Peer Modeling and College Men's Sexually Impositional Behavior in the Laboratory

Damon Mitchell, D. J. Angelone, Richard Hirschman, and Roy S. Lilly
Kent State University

Gordon C. Nagayama Hall
University of Oregon

The purpose of this study was to examine the influence of peer modeling on sexually impositional behavior in the laboratory. Male participants with and without a self-reported history of sexually aggressive behavior viewed video clips depicting nonaggressive and sexually aggressive behavior and then chose one of the clips to show to a female confederate. Half of the participants were first exposed to a male confederate who showed the sexually aggressive video clip to a female confederate. The other half of the participants were exposed to a male confederate who showed a nonaggressive video clip to a female confederate. Exposure to a male confederate who showed a sexually aggressive video clip to a female was associated with participants' choosing to engage in this same behavior. A self-reported history of sexually aggressive behavior was also associated with participants' showing the sexually aggressive video clip in spite of believing the effect on the female viewer would be negative.

This study used a laboratory paradigm to examine the influence of peer modeling on sexually impositional behavior. Researchers have conceptualized sexually aggressive behavior as existing on a continuum of severity based on the level of imposition (Fitzgerald et al., 1988; Hall & Hirschman, 1991; Hall, Hirschman, & Oliver, 1994; Leidig, 1992; Sugarman, Aldarondo, & Boney-McCoy, 1996). At the milder but serious end of this continuum are noncontact behaviors such as sexually offensive joke telling and sexually offensive comments. Surveys have found that noncontact sexually impositional behaviors occur with an extremely high frequency on college campuses and in the workplace (Fitzgerald et al., 1988; Gutek, 1985; Shepela & Levesque, 1998) and are perceived negatively by recipients (Sandler, 1997). For purposes of this study, a mild but serious noncontact sexually impositional behavior in the laboratory was defined as a male participant showing a sexually aggressive video clip to female confederate.

The substantial literature investigating the prevalence of sexually impositional behaviors varies in degree of methodological rigor, but a high prevalence for these behaviors has been a consistent finding as have differences in rates of perpetration and victimization between males and females (Spitzberg, 1999). It has been estimated that 25% of women have experienced some form of sexual imposition by adulthood, and 25% of men have committed some form of sexual imposition (Koss, Gidycz, & Wisniewski, 1987; Rapaport & Burkhart, 1984). Women may be as much as four times more likely than men to be sexually victimized (Spitzberg, 1999). Perhaps as a result of these discrepancies, analogue studies of sexually impositional behavior have largely placed male participants in the role of potential offender and female confederates in the role of victim (Hall & Hirschman, 1994; Hall, Hirschman, & Oliver, 1994; Pryor, 1987; Sinclair, Lee, & Johnson, 1995).

The person X situation model of sexually impositional behavior emphasizes the following:

1. Some men may have certain person factors (e.g., personality traits, beliefs and attitudes, physiological preferences, developmental characteristics) that make them more likely to sexually impose themselves than other men.

2. Certain situational factors (e.g., use of alcohol, decreased likelihood of being apprehended) facilitate the expression of sexually impositional behaviors.

3. Sexually impositional behavior is most likely to occur when these person and situational factors co-occur (Barongan & Hall, 1995; Gutek, 1985; Hall & Hirschman, 1991; Malamuth, 1986; McKenzie-Mohr & Zanna, 1990; Muehlenhard & Linton, 1987; Pryor & Whalen, 1997; Rapaport & Burkhart, 1984; Ullman, Karabatsos, & Koss, 1999).

The various behaviors along the continuum of sexual imposition may have different person and situational factors associated with them. For example, there may be different person and situational factors associated with a supervisor who offers advancement to an employee in exchange for sexual intercourse than with a man who makes repeated sexual advances to a colleague despite repeated rejections. In a series of laboratory-based experiments of the person X situation model of sexual imposition (Pryor, 1987; Pryor, Giedd, & Williams, 1995; Pryor, LaVite, & Stoller, 1993), it was found that sexually harassing behavior was linked to

The authors wish to thank Chad Coder, Adam Jenkins, Jamie Lewis, and Chris Talbert for their assistance on this project.

Address correspondence to Damon Mitchell, 1683 Gilbert Street, Norfolk, VA 23511; e-mail: damon.mitchell@eudoramail.com.

dispositional proclivities and social situations that condoned such behaviors.

The role of peer modeling as a situational factor in the person X situation model can be understood within the context of social comparison theory. Social comparison theory posits that people attempt to use available social cues to assess how they should react in ambiguous situations (Festinger, 1955; Sinclair et al., 1995). As such, peer modeling and other social cues may facilitate or hinder the expression of sexual aggression in men with predisposing person factors (Pryor & Whalen, 1997). For example, a man with certain dispositional factors, such as antisocial or sadistic personality traits, that predispose him toward sexually aggressive behavior may engage in socially appropriate conversation with women in the presence of family members at home, but make lewd sexual advances toward women in the presence of sexually harassing friends at a bar. Other potentially important situational factors may be better understood through other theories and mechanisms of action. For example, the role of alcohol intoxication in sexually aggressive behavior may be due to an interaction of biological and cognitive factors, while the effects of anonymity can be understood through the process of deindividuation.

