

Behavior Differences Seven Months Later: Effects of a Rape Prevention Program

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First-year men at a midsized public university either saw a rape prevention program or were in a control group and were asked to complete attitude and behavior surveys at the beginning and end of an academic year. Participants were also asked whether they joined fraternities during that year. With 90% of first-year men participating throughout the duration of the study, results showed that men who joined fraternities during the year and had seen a rape prevention program at the beginning of the academic year were significantly less likely to commit a sexually coercive act during the year than control group men who joined fraternities. Long-term attitude change was also associated with program participation. Results are discussed regarding effective program strategies for educating fraternity men about rape on college campuses.

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Despite much educational programming on college campuses focused on rape prevention and risk reduction (Anderson & Whitson, 2005; Katz, 2006), one in four college women have consistently reported surviving rape or attempted rape on numerous multicampus studies sampling thousands of college students for several decades (Fisher, Cullen, & Turner, 2000; Mohler-Kuo, Dowdall, Koss, & Wechsler, 2004; Koss, Gidycz, & Wisniewski, 1987). Up to 5% of college women survive rape or attempted rape every year (Mohler-Kuo et al., 2004). Perpetrators of rape are almost always (98%) men (Sedgwick, 2006); in addition, 9% of college men admit to acts that meet the legal definition of either rape or attempted rape (Ouimett & Riggs, 1998).

Early programmatic attempts to address this problem focused on encouraging women to change their behavior by not going out alone at night, curbing alcohol use, and taking self-defense classes. Although these recommendations have value, they showed few, if any, signs of addressing the root of the problem—the behavior of men who chose to rape (Katz, 2006).

Particularly during the last decade, an increasing number of programs have focused on educating men about rape, with a wide variety of consequences on posttest evaluations from showing a *greater* likelihood of committing rape (Berg, Lonsway, & Fitzgerald, 1999); to changes in attitudes toward less stereotyped beliefs about rape, rape victims, and rapists (Choate, 2003); to lower self-reported likelihood of raping (Foubert, 2000). Early efforts were largely ineffective, with few producing any signs of lasting change among male participants (Lonsway, 1996). In the last decade, several promising efforts have begun to establish a foothold in the rape prevention arena, with increasingly more powerful results (Choate, 2003; Foubert & Newberry, 2006; O'Donohue, Yeater, & Fanetti, 2003).

Some of the more successful efforts have used male college students to encourage their peers to change their perspectives on rape and to take greater responsibility for confronting their peers (Brecklin & Forde, 2001; Foubert, 2005; Katz, 2006). A few studies have shown initial signs of changes in behavior related to rape, such as being willing to help out or to advocate for funding for rape prevention (Heppner, Humphrey, Hillenbrand-Gunn, & Debord, 1995). Other research has found that after participating in a rape prevention program, men pre-

dict that they will be less likely to be sexually coercive or that they would intervene to help prevent an alcohol-related rape from occurring (Foubert, Tatum, & Donohue, 2006). Qualitative research has shown signs of changed behavior through comments from men who indicate that several months after participating in a rape prevention program they have avoided telling a rape joke or have confronted others when one is told (Foubert & Perry, 2007).

Among men on college campuses, fraternity men are more likely to commit rape than other college men (Bleeker & Murnen, 2005; Boeringer, 1999). Thus, rape prevention efforts often target fraternity men (Choate, 2003; Larimer, Lydum, Anderson, & Turner, 1999; Foubert & Newberry, 2006). Compared to their peers on college campuses, fraternity men are more likely to believe that women enjoy being physically "roughed up," that women pretend not to want sex but want to be forced into sex, that men should be controllers of relationships, that sexually liberated women are promiscuous and will probably have sex with anyone, and that women secretly desire to be raped (Boeringer, 1999). Beyond the aforementioned quantitative findings, qualitative research suggests that fraternity culture includes group norms that reinforce within-group attitudes perpetuating sexual coercion against women. These cultural norms have the potential to exert powerful influences on men's behavior (Boswell & Spade; 1996).

As many student affairs administrators can explain anecdotally, most rape committed by college students involves alcohol. Specifically, in 72–81% of cases in which a male rapes a female college student, the female is intoxicated (Lisak & Miller, 2002; Mohler-Kuo et al., 2004). Frequent, heavy episodic drinking increases college women's chances of experiencing rape by eightfold (Mohler-Kuo et al., 2004). Among male offenders who rape women, 64% were using alcohol and/or drugs prior to the attack (Brecklin & Ullman, 2002). In addition, men who are more sexually coercive also drink higher amounts of alcohol than noncoercive men, particularly during sexual encounters (Abbey, Clinton-Sherrod, McAuslan, Zawacki, & Buck, 2003; Abbey, McAuslan, Zawacki, Clinton, & Buck, 2001; Carr & VanDeusen, 2004).

