
**Rape Prevention with College Males: The Roles of Victim Empathy,
Rape Myth Acceptance, and Outcome Expectancies**

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Abstract

This study investigated the immediate effectiveness of a video-based prevention program for decreasing undergraduate males' potential to commit rape. The content of the three video segments (victim empathy, rape myth acceptance, and outcome expectancies) was developed through expert consultation and focus groups. Evidence for the construct validity of each of the modules was provided by examining the change scores of 101 male undergraduates on measures of victim empathy, rape myth acceptance, and outcome expectancies. In the final study, 102 male undergraduates were randomly assigned to either 1) the experimental treatment consisting of all three modules or 2) an equivalently length alternative video-treatment judged to contain none of these elements. The experimental video produced greater positive 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 future research are discussed.

Rape Prevention with College Males: The Roles of Victim Empathy, Rape Myth Acceptance, and Outcome Expectancies

There is an increasing body of evidence pointing to the significant incidence and debilitating effects of sexual victimization (e.g., Baier, Rosenzweig, & Whipple, 1991; Burt & Katz, 1987; Kilpatrick, Veronen, & Best, 1984; Marx, 1996). Approximately half of all college women report being victims of some form of sexual abuse and 27% report being victims of rape (15%) or attempted rape (12%; Koss, 1988). Of those college women who had been victimized, 84% knew their assailants and 57% of the assaults occurred on dates (Koss, 1988). Gold (1991) found in a sample of male undergraduates who completed the Sexual Experiences Survey (Koss, 1988) that 20% reported coercing a female into sexual intercourse. Malamuth, Sockloskie, Koss & Tanaka (1991) reported that 1 out of 13 men report having sexually assaulted a woman, and that approximately 50% of college males self-report that they would sexually assault a woman if they knew that they would not get caught for the offense.

Although the exact nature of the sequelae of sexual abuse are unknown, victims commonly experience shock, humiliation, anxiety, guilt, a loss of self-esteem, isolation, anger, distrust, pain, depression, substance abuse, suicidal ideation, fear of AIDS, and sexual dysfunction (Kilpatrick, Veronen, & Resick, 1982). There is also some evidence indicating that women who have been raped by casual acquaintances had more several adjustment problems than women who had been raped by strangers (Koss et al, 1988; McCahill, Meyer & Fischman, 1979). The consequences of sexual abuse are all made all the more problematic since there is evidence that only about 2%-8% of undergraduate females who have been raped seek help from a crisis center, counselor or a physician (Koss, 1988; Pirog-Good & Stets, 1989).

Currently, the most extensive form of sexual abuse prevention are the bothersome and burdensome precautionary efforts undertaken by females. In a recent survey of twenty-six universities, Parrot (1990) found that while twenty-one had sexual abuse programming for women, only two had any programs aimed at changing male behavior. The low frequency of rape prevention programs aimed at men might partly be due to the fact that there are only a few studies that demonstrate the efficacy of such programs (Schewe & O'Donohue, 1993). In the prevention programs aimed at women, females are taught martial arts, to be careful in selecting whom they will be alone with, not to go out alone at night, to avoid certain areas, to carry whistles or mace, and to dress so they do not attract attention and so that they can more easily escape from an attacker. Not only are these forms of prevention unacceptable on the basis of a severe restriction of basic human rights, but also these tactics will never be completely successful. Despite the fact that women take these and other precautions, the fact remains that no one can be constantly and perfectly vigilant. Thus, no matter how well trained potential victims

become in avoidance, escape, and physical self-defense, *they will be vulnerable to sexual assault to the extent that there are men who will attempt to commit acts of sexual abuse.*

The research reported below is an attempt to evaluate a relatively brief, easy to administer, effective program to reduce the amount of sexual abuse attempted by male college students. The development of this program was guided by practical considerations such as issues concerning utilization (length of treatment), dissemination issues (cost of specialist v. video-based intervention), methodological issues (high treatment fidelity allowed by video-based treatments), positive results attained in early pilot work (Schewe & O'Donohue, 1993; Schewe & O'Donohue, in press), as well as theoretical and empirical concerns. Specifically, the research is designed to evaluate the effectiveness of videotaped interventions aimed at male college students that are based on a model of rape and rape prevention which highlights the modifying of rape myths, victim empathy, and decision making/outcome expectancies, and replacing these with prosocial beliefs about consenting sex and safe sex.

