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Date rape prevention in women: A controlled outcome study

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DATE RAPE PREVENTION IN WOMEN:
A CONTROLLED OUTCOME STUDY

by

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Bachelor of Science
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1997

Master of Arts
University of Nevada, Las Vegas
2000

A dissertation submitted in partial fulfillment
of the requirements for the

**Doctor of Philosophy Degree in Psychology
Department of Psychology
College of Liberal Arts**

**Graduate College
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ABSTRACT

Date Rape Prevention in Women: A Controlled Outcome Study by

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Date rape is a widespread problem, especially among college-aged women. Date rape prevention programs have appeared on college campuses nationwide. However, the effectiveness of these programs to prevent date rape remains questionable. Studies addressing this issue have usually focused on changing students' thoughts about rape. A minority of studies have investigated the success of programs designed to change behaviors associated with rape. Even fewer studies have used the actual incidence of date rape as an outcome variable.

The present study examined a date rape prevention program designed to improve women's sexual assertiveness skills and decrease their involvement in behaviors associated with rape via a two hour behavioral group prevention and compared its effectiveness to the more standard "attitude change" prevention. Participants completed pre-test measures immediately preceding the prevention group and completed four-week and five-month post-prevention assessments.

There were four main hypotheses for this study. First, women in the behavioral condition would have a lower incidence of new victimizations, would show a reduction in risky dating behaviors and would improve prevention-related behaviors from pre-test to follow-up. Second, women in the behavioral condition would improve more than women in the attitude condition. Finally, history of victimization and alcohol use would moderate treatment success, such that previous victims would have lower treatment success.

Two hundred and ten college women participated in the initial prevention group. One hundred and sixty-nine returned for the four-week follow-up and eighty-two returned for the five-month follow-up. The hypotheses were partially supported. There were no differences between the two prevention groups with regard to new victimizations. Participants in the behavioral group reduced their reported alcohol usage, risky dating behaviors, beliefs in rape myths, and increased their sexual assertiveness and sexually assertive self-statements from pre-test to the four-week follow-up. The changes were maintained at the five-month follow-up. Participants in the attitude group increased their sexual assertiveness, decreased their risky dating behaviors, and reduced their beliefs in rape myths from pre-test to the four-week follow-up. These changes were also maintained at the five-month follow-up.

Women in the behavioral condition improved more than women in the attitude condition and those changes were maintained at the five-month follow-up. Participants were satisfied with treatment. Implications and suggestions for future studies are discussed.

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CHAPTER 1

INTRODUCTION

The terms rape, date rape, acquaintance rape, and sexual assault are often used interchangeably. Generally, there are three major components to the definition of rape: “(a) carnal knowledge of a person, which is defined as sexual penetration (b) lack of consent to this carnal knowledge, and (c) use of force or the threat of force to accomplish the act (Jackson & Petretic-Jackson, 1996, p. 8).” The National Crime Victimization Study (Fisher, Cullen, & Turner, 2000) defines rape as:

Forced sexual intercourse including both psychological coercion as well as physical force. Forced sexual intercourse means vaginal, anal, or oral penetration by the offender(s). This category also includes incidents where the penetration is from a foreign object such as a bottle. Includes attempted rapes, male as well as female victims, and both heterosexual and homosexual rape. Attempted rape includes verbal threats of rape. (p. 13)

Acquaintance rape or date rape describes a more specific type of rape that is perpetrated by someone the victim knows; this may include boyfriends, friends, coworkers, or classmates (Warshaw, 1994). Sexual assault subsumes many types of sex crimes, including fondling, forced touching, or kissing. Some authors refer to sexual assault as a less severe crime and do not include rape in this definition (Jackson & Petretic-Jackson,

1996). This paper will use the terms acquaintance rape and date rape interchangeably and will use rape as the overarching term to describe any type of unwanted penetration.

The prevalence of rape can be examined from a number of sources. First, the federal government conducts surveys of crime statistics from different agencies, including the FBI's Uniform Crime Reporting Program (UCR), the *National Crime Victimization Survey* (NCVS) by the U.S. Department of Justice Bureau of Justice Statistics, and the *National Violence Against Women Survey* by the U.S. Department of Justice Office of Justice Programs. Second, individual states, cities, and counties collect statistics on crime, for example, the State of Nevada Department of Public Safety's *Crime and Justice in Nevada* report. Third, colleges and universities collect crime statistics from students. Last, researchers collect statistics in the course of carrying out their research programs. All four of these methods help to provide a more accurate description of the prevalence of rape.

