

Rape Prevention With College Males

The Roles of Rape Myth Acceptance, Victim Empathy, and Outcome Expectancies

WILLIAM O'DONOHUE

University of Nevada, Reno

ELIZABETH A. YEATER

Indiana University Bloomington

MATTHEW FANETTI

Southwest Missouri State University

This study investigated the immediate impact of a video-based prevention program developed to decrease undergraduate men's potential to commit rape. Three video segments (rape myth acceptance, victim empathy, and outcome expectancies) were developed through expert consultation and focus groups. Evidence for the construct validity of each component was evaluated by examining change scores in a pilot study of 101 male undergraduates on measures of rape myth acceptance, victim empathy, and outcome expectancies. In the main study, 102 male undergraduates were randomly assigned to either the experimental program consisting of the video-based intervention or an equivalently long, alternate video-based program judged to contain none of the experimental elements. The experimental video produced greater immediate changes on measures of rape myth acceptance, attitudes toward interpersonal violence, adversarial sexual beliefs, attraction to sexual aggression, rape empathy, and self-efficacy ratings. Limitations of this study and directions for future research with college men are discussed.

Keywords: rape prevention; rape myth acceptance; victim empathy; outcome expectancies; program evaluation

There is an increasing body of evidence highlighting the significant incidence and debilitating effects of sexual victimization (e.g., Fisher, Cullen, & Turner, 2000; Kilpatrick, Best, Saunders, & Veronen, 1988; Koss, Gidycz, & Wisniewski, 1987). A recent national survey conducted by the National Institutes of Justice found that over the course of a college career, one fifth to one

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quarter of college women may experience a completed or attempted rape (Fisher et al., 2000). This study also suggested that other forms of sexual victimization (i.e., unwanted sexual contact and sexual coercion) range from 9.5% to 66.4%, and that the overwhelming majority of victims knew the offender (Fisher et al., 2000).

Currently, the most extensive form of sexual assault prevention on college campuses is often the burdensome precautionary efforts undertaken by women. In a survey of 26 universities, Parrot (1990) found that although 21 had sexual abuse programming for women, only 2 had any programs aimed at changing male behavior. This is in direct contrast to the empirical literature on sexual assault prevention, in which the majority of programs that have been evaluated have been directed either at men or at mixed gender audiences. In other words, the majority of prevention programs being used with women have not been evaluated adequately to determine whether they are accomplishing their intended goal (i.e., the reduction of rates of sexual assault). The low frequency of rape prevention programs on college campuses targeting men may be due in part to there being only a few studies that demonstrate the efficacy of such programs (e.g., Schewe & O'Donohue, 1993a).

Although it may appear reasonable to focus on intervening with men only, ways in which to implement this strategy remain elusive at present. Most universities do not mandate sexual assault prevention education for men, and those men who participate in these programs are often at the lowest risk for committing an act of sexual assault. In addition, college women come into contact with men who have not participated in a prevention program. Finally, no intervention for men will be 100% effective. Thus, sexual assault prevention programming on college campuses must take a two-pronged approach that focuses on developing effective programs for both men and women. This article focuses on one such program for college men.

The current study was an attempt to evaluate a relatively brief, easily administered program to reduce the probability of sexually abusive behavior in undergraduate college men. The development of this program was guided by practical considerations such as ease of use (length of treatment), dissemination (cost of specialist versus video-based intervention), methodological issues (high treatment fidelity allowed by video-based treatments), and positive results obtained from earlier pilot work (Schewe & O'Donohue, 1993b; Schewe & O'Donohue, 1996), as well as data from prior research studies. More specifically, this research was designed to evaluate the immediate effectiveness of a video-based intervention for male college students that focused on modifying rape myths, increasing victim empathy, and identify-

ing negative outcomes that could occur as a result of engaging in sexually coercive behavior.

Prevention model. Unfortunately, few prevention programs have been developed using theoretical models that specify the processes involved in sexual aggression (Schewe & O'Donohue, 1993a; Yeater & O'Donohue, 1999). This research attempted to improve on prior studies by using several models to develop the content included in the program. Currently, there are no empirically corroborated models of the primary prevention of sexual offending (Barbaree & Marshall, 1991). However, for the proposed research, a working model of rape prevention was drawn from both Finkelhor's (1986) four preconditions model of the etiology of rape and cognitive-behavioral accounts of aggression and sexual offending (e.g., Burt, 1980; Hildebran & Pithers, 1992; Scully & Marolla, 1985). Although Finkelhor's model has been used to conceptualize the etiology of child sexual abuse, it was hypothesized to be potentially applicable in understanding the processes involved in adult sexual assault.