Prevention Model. 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 will be drawn from both Finkelhor's (1986) four preconditions model of the etiology of rape and cognitive-behavioral accounts of aggression and sexual offending (Bandura, 1977; Burt, 1980; Hildebran & Pithers, 1992; Murphy, 1990; Scully & Marolla, 1984; Segal & Stermac, 1990).

In Finkelhor's model, sexual offending is the outcome of four individually necessary and conjointly sufficient set of factors: (1) factors that enhance motivation to sexually abuse (e.g., deviant sexual arousal); (2) factors that reduce internal inhibitions (e.g., rape myth acceptance); (3) factors that reduce external inhibitions (e.g., date location); and (4) factors that reduce victim resistance (e.g., poor self-defense strategies). The third and fourth set of factors are best targeted by prevention programs for females (see Yeater and O'Donohue, in press). Treatment for males will focus primarily on the second precondition (i.e., changing rape myths, poor victim empathy, and problematic outcome expectancies) and will focus on replacing these cognitions by cognitions that promote consensual sex. The outcome expectancy module also addresses the first stage (i.e., decreasing motivation for nonconsenting sex) by imparting a more accurate understanding of the diverse set of negative features of rape and a greater appreciation of the wide variety of positive features associated with consenting sex.

Another point of convergence for many models of rape is that cognitive variables play an important role. Bandura's (1978) social-learning account of aggression emphasizes aggressive behavior as the product of cognitions that: (1) make reprehensible conduct socially and ethically acceptable (e.g., rape myths); (2) misconstrue the consequences of the behavior (i.e., "We will both enjoy this and I will experience no negative

consequences"--problematic victim empathy and outcome expectancies; and (3) devalues or attributes blame to the victim (e.g., poor victim empathy). Moreover, in Burt's influential theory of rape, irrational beliefs about women and sexuality (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. Finkelhor (1986) also suggests that the endorsement of rape myths act as a factor that reduces internal inhibitions to rape. In Pithers' (Hildebran & Pithers, 1992) model of sexual offending apparently irrelevant decisions and poor victim empathy (a cognitive-affective variable) contribute to sexual offending. McFall (1990, p. 318) has stated in his information processing model of rape:

"This evidence paints the following portrait of sexually aggressive men. They enter heterosexual relationships holding distorted cognitive schemata that predispose them to sexual misunderstandings and misguided actions. It is as though these men were 'primed' by their schemata to read positive sexual connotations into women's neutral or negative messages; to believe that women secretly wish to be victims of sexual coercion; to misinterpret women's refusals of sexual advances merely as coquettish acceptances; to dismiss women's physical resistance as a primeval sexual ritual; to misperceive women's cries of pain as squeals of pleasure; and to redefine any attempted rebuffs as proof that women are 'teases' who deserve whatever they get."

In a cognitive model 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 since they are not easily changed (e.g., psychopathy, paraphilic arousal) and therefore will not be further discussed here. However, there is evidence that an educative orientation aimed at modifying cognitions can produce change in relatively short periods of time (Hollon & Beck, 1986). Thus, problematic cognitions such as myths about rape, woman and sexuality, myths about the experience of the victim of rape, and irrational outcome expectancies may be good candidates to be targeted in rape prevention. A more detailed description of the treatments follows.