Furthermore, the more alcohol that men consume, the more aggressive they are in situations in which a sexual assault takes place. The

link between alcohol and sexual assault is further compounded by findings that when men are intoxicated, they perceive rape survivors as being less distressed and less disgusted by their attackers than do sober men (Norris, George, Davis, Martel, & Leonesio, 1999). Interestingly, the more sexually coercive a man is the less honest he believes women are about not wanting to have sex on a particular occasion (Bernat Calhoun & Stolp, 1998). This is especially evident when alcohol has been consumed by both parties. Finally, studies examining sexually aggressive men have shown that they are less inhibited about being coercive with women who have consumed alcohol. Although the amount of alcohol a woman consumes has no effect on nonaggressive men's perceptions of how far to push their sexual advances, sexually aggressive men are much more likely to be coercive when a woman has consumed alcohol (Bernat et al., 1998).

Clearly, the problem of rape, fraternity men, and alcohol is a vexing dilemma on today's college campus. At present, no program evaluation study has shown a change in men's perpetration of sexually coercive behavior using an experimental design (Anderson & Whitson, 2005); in fact, only one rape prevention program has been shown to have a clear, long-lasting effect on men's attitudes (Schewe, 2002). A revision of this long-lasting program, The Men's Program (Foubert, 2005), is the intervention evaluated in the present study.

The theoretical framework used for the present study was belief system theory. The core concept of belief system theory is that in order to produce lasting attitude and behavior change, programmatic interventions must be designed to maintain people's existing self-conceptions (Grube, Mayton, & Ball-Rokeach, 1994). Many interventions begin with the implicit or explicit assumption that their male program participants are potential rapists (Berkowitz, 1994; Davis, 2000); thus, according to belief system theory, the probability of success of such programs is low. Research has shown that men, regardless of whether they have committed sexual assault, do not perceive themselves to be potential rapists (Scheel, Johnson, Schneider, & Smith, 2001). The program evaluated in the present study attempts to influence men by appealing to beliefs they have about being potential helpers (Scheel et al., 2001). Presenters of The Men's Program approach men as potential helpers of survivors who can learn to respond more effectively to women who might seek their assistance after surviving rape.

Appealing to this persona has shown success in earlier evaluation studies (Foubert, 2000; Foubert & Cowell, 2004).

The programmatic method in this study used the tone men suggested by Scheel et al. (2001) by framing the experience as a workshop on how to help a sexual assault survivor recover from her traumatic experience. The program has been grounded in belief system theory (Grube, Mayton, & Ball-Rokeach, 1994) and has been based in the literature on effective rape prevention programming methods (Brecklin & Forde, 2001). The findings of a meta-analysis showed that programs presented to all-male audiences are much more likely to change men's attitudes and behavioral intent to rape than those presented to coeducational audiences (Brecklin & Forde, 2001). In addition, research has shown that as men increase their empathy with survivors, understand rape trauma, and have more aversion to rape, they report less likelihood of raping (Schewe, 2002). According to Schewe's review, ten studies have been published that assess the effects of an empathy-based intervention on men's attitudes toward rape and/or their behavioral intent to rape. *All* of the studies depicting a man as a survivor significantly improved men's attitudes toward rape and/or lowered their behavioral intent to rape. In stark contrast, *all* of the studies evaluating the impact of a program whose primary intervention method was to depict a female survivor *increased* men's rape myth acceptance; one such program even increased men's reported likelihood of sexual aggression. Therefore, presenters of The Men's Program show a video (One in Four, 2000) describing a male-on-male rape experience designed to teach men how a rape experience might feel. Afterward, presenters note that the described perpetrators were presumably heterosexual and known to the survivor, as with many male-on-male rapes (Lisak, Hopper, & Song, 1996). This point is made clear to the audience in an effort to meet one of the program's goals: to confront any preexisting homophobic assumptions held by audience members that male-on-male rapes are commonly perpetrated by gay men. Instead, presenters of The Men's Program note that they are describing the more common occurrence of heterosexual perpetrators who use rape and battery to exert power and control over another male.

Next, presenters make connections between a male-on-male and a male-on-female rape experience to facilitate audience members' empa-

thy toward rape survivors. Later, men are taught how to support a rape survivor. Men next learn the basics of defining sexual consent and hear strategies for confronting peers as bystanders when they overhear others tell jokes about rape, act in ways that demean women, or brag about abusing women. Following that, men are taken through a guided imagery of a woman close to them who is raped under the influence of alcohol while a bystander watches and does nothing. Men then brainstorm ways that they could intervene in situations where an alcohol-related rape might occur. The program itself lasts about 1 hour and is usually presented by four undergraduate male peer educators, often part of peer education groups named One in Four (see www.oneinfourusa.org). Given the potential for a strong emotional impact on audience members, particularly survivors of sexual assault, several disclaimers are given to participants and appropriate resources are offered.