In Finkelhor's (1986) model, sexual offending is hypothesized to be the outcome of four necessary and conjointly sufficient set of factors: (a) factors that enhance motivation to sexually abuse (e.g., deviant sexual arousal), (b) factors that reduce internal inhibitions (e.g., rape myth acceptance), (c) factors that reduce external inhibitions (e.g., date location), and (d) factors that reduce victim resistance (e.g., poor self-defense strategies). This prevention program focused primarily on the second precondition (i.e., changing rape myths, increasing victim empathy, and altering problematic outcome expectancies).

Because cognitive variables appear to play an important role in sexual aggression, several cognitive and information-processing models were used to develop the content for the program. Bandura's (1973) social learning model of aggression was used, as well as models developed by Burt (1980) and Hildebran and Pithers (1992). Bandura's model posits that aggressive behavior is the product of cognitions that (a) make reprehensible conduct ethically acceptable (i.e., rape myths), (b) misconstrue the consequences of the behavior (i.e., problematic outcome expectancies), and (c) devalue or attribute blame to the victim (i.e., poor victim empathy). In Burt's influential theory of rape, irrational beliefs about women and sexuality (i.e., rape myths) such as "Women really want to be raped" and "If a man pays for a date then he is entitled to sex" cause men to rape. Finally, Hildebran and Pithers's model of sexual offending posits that poor decision making and poor victim empathy (a cognitive-affective variable) contribute to sexual offending.

In sum, a cognitive model suggests that nonconsenting offenses are not discrete events that "just happen" but rather are the culmination of a series or chain of cognitive and behavioral events. Unfortunately, some of these factors are poor targets for rape prevention programming because they are not easily changed (e.g., psychopathy, paraphilic arousal) and therefore will not be discussed further. However, there is evidence that information aimed at modifying cognitions can produce change in relatively short periods of time (Hollon & Beck, 1986). A more detailed rationale for the three components included within the prevention program is included in the following paragraphs.

Rape Prevention Program Characteristics

Rape myths. Rape myths can be defined as irrational beliefs that act as "releasers" or "neutralizers" that then elicit sexually aggressive behavior (Burt, 1980). Dispelling rape myths has been a common target of past rape prevention programs with men (e.g., Borden, Karr, & Caldwell-Colbert, 1988; Gilbert, Heesacker, & Gannon, 1991). Research studies demonstrate that participants who adhere to more rape supportive attitudes report a more extensive history of sexual aggression, indicate more likelihood of future sexual aggression if assured of not getting caught, and display a more deviant pattern of sexual arousal than those participants who hold less rape supportive attitudes (e.g., Malamuth, 1986; Malamuth, Haber, & Feshbach, 1980).

There is also some evidence from empirical studies that changing rape myths may be important in decreasing proclivity to engage in sexually abusive behavior. Gilbert et al. (1991) randomly divided 60 male research participants into treatment and control groups. The treatment group received a rape prevention lecture covering topics concerning sexual communication, rape myths, relationship issues, and the negative consequences of using force in sexual relationships. Pretest measures, including Burt's (1980) Adversarial Sexual Beliefs scale and Rape Myth Acceptance scale, were collected 2 weeks prior to treatment. The experimenters found that the attitudes of the treatment group changed significantly more than those of the control group. Similarly, Jones and Muehlenhard (1990) evaluated a rape prevention lecture regarding rape myths and facts using a variety of self-report measures such as Burt's Adversarial Sexual Beliefs scale and Rape Myth Acceptance scale. The experimenters reported significant gains in reducing adherence to rape myths for lecture participants compared to the no-treatment control group. Finally, Schewe and O'Donohue (1996) found that a video-based program

focusing on rape supportive beliefs significantly changed scores for high-risk undergraduate males on rape myth acceptance, adversarial sexual beliefs, attraction to sexual aggression, and acceptance of interpersonal violence, while a program focusing on victim empathy and outcome expectancies lowered scores on only the last three measures.