Victim Empathy. Victim empathy can be defined as a cognitive-emotional recognition of a rape victim's pain and trauma (Hildebran & Pithers, 1989; 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). Increasing victim empathy and empathy for women appears to be a potentially fruitful intervention for decreasing males' propensity to rape. Empathy involves both an understanding of the victim's experience of the actual rape as well as the aftermath of rape (worries about

AIDs, pregnancy, and social sanctions and embarrassment--what has been called by some as the "second assault" (Williams & Holmes, 1981)). Pithers' sex offender treatment program uses victim empathy in an effective program for preventing recidivism among convicted rapists (Hildebran & Pithers, 1989). Increasing empathy for women might serve to reduce hostility toward women, adversarial sexual beliefs, and the acceptance of heterosexual violence and increase the belief that men and women can work together toward forming and achieving common goals, including sexual goals. Malamuth and Check (1980; 1983) found that undergraduate males were more sexually aroused by rape stimuli when the victim was described as sexually aroused than when the victim displayed disgust. This research highlights two possibilities: (1) inaccurate cognitive expectations regarding the victim can function to increase the likelihood of initiating nonconsenting sex; and (2) more accurate expectations regarding the victim's reactions can decrease arousal and thereby interest in initiating nonconsenting sexual encounters.

There is some preliminary evidence that increasing victim empathy may impact rape-related variables. Lee (1987) evaluated the effects of a rape prevention workshop for males that purported to increase empathy for victims. The workshop manipulated 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 subjects' post-test scores were significantly lower than their pretest scores on the Attitudes Toward Rape scale (Feild, 1978; where lower scores indicate more pro-social attitudes toward rape). Unfortunately, the design of this study did not include a control group so it is impossible to determine whether victim empathy or some other component, such as mere attention, test sensitization, or spontaneous remission, was responsible for the observed change. Consistent with Lee's findings, Schewe & O'Donohue (1993) found that a 45 minute videotaped presentation which was modeled after Lee's empathy workshop had a larger effect on rape-related variables than a 45 minute rape facts videotape (modeled after Jones & Muehlenhard, 1990; and Gilbert, Heesacker, & Gannon, 1991) for subjects who were initially judged to be at "high risk" (as measured by their self-reported likelihood to commit a sexual offense) for committing sexual abuse.

Rape Myths. Rape myths may be defined as irrational beliefs that are widely accepted in Western culture that act as releasers or neutralizers, "allowing potential rapists to turn off social prohibitions against injuring or using others" (Burt, 1978; p. 282). Dispelling rape supportive myths and changing rape supportive attitudes have been a common element of past prevention efforts involving males (Borden, Karr, & Caldwell-Colbert, 1988; Gilbert, Heesacker, & Gannon, 1991; Jones & Muehlenhard, 1990). These myths include the idea that in some instances rape might be justified or that women might actually enjoy rape, or hapless males can be provoked to the point of no return to commit rape. Studies have shown that incarcerated rapists hold more rape

supportive attitudes than non-rapists (Burt, 1980). Furthermore, subjects who hold 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 subjects who hold less rape supportive attitudes (Koss & Dinero, 1989; Malamuth, Haber, & Feshbach, 1980; Malamuth, 1986; Schewe & O'Donohue, in press).

Gilbert, Heesacker, and Gannon (1991) randomly divided 60 male research participants into treatment and control groups. The treatment group received a rape prevention lecture based on a 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 (ASB) and Rape Myth Acceptance scale (RMA), were collected two 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 (1980) Adversarial Sexual Beliefs and Rape Myth Acceptance Scale, and Muehlenhard and Felt's (1987) Sexual Beliefs Scale. The experimenters report significant gains for lecture participants over the no-treatment control group. Finally, Schewe and O'Donohue (in press) found that a video-based program focusing on rape supportive beliefs lowered high risk undergraduate males scores on rape myth acceptance, adversarial sexual beliefs, attraction to sexual aggression and acceptance of interpersonal violence, while a treatment focusing on victim empathy and outcome expectancies lowered scores only on the last three measures.