Laboratory analogue research has provided some empirical support for the inhibitory and disinhibitory role of situational factors in sexual aggression. Pryor (1987) studied men who had scored in the upper and lower quartiles of a scale assessing their likelihood to harass sexually, providing them with an opportunity to engage in sexually impositional behavior in the laboratory. Participants were assigned to teach a female confederate to putt or play poker. The putting condition required some physical contact between the participant and the confederate, and the poker condition did not require any physical contact. In the putting condition, men with high scores on the sexual harassment scale made verbal sexual overtures to the confederate and tended to touch the confederate in a more sexual way than did men with low scores on the sexual harassment scale. Neither high nor low scoring men exhibited these types of behaviors in the poker condition. The results suggest that the situational excuse for sexual contact provided by the putting condition may have acted as a disinhibitor for men with a predisposition for sexually harassing behavior, whereas the lack of contact in the poker condition may have acted as an inhibitor for men with this same disposition.

Most analogue research on person and situational factors in sexually impositional behavior has focused on the interaction of a single perpetrator and victim in isolation. Yet, sexually impositional behavior may occur in nondyadic interactions, such as incidents involving multiple perpetrators and one or more victims (e.g., gang rape). A milder example of this type of sexually impositional behavior would be a group of men leering, whistling, and shouting sexually offensive comments to a female pedestrian. On both ends of the sexual imposition continuum, social comparison theory would predict that the behaviors of an individual's peers may play a crucial role in his decision to engage in sexually impositional behavior. Through the modeling of sexually impositional behavior or through verbal approval of sexually impositional behavior, peers may have a disinhibitory effect on a potential offender's behavior. Conversely, peer modeling of socially appropriate behavior or verbal disapproval of sexually inappropriate behavior may have an inhibitory effect on a potential offender's behavior. For example, a man who may not engage in sexually harassing a woman when he is alone at a bar may begin catcalling to a woman at the same bar if he observes or is with friends engaging in this behavior. Conversely, a man who is accustomed to making sexual comments to female coworkers may refrain from this behavior if he starts a new job and observes his male coworkers behaving appropriately with female staff, and believes that his new colleagues would frown upon sexual comments. According to a person X situation model, the degree to which a man is influenced by peer behavior may be due to various person factors. Thus, some men may be more susceptible than others to the influence of social cues from peers. Within the sexual harassment literature, there is evidence that men's susceptibility to peer influence may be moderated by certain personality factors (Pryor et al., 1995; Pryor et al., 1993).

The potential for peers to inhibit or disinhibit a potential offender's sexual imposition is supported by research on physical aggression. Laboratory studies using physical aggression paradigms have found that men are less aggressive toward other men in the presence of high-status observers than when alone (Baron, 1971), and that men are more aggressive in the presence of proaggressive peer observers than in the presence of antiaggressive peer observers (Bordon, 1975). In the physical aggression literature, it was found that receiving peer feedback on the demeaning and degrading treatment of women in erotic, physically violent, and sexually violent film clips is associated with subsequent decreases in levels of imposition toward women in the laboratory (Sinclair et al., 1995).

Laboratory analogues of sexually harassing behavior have suggested an association between a male's sexually harassing behavior and the attitudes and behavior of peers. Pryor et al. (1995) hypothesized that men who are attitudinally predisposed to engage in sexually harassing behavior would be more likely to sexually harass a woman when they were among peers who they believed shared their views on women than among peers whose views on women were unknown to them. In phase one of a study designed to test this hypothesis, researchers formed two groups from men who scored high and low on a likelihood-to-sexually-harass scale and asked them to discuss and rate either a set of sexist or a set of neutral cartoons. This phase provided a condition in which men with similar attitudes toward sexual harassment would be given the opportunity to learn that others in their group held similar views. In phase two, researchers asked participants to help

train and evaluate a female confederate who was ostensibly a candidate for employment with visually handicapped individuals. The female confederate was blindfolded and participants were instructed to lead her around a maze and evaluate her on a variety of dimensions. Participants were given a sense of power over her in that they believed that their ratings would have an impact on her getting the position. After the training phase of the study, the confederate rated the degree to which the participants sexually harassed her during the training. Men with high scores on the sexual harassment scale who had rated the set of sexist stimuli tended to model one another's sexually harassing behavior, whereas this effect was not observed in any other condition. Thus, sexually harassing behavior appeared to be initiated and modeled when person factors and the disinhibitory situational effect of peer behavior were present.