Over time, The Men's Program has been modified in accordance with feedback obtained through quantitative and qualitative evaluation studies of mostly, but not exclusively, fraternity men (Foubert, 2000; Foubert & Cowell, 2004; Foubert & Newberry, 2006; Foubert & Perry, 2007). For example, a focus group study with a follow-up survey of fraternity men and student athletes has shown evidence of lasting attitude and behavior change (Foubert & Cowell, 2004; Foubert & Perry, 2007). Participants who gave feedback in these focus groups and on a follow-up survey of open-ended questions attributed their changed attitudes and changed bystander behavior to their program participation. Fully 100% of focus group participants reported either lasting attitude or behavior change 5 months after participating in The Men's Program. Most reported both attitude and behavior change. Research on fraternity culture suggests a strong aversion among men in fraternities to verbalize a request for sexual consent, particularly with a partner who is under the influence of alcohol. This result in particular suggests the need for targeting programming with this population and on this issue (Foubert, Garner & Thaxter, 2006). Using this feedback, and feedback gained from earlier focus group studies (Foubert & Cowell, 2004), a program module covering alcohol and bystander intervention was added to The Men's Program. When tested on fraternity men, results showed significant pre/post declines in rape myth acceptance, likelihood of raping, likelihood of committing sexual assault, and significant increases in empathy toward rape sur-

vivors (Foubert & Newberry, 2006). The present study sought to extend these findings to a larger population with a longitudinal design.

In addition to extending prior findings, other important research questions emerging from the literature were addressed by the present study. For example, are men in fraternities more likely to commit sexual assault because of some preexisting characteristic? Is there something about fraternity culture that makes a man more likely commit sexual assault once he is socialized into fraternity culture? Thus far, research has not been conducted assessing the attitudes and behavior related to sexual assault among men who join fraternities *prior* to their joining a fraternity. This gap in the literature makes it challenging to determine whether fraternity culture affects college men or whether certain college men have preexisting characteristics that lead to increased sexually coercive behavior. Of course, it could be a combination of the two. Another hole in the literature exists with the absence of a study measuring the sexually coercive behavior of men who join fraternities during their freshman year compared to those who do not join fraternities. The present study addresses both gaps in the research literature.

The researchers focused their inquiry on the following research questions.

1. Do first-year men who join fraternities during their first year of college begin the year with different attitudes toward rape and/or different precollege acts of sexual assault when compared to men who do not join fraternities?
2. How do the attitudes toward rape and the rate of sexual assault perpetration by first-year men who join fraternities compare to those of first-year men who do not join fraternities at the end of their first year?
3. Does participating in The Men's Program at the beginning of the academic year impact first-year men's attitudes toward rape for men who join a fraternity?
4. Does participating in The Men's Program at the beginning of the academic year impact first-year men's acts of sexual assault committed during their first year in college for men who join a fraternity?

Based on research showing that fraternity men have a higher likelihood of committing sexual assault than other college men, hypothesis one was that men who joined a fraternity would be more likely to commit sexual assault during their first year of college than men who did not join a fraternity. Based on research on the efficacy of The Men's Program in helping to change men's attitudes and behavioral intent to rape, and the work done with fraternity men to revise the program to be more salient to their culture, hypothesis two was that men who joined fraternities and who saw The Men's Program would commit fewer acts of sexual assault during their first year of college than fraternity men who did not see The Men's Program.

Based on prior research on The Men's Program (Foubert; 2000; Foubert & Newberry, 2006), the third hypothesis was unidirectional, predicting that men who joined fraternities and began the year by participating in The Men's Program would report significant declines in rape myth acceptance immediately after and 7 months after program participation. The researchers further hypothesized this effect to be lower than a control group at the post and follow-up posttest.

Methodology

Participants

Participants for this study were traditional age undergraduate male students enrolled at a small to mid-sized public, southeastern university. First-year men at this institution either saw The Men's Program as part of their extended orientation programming during the first month of the school year or were in a control group that saw a program designed not to elicit attitude or behavior change on the variables measured. The campus holds fraternity recruitment in the fall, so men who joined fraternities did so shortly after participating in The Men's Program. A total of 565 first-year men completed useable surveys in the fall and spring administration of this study, constituting 90% of first-year men at the institution. All were full-time students who lived on campus.

Materials

Participant's attitudes toward sexual assault were measured using the

short form of the Illinois Rape Myth Acceptance Scale (Payne, Lonsway, & Fitzgerald, 1999). Payne et al. (1999) developed this scale through six studies including a factor analysis for construct definition and item pool selection, a complete-link cluster analysis to determine the structure and dimensions of the scale, item pool selection based on fit to a hierarchical model, and a construct validity study correlating the IRMA to seven similar measures ($r =$ between .50 and .74, $p < .001$). They also conducted a study where groups known to differ in rape myth acceptance scored differently as predicted on the IRMA ($p < .001$) and a validity study correlating IRMA scores with a content analysis of open-ended scenarios written by participants that were analyzed for rape myth content ($r = .32$, $p < .05$).

