, with participants who believed intoxicated women to be more vulnerable to sexual aggression also reporting more sexual arousal to the story.

Participant sexual aggression likelihood. For participants' likelihood of behaving like the male character, the regression equation accounted for approximately 13% of the variance, $R^2_{cha} = .127$, $P < .05$. As hypothesized, the standardized beta weights indicated that participant sexual

arousal, $\beta = .308$, $P < .05$, significantly predicted participants' estimations of their likelihood of committing sexual aggression. The direction of the beta weights indicated that participants with higher self-reported sexual arousal rated themselves as more likely to behave like the sexually aggressive male character than did participants with lower self-reported sexual arousal. There were no other significant effects. See Figure 2 for the final path model.

DISCUSSION

Consistent with our predictions, sexual arousal was an important component in predicting men's self-reported likelihood of committing sexual aggression after exposure to violent pornography, supporting previous work indicating that sexual arousal to violent sexual stimuli is predictive of men's propensity to commit rape [Lalumiere et al., 2003; Malamuth et al., 1980a,b]. This study represents a unique contribution to research regarding the relationship between sexual arousal to violent pornography and sexual aggression likelihood, for it suggests that situational, attitudinal, and stimulus factors account for some of the individual differences in men's sexual response to eroticized rape depictions. In this study, sexual arousal was influenced by three variables: acute alcohol intoxication, beliefs about drinking women's vulnerability to sexual aggression, and a hypothetical rape victim's response during the rape.

Although alcohol intoxication is implicated in approximately half of all sexual assaults [Muehlenhard and Linton, 1987], we did not find that alcohol intoxication directly increased men's self-reported likelihood of sexual aggression. Rather, alcohol intoxication facilitated men's self-reported sexual arousal to violent sexual materials, which subse-

TABLE I. Summary of Hierarchical Multiple Regression Analyses Predicting Successive Levels of Outcomes in Estimated Path Model

Variables	Participant sexual arousal		Sexual aggression likelihood	
	R^2	β	R^2	β
Beverage condition		.252*		.084
Victim response condition		.258*		.004
Perceptions of women's vulnerability		.262*		.058
Participant sexual arousal				.308*
Total R^2	.217***		.127*	

* $P < .05$.

** $P < .01$.

*** $P < .001$.

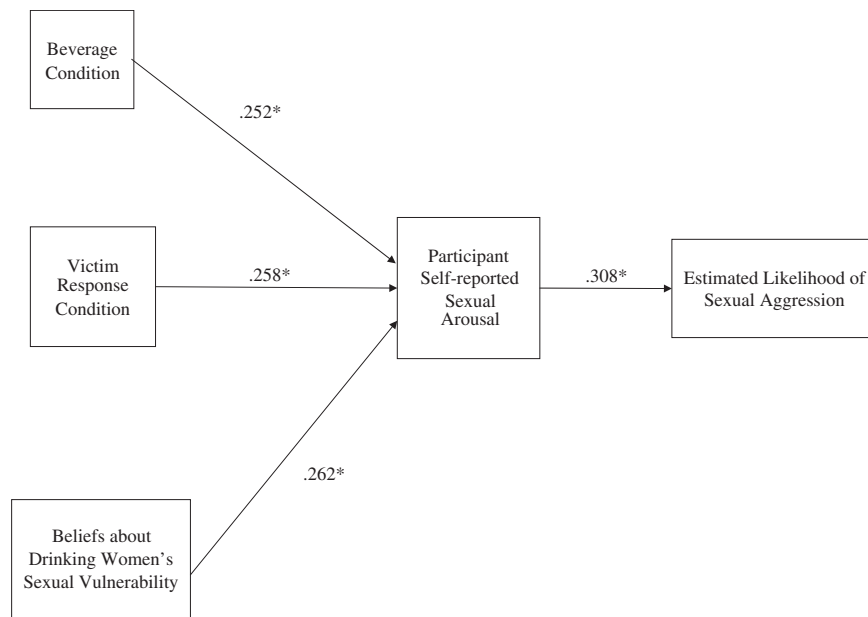


Fig. 2. Estimated model relating beverage condition, victim response condition, and beliefs about drinking women's sexual vulnerability to participants' self-reported sexual arousal and likelihood of sexual aggression.

quently predicted their self-reported likelihood of rape. Our data thus suggest that the role of sexual arousal as a proximal factor underlying the alcohol–sexual aggression relationship deserves further investigation [Testa, 2002].

Consistent with our findings, George and Stoner [2000] have argued that in sexual situations, the myopic effects of alcohol intoxication may direct men's attention towards the salient, impelling cue of sexual arousal and away from inhibitory cues such as the woman's unwillingness, thereby increasing their likelihood of engaging in sexual aggression. Alternatively, because atypical or deviant behavior performed under the influence of alcohol is often attributed to the effects of alcohol rather than to the character or personality of the individual [Critchlow, 1983], intoxicated men may engage in a form of deviance disavowal, attributing their sexual arousal to the effects of alcohol, rather than a personal interest in violent sexual material. Consequently, intoxicated men may feel less concern about experiencing and/or reporting sexual arousal to violent pornography than their sober counterparts.