According to the UCR, forcible rape is defined as "...the carnal knowledge of a female forcibly and against her will. Assault or attempts to commit rape by force or threat of force are also included; however, statutory rape (without force) and other sex offense are excluded (p. 27)." The FBI reported that 93,433 forcible rapes were reported in 2003, which translates into 63.2 forcible rapes per 100,000 females. One rape occurs in the United States every 5.6 minutes (FBI, 2003). However, according to the *National Crime Victimization Survey 1992-2000* most rapes and sexual assaults against females are not reported to the police (Rennison, 2002). A full 63% of completed rapes, 65% of attempted rapes, and 74% of completed and attempted sexual assaults against women

were not reported to the police. Therefore, it is essential to examine statistics outside of law enforcement agencies, which use reported crimes in their statistics.

The *National Violence Against Women Survey* conducted by the National Institute of Justice reported that 302,091 women are forcibly raped each year (Tjaden & Thoenees, 1998). The survey found that one in six women were victims of attempted or completed rape. Based upon U.S. Census reports, an estimated 17,722,672 women will be victims of attempted or completed rape in their lifetime. All of the above statistics have included women over the age of 18; however, if only college aged women (18-24) are examined, the percentage of women victimized increases. The National Institute of Justice conducted the *National College Women Sexual Victimization Study* in 1997 and found that one in four to one in five women were victims of completed or attempted rape during their college career (Fisher et al., 2000). In 90% of the cases, the women knew their offender.

The rates of rape described above have been replicated many times in peer-reviewed research studies. As an example, Koss and colleagues (1987) used a national sample of over 3000 women and found that 53.7% of women revealed some form of sexual victimization; 15.4% reported experiencing rape. Similarly, Koss and Dinero (1989) found that 14.7% of their national sample of women reported being raped. Larimer, Lydum, Anderson, and Turner (1999) reported that 27.5% of sorority women reported being victims of unwanted sexual contact.

The above statistics focus essentially on the victims of date rape; clearly, the men who are doing the raping are an important part of the equation. Many studies have examined prevention strategies with men; however, there are fewer studies focusing

specifically on prevention with women. The current study will focus solely on prevention strategies for women. Therefore, the following literature review will focus primarily on studies aimed at female participants.

CHAPTER 2

REVIEW OF RELATED LITERATURE

Date rape research can be grouped into the two major categories of studies, those that examine rape attitudes and those that focus on behaviors that are associated with risk of rape (e.g., consumption of alcohol). Attitude studies have focused primarily on participants' beliefs about rape and empathy for rape victims. Behavioral studies have focused on risk-taking behaviors, self-defense, communication, and assertiveness. This review will begin with attitude studies and then move into the more behaviorally oriented studies.

Attitude studies take two general forms, surveys about participants' attitudes and studies aimed at changing attitudes. The research using exclusively female samples is sparse, so studies using both co-ed and male-only samples will be included to provide a more complete picture.

Survey Studies

Carmody and Washington (2001) assessed 623 female undergraduate students' attitudes about date rape using one of the most widely used attitude scales, Burt's Rape Myth Acceptance Scale (RMAS; 1980). The researchers examined participants' beliefs in rape myths as a function of their race (i.e., African American or Caucasian) and their victimization status. Victimization status is commonly assessed using Koss and Oros's

(1982) Sexual Experiences Survey (SES), which inquires about specific sexual experiences that the woman has had. Items include sexually coercive experiences, attempted rape, rape, and consensual sex. Carmody and Washington found that most participants disagreed with rape myths. Caucasian participants were slightly more supportive of rape myths than African American participants were, though the difference was not statistically significant. The endorsement of rape myths did not vary as a function of victimization status.

Male undergraduate students living in either single-sex residence halls, co-ed residence halls, or fraternity houses were randomly selected to participate in a study designed to assess rape supportive attitudes (Schaeffer & Nelson, 1993). The students had selected their own living situations. Men who lived in co-ed dormitories or in fraternity houses were less supportive of rape attitudes than men who lived in single-sex dorms. Participation in rape education did not relate to the housing condition or scores on rape supportive attitudes.