The Sexual Experiences Survey (SES) (Koss & Gidycz, 1985) is a 10 item survey that asks respondents to indicate whether they have perpetrated behaviors ranging from engaging in fondling, kissing, or petting through excessive psychological pressure on a woman to more extreme behavior such as unwanted sexual intercourse. Participants respond to each question by answering yes or no. An individual's score on the instrument is the number of the highest question (closest to 10) to which he answered yes. If participants answer yes to questions 8, 9, or 10, rape is indicated; 6 or 7 indicates sexual coercion; 4 or 5 indicates attempted rape; and 1, 2, or 3 indicates unwanted sexual contact. Scores on each item are not added together. Rather the participant's score is the number of the highest (closest to 10) question to which he responded yes. Participants also indicate the number of times they have committed each act, to allow for further analyses if necessary.

Koss and Gidycz (1985) reported that the SES was designed for normal populations and was used in a study of 10,000 college students nationwide. When measuring the internal consistency of the SES among 448 introductory psychology students (305 women, 143 men), a Cronbach's alpha of .74 was found for women and .89 for men. Test-retest reliability was assessed among 71 females and 67 males who took it a week apart; agreement emerged on 93% of the items.

In a validity study of the SES, Koss and Gidycz (1985) administered the SES to a group of 386 students who were also interviewed by a

psychologist assessing the same behaviors. Of these students, 242 were women and 144 were men. For women, SES and behaviors they reported in an interview correlated .73. Correlation for men between written SES scores and responses from an SES personal interview was .61. Koss and Gidycz (1985) reported that men tended to deny behaviors to a psychologist that they had admitted on paper. This inconsistency in reports did not occur in the test-retest survey situation. Thus, Koss and Gidycz (1985) suggested that the survey format has stronger validity than individual interviews.

Koss et al. (1987) found that 93% of male participants in their validity study of the SES reported the same information on the survey as in the interview. When participants differed in their reports, they admitted behavior on the questionnaire that they would not admit to an experimenter in person. When participants rated their honesty in completing the measure, on average they indicated 95% honesty.

Procedure

The University where the study took place required all first-year men to participate in either this or another program as part of new student orientation. For those who attended this program, trained graduate students explained that a study was being done of the program's effects and they were under no obligation to participate in the study itself, only to see the program. In return for survey completion throughout the study, participants were rewarded with a \$10 gift card to a nearby convenience store.

Using a Solomon four square design (Borg & Gall, 1989), participants were randomly assigned to four groups varying pretesting or no pretesting and participation in The Men's Program or a control condition. A trained graduate student distributed a pretest to one half of the participants and posttest surveys to all participants immediately after program participation in accordance with the Solomon four design. Seven months after program or control group participation, graduate student experimenters returned to first-year residences to distribute follow-up posttest surveys to all study participants. Experimenters returned to residences daily for a month until they reached a 90% return rate of the total population eligible for the study. A standard protocol of consent form distribution and reading of directions was

followed for each group. Pretest and posttest measures took approximately 10 minutes each to complete. Participants completed a pretest survey that included the short form of the Illinois Rape Myth Acceptance Scale the SES and a demographic questionnaire. Measures were counterbalanced to control for order effects.

Experimental group participants saw a presentation of The Men's Program (Foubert, 2005) by four experienced peer educators, each of whom had at least 20 hours of peer education training. Presenters began by setting a nonconfrontational tone, where participants heard that they would not be blamed for rape, nor would it be assumed that they wanted to rape a woman. Participants were told, instead, they would learn how they can assist women who come to them for help after being sexually assaulted. This approach was taken to be consistent with belief system theory. After disclaimers, an overview, and a basic review of rape definitions, presenters told the audience that they would view a videotape that described a rape situation. This tape described a male police officer being raped by two men who were depicted as violent, known previously to the officer, and heterosexual.

At the conclusion of the video, presenters noted that as with most male-on-male rape, the video they just watched depicted two presumably heterosexual men using rape and battery to exert power and control over the survivor. This portion was important because it confronted the homophobic misunderstanding some men may have that male-on-male rape is primarily perpetrated by homosexual men. Presenters then drew parallels from the male police officer's experiences to common experiences of female rape survivors. Participants were then taught basic skills on how to help a woman recover from rape. Next, presenters discussed how to define consent in intimate encounters and how to intervene as a bystander to help change social norms that condone rape. Presenters then led participants through a guided imagery of a woman close to them being sexually assaulted while another man, a bystander, did nothing to stop it. Next, participants were asked to consider what they would do in hypothetical situations in which they had the opportunity to confront another man who may be either abusing or preparing to be intimate with a woman who cannot give consent due to intoxication. Finally, participants considered what they would do in a potentially sexually intimate situation involving alcohol.

After answering questions, participants were reminded of the prevalence of rape and of the necessity for everyone to end men's violence against women.