Decision Theory/Outcome Expectancies. Perceived rewards, costs, and low probability of punishment are seen as contributory factors of rape (Bandura, 1973; Ellis, 1989; Jenkins-Hall, 1989; O'Donohue, McKay, & Schewe, in press; Scully & Marolla, 1985). This 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. This is based on the view that in general humans (and perhaps particularly adolescents) are basically self-interested and hedonistic, and in general will seek to make decisions that maximize personal utilities. Breslin, Riggs, O'Leary and Arias (1988) found that male undergraduates who committed acts of dating violence anticipated fewer negative consequences than nonaggressive subjects. Scully and Marolla (1985) used information from the interviews with 114 incarcerated rapists to suggest that most rapists viewed rape as a rewarding, low risk act. O'Donohue, McKay, and Schewe (in press) in a study of male

undergraduates found that both subjects with higher self-reported future likelihood of rape and subjects who reported a greater past history of coercive sexual behavior had lower negative outcome expectancies regarding rape. Decision theories suggest that information which changes men's perceptions of rape such that they begin to view it as 1) less immediately rewarding than they might expect it to be; 2) less rewarding than consensual sex, both short-term and long-term, 3) potentially more costly than consensual sex (i.e., imprisonment, shame, loss of job, etc.), and 4) more likely to lead to negative consequences (i.e. high probability of getting caught, unwanted pregnancies, AIDS) might be beneficial in preventing attempted rapes. Keown, Slovic, and Lichtenstein (1983) found that risk perceptions can be directly influenced by information. Interventions directed at the decision making processes of rapists and pedophiles have become an important component of many relapse prevention programs (Jenkins-Hall, 1989). Whereas victim empathy and to a lesser extent rape myth interventions are based on more prosocial and altruistic elements, this element emphasizes rational self-interest.

This research also extends earlier work (Schewe & O'Donohue, 1993; in press) by examining the effects of a combination of a professionally produced treatment employing all three constructs compared to an alternative treatment in a non-high risk group of undergraduate males. In both the previous studies the videos were constructed by the authors, a high risk sample was studied and no-treatment comparisons were used. The use of professionally produced treatments could potentially enhance treatment effects by improving production values and thereby impact. The reliance on high risk subjects increases the likelihood that effects may be due to regression toward the mean and decreases external validity as existing programs do not screen out certain males. Moreover, neither previous study examined the effects of all three treatment components, but rather examined components individually or in pairs. Finally, a comparison with an alternative treatment is a more rigorous test as it allows placebo effects and other treatment models to be tested.

Methods

Content Validation and Consumer Acceptability

The initial phase of the study was designed to evaluate the content validity and consumer acceptability of the video intervention. In order to accomplish this, scripts were developed with the cooperation of two noted experts in the field of rape prevention and rape issues, Charlene Meuhlenhard, Ph.D., and William Pithers, Ph.D. These experts evaluated the initial scripts, as well as revisions and offered guiding feedback and suggestions for maximizing the content validity of the program. When all of their suggestions were met to their satisfaction, they agreed that the program was content valid. This script was then used by the production facility to produce the video program.

After completion of the prototype program, several pilot sessions were organized to

qualitatively assess consumer acceptability. Three focus groups of approximately ten subjects each were asked to view the tape and provide their unstructured feedback about the program, what they did not like, and what they did like. Two groups were composed of the target audience for the final program, college-aged males, while the third was composed of college-aged females. It was decided that feedback from women about the program would increase awareness of gender-based insensitivities that might not otherwise be noted. The feedback from these focus groups was used to rewrite some sections of the script. The new sections were sent to the content experts to assure that the content was still valid and that the experts would still agree about the content validity of the program. The production facility used this script to generate the final intervention tape used in the experimental trials.

Description of the three video-intervention components

Rape Myths -The setting is an American college campus. This segment is divided into short clips involving 2-4 characters each. These characters are discussing a recent alleged rape, in a way that systematically states and refutes all of the most relevant rape myths that are hypothesized to significantly contribute to rape potential. Arguments and counter arguments are presented in a manner intended to resemble the typical interactions of contemporary college students. The intended goal is to convey the message that believing negative myths about dating and sexuality is not harmless. The section covered eighteen common myths including: 1) women say "no" when they mean "yes"; 2) men who pay for all the expenses of a date deserve sex; 3) women secretly desire to be raped; and 4) women who dress provocatively deserve what they get.