Ellis, O'Sullivan, and Sowards (1992) assessed rape attitudes of 100 women and 51 men as a function of gender and whether the participant knew someone who had been raped. Women were less supportive of rape supportive attitudes than men. Participants who reported knowing someone who had been raped were less supportive of rape myths than participants who did not know someone who had been raped.

Kopper (1996) asked male and female participants to read a date rape scenario. The scenarios varied by time of resistance by the woman (early or late in the date). Participants completed measures on rape myth acceptance and opinions on blame for the assault. Men and women who reported significantly less endorsement of rape myths and

who read a scenario in which resistance occurred early in the date, blamed the perpetrator for the attack and viewed the attack as less avoidable (by the woman).

Prevention Studies Focusing on Rape Supportive Attitudes

Studies Focusing on Men

In a study designed to test long-term changes in rape supportive attitudes, Foubert (2000) randomly assigned four fraternities to a treatment condition and four to a control condition. Two of the fraternities from each condition were randomly assigned to complete a pre-test, whereas the other two did not receive the pre-test. Pre-tested groups completed measures immediately before, after, and then seven months following the intervention. The other groups took the post-test and follow-up only. Participants in the intervention condition attended a one-hour program consisting of definitional information, a video description of a rape, how to help women recover from rape, and discussion.

Foubert (2000) found that the treatment group endorsed rape myths significantly less than the control group at follow-up. Further, the experimental group's endorsement of rape myths and their reported likelihood of engaging in rape decreased from pre-test to post-test and the change was maintained at follow-up. Unlike many of the attitudinal studies, this author attempted to relate attitude change to behavioral change. He assessed whether a change in attitude led to a decrease in reported sexually coercive behavior; however, there were no differences between the treatment and control conditions in reported sexually coercive behavior.

In a unique approach to decreasing men's beliefs in rape supportive attitudes and myths, Foubert and Marriott (1997) evaluated a program that purported to train male peer rape educators. The authors recruited participants from fraternity pledge classes; the pledge classes were assigned to either the treatment condition or the control condition (researchers did not specify assignment procedures). Experimental condition participants completed measures immediately preceding and following the intervention and at a follow-up two months later. Control participants completed measures twice, one month apart. From pre-test to post-test, rape myth acceptance decreased for the treatment group. The changes in rape myth acceptance levels rebounded at follow-up, but remained significantly lower than pre-test levels. However, the control group's endorsement of rape myths also declined from pre-test to post-test. Therefore, although there were some differences between the treatment and control conditions, the pre-testing may have affected post-test scores.

In another study focused on fraternity men, Foubert and McEwen (1998) randomly assigned two fraternities to a pre-tested experimental group, two to a no pre-test experimental group, and two to a pre-test control group. Participants attended a one-hour program that presented male-on-male rape situations and drew parallels to male-on-female rapes. The participants learned how to help a sexual assault survivor. At post-test, immediately following the program, the pre-tested experimental group showed a significant decline in their acceptance of rape myths from the pre-test. Further, the experimental group endorsed significantly fewer rape myths than the control group. The researchers also measured participants' behavioral intent to rape; this intent decreased

significantly from pre-test to post-test. However, the change in the experimental group did not differ from the change in the control group.

Gilbert, Heesacker, and Gannon (1991) evaluated a psychoeducational intervention for decreasing sexually aggressive attitudes in 61 men. The authors included three components in their intervention. The first component involved the participants' motivation to think about the topic. The researchers attempted to improve participants' motivation by having the subjects view role-played vignettes and by having facilitators present the didactic information orally instead of having the participants read the information. Second, the ability to think about the topic was accomplished through the use of vocabulary and messages that were suitably complex for a general adult audience, key points were repeated throughout the presentation, and the content was summarized at the end. Finally, researchers discussed the negative consequences of accepting interpersonal violence, rape myths, adversarial sexual beliefs, male-dominance ideology, and the social sanctions associated with accepting these beliefs.

Subjects were randomly assigned to the aforementioned psychoeducational group or the no-treatment control group (Gilbert et al., 1991). During the first session, subjects completed the pre-test and were dismissed. After the second intervention session, subjects immediately completed post-test measures, and control group subjects completed the post-test only. Results indicated that intervention subjects changed their attitudes in the desired direction (e.g., less endorsement of rape myths) more than the control group did.