Results

Hypothesis one was that men who joined a fraternity would be more likely to commit sexual assault during their first year of college than men who did not join a fraternity. This hypothesis was confirmed. As can be seen in Table 1, a one-way analysis of variance showed that prior to entering college, men who joined fraternities and men who did not join fraternities had statistically equivalent rates of precollege sexually coercive behavior. An additional one-way analysis showed that during their first year of college, men who joined fraternities committed significantly more sexual assaults than men who did not join fraternities. In addition to the means presented in Table 1, one can look at this same data as percentages and find that 8% of first-year men who joined fraternities committed a sexually coercive act during their first-year compared to 2.5% of men who did not join fraternities.

Table 1
Pre and Post First-year Means, Standard Deviations on
the Sexual Experiences Survey by Fraternity Membership

	Joined Fraternity <i>n</i> = 111	Did Not Join <i>n</i> = 365
Precollege Lifetime SES	.35 (1.4)	.21 (1.5)
End of First-Year 7-Month SES	.21 (.93)	.04 (.35)

Precollege Lifetime SES, $F(1, 440) = 1.22, p > .05$.

End of First-Year 7-Month SES $F(1, 474) = 8.35, p < .01$.

Hypothesis two was that men who joined fraternities and who saw The Men's Program would commit fewer acts of sexual assault during their first year of college than fraternity men who did not see The Men's Program. Hypotheses two was confirmed. As shown in table 2, fraternity men who saw The Men's Program at the beginning of their first year committed significantly fewer acts of sexually coercive behavior during the 7 months of their first year in college than fraternity men who did not see this program. In addition to the means shown in Table 2, it is noteworthy that 6% of first-year men who joined fraternities and saw The Men's Program committed a sexually coercive act during their first year compared to 10% of men who joined fraternities and did not see The Men's Program.

Table 2
End of First-year Means and Standard Deviations on the
Sexual Experiences Survey by Fraternity Membership
and September Participation in The Men's Program

	Joined Fraternity <i>n</i> = 111	Did Not Join <i>n</i> = 365
Saw The Men's Program	.05 (.22)	.05 (.47)
Control Group	.40 (1.3)	.03 (.17)

Difference in fraternity men who saw program vs. control $F(1,109) = 4.06, p < .05$

Hypothesis three was that men who joined fraternities and began the year by participating in The Men's Program would report significant declines in rape myth acceptance immediately after and 7 months after program participation. The researchers further hypothesized this effect to be lower than a control group at the post and follow-up posttest. Hypothesis three was mostly confirmed. In order to test hypothesis three, the researchers computed a two by two by three mixed analysis of variance with fraternity membership and program participation as between subjects independent variables, time (pretest,

posttest, 7 month follow-up) as within subjects variable and rape myth acceptance score as a dependent variable.

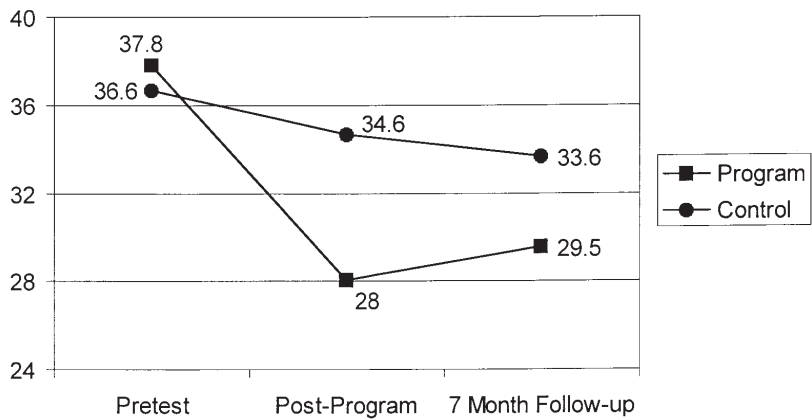
An interaction between time, program participation, and fraternity membership indicated differential effects of program participation over time relative to fraternity membership, $F(2, 230) = 4.16$, $p = .017$. A significant interaction also emerged between program participation and time, $F(2, 230) = 13.07$, $p < .001$. A significant main effect also emerged for time, $F(2, 230) = 51.07$, $p < .001$.

As can be seen in Table 3 and Figure 1, men who saw The Men's Program and later joined fraternities experienced a significant decline in their rape myth acceptance from their pretest to their posttest, $F(1, 55) = 37.85$, $p < .000$. This decline in rape myth acceptance remained significant at the 7-month follow-up posttest, $F(1, 55) = 17.98$, $p < .000$. Posttest and follow-up posttest scores were statistically equivalent, showing no rebound effect. The difference between the control group and the program group at the posttest was statistically significant, $F(1, 55) = 4.32$, $p < .05$. The difference between the control and program group at follow up was marginally significant, $F(1, 55) = 2.37$, $p = .065$.