In an unpublished dissertation, Norton (1997) examined the effect of peer influence on a male participant's willingness to show a video clip depicting a rape to a female confederate. The researcher used a modified version of a video-showing paradigm developed by Hall and Hirschman (1994), who have argued that the presentation of such an onerous sexual stimulus to an unknown woman is a valid laboratory analogue of a sexually impositional act. In the Norton study, participants were screened on self-report measures for their history of sexually aggressive behavior and degree of sexual attraction to sexually aggressive acts. They were paired with a male confederate and shown four video clips, one of which graphically depicted a gang rape. They were asked to choose one of the video clips to show to a female confederate, who was in another room. Prior to choosing the clip, half of the participants heard the male confederate state that he planned to show the rape scene to the female with whom he had been paired. Exposure to the disinihibiting male confederate predicted participants' showing of the rape clip. A history of sexually aggressive behavior and high degree of attraction to sexual aggression did not predict showing the rape clip. Likewise, the interaction between exposure to the disinhibiting confederate and high scores on the self-report measures did not predict participants' showing of the rape clip. The results suggest that peer behavior may be a significant factor in sexually aggressive behavior even in the absence of prominent person factors.

The present study examined the influence of peer modeling and participant history of sexual aggression on sexually impositional behavior in the laboratory using a modification of the video-showing paradigm developed by Hall and Hirschman (1994) that was also different from the Norton modification described above. In the present study, male participants with and without a self-reported history of sexual aggression viewed two nonviolent and nonsexual video clips and one sexually aggressive video clip in the presence of a male confederate. The participant then observed the confederate showing a sexually aggressive video clip or a nonsexual and nonaggressive video clip to a female confederate. After being exposed to the confederate's behavior, the participant was instructed to show a video clip of his choice to another female confederate. Unlike the Norton study, the male confederate modeled the sexually impositional and nonimpositional behavior rather than stating his intention to do so. In addition, the sexually aggressive stimulus was different from the violent gang rape video clip used by Hall and Hirschman and Norton: The sexually aggressive stimulus in this study depicted date rape involving college students in a fraternity house. This clip was thought to have more relevance for college male participants because it may be similar to behaviors that participants had engaged in, witnessed, or heard about on campus.

In keeping with Hall and Hirschman's (1994) earlier argument, we operationally defined sexual imposition in the laboratory as a male participant showing a sexually aggressive video clip to a female confederate because of the onerous sexual nature of the stimulus and its potentially negative impact on a female viewer. This definition emphasizes the sexual nature of the imposition and its potential for harm to the recipient versus issues of victim nonconsent. Conceptually, this operational definition was believed to provide an analogue for how these elements operate in many forms of sexual imposition involving peer influence. Sexual imposition involving peers (such as a group of men leering, whistling, and shouting sexually offensive comments to a female pedestrian or catcalling in a bar) may involve one or several male perpetrators harming a female victim without explicit consideration or awareness of her nonconsent. That is, by engaging in the behavior, the men take a chance that the woman might be offended by their behavior and perhaps they may also not care if she is offended by their behavior. This type of situation contrasts with forms of sexual aggression that explicitly involve a male perpetrator harming a female victim who he knows does not consent to sexual activity, such as when a man physically forces a woman to have sexual intercourse. Addressing the issue of victim nonconsent is complicated by the fact that even perpetrators who commit forced sexual intercourse may deny an awareness of the victim's nonconsent, and maintain that the victim enjoyed or sought out the sexual activity. In many instances of sexual imposition, the intent of the man is less important than his willingness to engage in behavior that is potentially unpleasant for the female recipient.

In this study, we hypothesized that observation of peer modeling of sexually impositional behavior would influence subsequent participant behavior. Therefore, we predicted that participants exposed to a male confederate who showed the sexually aggressive video clip would be more likely to show the sexually aggressive video clip than would participants exposed to a male confederate who showed a nonaggressive video clip. We also predicted that participants with a history of sexually aggressive behavior outside the laboratory would be more likely to show the sexually aggressive video clip than would participants with no history of sexually aggressive behavior. Finally,

we predicted that situational and person variables would interact such that participants with a history of sexually aggressive behavior exposed to a sexually impositional male confederate would be more likely to show the sexually aggressive video clip than would other participants.