Victim empathy. Victim empathy can be defined as a cognitive-emotional recognition of a victim's pain and trauma (e.g., Marshall, 1996). Theoretically, empathy is a response antithetical to aggression and appears to play a significant role in several theories of aggression (Miller & Eisenberg, 1988). The evidence that empathy is an important construct to target to reduce sexual aggression comes from several empirical studies. Hildebrand and Pithers's (1989) sex offender treatment program targets victim empathy to prevent recidivism among convicted rapists. Malamuth and Check (1980, 1983) found that undergraduate men reported more sexual arousal to rape-related stimuli when the victim was described as sexually aroused than when the victim displayed disgust. This research highlights two possibilities: (a) Inaccurate cognitive appraisals regarding the emotional state of the victim can function to increase the likelihood of initiating nonconsenting sex, and (b) more accurate expectations regarding the victim's reactions may decrease arousal and, consequently, decrease motivation to initiate nonconsenting sex.

There is also some preliminary evidence from rape prevention studies that increasing empathy for victims may affect rape-related variables. Lee (1987) evaluated the effects of a rape prevention workshop for college men that attempted to increase empathy for victims. The workshop targeted empathy by having participants listen to victims' stories of rape, engage in written empathy exercises, and imagine themselves as victims of homosexual rapes. Lee found that participants' posttest scores were significantly lower than their pretest scores on the Attitudes Toward Rape scale (Feild, 1978). Unfortunately, the design of this study did not include a control group, so it is impossible to determine whether victim empathy was responsible for the observed change. Consistent with Lee's findings, Schewe and O'Donohue (1993b) found that a 45-minute videotaped presentation modeled after the Lee study had a larger effect on rape-related variables for high-risk participants (i.e., increased likelihood to commit a sexual offense) than a 45-minute rape facts videotape.

Outcome expectancies. Perceived rewards, low costs, and low probability of punishment are thought to contribute to males' sexually abusive behavior

(e.g., O'Donohue, McKay, & Schewe, 1996; Scully & Marolla, 1985). This hypothesis is also consistent with Bandura's (1973) social learning theory of aggression, which states that perceived consequences act to change the probability of aggression by altering the expected outcome of aggression. Decision theory asserts that people weigh the costs and benefits of certain actions, along with the probabilities of potential outcomes, when deciding which course of action to take. There is some evidence from research studies that inaccurate outcome expectancies may increase proclivity to rape. Breslin, Riggs, O'Leary, and Arias (1988) found that male undergraduates who committed acts of dating violence anticipated fewer negative consequences than nonaggressive participants. Scully and Marolla (1985) used information from interviews with 114 incarcerated rapists and found that most rapists viewed rape as a rewarding, low-risk act. O'Donohue et al. (1996) found that male undergraduate participants who reported higher future likelihood of committing rape and a more frequent history of past sexually coercive behavior reported lower negative outcome expectancies regarding rape. Research conducted by Keown, Slovic, and Lichtenstein (1983) found that providing accurate information to participants could influence risk perception. Decision theories suggest that information that alters men's perceptions of rape—such that they begin to view it as (a) less immediately rewarding than they might expect it to be, (b) less rewarding than consensual sex, (c) potentially more costly than consensual sex (i.e., imprisonment, shame, loss of job, etc.), and (d) more likely to lead to negative consequences (i.e., high probability of getting caught, unwanted pregnancies, AIDS)—might reduce sexually aggressive behavior. Deterrence theory is similar to decision theory in that it posits that groups and specific individuals are rational beings that are able to execute good decisions when provided with the costs and benefits to courses of action (Brown & Esbensen, 1988). In other words, people are basically hedonistic and strive continually to maximize pleasure and minimize pain. Therefore, when provided with accurate information that outlines the potential costs of a behavior, they will behave rationally and refrain from committing the act (Brown & Esbensen, 1988).

The current research improves on past work (Schewe & O'Donohue, 1993b, 1996) by evaluating the short-term efficacy of a video-based rape prevention program for college males that targets three components, rather than one or two, hypothesized to decrease the likelihood of sexually aggressive behavior. This study also improved on past research by comparing the prevention program to an alternate program, using a professionally made product rather than one produced by the researchers, and intervening with a representative sample of college men (i.e., low and high risk).

METHOD

Pilot Study: Content Validation and Consumer Acceptability

The first phase of the research evaluated the content validity and consumer acceptability of the video-based intervention. Written scripts for each program segment were developed through the cooperation of two experts in the field of rape prevention. These experts evaluated the initial scripts, as well as revisions, and offered feedback and suggestions for maximizing the content validity of the program. The program was determined to be content valid when all revisions were made and experts had no more suggestions for change. The final script was then used by the production facility to produce the video-based program.