Victim Empathy - This segment focuses on a depiction of the testimonials and portrayals of women who were raped. The script focuses on conveying the immediate, short-term and long-term physical, psychological, and social experiences of rape victims. A male and a female commentator guide the viewer through testimonials and further discuss the ramifications of rape for the victim. Viewers are asked to imagine the experience of a loved one being raped. The intended goal is to accurately convey the level of harm that can be caused by rape in a manner that evokes empathy.

Outcome Expectancies - This segment focuses on the testimonials of four young men who engaged in sexual assault. The viewer is guided through the testimonials and depictions by a male commentator who also serves as the interviewer. Two of the men are in prison. These men talk about the problems associated with being a young male in prison, including their own sexual victimization. One man has recently been paroled, but cannot find decent employment, even though he has a degree from a good school. The fourth young man was never convicted, but suffered severe social and educational ramifications, including stigmatization and isolation. He eventually had to move to

another location. Viewers are asked to imagine their parents' reactions to their being charged with rape.

Participants

Participants for both the pilot study and the experimental conditions consisted of 203 undergraduate males from the University of Nevada, Reno (100 for the pilot study and 103 for the experimental conditions). Recruitment consisted of flyers posted on campus, in dorms, near fraternities, and in introductory psychology classes. No steps were taken to control for age, ethnicity, or any other demographic variable. However, these variables were assessed via questionnaire and analyzed.

Procedures

The pilot study was designed to measure the ability of each video segment to affect the psychological construct intended (e.g., does the victim empathy segment change the empathy ratings?). Participants were randomly assigned to one of three conditions, rape myth acceptance, victim empathy, and outcome expectancy, and were assigned a subject number. After reading an informed consent and agreeing to continue, participants were asked to complete a demographics questionnaire and a content specific experimental questionnaire (i.e., empathy manipulation check, rape myth acceptance questionnaire, and outcome expectancy questionnaire). These forms were collected after completion and the participant was asked to view a short video segment which consisted of the corresponding portion of the video intervention. Finally, participants completed a post-test questionnaire which consisted of the same measure administered pre-test. Subject data was stored by subject number and kept separate from informed consent forms.

Subjects for the experimental conditions were randomly assigned to either of two conditions, the experimental condition and the alternate treatment control condition, and were run in groups. Groups sizes ranged from two individuals to ten individuals. All subjects within one trial group were in the same condition (i.e., experimental or alternate treatment). Participants were assigned a subject number and were asked to read and sign an informed consent. These forms were kept separate from any data. Subjects were then given a series of pre-test measures (listed below). The appropriate video-intervention was then shown on a Sony 27" Trinitron XBR monitor with Mitsubishi S-VHS video recorder. The video lasted for approximately 45 minutes. After the video presentation, participants were asked to complete another set of questionnaires (described below). After completion, subjects were debriefed regarding the task and goals of the experiment, and were asked to refrain from sharing their experience with other potential subjects until after conclusion of the project.

Measures for the Pilot Study

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

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

Rape Myth Acceptance Scale (Burt, 1980). This scale measures the degree to which a person believes the false information concerning rape (i.e., "Women who get raped while hitchhiking get what they deserve;"). Burt reported an alpha coefficient of .88 for this scale. This scale has been found to discriminate between convicted rapists and non-rapists. This measure was used to evaluate the construct validity of the rape myth treatment.

Probability Questionnaire (O'Donohue, McKay, & Schewe, in press). Bandura (1977) suggested that outcome expectancies can be assessed by subjects' rating their perceived likelihood of outcomes on 10-point Likert scales. For this study, outcomes such as guilt, shame, worries about sexually transmitted diseases, pregnancy, likelihood of arrest and conviction, career and reputation being negatively affected were evaluated on 10-point Likert scales that ranged from 0 (no likelihood of occurring) to 10 (complete expectation of occurring). O'Donohue et al (in press) found that in a sample of 185 male undergraduates that subjects indicating lower negative outcome expectancies regarding rape reported a greater history of coercive sexual behavior, higher future likelihood of raping and were more likely to fit a hyper-masculine personality pattern. This measure was used to assess the construct validity of the decision theory module.