Heppner and colleagues (1999) conducted a study that attempted to increase men's rejection of rape attitudes (Heppner, Neville, Smith, Kivlighan, & Gershuny,

1999). The authors used a multi-session, culturally-relevant intervention. One hundred and nineteen men were recruited for the study. The authors made special attempts to recruit African American men such that 36% of the participants were African-American. Participants completed questionnaires before the intervention, after each of the three intervention sessions, at a post-test immediately following the intervention, and at a five-month follow-up. The researchers randomly assigned participants to the culturally relevant intervention, the non-culturally specific intervention or to the control group. The 90-minute intervention sessions, held weekly, included a cognitive, affective, and behavioral aspect. The cognitive session included such topics as rape myths, statistics, and other psychoeducational components. The affective session focused on victim empathy, while participants in the behavioral component were presented with a role-play scenario and asked for suggestions on how to avoid sexual coercion. The culturally relevant groups included facts specific to different racial groups and were facilitated by both African American and Caucasian researchers.

Researchers found a significant effect for time; all participants showed a low-high-low pattern in their rejection of rape attitudes (Heppner et al., 1999). That is, participants reported a low rejection of rape attitudes at pre-test, a high rejection at post-test, and a low rejection at follow-up. This pattern is consistent with many studies on rape attitudes. The authors then used cluster analysis to identify the groups (clusters) within the participants. They identified a group whose scores improved from pre-test to follow-up, one whose scores decreased from pre-test to follow-up, and one whose scores show the typical rebound pattern. The authors found that participants assigned to either treatment condition were significantly more likely than control group members to be in

the improving group. Further, African American participants in the culturally specific intervention were more involved in the intervention than those in the “colorblind” group. Researchers were unable to examine any interactions between race and treatment condition at follow-up due to high attrition rates.

Studies Focusing on Co-ed Audiences

Within the co-ed attitude studies, the interventions can be grouped into those that utilized pre-existing participant groups, such as entire academic course sections or sororities, those studies that used pre-existing intervention programs, and those that examined interventions designed by researchers.

Pre-existing Groups

Dallager and Rosen (1993) compared co-ed undergraduate students in a human sexuality class with those in a general education class on their endorsement of rape myths and the acceptability of interpersonal violence. Participants were not randomly assigned; however, pre-test scores were used as covariates. Following the semester-long courses, those students in the human sexuality class indicated less support for rape myths, but there were no differences between men and women. In a similar study, Fischer (1986) compared students enrolled in three sections of a human sexuality course with students in one section of introductory psychology. Participants were not randomly assigned and pre-test scores were not used as a covariate. Generally, the same results were obtained; at the end of the semester, students in the sexuality class were less supportive of rape attitudes than those in the introductory course. Fischer did not examine the multiple interactions he found, so drawing a conclusion about differences between genders is

difficult. However, it appeared that women were less supportive of rape attitudes than men.

Franier, Valtinson, and Candell (1994) also attempted to reduce rape supportive attitudes using pre-existing groups. One sorority and one fraternity participated in the two-hour intervention and another sorority and fraternity were assigned to the control group. Participants were pre-tested one week prior to the intervention, post-tested immediately following the intervention and followed-up with one month later. At post-test, the intervention group indicated less rape supportive attitudes than the control group; however, at follow-up the differences disappeared.

Several studies have used existing courses that most college freshmen are required to take. Fonow, Richardson, and Wemmerus (1992) used students in 14 sections of introductory sociology. The sections were randomly assigned to receive a video presentation, a live presentation, or a no-treatment control group. Participants in both of the treatment conditions endorsed less supportive rape attitudes at the three-week post-test than the no-treatment control group.

Anderson and colleagues (1998) randomly assigned 10 sections of a psychology human development course to a video-based intervention, a talk-show intervention, or a control group. Both interventions were designed to discuss rape issues and to reduce rape supportive attitudes (Anderson, Stoelb, Duggan, Hieger, Kling, & Payne, 1998). Generally, attitudes improved from pretest to posttest, but trended back to pretest values at the seven-week follow-up. Both interventions were superior to the control group at post-test. Further, women reported fewer rape-supportive attitudes than men at all three

time assessments. Those participants who knew a rape victim were less supportive of rape attitudes than those who did not.