Method

Participants

Eighty undergraduate men from a large midwestern university participated in the study as one of several options for research credit. We selected participants for the study based on their responses to the Coercive Sexuality Scale (CSS; Rapaport & Burkhart, 1984), administered during a mass testing procedure in which general psychology students also completed measures that did not pertain to sexual or aggressive behavior. The 40 respondents who reported the most extensive history of sexually coercive behavior on the CSS comprised the *sexually aggressive* group. Participants with a self-reported history of sexual aggression admitted to a variety of physically and verbally coercive behaviors, such as removing a woman's clothing against her will, using verbal threats to obtain sex, and using physical restraint to obtain sex. Participants with a self-reported history of sexual aggression had committed at least two different types of sexually aggressive behavior or one type of sexually aggressive act several times. Forty respondents who reported no history of sexually coercive behavior on the CSS comprised the *sexually nonaggressive* group. We randomly assigned 20 participants in each of these groups to a neutral condition or disinhibiting condition. The mean age of the participants was 19.4 years (SD = 1.9) and ranged from 18 to 29 years. With respect to ethnic background, 73% identified themselves as Caucasian, 8% as African American, 4% as Asian, and 1% as Latino. Five percent identified themselves as of mixed ethnic background or chose not to respond to the item. The data of 6 participants were omitted from the final analyses because they indicated some knowledge of the experiment's hypotheses on a manipulation check. One participant was unable to complete the study due to equipment malfunctions. These 7 participants were distributed relatively equally by experimental condition and sexual aggression history. There were 73 participants in the final data analyses. Thirty-seven participants were from the sexually aggressive group and 36 were from the sexually nonaggressive group. Thirty-five participants were exposed to the neutral condition and 38 were exposed to the disinhibiting condition.

Materials

We used the Coercive Sexuality Scale (CSS), a self-report measure that assesses the extent to which a male respondent has engaged in various types of coercive sexual behavior against a woman (Rapaport & Burkhart, 1984). The CSS consists of 19 items answered on a 4-point scale (*never*, *once or twice*, *several times*, *often*). The reported coefficient alpha is .96. Rather than a total score, the scale yields descriptive and quantitative information on the type and frequency of a variety of sexually aggressive behaviors. Self-reported sexually aggressive behavior on the CSS is significantly correlated with measures of adversarial sexual beliefs and acceptance of interpersonal violence (Rapaport & Burkhart, 1984). We used the CSS in the present study because it measures a wide continuum of sexually aggressive behavior.

Procedure

Eighty participants who had completed the CSS during a mass testing procedure were contacted by telephone and invited to participate in a study on "common themes in the media" as one of several options for research credit. They were unaware that their participation was based upon their responses to the CSS. Upon arrival at the laboratory, each participant was met by a male experimenter and a male confederate posing as another participant. The experimenter and confederate were blind to participant history of sexually aggressive behavior. The participant and confederate were informed that the study was examining reactions to "common themes in the media." They were told they had each been partnered with a female student who was waiting in a separate room (in actuality, these students did not exist). The participant and confederate were led to believe that they would be tasked with either (a) watching several video clips and choosing one for their partner, or (b) completing questionnaires and watching a video clip chosen for them by their partner. The tasks would be determined by a random drawing. The experimenter presented a baseball cap containing two folded pieces of paper and asked the participant to draw one. The drawing was prearranged such that the participant selected a piece of paper indicating that he and the confederate would be watching three video clips and choosing one to show to their partners.

The experimenter escorted the participant and the confederate into a laboratory where their female partners would ostensibly be working. The experimenter pointed out that the room contained a television that was connected to a TV-VCR in an adjoining room, and that this facilitated the simultaneous viewing of video clips. They were escorted into the adjoining room and presented with a consent form. The consent form indicated they would be exposed to violent or sexually oriented material, that their responses to the material would be kept confidential, and that they were free to withdraw from the study at any time without penalty. The experimenter explained that they would watch three video clips and later choose one to show to their female partners. They could choose the same or different video clips to show their respective partners.

The experimenter set aside the three clips and stated that he would leave the participant and confederate alone to watch the clips while he worked with the other students. Two of the video clips were nonviolent, nonsexual, action-oriented scenes (one depicted a roller coaster ride and the other depicted a race). A third depicted a date rape. The video clips were about 1.5 minutes long and came from different commercially available films. The roller coaster scene was from *My Life*, the race scene was from *The Running Man*, and the

date rape scene was from *Higher Learning*. Their presentation was randomized for each participant.

After viewing the clips, the participant and confederate were asked to each choose a video clip to show to their female partner. They were told that after they made their choice they would play the clip on their TV-VCR and it would be played simultaneously on a TV in the adjoining room where their female partner would be working. The experimenter indicated that the confederate would be asked to choose first, and then left the room ostensibly to get the confederate's partner set up in the adjoining room. The experimenter could be heard escorting the confederate's partner into the adjoining room and explaining her upcoming tasks in the study. When the experimenter returned to the participant's and confederate's room, he told the confederate to play his chosen video clip on the VCR. In the experimental condition, the confederate chose the sexually aggressive video clip. In the neutral condition, he chose the video clip depicting the roller coaster ride. After the video clip was over, the experimenter could be heard ushering the confederate's partner out of the adjoining room and escorting the participant's partner into the room and explaining her upcoming tasks in the study. The experimenter returned to the participant's and confederate's room and instructed the participant to play his chosen video clip on the VCR.