Several focus groups were then used to assess the consumer acceptability of the program. Three focus groups of approximately 10 participants each were asked to view the tape and describe what they liked and did not like about the program. Two focus groups included college-age men, while the third was composed of college-age women. Feedback from the focus groups was used to rewrite sections of the script that were evaluated as problematic. The new sections were sent back to the expert consultants to ensure that the scripts remained content valid. The production facility used the final script to generate the videotape used in the study.

Content of the Three Video-Based Prevention Segments

The content of three components included in the prevention program is described in the following section.

Rape myths. The setting depicted in this section of the videotape is a "typical" American college campus. The segment is divided into short clips involving two to four characters each. The characters are discussing a recent alleged rape, in a manner that systematically states, and then debunks, rape myths hypothesized to contribute to sexually coercive behavior. Arguments and counter arguments are presented in a manner intended to resemble the interactions of contemporary college students. The goal of this segment is to convey the message that believing rape myths is not harmless and may contribute to engaging in sexually abusive behavior. The section covered a total of 18 common myths.

Victim empathy. This segment provides testimonials of women who have experienced a rape or sexual assault. The script focuses on conveying the

short- and long-term consequences of sexual assault. A male and a female commentator guide the viewer through testimonials and discuss the ramifications of rape for the victim. Viewers are then asked to imagine the experience of a loved one being raped. They are also asked to imagine what they would feel like if another man raped them. The goal is to convey a level of harm caused by rape that evokes empathy.

Outcome expectancies. This segment provides testimonials of four young men who committed a prior sexual assault. The viewer is guided through the testimonials by a male commentator who also serves as the interviewer to the offenders. Two of the characters are in prison. These men talk about the problems associated with being in prison, including their own sexual victimization and the negative effects of their imprisonment on family members. One character, who has recently been paroled, discusses his inability to find employment because of his prior sexual assault conviction. The fourth character, who was never convicted, reveals the social and educational consequences he experienced as a result of his behavior. Viewers are then asked to imagine the impact on their parents and friends if they were charged with rape.

Content of the Alternate Program

The first author's university provided the alternate video-based prevention program, "The Date Rape Backlash" (Media Education Foundation, 1994). This program was judged to be representative of a "typical" rape prevention program. The presentation included a definition of rape, a conceptualization of rape as violence rather than sex, and a depiction of the societal forces in our culture that support and reinforce violence against women. This program was chosen because it did not target constructs (i.e., rape myths, victim empathy, outcome expectancies) included in the video-based prevention program that were predicted to produce change.

Participants

Participants for both the pilot and main study consisted of 203 undergraduate males from a medium sized university (101 for the pilot study and 102 for the main study). For the pilot study, participants' mean age was 22 ($M = 22.0$, $SD = 5.6$), and the majority were White (73.3%). For the main study, participants' mean age was 20 ($M = 19.7$, $SD = 2.4$), and the majority were White (77.5%). Participants in the main study were assigned randomly to either an experimental ($n = 52$) or control ($n = 50$) condition.

Data were also collected regarding participants' history of participation in sexually coercive behavior using the male version of the Sexual Experiences Survey (Koss & Oros, 1982). Of the control group, 62% reported no history of sexual coercion, and 24% reported engaging in unwanted sexual contact, 6% in sexual coercion, 6% in attempted rape, and 2% in completed rape. Of the experimental group, 43% reported no history of sexual coercion, and 46.2% reported engaging in unwanted sexual contact, 7.7% in sexual coercion, 3.8% in attempted rape, and 0% in completed rape. The results of a chi-square analysis did not reveal a significant difference between groups with respect to a history of prior sexually coercive behavior $\chi^2(2, N = 102) = 3.96$, $p = .05$. There also were no significant differences between experimental and control groups on other demographic variables.

Procedures

Participants were recruited through the use of flyers posted on campus. Participants were offered extra credit points for their participation if they were enrolled in an undergraduate psychology course that offered such credit. The pilot study was conducted to evaluate whether each video segment affected the psychological constructs included in the prevention program (e.g., Does the victim empathy segment change empathy ratings?). Participants were randomly assigned to one of three conditions: rape myth acceptance, victim empathy, or outcome expectancies. Participants were asked to complete a demographics questionnaire and the questionnaire specific to their assigned condition (i.e., empathy manipulation check, rape myth acceptance questionnaire, or outcome expectancy questionnaire). The pilot study participants were then asked to view a short video segment that consisted of the corresponding portion of the video. Finally, participants completed a posttest questionnaire that consisted of the same measure administered pretest. The procedure for the pilot study took approximately 30 minutes for participants to complete.