Similarly, Lenihan and colleagues (1992) recruited participants from 15 sections of an introductory health course (Lenihan, Rawlins, Eberly, Buckley, & Masters, 1992). The researchers used one 50-minute class period and presented information about rape and its effects. Students were divided into four groups. Group one was pre-tested, exposed to the program, and post-tested; group two was pre-tested and post-tested only; group three was post-tested only; and group four participated in the program and then was post-tested. The post-tests occurred one month following the program. Generally, men indicated more rape supportive attitudes than women did. The treatment was ineffective in changing attitudes for male participants. Women indicated less favorable attitudes toward rape at post-test regardless of participation in the program; however, women who participated showed greater change in their scores than control group women.

In a study designed to evaluate freshman athletes' attitudes toward rape, researchers randomly assigned sections of a health class to a treatment or a control group (Holocomb, Savage, Seehafter, & Waalkes, 2002). Participants completed a post-test only. As was expected, the control group reported more rape tolerant attitudes than the intervention group. In addition, men reported more rape tolerant attitudes than women. Researchers also tested for a differential impact of the intervention on women and men, but found no significant differences.

Overall, the literature suggests that date rape interventions that using pre-existing groups were not successful at changing rape attitudes. Although, some change in

attitudes was evident, often it was not maintained at follow-up (e.g., Franier et al., 1994) or no follow-up was conducted (e.g., Fischer, 1986) or equivalent changes occurred in both the control group and the intervention group (e.g., Lenihan et al., 1992). It does seem clear, from this group of studies, that men generally hold more rape supportive attitudes than women. One limitation with this group of studies is that many of the studies used different instruments to assess rape supportive attitudes and attitudes toward women, so making comparisons across studies is difficult.

Pre-existing Programs

Another way to study the effectiveness date rape intervention programs has been to assess programs already in use by colleges and universities. One university used an interactive drama program aimed at co-ed audiences to increase awareness about the risk of rape, rape prevention, and treatment. Researchers tested the program by randomly assigning 60 undergraduates to a pre-test/post-test treatment group, a post-test only treatment group, or a post-test only control group (Shultz, Scherman, & Marshall, 2000). Both of the treatment groups indicated significantly lower acceptance of rape myths than the control group at posttest. There were no differences between the two treatment groups at posttest. Further, from pre-test to post-test, the treatment group held significantly less rape supportive attitudes. Conversely, control group participants' beliefs in rape myths did not change significantly from pre-test to post-test. Moreover, there were no differences among the groups on intent to engage in risky behaviors associated with rape.

Similarly, researchers assessed the effects of a mandatory first-year rape education program (Lonsway & Kothari, 2000). The program lasted two hours and

included basic statistics and state laws concerning rape, a date rape video dramatization with discussion following the video, and a discussion of strategies to prevent rape.

Participants included students who had just completed the program, those that had not yet completed the program, and those who participated four to six months prior to the study. Consistent with previous results, participants tested immediately following the program showed more change in rape supportive attitudes and knowledge than those who had not participated and those who had participated months earlier. Further, women endorsed less favorable attitudes toward rape than men did. Finally, participants who had attended other rape programs endorsed more empathic attitudes toward the victim than those who had only participated in the mandated program.

In a study aimed at students involved in the Greek system, Lenihan and Rawlins (1994) evaluated a mandatory rape program that emphasized rape myths, responsibility to provide leadership, avoidance of alcohol abuse, and protecting other members of the sororities and fraternities. This group was compared with the data obtained in the Lenihan et al. (1992) study (described above). The 1992 study participants received a different program and that study did not include Greek members. The Greek group endorsed significantly less rape supportive attitudes than the control group at pre-test. As in previous studies, women endorsed less rape supportive attitudes than men. However, there was no significant change in participants' scores from pre-test to post-test.

Researcher Designed Programs

Heppner and colleagues (1995) conducted a study using a one-hour rape prevention program with didactic information, as well as a video dramatization and discussion following the video (Heppner, Good, Hillenbrand-Gunn, Hawkins, Hacquard,

Nichols, DeBord, & Brock, 1995). Participants were pre-tested six weeks prior to the intervention, post-tested immediately following the intervention, and followed-up with two months after the intervention. Consistent with previous studies, women indicated less rape supportive attitudes than men at pre-test, post-test, and follow-up. Further, scores rebounded at follow-up for both groups, that is, post-test scores were significantly lower than pre-test and follow-up scores.