Measures for the experimental conditions

Demographics (pre only)-described above.

Hyper-masculinity Scale (pre only)-(Mosher & Sirkin, 1984) This 30-item questionnaire measures the subject's 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. A Cronbach's alpha of .89 was found in a sample of 135 college men.

Sexual Experiences Survey (SES; pre only)-Koss and Oros (1982) developed the SES with the purpose of detecting "hidden" incidents of sexual aggression and sexual victimization in a person's past. When used in college populations, researchers have found that 10% to 35% of males indicate some past use of force in sexual relationships (Schewe & O'Donohue, 1993). In a community sample that consisted largely of college students, Malamuth (1986) found an alpha coefficient of .83 (n=155). Malamuth found that responses to the SES are correlated with sexual arousal to rape, dominance as a

sexual motive, hostility towards women, acceptance of violence toward women, and sexual experience (r 's = .30 to .43).

Motivation Rating (pre only)-George and Marlatt (1984) found that subjects' self-report of their degree of motivation to change was a useful predictor of short and long-term therapy outcome. Subjects were asked to rate on a ten-point Likert scale their motivation to decrease their potential to commit acts of sexual abuse.

Rape Myth Acceptance scale (pre/post)-described above.

Acceptance of Interpersonal Violence (pre/post) - This scale measures attitudes condoning the use of force in relationships (Burt, 1980). Malamuth found this scale to have a stronger relationship with sexual aggression, as measured by the SES, than any of Burt's other scales (Malamuth, 1986). Reliability studies for this scale report alpha coefficients around .60 (Burt, 1980; Malamuth, 1986).

Adversarial Sexual Beliefs Scale -(pre/post) 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 this scale is .80.

Attraction to Sexual Aggression Scale -(pre/post) - Malamuth (1989) developed this sixitem scale (short version) to improve upon the psychometric properties of previously described "likelihood" measures and to expand the construct of the "lure" of sexual aggression. The scale shows high internal consistency ($\text{Alpha} = .84 - .91$) and adequate test-retest reliability $r = .76$. In addition, the scale was significantly correlated with rape supportive attitudes ($r = .46$), perceptions ($r = .30$), and behavioral inclinations to commit acts of sexual violence (r 's = .22-.56). As evidence of the scale's discriminant validity, the ASA did not correlate highly with attraction to other deviant behaviors.

Rape Empathy Scale (RES; pre/post)- Deitz et. al (1982) created a forced choice, 19-item scale purported to measure empathy either for the rapists or for the victims of rape. The internal consistency of the scale varies for different populations between $\text{alpha} = .89$ to $\text{alpha} = .82$. Scores on the RES were found to be negatively correlated with male's reported desire to rape a woman ($r = -.58$) and as evidence of discriminant validity scores were not significantly correlated with scores on the Marlowe-Crowne Social Desirability Scale. Subjects who indicated more empathy for victims sentenced a hypothetical rape defendant to a longer prison term and attributed more responsibility for the crime to the defendant than subjects who scored low on the RES.

Self Efficacy Ratings (pre/post, Bandura, 1973; Hall, 1989) - Self-efficacy is a

construct developed by Bandura to predict future behavior. Changes in self-efficacy ratings have been found to be predictive of therapy outcome (e.g., Bandura, Adams, & Beyer, 1977). Self-efficacy refers to ones' belief that one has the ability to perform a task successfully in a given situation. Subjects rated their certainty of performing behaviors on a seven-point Likert scale (Bandura, Adams, & Beyer, 1977).

Credibility Ratings (post only) -This is a series of three questions rated on a Likert scale which assess the perceived accuracy of the video, the perceived credibility of the video, and how effective the subject predicts the video will be in decreasing rape.

Pilot Results

Due to the limited number of comparisons conducted in this study (i.e., four), paired-comparisons t-tests were utilized to compare group means, and a one way ANOVA was utilized to compare group age means. One of the two independent sections of the Probability Questionnaire had to be discarded because a large percentage of subjects 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., in press).