After the participant showed a video clip, he was escorted out of the room and asked to fill out a brief poststudy questionnaire. One question asked participants to name the video clip they believed would have been most upsetting to their partner. Other items assessed participants' impressions of the video clips and perceptions of the other students using a 5-point Likert-type format. One question asked participants to rate how upset they had anticipated their partner would be with their video clip selection (1 = *extremely upset*, 5 = *extremely happy*). Another item asked participants what they believed their partner's actual reaction had been to their video clip selection (1 = *extremely upset*, 5 = *extremely happy*). As a manipulation check, we asked participants to write what they believed the purpose of the study had been. All participants were given a partial debriefing and encouraged to attend a full debriefing session at the end of the semester.

Results

Manipulation Check

Written responses from 6 participants to the manipulation check item on the poststudy questionnaire indicated that they had some rudimentary understanding of the experiment's hypothesis. Data from these participants were excluded from analyses. Responses from other participants were consistent with the cover story for the project.

Video Showing: Descriptive Data

Overall, 22% of participants chose to show the sexually aggressive video clip. Of these participants, all but one had a history of sexually aggressive behavior and/or were exposed to a male confederate who showed the sexually aggressive video clip. Twelve of the 36 participants (33%) with a self-reported history of sexually aggressive behavior chose to show the sexually aggressive video clip, whereas 4 (11%) of their 34 sexually nonaggressive counterparts chose to show the sexually aggressive video clip. Twelve of the 37 participants (32%) exposed to the male confederate who modeled sexually aggressive behavior also showed the sexually aggressive video clip, compared to 4 (11%) of the 35 participants exposed to the male confederate who modeled nonimpositional behavior. Chi-square analyses indicated that participants' choice of a particular video clip did not significantly differ as a function of the particular experimenter, χ^2 (1) = 2.56, ($p > .1$), or confederate, χ^2 (3) = 3.61, ($p > .3$), conducting the study.

Video Showing: Predictive Analysis

We performed logistic regression analysis using SPSS software to analyze the associations between participants' video clip choice and the independent variables. We chose this procedure due to the dichotomous nature of the dependent variable (sexually aggressive vs. sexually nonaggressive video clip choice). Participants' video clip choice was coded either 0 (indicating a participant had chosen to show a sexually nonaggressive video clip) or 1 (indicating a participant had chosen to show the sexually aggressive video clip). We entered independent variables into the regression hierarchically as follows: first, participants' self-reported history of sexual aggression; second, confederate's modeling behavior; and third, the product terms of these independent variables. This order of variable entry was based on Cohen and Cohen's (1983) recommendation that variables be entered in a temporal format, with variables of earlier origin entered before variables of later origin. The utility of the independent variables in predicting the probability that a participant's video clip choice would be correctly classified as sexually aggressive or sexually nonaggressive was evaluated by the Wald statistic and the expected B (or odds ratio), as recommended by Menard (1995) and Hosmer and Lemeshow (1989). In keeping with the recommendations of Hosmer and Lemeshow (1989), Wald statistics greater than 2 were considered to be significant. Odds ratios greater than 1 indicated that the variable increased the likelihood of showing the sexually aggressive video, while odds ratios less than 1 indicated that the variable decreased the likelihood of showing the sexually aggressive video. The results of the logistic regression analysis are presented in Table 1.

A test of the full model with two predictors and their interaction against a constant-only model was statistically significant (model $\chi^2 = 9.75$, $df = 3$, $p = .02$). With respect to the independent variables, participants' history of sexual aggression significantly predicted the probability of showing the sexually aggressive video clip (Wald = 4.95, $p = .03$; $\phi = .27$). Odds ratios indicate that participants with a self-reported history of sexual aggression were 4.13 times more likely than their sexually nonaggressive coun-

Table 1. Summary of Hierarchical Logistic Regression Analysis for Variables Predicting Participant Video Choice (N = 73)

Variable	B	Wald	R	Exp(B)
Step 1				
History of sexual aggression	1.41**	4.95	.20	4.13
Step 2				
History of sexual aggression	1.41	4.68	.20	4.11
Confederate behavior	1.27*	3.75	.16	3.56
Step 3				
History of sexual aggression	1.41	3.87	.17	4.12
Confederate behavior	1.27	3.13	.13	3.57
History X confederate	–.01	.00	.00	.99

Note. Nagelkerke R^2 = .11 for Step 1, .19 for Step 2, .19 for Step 3.
*p = .05. **p = .02.

terparts to show the sexually aggressive video clip. After controlling for the effect of sexually aggressive history, we found that exposure to the sexually impositional confederate also aided in predicting the probability that a participant would show the sexually aggressive video clip (Wald = 3.75, p = .05; ϕ = .24). Odds ratios indicate that participants exposed to the sexually impositional confederate were 3.56 times more likely to show the sexually aggressive video clip than were participants exposed to the sexually nonimpositional confederate. The interaction between participant history of sexual aggression and confederate behavior was not significant.