Researchers randomly assigned 258 students to an interactional drama intervention, a didactic-video intervention, or a stress management control group (Heppner, Humphrey, Hillenbrand-Gunn, & DeBord, 1995). Participants completed measures one week before the intervention, immediately following the intervention, five weeks after pre-test, four months after pre-test, and five months and one week after pre-test. The only obtained difference across time and across groups was that men in the didactic-video condition endorsed less rape myths than men in the control group five weeks after the pre-test. Consistent with many studies, the authors found that scores rebounded at the four-month and five-month follow-up periods. However, no differences existed among the groups. Contrary to the authors' hypothesis, the interactional drama group did not have the least rebound at follow-up.

Lanier, Elliott, Martin, and Kapadia (1998) evaluated date rape attitudes among 436 students who were randomly assigned to view a play designed to combat rape supportive attitudes or to a control play about multicultural issues. Participants completed measures immediately preceding and following the plays. Controlling for pre-test scores, gender, race, and sexual activity, researchers found that the intervention group endorsed less rape supportive attitudes than the control group at post-test. Interestingly,

the authors did not discuss how they assessed for sexual activity, or why they chose this as a covariate. Unlike previous studies, men and women did not differ significantly in their rape attitudes. In addition, the researchers examined the most rape tolerant participants (i.e., scored in the lowest quartile) and again found that those in the intervention group endorsed significantly fewer rape supportive attitudes than the control group.

Pinzone-Glover, Gidycz, and Jacobs (1998) evaluated a 50-minute acquaintance rape prevention program using a controlled, randomized design with 152 subjects. Approximately 15 to 20 male and female participants comprised each experimental program group. In the intervention group, participants received information on rape statistics, myths, prevention, and information about rapists. The control condition was a program on sexually transmitted diseases.

To decrease demand characteristics, researchers told participants that they were participating in two separate experiments, one regarding judgments and attitudes of various issues and one regarding an evaluation of either a rape-awareness program, or a sexually transmitted diseases education program (Pinzone-Glover et al., 1998). The first “experiment” consisted of the participants completing pre-test measures and several distracter tasks. The pre-test assessments included measures that assessed empathy toward a perpetrator or victim, attitudes towards women, and degree of acceptance with established rape myths. Participants were randomly assigned to either the intervention or the control group. One week later, subjects returned to complete the same measures they completed in the pre-test session. Following the post-test session, experimenters asked

participants what they thought was the intent of the experiment (only 2% indicated that they had some knowledge of the true intent).

Both groups scored the same on the empathy measure at pre-test (Pinzone-Glover et al., 1998). However, at post-test, subjects in the rape prevention condition demonstrated more empathy toward the rape victim. At post-test, men in the prevention group also demonstrated less traditional attitudes than men in the comparison group; however, women did not significantly change their attitudes. Men in the prevention group changed more over time in their attitudes toward women than the women in the prevention group from pre-test to post-test. There were no significant differences between the experimental and control group subjects in the degree of acceptance of rape myths.

Holcomb, Sarvela, Sondag, and Hatton Holcomb (1993) evaluated the effectiveness of a mixed-gender date rape prevention workshop in a sample of 331 subjects. The researchers utilized a post-test only design and examined the students' responses to a date rape attitudes survey. The workshop consisted of a male and female facilitator team presenting, to a class of students, a hypothetical scenario of a male and female on a first date. Researchers asked the students to determine when, and how, consent to have sex takes place and then gave the students suggestions on preventing date rape. The workshop lasted approximately 35 minutes.

The experimental group subjects were significantly less tolerant of date rape than subjects in the control group. Overall, men had significantly more tolerance of date rape than women. The researchers also found that the experimental program had greater effects for men than for women. This study, however, did not utilize a pre-test, nor did

the researchers conduct a follow-up assessment. In addition, researchers did not randomly assign individual students to the intervention conditions; rather entire classes of students were randomly assigned.

Two hundred forty-five co-ed undergraduates participated in a small group (25 individuals), one-hour intervention designed to reduce rape-supportive attitudes (Rosenthal, Heesacker, & Neimeyer, 1995). Participants completed measures immediately preceding and following the intervention. Control participants completed the measures, but did not receive an intervention. During the one-month follow-up, participants answered questions about volunteering for women's safety projects. Intervention participants endorsed less rape myths than control participants at post-test. Again, men held more rape supportive attitudes than did women. The authors did not factor in the possible effects of pre-testing. With regard to the follow-up, participants in the treatment group were more likely to volunteer their help than the control condition.