Participants for the main study were assigned randomly to either the video-based prevention program condition ($n = 50$) or the alternate treatment control condition ($n = 52$). Group sizes ranged from 2 individuals to 10 individuals. This number fluctuated depending on how many individuals volunteered to participate at a specified time. There was no reason to assume that group size would influence responses to the intervention. Experimental and control group participants were kept separate at all times and were run in groups specific to their condition. Participants were then given a series of pre-test measures (to be described). The appropriate video intervention was then shown on a Sony 27-inch Trinitron XBR monitor with Mitsubishi S-VHS

video recorder. The video for each condition lasted approximately 45 minutes. After the video presentation, participants were asked to complete another set of questionnaires (to be described). The procedure for the main study took approximately 75 minutes to complete. Participants were debriefed regarding the purpose of the experiment and asked to refrain from sharing their experience with other potential participants until after conclusion of the project.

Measures for Pilot Study

Demographics questionnaire. This questionnaire measured various demographic variables such as age, marital status, ethnic membership, and religion affiliation.

Empathy Manipulation Check. This is a 24-item adjective checklist designed to measure feelings of empathy, happiness, distress, sadness, anger, and excitement (Fultz, Schaller & Cialdini, 1988). It was used to evaluate the construct validity of the victim empathy component.

Rape Myth Acceptance scale. This scale measures the degree to which a person believes false information about rape (e.g., "Women who get raped while hitchhiking get what they deserve") (Burt, 1980). The scale has an alpha coefficient of .88 and has been found to discriminate between convicted rapists and nonrapists. This measure was used to evaluate the construct validity of the rape myths component.

Probability questionnaire. This scale was used to assess participants' perceptions of the likelihood of negative consequences occurring to them if they engaged in sexually coercive behavior (O'Donohue et al., 1996). Outcomes such as guilt, shame, worries about sexually transmitted diseases and pregnancy, and likelihood of arrest and conviction were evaluated on a 10-point Likert-type scale that ranged from 0 (*no likelihood of occurring*) to 10 (*complete expectation of occurring*). This measure was used to assess the construct validity of the outcome expectancies component.

Measures for the Main Study

The following questionnaires were used as pretest measures for experimental participants prior to receiving the intervention.

Demographics questionnaire. Previously described.

Hypermasculinity scale. This 30-item questionnaire measures interest in dominating others, being forceful and aggressive with women, inhibiting "weak" emotions such as caring and empathy, finding danger as exciting, being unafraid to take risks, and finding violence as manly (Mosher & Sirkin, 1984). This scale has a Cronbach's alpha of .89.

Sexual Experiences Survey. This instrument was used to detect use of force in prior sexual relationships (Koss & Oros, 1982). The Sexual Experiences Survey is a 10-item self-report questionnaire that was developed to detect various degrees of sexual victimization in female populations (Koss et al., 1987; Koss & Oros, 1982). This instrument uses behaviorally specific definitions of sexual assault and does not include the word *rape* within the questions. This instrument has also been used in male populations in which the wording has been changed to reflect behaviorally specific definitions of sexual coercion. Malamuth (1986) reported an alpha coefficient of .83 for the Sexual Experiences Survey. He also found that responses were correlated with sexual arousal to rape, dominance as a sexual motive, hostility toward women, acceptance of violence toward women, and sexual experience ($r = .30$ to $.43$).

Motivation ratings. This questionnaire was used to evaluate motivation to decrease use of sexually coercive behavior. George and Marlatt (1984) found that degree of motivation to change was a useful predictor of short- and long-term therapy outcome. Participants were asked to rate their motivation on a 10-point Likert-type scale.

The following questionnaires were provided to the participants prior to and after participation in the experimental and control conditions.

Rape Myth Acceptance scale. Described previously.

Acceptance of Interpersonal Violence. This scale measures attitudes that condone the use of force in relationships (Burt, 1980). Malamuth (1986) found this scale to have a stronger relationship with sexual aggression, as measured by the Sexual Experiences Survey, than any of Burt's other scales. This scale has an alpha coefficient of .60 (Burt, 1980; Malamuth, 1986).

Adversarial Sexual Beliefs scale. This scale measures the degree to which a person believes that sexual relationships are exploitative or adversarial in

nature (Burt, 1980). The alpha coefficient for the Adversarial Sexual Beliefs scale is .80.