Table 3
Rape Myth Acceptance Before, After, and at 7-Month
Follow-up for The Men's Program and Control Groups
Separated by Fraternity and Nonfraternity Men

	Pretest	Posttest	7-Month Follow Up
Fraternity			
Program	37.8 (13.5)	28.0 (11.3)	29.5 (10.1)
Control	36.6 (10.9)	34.6 (12.6)	33.6 (9.8)
Nonfraternity			
Program	33.5 (9.7)	28.0 (8.1)	31.5 (10.1)
Control	35.6 (10.2)	32.6 (10.8)	31.9 (11.8)

Figure 1
Mean Rape Myth Acceptance for
First-year Men Who Joined Fraternities



In accordance with the Solomon 4 design, a test to determine whether pretest effects emerged for rape myth acceptance at posttest or follow-up posttest or sexual assault at follow-up posttest was computed. Results showed that the only significant pretest effects in this study were for the posttest for rape myth acceptance $F(1, 451) = 21.51$, $p < .001$. Thus, first-year men who completed a pretest were more likely to score lower on the posttest for rape myth acceptance, regardless of program condition. Pretest effects were not significant for the follow-up posttest for either rape myth acceptance or for sexually coercive behavior. Given that the effects of the program measured on the short- and long-term attitudes of men are well established (Foubert, 2000; Foubert & Newberry, 2006), and that testing the short-term impact of the program was not part of the research questions for the study, this result does not have a major bearing on the overall findings.

Discussion

For decades, researchers have sought to write and evaluate a program that could demonstrate a measurable change in the sexually coercive behavior among program participants, to no avail (Anderson & Whitson, 2005; Schewe, 2002). The present study marks the first time

the research literature has broken the behavior change barrier in the rape prevention arena. In this study, men who joined fraternities during their first year of college and who saw The Men's Program at the beginning of that year reported committing fewer and less severe cases of sexually coercive behavior when the year was over than fraternity men who did not see The Men's Program. In fact, the only incidents of sexually coercive behavior reported by fraternity men who saw The Men's Program were the least severe possible on the scale (unwanted sexual contact). For the control group, the same unwanted sexual contact was reported by participants along with cases of attempted rape and coerced intercourse. With the use of a Solomon 4 research design, evidence points to the program as the source for the behavior difference between the control and experimental group.

The lessons this study teaches are as much about program development as they are about rape prevention. The approach used to create and continuously revise the program used in this study mirrored what student affairs scholars have called "the scholarship of practice" (Carpenter, 2001, p. 304). As such, The Men's Program is theory-based, data-based, peer-reviewed, and has changed over time. It is grounded in a theory of attitude and behavior change (Grube, Mayton, & Ball-Rokeach, 1994), guided in its development by research on effective rape prevention program elements (Brecklin & Forde, 2001), and has been subjected to continuous outcomes assessment testing (Foubert, 2000; Foubert & Cowell, 2004; Foubert & Newberry, 2006; Foubert & Perry, 2007; Foubert, Tatum, & Donahue, 2006). In addition, the program has been rewritten to fit outcomes assessment research (Foubert, 2005) and readjusted to fit specific cultures (Foubert, Garner, & Thaxter, 2006).

The result that men who joined fraternities reported long-term declines in their rape myth acceptance confirmed prior research (Foubert, 2000). What is interesting is that men who did not join fraternities did not experience a decline in rape myth acceptance. It could be that the program is more effective for fraternity audiences than for other college men or it could be that fraternity men are the ones who have more room to change. It could also be that the program is more effective with fraternity men and first-year men who have been influenced by fraternity men, but not as effective with first-year men who have are not part of social networks with upperclassmen.

Obviously, not every man is someone who commits a sexually coercive act (Ouimett & Riggs, 1998). Still, more men in this study who committed sexually coercive acts during their first-year of college were found among those who joined fraternities. Future research should focus on larger samples of sexually coercive men who are not only members of fraternities but who are from other student populations to identify the most effective method for leading them to be less coercive in the future.

It is noteworthy that the present study found evidence of behavior change and attitude change within the same population. In fact, the evidence for behavior change seems even stronger than that for attitude change. Scholars within and outside the rape prevention field have long debated the relationship between attitudes and behavior (Grube, Mayton, & Ball-Rokeach, 1994; Schewe, 2002), noting that a relationship exists between the two but that one does not necessarily always follow from the other. This points to the necessity of measuring both constructs when evaluating programmatic interventions and being careful not to assume that change in attitudes leads to change in behavior and vice versa.

Perhaps the greatest implication of this study is that it is possible to lower the incidence of sexually coercive behavior among a group of men through a programmatic intervention. Student affairs professionals have reason for greatly increased optimism in their efforts to prevent rape if they use this or other similar research-based approaches to prevention. Though future research should confirm the findings of this study before generalizing them broadly, this early result offers hope in the fight to end sexual assault on college campuses, particularly when dealing with fraternity men.

Another implication of this study points to the importance of using theory, research, outcomes assessment, and assessment of student cultures in program design to enhance their efficacy. By grounding a rape prevention program in the research literature, a result was generated that is the first to report a behavioral difference in sexually coercive behavior resulting from a program. Surely this is the beginning, not the end, of such studies. For this to be a beginning, more programs grounded in the research literature need to be developed, tested, and modified in that regard.