Poststudy Questionnaire

On the poststudy questionnaire, 72 of the 73 participants indicated that of the three video clips, the sexually aggressive clip would have been most upsetting to their partner. Participants who showed the sexually aggressive video clip had anticipated that their partner would be more upset by their choice (M = 2.06, SD = .68) than had participants who showed a sexually nonaggressive video clip (M =3.25, SD = .61), t (68) = 6.59, p < .001. The effect size for this comparison was large by Cohen's (1988) guidelines (d = 1.48). Participants who showed the sexually aggressive video clip also perceived their partner to be more upset by their choice (M = 1.81, SD = .66) than did participants who showed a sexually nonaggressive video clip (M = 3.44, SD = .63), t (68) = 8.98, p < .001. The effect size for this comparison was also large by Cohen's (1988) guidelines (d = 1.69). These two questionnaire items had a Pearson correlation of .72, p < .01. Mean scores on the items did not differ as a function of participant history of sexual aggression.

Discussion

As hypothesized, exposure to a male confederate who showed a sexually aggressive video clip to a female was associated with participants choosing to engage in this same behavior. This finding indicates that peer modeling can facilitate sexually impositional behavior in the laboratory. This finding also indicates that a man's sexually impositional behavior may be influenced by his observation of the sexually impositional behavior of a peer.

The apparent influence of the confederates' behavior on the participants' behavior may have been due to several factors. One possibility is that participants felt socially pressured to show the sexually aggressive video clip after they observed the confederates. This seems unlikely because the confederates did not comment on their choice to participants nor did they offer any verbal suggestion for participants to engage in the same behavior. A more likely possibility, consistent with social comparison theory, is that the confederates' choice normalized the showing of the sexually aggressive stimulus for participants who wanted to show the clip but were unsure if such behavior would be socially acceptable. The confederates' behavior provided direction and social approval. Another likely possibility, also consistent with social comparison theory, is that some participants wanted to show the sexually aggressive video clip but were only willing to do so in the company of a likeminded peer due to uncertainty about the acceptability of the behavior to the male confederate.

Differences in rates of sexually aggressive video-clip showing between participants exposed to a sexually impositional confederate versus a sexually nonimpositional confederate (32% vs. 11%) suggest that peer modeling may also be relevant to the inhibition of sexually impositional behavior. The confederates' choice of a neutral video clip may have discouraged some participants from choosing the sexually aggressive video clip. For example, some participants may have believed that the choice of the sexually aggressive video clip would have been offensive to the confederates or been met with their disapproval.

In addition to confederate modeling, a self-reported history of sexually aggressive behavior was associated with participants showing the sexually aggressive video clip. That men who were sexually aggressive outside the laboratory were also more likely to be sexually impositional inside the laboratory provides support for the external validity of the paradigm. The internal validity of the paradigm is supported by participants' responses to the poststudy questionnaire. Seventy-two of the 73 participants reported that the sexually aggressive video clip would have been the most upsetting of the three to their female partner. Participants who chose to show the sexually aggressive video clip to their partner both anticipated that it would be upsetting to the recipient and believed its actual impact was upsetting to the recipient. Thus, some participants chose to show a sexually aggressive stimulus that they perceived would be upsetting to the female recipient.

Given the importance of both situational factors and participant's prior history of sexual aggression, it was surprising that the combined effect of these variables was not a significant predictor. One remote possibility is that the relatively small sample sizes per cell accounted for the nonsignificant interaction effect. Unfortunately there has been little work on sample size estimates in logistic regression (Hosmer & Lemeshow, 1989). A more likely possibility is that the interaction effect was simply not important

in the video-clip choice compared to the main effects. Examination of Nagelkerke R^2 for the main effects and interaction indicate that the interaction effect accounted for a miniscule percentage of the variance after controlling for the main effects. While larger sample sizes may have eventually made this percentage statistically significant, its aid in predicting participant behavior would never have been meaningful. This finding, along with the negative findings reported by Norton (1997), suggests that the interaction between person and situation may not be significant in peer modeling and sexual aggression. Instead, person factors and situational factors may operate individually or perhaps be more important in other circumscribed contexts that have yet to be investigated.

A potential threat to the study's validity is the possibility that the confederates' nonverbal behavior was different in the sexist and neutral conditions and somehow provided participants with cues regarding which video clip to show. To avoid this confound, confederates were coached to behave in a neutral manner and to avoid conversation with participants. Videotaping the participants and confederates for later behavioral review may have assisted in determining if this bias was systematically operating.