Attraction to Sexual Aggression scale. Malamuth (1989) developed this 6-item scale to improve on the psychometric properties of previous “likelihood” measures of sexual aggression. The scale demonstrates high internal consistency (alpha = .84 to .91) and adequate test-retest reliability ($r = .76$). In addition, the scale is correlated with rape supportive attitudes ($r = .46$), rape-related perceptions ($r = .30$), and behavioral indications to commit acts of sexual violence ($r = .22$ to $.56$). The scale also demonstrates discriminant validity, as it does not correlate highly with attraction to other deviant behaviors.

Rape Empathy scale. This forced choice, 19-item scale is designed to measure empathy for rapists or rape victims (Deitz, Blackwell, Daley, & Bentley, 1982). The internal consistency of the scale varies for different populations (alpha between .89 to .82). Scores on the Rape Empathy scale are negatively correlated with men’s reported desire to rape a woman ($r = -.58$). The Rape Empathy scale demonstrates good discriminant validity, and responses to the scale are not correlated significantly with social desirability measures.

Self-Efficacy Ratings. Self-efficacy is a construct developed by Bandura (1973) to predict future behavior. Self-efficacy refers to a belief that one has the ability to successfully perform a task in a given situation. Participants rated their certainty of performing various behaviors on a 7-point Likert-type scale (Bandura, Adams, & Beyer, 1977). This construct was measured to evaluate whether the video-based intervention increased participants’ beliefs that they could successfully deal with a variety of situations that might increase their chances of engaging in sexually abusive behavior.

Credibility ratings. This measure included three Likert-type scale questions that asked participants to evaluate the accuracy, credibility, and potential efficacy of the video-based intervention for decreasing potential to rape.

Results: Pilot Study

Due to the limited number of comparisons conducted in this study (i.e., four), paired-comparisons t tests were run to determine differences on the manipulation check measures. One of the two independent sections of the probability questionnaire had to be discarded because a large percentage of

participants misunderstood directions and completed the subscale incorrectly. However, this was not the primary section of the questionnaire, and the two sections are scored independently (O'Donohue et al., 1996). The results of the paired-samples *t* tests indicated that there were significant differences on the Rape Myth Acceptance scale, $t(32) = -4.45, p < .001$; Victim Empathy Check, $t(33) = 9.66, p < .001$; and probability questionnaire, $t(33) = -2.73, p < .010$. Each difference was in the predicted direction. These results suggest that the video segments affected the three psychological constructs targeted in the experimental program (i.e., rape myths, victim empathy, and outcome expectancies).

Results: Main Study

A MANOVA was used to compare experimental and control group scores on the pre-only and post-only assessments. As predicted, the results indicated that there were no significant differences between groups on the motivation ratings, $F(1, 100) = 3.15, p = .079$, or the Hypermasculinity scale, $F(1, 100) = 1.75, p = .189$. This suggests that participants were relatively similar across groups on these dimensions.

Responses to the questions on the credibility questionnaire were analyzed separately. Results indicated that participants reported the two programs were equally realistic (i.e., "The video I watched was realistic,"), $F(1, 100) = 1.59, p = .210$. However, participants reported that they believed the experimental condition was more closely related to actual rape issues and would be more effective in stopping rape (i.e., "The video I watched was accurate about rape issues"), $F(1, 100) = 22.64, p < .001$, and (i.e., "The video I watched will be effective in stopping rape") $F(1, 100) = 29.47, p < .001$, respectively. It is difficult to determine how this may have affected the experimental results. It would have been ideal if all credibility ratings were similar; however, this may not be realistic. It is possible that participants were able to distinguish accurately between effective and noneffective interventions, but it may also be that their judgments regarding credibility artificially enhanced the experimental findings.

A repeated measures analysis was conducted on the six pre-post dependent measures. These results are shown in Figures 1 and 2. The results revealed a significant interaction between condition and time in the predicted direction on the Rape Myth Acceptance scale, $F(1, 100) = 31.63, p < .001$; the Acceptance of Interpersonal Violence scale, $F(1, 100) = 14.82, p < .001$; the Adversarial Sexual Beliefs scale, $F(1, 100) = 23.78, p < .001$; the Attraction to Sexual Aggression scale, $F(1, 100) = 22.39, p < .001$; the Rape Empathy scale, $F(1, 100) = 7.87, p < .01$; and Self-Efficacy Ratings, $F(1, 100) = 10.85,$