The present study has several limitations. First, pretest effects for initial pre/post attitude changes are of some concern. However, given that immediate attitude change was not part of the research questions for this study, this concern is attenuated. Another limitation was that the study occurred on one college campus. To support generalizability, more campuses and larger populations should be used. In addition, the difference between the control and experimental group on the follow-up posttest for attitude change was marginally significant, just shy of the .05 level, thus raising some question about the strength of the long-term attitude change resulting from program participation. This could indicate some slippage of the program's long term effect on attitudes. Another limitation to the study is that random assignment to joining fraternities was not possible given student choices and their freedom of association, thus the study could only be quasi-experimental.

In this study, men who joined fraternities and participated in The Men's Program committed fewer acts of sexually coercive behavior, and the acts they committed were less severe than those in a control group. Further research should identify what additional programs can strengthen this effect to further reduce these men's sexually coercive behavior.

Ultimately, this study identifies hope for the field of sexual assault prevention. A longitudinal study with a very high response rate validated a rape prevention program in its claim to reduce frequency and severity of sexually coercive behavior of participants. Now that the behavior barrier has been broken in the field of rape prevention, a new frontier stands ready to be explored. How do we make our existing programs even better to make behavior change even more powerful and lasting? How do we combine programs to find stronger interactive effects? How can policy makers, programmers, administrators, people in the rape prevention and risk reduction movement, and researchers work together to make even further progress? The well being of many survivors, and those who might not become survivors, depends on all of those parties working with all deliberate speed to find more effective solutions to the highly complex problem of rape on our college campuses and in our society.

References

- Abbey, A., Clinton-Sherrod, A. M., McAuslan, P., Zawacki, T., & Buck, P. O. (2003). The relationship between the quantity of alcohol consumed and the severity of sexual assaults committed by college men. *Journal of Interpersonal Violence*, 18, 813–833.
- Abbey, A., McAuslan, P., Zawacki, T., Clinton, A. M., & Buck, P. O. (2001). Attitudinal, experimental, and situational predictors of sexual assault perpetration. *Journal of Interpersonal Violence*, 16, 784–807.
- Anderson, L., & Whiston, S. (2005). Sexual assault education programs: A meta-analytic examination of their effectiveness. *Psychology of Women Quarterly*, 25, 374–388.
- Berg, D. R., Lonsway, K. A., & Fitzgerald, L. F. (1999). Rape prevention education for men: The effectiveness of empathy induction techniques. *Journal of College Student Development*, 40, 219–234.
- Berkowitz, A. D. (1994). Men and rape: Theory, research and prevention programs in higher education. San Francisco: Jossey-Bass.
- Bernat, J. A., Calhoun, K. S., & Stolp, S. (1998). Sexually aggressive men's responses to a date rape analogue: Alcohol as a disinhibiting cue. *Journal of Sex Research*, 35, 341–348.
- Bleeker, E. T., & Murnen, S. K. (2005). Fraternity membership, the display of degrading sexual images of women, and rape myth acceptance. *Sex Roles*, 53, 487–493.
- Boeringer, S. B. (1999). Associations of rape-supportive attitudes with fraternal and athletic participation. *Violence Against Women*, 5(1), 81–90.
- Borg, W. R., & Gall, M. D. (1989). *Educational research: An introduction*. New York: Longman.
- Boswell, A. A., & Spade, J. Z. (1996). Fraternities and collegiate rape culture: Why are some fraternities more dangerous places for women? *Gender & Society*, 10(2), 133–147.
- Brecklin, L. R., & Forde, D. R. (2001). A meta-analysis of rape education programs. *Violence and Victims*, 16, 303–321.
- Brecklin, L., & Ullman, S. (2002, January). The roles of victim and offender alcohol use in sexual assaults: Results from the national violence against women survey. *Journal of Studies on Alcohol*, 63, 57–63.

- Carpenter, D. S. (2001). Student affairs scholarship reconsidered: Toward a scholarship of practice. *Journal of College Student Development*, 42, 301–318.
- Carr, J. L., & VanDeusen, K. M. (2004). Risk factors for male sexual aggression on college campuses. *Journal of Family Violence*, 19(5), 279–289.
- Choate, L. H. (2003). Sexual assault prevention programs for college men: An exploratory evaluation of the men against violence model. *Journal of College Counseling*, 6, 166–176.
- Davis, T. L. (2000). Programming for men to reduce sexual violence. In D. Liddel and J. Lund (Eds.), *Powerful approaches for student learning: Programs that make a difference (New Directions for Student Services)*, pp. 79–89. San Francisco: Jossey-Bass.
- Fisher, B. S., Cullen, F. T., & Turner, M. G. (2000). *The sexual victimization of college women*. Washington, D.C.: National Institute of Justice, U.S. Department of Justice.
- Foubert, J. D. (2000). The longitudinal effects of a rape-prevention program on fraternity men's attitudes, behavioral intent and behavior. *Journal of American College Health*, 48, 158–163.
- Foubert, J. D. (2005). *The Men's Program: A peer education guide to rape prevention* (3rd ed.). New York: Routledge.
- Foubert, J. D., & Cowell, E. A. (2004). Perceptions of a rape prevention program by fraternity men and male student athletes: Powerful effects and implications for changing behavior. *NASPA Journal*, 42, 1–20.
- Foubert, J. D., Garner, D. G., & Thaxter, P. J. (2006). An exploration of fraternity culture: Implications for programs to address alcohol-related sexual assault. *College Student Journal*, 40, 361–373.
- Foubert, J. D., & Newberry, J. T. (2006). Effects of two versions of an empathy-based rape prevention program on fraternity men's rape survivor empathy, rape myth acceptance, likelihood of raping, and likelihood of committing sexual assault. *Journal of College Student Development*, 47, 133–148.
- Foubert, J. D., & Perry, B. C. (2007). Creating lasting attitude and behavior change in fraternity members and male student athletes: The qualitative impact of an empathy-based rape prevention program. *Violence Against Women*, 13, 70–86.
- Foubert, J. D., Tatum, J. L., & Donahue, G. A. (2006). Reactions of first-year men to a rape prevention program: Attitude and predicted behavior changes. *NASPA Journal*, 43, 578–598.