An ANOVA was utilized to determine significant age differences. Results indicated that there was no significant difference in the mean age of the three groups ($f = 2.25$, $p = .11$). Paired-samples t-tests were conducted to determine differences in the manipulation check measures. There were significant differences in the pre-post scores of subjects in the Rape Myth condition ($t=4.5$, $p<.000$), Victim Empathy ($t=9.7$, $p<.000$), and Outcome Expectancy ($t=2.7$, $p<.01$). Each of the differences was in the direction predicted. This indicates that the three video segments incorporated in the intervention changed the corresponding psychological construct.

Experimental Results

An independent sample t-test was utilized to determine significant differences in age between the experimental and alternate treatment conditions. Results indicated that there was no significant difference ($t=1.92$, $p = .057$). A MANOVA was utilized to compare experimental and alternate group scores on the three pre-only, and post-only assessments and the data are illustrated in Table One. As predicted, the results indicated that there was no significant difference on the Motivation rating ($f = 3.1$, $p <.074$), the Sexual Experiences Survey ($f = .4$, $p <.528$), or the Hypermasculinity Scale ($f = 1.8$, $p <.189$). This suggests that participants were relatively similar across groups. Responses to the questions on the credibility questionnaire were analyzed separately. Results indicated that subjects reported the two programs were equally realistic (i.e., "The video I watched was realistic", $f=1.6$, $p<.210$). However, subjects reported that the experimental treatment 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", $f=22.6$, $p<.000$; "The video I watched will be effective in stopping rape", $f=29.5$, $p<.000$). It is difficult to determine how this may have affected the experimental results. It would have been more 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 non-effective interventions, but it may be that their differential perceptions of credibility artificially enhanced the experimental results.

A MANOVA was conducted on the difference scores of the six pre-post measures. The results (see Table 1) indicated that there were greater differences (in the predicted direction) on the RMA ($f=31.6$, $p<.000$), the AIV ($f=7.9$, $p<.000$), the ASBS ($f=21.6$, $p<.000$), the ASAS ($f=14.2$, $p<.000$), the RES ($f=23.8$, $p<.006$) and the SER ($f=10.8$, $p<.001$). This suggests that the experimental video-based intervention tested in this study was significantly more effective in changing each of the specific classes of rape-related cognitions previously identified than the alternate treatment.

Analysis of Effect of Ethnic Categorization

While the number of students in specific individual minority groups was too small to allow evaluation of specific differences (i.e., differences between ethnicities), results of study were analyzed to determine if there was a differential effect for minority vs. non-minority groups. A MANOVA on difference scores was utilized to determine if there were effects due to minority status. As indicated in Table Two, results indicated that there were no significant differences between minority and non-minority subjects' on any measure in either condition.

Discussion

A video-based rape prevention program aimed at undergraduate males was developed and evaluated. Expert consultants judged each of the modules to be content valid. The program was judged to have satisfactory consumer acceptability in three focus groups. The next study provided evidence that each module of the program had acceptable construct validity in that each module resulted in significant change in the relevant measure of the hypothesized underlying construct. Finally, the experimental program resulted in significantly more immediate change on a number of rape-related measures such as self-efficacy ratings, Attraction to Sexual Aggression, Adversarial Sexual Beliefs, and the Rape Empathy Scale, than an alternative treatment.

This study is consistent with previous research which points to the usefulness 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 statements concerning the relative contributions of each of the modules. Schewe and O'Donohue (1993; in press) found somewhat conflicting results from video modules that

were not professionally made and with a sample of high risk subjects. Schewe and O'Donohue (1993) found that victim empathy modules produced more change on a number of indices related to rape proclivity, while the same authors in a later study found that an intervention targeting rape myths produced more change than a module which contained both victim empathy and outcome expectancies. Future research should utilize a dismantling design to assess the relative contributions of these modules singly and in various combinations. However, this research in combination with this previous research, points to the initial promise of targeting these constructs to decrease male rape potential.