Prior research has well established that perpetrator attitudes and situational characteristics are important components of the relationship between alcohol and sexual aggression (see Abbey et al. [2004] for a review). Thus, it is noteworthy that alcohol intoxication significantly increased self-reported sexual arousal, and ultimately sexual aggression likelihood, irrespective of men's

alcohol-related beliefs and the victim's response. That noted, alcohol-related beliefs did directly increase sexual arousal for some men. Men who more strongly believed that alcohol increases women's sexual vulnerability reported greater sexual arousal while reading a rape vignette in which the female rape victim had consumed alcohol, regardless of their own beverage consumption. As previous studies have shown, women who consume alcohol are typically seen as more sexually responsive and available [George et al., 1988]. Thus, perhaps men who more strongly believe that alcohol consumption increases a woman's likelihood of becoming a sexual target also believe, to some extent, that more aggressive sexual advances towards a drinking woman are justified. Indeed, other studies have indicated that drinking rape victims are assigned more blame for the rape than their non-drinking counterparts [Richardson and Campbell, 1982]. In this vein, we predicted a direct increase of sexual aggression likelihood for men who reported holding such beliefs. Our findings did not reveal such a relationship; rather, men who more strongly believed that drinking women are sexually vulnerable reported greater sexual arousal to the pornographic rape depiction, which then subsequently predicted increased sexual aggression likelihood. Perhaps men who believe that drinking women are sexually vulnerable experience greater arousal to depictions of rape involving intoxicated women because the victim's intoxication acts as a situationally

permissive cue to become aroused [Norris et al., 2002]. Additionally, intoxicated women's sexual vulnerability may, for some men, indicate an opportunity to engage in sexual dominance or power over a vulnerable woman, an opportunity that some men may find arousing. Consequently, sexual arousal may also be an important mediator of the previously established relationship between men's attitudes towards dominance in sexual relations and their self-reported likelihood to rape [Murnen et al., 2002].

In addition to her drinking behavior, the victim's reaction to the rape also influenced men's sexual arousal. Men reported greater sexual arousal after reading an eroticized rape vignette in which the victim reacted with pleasure rather than disgust. This result replicates previous work conducted by Malamuth and his colleagues [Malamuth and Check, 1980; Malamuth et al., 1980a,b]. Additionally, these findings reveal one possible pathway through which the viewing of rape myth supportive pornography (that is, pornography depicting rape as enjoyable for the victim) may lead to an increase of sexual aggression. By portraying rape as a pleasurable event for the victim, rape myth supportive pornography may facilitate men's sexual arousal by creating an atmosphere in which sexual aggression is considered not only tolerable but, to some extent, desired. Such a context provides greater "permission" for men to experience and report sexual arousal to rape depictions, as well as to endorse a greater likelihood of behaving in a similar fashion. Our prediction that this effect would be exacerbated among men who had consumed alcohol was not upheld; sober and intoxicated men's reported sexual arousal did not vary as a function of victim response. One possible explanation for this null finding is that the victim's response, be it pleasure or distress, was such a salient factor in men's reactions to violent pornography that the mild cognitive deficits created by a moderate alcohol dose simply could not outweigh the primacy of this contextual variable. Future research could explore this possibility by utilizing higher alcohol doses and a wider range of victim responses.

Limitations and Conclusions

One limitation of this study is the use of a moderate dose of alcohol, which does not allow us to generalize these findings to situations involving greater or lesser amounts of alcohol. Future studies could explore the ways in which different doses of alcohol consumption affect men's sexual arousal,

and subsequently sexual aggression likelihood. Additionally, the lack of an expectancy set in this study does not allow us to disentangle the expectancy and physiological effects of alcohol on sexual arousal to violent pornography. Future studies could include an expectancy set condition to address this limitation. Although studies have shown a strong correlation between men's self-reported and physiologically measured sexual arousal [Sakheim et al., 1984], our reliance upon self-reported measures of sexual arousal could be augmented in future studies by incorporating physiological measures of sexual arousal as well. Finally, this study did not measure men's actual aggressive behavior; instead, a single-item measure in which men self-reported their likelihood of committing sexual aggression was used. Although previous research indicates that men's estimations of their sexual aggression likelihood are related to actual behavior [Malamuth, 1989], this study did not address actual behavior directly.

Despite its limitations, the present work provides important information about the influence of alcohol consumption and alcohol-related beliefs on men's self-reported sexual arousal in response to violent pornography. Moreover, our findings suggest that this alcohol-influenced sexual arousal may be one potential mechanism through which violent pornography exposure may potentially increase men's likelihood of engaging in alcohol-related sexual assault. Because pornography is both widely available and easily accessible in this culture [Rich, 2001], a better understanding of the potential connection between men's violent pornography exposure and sexually aggressive behavior, especially when combined with alcohol consumption, is greatly needed.

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