The use of this follow-up underscores a larger problem with date rape studies. That is, the studies have not assessed the ultimate dependent variable, namely incidence of date rape. Instead, it is generally assumed that changing the endorsement of rape myths and attitudes, and increasing rape knowledge, will lead to a change in behavior. There is no direct evidence that changing someone's beliefs about rape will lead to a change in behaviors associated with rape. In fact, in most of the studies where change did take place, change usually did not persist at follow-up, even with short follow-up periods of several weeks. Other problems evident in this literature set include using no-attention control groups, short follow-up periods, the absence of follow-up periods, not

accounting for pre-testing effects on post-test scores, and using varying measures to assess for differences between treatment and control groups.

Overall, the results were relatively consistent among the mixed-audience programs. Generally, women endorsed less rape supportive attitudes than men. Treatment groups generally reported less supportive attitudes than control groups; however, those changes tended to disappear at follow-up.

Prevention Studies Focusing on Victim Empathy

Another rape prevention research area has focused on victim empathy. Generally, researchers have attempted to increase men's empathy for rape victims. Typically, victim empathy studies take the form of exposing participants to stories of rape and child sexual abuse and asking the participants to focus on the consequences of rape.

In one such study, Schewe and O'Donohue (1993) began with a sample of 216 undergraduate men. The men were screened for their likelihood to commit sexual abuse and 42 high-potential men were selected. Researchers randomly assigned the 42 men to a victim empathy group, a rape facts group, or a no-treatment control group. Additionally, 13 men who manifested a low likelihood of sexually abusing women served as another control group. Each of the experimental groups watched a 45-minute video, specific to their group (i.e., empathy or rape facts), in small groups of two to five men. Participants completed questionnaires immediately preceding and following the groups. The authors reported that the empathy intervention significantly reduced the participants' adversarial sexual beliefs and lowered their reported likelihood of abusing from pre-test to post-test. The empathy group, as compared to the facts group, displayed fewer rape supportive

attitudes and behaviors than the facts group at post-test, but no differences existed in victim empathy.

In a study that addressed both cognitions and victim empathy, Schewe and O'Donohue (1996) evaluated a short-term prevention program with 74 high-risk college males. The researchers randomly assigned subjects to one of three conditions, Victim Empathy/Outcome Expectancies (VE/OE), Rape Supportive Cognitions (RSC), or a no-treatment control group. The VE/OE group viewed a 50-minute video designed to facilitate empathy toward rape victims and to point out negative consequences for men who choose to rape. Participants were instructed to imagine how a woman might feel before, during, and after a rape. Finally, the group participated in a behavioral exercise; they were instructed to convince a hypothetical man, who believes he can force sex upon women, to change his behavior. The RSC group viewed a 50-minute video that discussed the importance of cognitions in preventing sexual assault, the role that they play in sexual assaults, and finally, the RSC group engaged in the same behavioral exercise as the VE/OE group. The no-treatment control group was pre-tested and then post-tested two weeks following the intervention.

The subjects in the Rape Supportive Cognitions group had a significantly lower likelihood of committing acts of sexual aggression, they endorsed fewer rape myths, less adversarial sexual beliefs, and less acceptance of interpersonal violence at post-test as compared to pre-test (Schewe & O'Donohue, 1996). Compared to pre-test, the victim empathy (VE/OE) group endorsed less acceptance of interpersonal violence, and less likelihood to commit acts of sexual aggression at post-test; furthermore, this group evidenced more empathy at post-test.

The results of this study were encouraging. However, only RSC subjects improved on lowering their endorsement of rape myths, and less adversarial sexual beliefs, and only the VE/OE group improved on empathy scores. This may indicate the need to include both components in an intervention.

In a similar study, O'Donohue, Yeater, and Fanetti (2003) evaluated a 45-minute video with three components (rape myths, victim empathy, and consequences for raping) designed to reduce men's potential for raping. The experimental video was compared to a control video about rape, which did not contain information about rape myths, victim empathy, or consequence for raping. One hundred and two men were randomly assigned to the two conditions; they completed a pre-test and post-test. Participants in the experimental condition reported significantly less belief in rape myths, less acceptance of interpersonal violence, less attraction to sexual aggression, less belief in adversarial sexual beliefs, and more rape-related empathy at post-test than did the control condition.