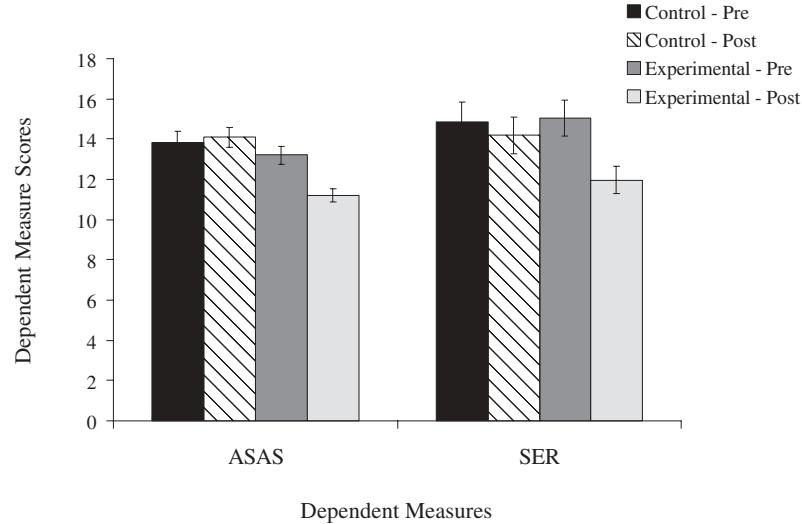


Figure 1: Comparison of Mean Responses on the Attraction to Sexual Aggression Scale (ASAS) and Self-Efficacy Ratings (SER) at Pretest and Posttest for Experimental and Control Group Participants

NOTE: Lower scores on the Attraction to Sexual Aggression scale indicate less attraction to sexual aggression. Lower scores on the Self-Efficacy Ratings indicate improved self-efficacy.

$p < .01$. This suggests that the experimental video-based intervention was more effective in changing responses to each of these rape-related measures than the alternate intervention.

Finally, independent samples t tests were used to evaluate whether participants who reported engaging in prior sexually coercive behavior responded differentially to the intervention. Results revealed significant differences between groups for all dependent measures, with high-risk participants (i.e., prior assault history) responding in the predicted direction on the Rape Myth Acceptance scale, $t(47) = -4.45, p < .001$; the Acceptance of Interpersonal Violence scale, $t(47) = -3.07, p < .01$; the Adversarial Sexual Beliefs scale, $t(47) = -2.86, p < .01$; the Attraction to Sexual Aggression scale, $t(47) = 4.07, p < .001$; the Rape Empathy scale, $t(23) = -3.46, p < .01$; and the Self-Efficacy Ratings, $t(47) = 2.42, p < .05$. Results revealed only two significant differences between groups of low-risk participants (i.e., no prior assault history). These differences were in the predicted direction on the Adversarial Sexual Beliefs scale, $t(37) = 3.89, p < .001$, and the Rape Empathy scale,

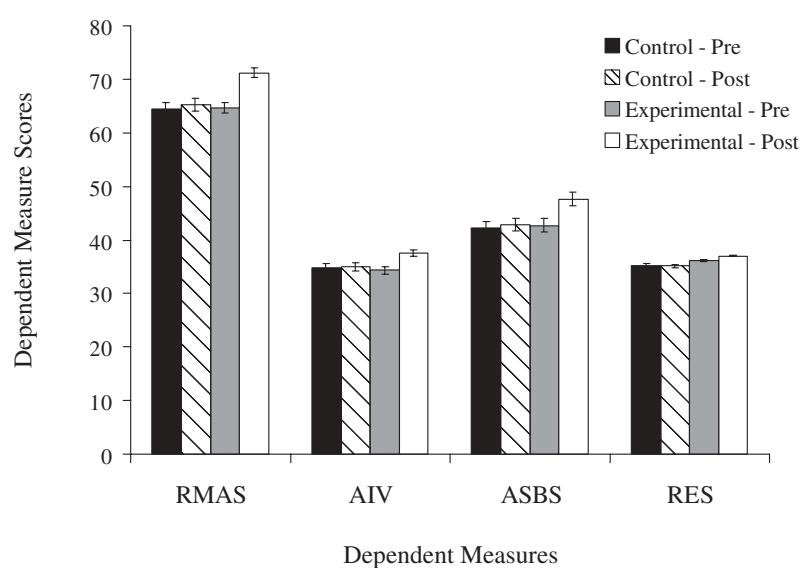


Figure 2: Comparison of Mean Responses on the Rape Myth Acceptance Scale (RMAS), Acceptance of Interpersonal Violence (AIV), Adversarial Sexual Beliefs Scale (ASBS), and the Rape Empathy Scale (RES) at Pre-test and Posttest for Experimental and Control Group Participants

NOTE: Higher scores on the Rape Myth Acceptance scale, Acceptance of Interpersonal Violence, and Adversarial Sexual Beliefs scale indicate less acceptance of rape myths, interpersonal violence, and adversarial sexual beliefs. Higher scores on the Rape Empathy scale indicate increased empathy for victims of rape.