- Grube, J. W., Mayton, D. M., & Ball-Rokeach, S. J. (1994). Inducing change in values, attitudes, and behaviors: Belief system theory and the method of value self-confrontation. *Journal of Social Issues*, 50, 153–173.
- Heppner, M. J., Humphrey, C. F., Hillenbrand-Gunn, T. L., & DeBord, K. A. (1995). The differential effects of rape prevention programming on attitudes, behavior, and knowledge. *Journal of Counseling Psychology*, 42, 508–518.
- Katz, J. (2006). *The macho paradox: Why some men hurt women and how all men can help*. New York: Sourcebooks.
- Koss, M. P., & Gidycz, C. A. (1985). Sexual experiences survey: Reliability and validity. *Journal of Consulting and Clinical Psychology*, 53, 422–423.
- Koss, M. P., Gidycz, C. A., & Wisniewski, N. (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.
- Larimer, M. M., Lydum, A. R., Anderson, B. K., & Turner, A. P. (1999). Male and female recipients of unwanted sexual contact in a college student sample: Prevalence rates, alcohol use, and depression symptoms. *Sex Roles*, 40, 295–308.
- Lisak, D., Hopper, J., & Song, P. (1996). Factors in the cycle of violence: Gender rigidity and emotional constriction. *Journal of Traumatic Stress*, 9, 721–743.
- Lisak, D., & Miller, P. (2002). Repeat rape and multiple offending among undetected rapists. *Violence and Victims*, 17(1), 73–84.
- Lonsway, K. A. (1996). Prevention acquaintance rape through education: What do we know? *Psychology of Women Quarterly*, 20, 229–265.
- Mohler-Kuo, M., Dowdall, G. W., Koss, M. P., & Wechsler, H. (2004). Correlates of rape while intoxicated in a national sample of college women. *Journal of Studies on Alcohol*, 9, 37–43.
- Norris, J., George, W. H., Davis, K. C., Martel, J., & Leonesio, R. J. (1999). Alcohol and hypermasculinity as determinants of men's empathic responses to violent pornography. *Journal of Interpersonal Violence*, 14(7), 683–700.
- O'Donohue, W., Yeater, E. A., & Fanetti, M. (2003). Rape prevention with college males: The roles of rape myth acceptance, victim empathy, and outcome expectancies. *Journal of Interpersonal Violence*, 18(5), 513–531.

- One in Four Inc. (Producer). (2000). *The Police Rape Training Video* [Motion picture]. (Available from One in Four, William and Mary School of Education, Jones 320, P.O. Box 8795, Williamsburg, VA 23187-8795)
- Quitmette, P. C., & Riggs, D. (1998). Testing a mediational model of sexually aggressive behavior in nonincarcerated perpetrators. *Violence and Victims, 13*, 117–130.
- Payne, D. L., Lonsway, K. A., & Fitzgerald, L. F. (1999). Rape myth acceptance: Exploration of its structure and its measurement using the Illinois rape myth acceptance scale. *Journal of Research in Personality, 33*, 27–68.
- Scheel, E. D., Johnson, E. J., Schneider, M., & Smith, B. (2001). Making rape education meaningful for men: The case for eliminating the emphasis on men as perpetrators, protectors, or victims. *Sociological Practice: A Journal of Clinical and Applied Sociology, 3*(4), 257–278.
- Schewe, P. A. (2002). Guidelines for developing rape prevention and risk reduction interventions. In P. A. Schewe (Ed.), *Preventing violence in relationships: Interventions across the life span* (pp. 107–136). Washington, D.C.: American Psychological Association.
- Sedgwick, J. L. (2006). Criminal victimization in the United States, 2005 statistical tables: National crime victimization survey. Washington, D.C.: U.S. Department of Justice, Bureau of Justice Statistics, NCJ 215244