Another potential threat to the study's validity is the possibility that the deception was not effective. Some participants may have come to suspect that the project was examining sexual imposition and altered their behavior as a result of these suspicions. Several attempts were made to address different aspects of this problem. First, participants completed the Coercive Sexuality Scale along with other unrelated personality and behavioral measures for other psychology projects during a mass testing session early in the semester. This should have reduced the likelihood that their recollection of the content of the Coercive Sexuality Scale items would be salient when they participated in the present study. Second, when participants were contacted to participate in the study, they were not told that the study was specifically related to the Coercive Sexuality Scale. They were simply told that the study was open to individuals who had participated in the large-scale questionnaire session they had already attended. Third, the study was presented under the guise of a project on common themes in the media. The laboratory was decorated with numerous film and television posters to promote this guise. Fourth, the terms *sexual imposition* or *sexual aggression* were not mentioned in any of the materials used in the study. Finally, participants were given the opportunity to write down what they believed the purpose of the study had been. Despite these efforts, the manipulation check indicated that 6 participants were able to ascertain a rudimentary understanding of the study's hypotheses. Their data were not included in the final analysis.

One limitation of the study concerns the artificiality of the laboratory environment and the loss of the context within which socially facilitated sexually aggressive behaviors occur (e.g., bars, concerts, parties, classrooms). Furthermore, it may not be possible to capture the spontaneity and anonymity of many acts of sexual imposition (e.g., shouting obscene comments out of a car window) in a controlled setting. Another limitation concerns the comparability of the video clips in their interactional level and emotional valence. Only the date rape video clip was intimately interpersonal in nature and contained negative affect. Differences across the video clip choices along these dimensions could have had some impact on participant video clip selection.

The present study tried to improve upon similar analogues by using a sexually aggressive stimulus that was more relevant to a college population than has been used in prior studies. The date rape stimulus involving college students may resemble the types of sexually impositional acts participants may have personally engaged in, witnessed, or heard about on campus. The present study also tried to improve upon similar analogues by having the confederate actively model sexually impositional and nonimpositional behavior rather than state an intention to do so.

The present paradigm can be adapted to study personality variables that interact with peer modeling to facilitate the expression of sexually impositional behavior. For example, there may be certain personality variables (e.g., adversarial sexual beliefs, sexism) that increase a man's likelihood to impose himself sexually in the presence of a peer who has engaged in the same behavior. Administering measures of such variables prior to or after participants take part in the experiment may help to identify individuals who are especially susceptible to such negative peer influences. Similar modifications of the paradigm may help reveal personality factors that act as strong disinhibitors of sexual imposition even in the presence of a peer who models nonimpositional behavior.

The fact that only 22% of participants selected the sexually aggressive video clip despite the presence of disinhibitory cues suggests that sexual imposition is a behavior with strong normative inhibitions. Perhaps one of the most important areas for further exploration is that of variables that can facilitate this inhibitory process and actively inhibit the expression of sexual imposition. The present study exposed some participants to a confederate who observed the sexually aggressive video clip and then chose to show a neutral video clip. One modification of the paradigm that may produce stronger inhibitions against showing the sexually aggressive video clip would be instructing the confederate to show a nonaggressive video clip while openly voicing his disgust for the sexually aggressive video clip or expressing a sense of incredulity that anyone would show the sexually aggressive video clip. Another modification that may produce stronger inhibitions against showing the sexually aggressive video clip would be varying participant knowledge of the female confederate's consent for viewing sexually aggressive subject matter. In the present study, participants may have believed that female confederates gave their consent to view sexually aggressive material. If the procedure had been modified so that participants were led to believe the female confederate had

not consented to view sexually aggressive material, they may have behaved differently. Laboratory research that explores inhibitory factors may help discover unique person and situational factors that can help limit sexual imposition. Research on inhibitory factors may also shed light on personality and situational factors that can effectively inhibit sexual imposition even in the presence of other strong disinhibitory factors.

Overall, the results suggest that the video-clip-showing paradigm may be a viable analogue for examining the influence of peer behavior on laboratory sexual imposition. Participants exposed to a male confederate who showed the sexually aggressive video clip were more likely to show that same video clip than were participants exposed to a male confederate who showed a neutral video clip. Participants with a history of sexually aggressive behavior outside the laboratory were also more likely to impose a sexually aggressive stimulus onto a female than were participants with no history of sexual aggression. Participants who showed the sexually aggressive video clip believed their choice was more upsetting to the recipient than did participants who chose to show a neutral video clip. It is hoped that this paradigm will facilitate the study of personality factors that make men more susceptible to the influence of sexually impositional peer modeling and lead to the identification of factors that reduce or eliminate the influence of sexually impositional peer modeling.

References

Baron, R. A. (1971). Aggression as a function of audience presence and prior anger arousal. *Journal of Experimental Social Psychology, 7,* 515–523.

Barongan, C., & Hall, G. C. N. (1995). The influence of misogynous rap music on sexual aggression against women. *Psychology of Women Quarterly, 19,* 195–207.

Bordon, R. J. (1975). Witnessed aggression: Influence of an observer's sex and values on aggressive responding. *Journal of Personality and Social Psychology, 31,* 567–573.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences.* New York: Academic Press.