$t(51) = -3.60, p < .001$. These results suggest that high-risk participants responded more favorably to the video-based intervention as measured by the dependent measures than did low-risk participants.

DISCUSSION

A video-based rape prevention program developed to target sexual coercive behavior in undergraduate men was developed and evaluated. A pilot and main study were conducted. The pilot study included a manipulation check on the independent variables and an evaluation of the program on the dimensions of credibility, consumer satisfaction, and content validity. Expert consultants evaluated the content validity, while focus groups composed of undergraduate men and women assessed credibility and consumer accept-

ability. The prevention program was judged to be content valid by experts and credible and acceptable to male and female undergraduates.

The main study provided evidence that each component of the experimental prevention program demonstrated acceptable construct validity in comparison to the alternative program. Each program component produced significant change on the relevant measures that evaluated constructs hypothesized to reduce college men's proclivity to engage in sexually coercive behavior (i.e., rape myths, victim empathy, and outcome expectancies). The experimental program resulted in significant change when compared to the alternative program on a number of rape-related measures such as self-efficacy, attraction to sexual aggression, adversarial sexual beliefs, and rape empathy. Finally, the experimental program was more effective than the alternative program in changing these responses for participants who reported a previous history of sexually coercive behavior. This is an encouraging result and one that should be researched more extensively through the use of longitudinal studies to evaluate whether the program reduces future incidents of sexual coercion.

The results of this study are consistent with past research that supports the potential utility of modifying rape myths and victim empathy to decrease male rape proclivity (Gilbert et al., 1991; Jones & Muehlenhard, 1990; Lee, 1987). The design of this study does not allow for statements regarding the relative contributions of each module. Past research (Schewe & O'Donohue 1993b, 1996) found somewhat conflicting results from video modules that were not professionally made and were used solely with a high-risk sample of men. Future research should use dismantling designs to assess the relative contributions module. However, this research, in combination with this previous research, points to the potential utility of targeting these constructs in male rape prevention programs.

The two major limitations of the study concern measurement limitations and the lack of follow-up period to evaluate the long-term effectiveness of the prevention program. The design of the study does not answer the question of whether the program is effective at decreasing actual rates of sexually coercive behavior. Rather, a series of proxy variables (e.g., acceptance of interpersonal violence, rape empathy, rape myth acceptance) were measured. Although these are theoretically related to sexual perpetration, they are still only proxy measures and do not answer the most relevant question as to whether the program decreased the incidence of sexual assault in the measured sample. In addition, this study relied exclusively on self-report questionnaire data and thus suffers from mono-method bias. Finally, now that this study has provided positive evidence for the immediate effectiveness of the

modules, future research should investigate the maintenance of these effects over time. A particularly interesting design would assess the contributions of booster sessions during multiple measurement periods. Most rape prevention programs are given once to students. However, it is unclear whether this "dosage" is sufficient to allow participants to learn the material adequately or to maintain the changes observed immediately after the intervention. In fact, past research with college women has revealed that women need more than one trial of the intervention to comprehend and use the skills taught within a standard prevention program (Yeater & O'Donohue, 2002).

To date, the major focus of rape prevention efforts on college campuses has been directed at either coed or female-only audiences. This study points to the importance of augmenting existing prevention efforts by developing and implementing programs aimed at changing men's potential for engaging in sexually coercive behavior.

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William O'Donohue is the Nicholas Cummings Professor of Organized Behavioral Healthcare Delivery at the University of Nevada, Reno. He has a doctorate in clinical psychology from State University of New York at Stony Brook and a master's degree in philosophy from Indiana University.

Elizabeth A. Yeater is a clinical science research fellow in the psychology department at Indiana University Bloomington. She has a doctorate in clinical psychology from the University of Nevada, Reno. Her current research focuses on understanding the processes involved in the sexual victimization and revictimization of women, using methods borrowed from cognitive science and an information processing model of social competence as a general framework.

Matthew Fanetti is an assistant professor in the Department of Psychology at Southwest Missouri State University. His research interests are related primarily to the assessment and prevention of sexual crimes against women and children.