The two major limitations of the present research concern measurement limitations and the fact that only the immediate effectiveness of the intervention was assessed. This study relied exclusively on self-report questionnaire data and thus suffers from mono-method bias. Moreover, there was no measure of the actual bottom line—a reduction in the incidence of sexual assault. Rather, a series of related variables (e.g., acceptance of interpersonal violence, rape empathy) was measured. Although these are theoretically related to the sexual perpetration, they still need to be recognized as proxy measures. Because it is difficult to measure the actual incidence of rape due to huge under reporting, measurement of the bottom line presents enormous difficulties. 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 in multiple measurement periods. Most rape-prevention programs are given once in a students' college career. However, it is an open empirical question whether this frequency is sufficient to maintain the changes seen immediately after the treatment.

To date, the major focus of rape prevention efforts has been directed at teaching females strategies to avoid or escape from perpetration. This study points to the importance of augmenting these efforts by including programs aimed at males to reduce their potential for attempting rape. The study developed and evaluated a brief, easy to administer, low cost, intervention that was acceptable to consumers and which produced positive changes in males on a number of rape-related variables.

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Table 1. Means and (Standard Deviations) of Raw Scores from Pre and Post Intervention Measurements in the Pilot Study

<u>Measurement</u>	<u>Pre</u>	<u>Post</u>	<u>t</u>	<u>p</u>
Rape Myth Acceptance Scale**	63.3 (10.2)	69.1 (8.2)	4.5	.000
Empathy Manipulation Check**	21.9 (7.2)	36.5 (7.6)	9.7	.000
Outcome Expectancy *	1485.5(350.8)	1615.5 (328.1)	2.7	.010

* $p < .05$; ** $p < .001$

Table 2. Mean and S.D. of (1) Difference Scores for Experimental and Alternate Treatment Conditions, (2) Pre-Only Measures, and (3) Post-Only Measures.

<i>Difference score means/S.D.'s</i>	<i>Exp diff</i>	<i>Alt diff</i>	<i>f</i>	<i>p</i>
Acceptance of Interpersonal Violence*	3.5(4.5)	.1(4.7)	7.9	.006
Attraction to Sexual Aggression Scale**	2.0(2.4)	-.46(2.9)	14.2	.000
Adversarial Sexual Beliefs Scale**	4.9(3.9)	.66(4.8)	21.6	.000
Rape Empathy Scale**	.83(1.3)	-.04(1.8)	23.8	.000
Rape Myth Acceptance Scale**	6.6(5.2)	.9(4.9)	31.6	.000
Self-Efficacy Ratings*	3.1(4.1)	.64(3.3)	10.8	.001
<i>Pre-Only Measure Means/S.D.'s</i>	<i>Exp</i>	<i>Alt</i>	<i>f</i>	<i>p</i>
Motivation rating	1.6(1.4)	2.1(1.8)	3.1	.08
Hypermasculinity Scale	8.8(5.3)	7.5(5.0)	1.8	.19
SES	.73(.77)	.62(.99)	.4	.53
<i>Post-Only Measure Means/S.D.'s</i>	<i>Exp</i>	<i>Alt</i>	<i>f</i>	<i>p</i>
Credibility 1	2.4(1.6)	2.8(1.6)	1.6	.21
Credibility 2**	1.7(1.1)	2.9(1.5)	22.6	.000
Credibility 3**	2.9(1.6)	4.7(1.8)	29.5	.000

* $p < .05$; ** $p < .001$

Table 3. Ethnicity Based Differences.

<i>Pilot Study</i>				<i>Study Two</i>			
<u>Condition</u>	<i>f</i>	<i>p</i>		<u>Condition</u>	<i>f</i>	<i>p</i>	
Rape Myth Acceptance	.05	.82		AIV	1.39	.24	
Victim Empathy	1.41	.24		ASAS	.01	.92	
Outcome Expectancies	1.30	.26		ASBS	.79	.38	
				RES	.30	.58	
				RMA	.01	.92	
				SER	.65	.42	