Cohen, J., & Cohen, P. (1983). *Applied multiple regression/correlation analysis for the behavioral sciences.* Mahwah, NJ: Lawrence Erlbaum Associates.

Festinger, L. (1955). A theory of social comparison processes. *Human Relations, 7,* 117–140.

Fitzgerald, L., Shullman, S., Bailey, N., Richards, M., Swecker, J., Gold, Y., et al. (1988). The incidence and dimensions of sexual harassment in academia and the workplace. *Journal of Vocational Behavior, 32,* 152–175.

Gutek, B. (1985). *Sex and the workplace: The impact of sexual behavior and harassment on women, men, and organizations.* San Francisco: Jossey-Bass.

Hall, G. C. N., & Hirschman, R. (1991). Toward a theory of sexual aggression: A quadripartite model. *Journal of Consulting and Clinical Psychology, 59,* 662–669.

Hall, G. C. N., & Hirschman, R. (1994). The relationship between men's sexual aggression inside and outside the laboratory. *Journal of Consulting and Clinical Psychology, 62, 375–380.*

Hall, G. C. N., Hirschman, R., & Oliver, L. I. (1994). Ignoring a woman's dislike of sexual material: Sexually impositional behavior in the laboratory. *The Journal of Sex Research, 3,* 3–10.

Hosmer, D. W., & Lemeshow, S. (1989). *Applied logistic regression.* New York: Wiley.

Koss, M. P., Gidycz, C. A., & Wisniewski, W. (1987). The scope of rape: Incidence and prevalence of sexual aggression and victimization in a national sample of higher education students. *Journal of Consulting and Clinical Psychology, 55,* 162–170.

Leidig, M. W. (1992). The continuum of violence against women: Psychological and physical consequences. *Journal of American College Health, 40,* 149–155.

Malamuth, N. M. (1986). Predictors of naturalistic sexual aggression. *Journal of Personality and Social Psychology, 50,* 953–962.

McKenzie-Mohr, D., & Zanna, M. P. (1990). Treating women as sexual objects: Look to the male who has viewed pornography. *Personality and Social Psychology Bulletin, 16,* 296–308.

Menard, S. (1995). *Applied logistic regression analysis.* Thousand Oaks, CA: Sage.

Muehlenhard, C. L., & Linton, M. A. (1987). Date rape and sexual aggression in dating situations: Incidence and risk factors. *Journal of Consulting and Clinical Psychology, 34,* 186–196.

Norton, M. R. (1997). *The effects of attraction to sexual aggression history of self-reported sexually aggressive behavior and social disinhibition on the expression of sexually aggressive behavior in the laboratory.* Unpublished doctoral dissertation, University of North Dakota, Grand Forks, ND.

Pryor, J. B. (1987). Sexual harassment proclivities in men. *Sex Roles, 17,* 269–290.

Pryor, J. B., Giedd, J. L., & Williams, K. B. (1995). A social-psychological model for predicting sexual harassment. *Journal of Social Issues, 51,* 69–84.

Pryor, J. B., LaVite, C. M., & Stoller, L. M. (1993). A social psychological analysis of sexual harassment: The person/situation interaction. *Journal of Vocational Behavior, 42,* 68–83.

Pryor, J. B., & Whalen, N. J. (1997). A typology of sexual harassment: Characteristics of harassers and social circumstances under which sexual harassment occurs. In W. O'Donohue (Ed.), *Sexual harassment: Theory, research, and treatment* (pp. 129–151). Needham Heights, MA: Allyn & Bacon.

Rapaport, K., & Burkhart, B. R. (1984). Personality and attitudinal characteristics of sexually coercive college males. *Journal of Abnormal Psychology, 93,* 216–221.

Sandler, B. R. (1997). Student-to-student sexual harassment. In W. O'Donohue (Ed.), *Sexual harassment: Theory, research, and treatment* (pp. 50–65). Needham Heights, MA: Allyn & Bacon.

Shepela, S. T., & Levesque, L. L. (1998). Poisoned waters: Sexual harassment and the college climate. *Sex Roles, 38,* 589–611.

Sinclair, R. C., Lee, T., & Johnson, T. E. (1995). The effect of social-comparison feedback on aggressive responses to erotic and aggressive films. *Journal of Applied Social Psychology, 25,* 818–837.

Spitzberg, B. H. (1999). An analysis of empirical estimates of sexual aggression victimization and perpetration. *Violence and Victims, 14,* 241–260.

Sugarman, D. B., Aldarondo, E., & Boney-McCoy, S. (1996). Risk marker analysis of husband-to-wife violence: A continuum of aggression. *Journal of Applied Social Psychology, 26,* 313–337.

Ullman, S. E., Karabatsos, G., & Koss, M. P. (1999). Alcohol and sexual aggression in a national sample of college men. *Psychology of Women Quarterly, 23,* 673–689.

Manuscript accepted August 7, 2002