Borden, Karr, and Caldwell-Colbert (1988) employed 50 men and 50 women to assess the effects of a 45-minute didactic rape program on attitudes toward rape and rape empathy. Students were not randomly assigned. Those students enrolled in one hour and 20 minute classes were exposed to the rape program and those in the 50-minute classes served as the no-treatment control condition. Participants completed pre-tests immediately prior to the program and then again four weeks following the program. Women, regardless of their group assignment, indicated less perceived responsibility on the part of the victim and more empathy than did men at pre-test and at post-test. The rape program did not result in significant pre to posttest change on any measure.

Fifty-four college men participated in a study designed to assess the effects of an intervention on behavioral intentions, rape supportive attitudes, and empathy (Berg, Lonsway, & Fitzgerald, 1999). Researchers randomly assigned participants to an empathy induction group with a female victim, an empathy induction group with a male victim, or to a control condition. Each of the empathy groups consisted of a 25-minute didactic component and a 50-minute empathy component. The control group received only the 25-minute didactic component. Participants completed a pre-test and a two-week post-test. The only post-test difference between groups occurred on a measure designed to assess participants' behavioral intention to commit sexual assaults. Participants in the female empathy group reported a *greater* likelihood of committing rape. The program did not produce change in empathy scores.

With regard to the empathy studies, results generally suggested that the programs were not effective in producing changes in empathy, with a few exceptions (e.g., O'Donohue et al., 2003). These studies almost exclusively focused on changing men's reported empathy, again with the likely expectation that this would lead to a change in men's sexual assaultive behavior. None of the studies assessed whether the men committed less sexual assault during a follow-up period as a result of the program they attended.

Prevention Studies Focusing on Behavioral Change

The next large group of studies has focused more on a behavioral change paradigm than the previous studies. These can be grouped into three general categories:

risk factors for sexual assault, rape avoidance, and assertiveness. The studies reviewed utilized female participants.

Risk Factors

Risk factors for sexual assault can be grouped into two major categories.

Historical (or static) risk factors include unchangeable variables, for example, a history of sexual victimization. Dynamic risk factors, however, are possibly changeable. For example, drinking alcohol is a more variable risk factor that may respond to intervention. Most of the studies designed to assess women's risk factors for sexual assault consist of correlational research. Only a handful of studies have examined the effects of an intervention on risk-taking behaviors. First, studies examining the scope of risk factors will be discussed. This will be followed by a review of intervention studies.

Prior victimization is a historical risk factor for sexual assault that appears to have some strength and consistently appears throughout the literature. For example, Casey and Nurius (2005) conducted a telephone survey with over 1000 adult women to investigate the relationship of trauma exposure and sexual assault risk. Thirty-eight percent of the sample reported experiencing at least one sexual assault in their lifetime. Twenty-two percent reported multiple victimizations from multiple perpetrators. Compared with women who experienced a single victimization (or an ongoing victimization by one perpetrator), women who experienced multiple victimizations were significantly younger at the time of the first victimization, they rated the first victimization as more severe, and they were more likely to be injured during the attack. Multiply victimized women were also more likely to have experienced more nonsexual traumatic events than singly victimized women.

In a prospective design, Gidycz, Coble, Latham, and Layman (1993) assessed the relationship of prior victimizations to new victimizations reported during the study follow-up period. Women reported whether they had experienced childhood sexual abuse, victimization during adolescence, and/or victimization during the study. Researchers found that women who experienced childhood victimization were more likely to have experienced a sexual assault as an adolescent; 29.5% of women raped as a child were raped as an adolescent compared to only 8.8% of women not raped as a child. Furthermore, women who reported a childhood rape were also more likely to report a rape during adolescence and during the study follow-up period.

Gidycz, Hanson, and Layman (1995) evaluated women's victimization over three, six, and nine month follow-up periods. In addition to previous results, they found that the more severe the prior victimization, the more likely the woman would be to experience victimization in the future. Similarly, the researchers found that women were more likely to report the same level of severity across victimizations. For example, if they reported a moderately severe victimization in childhood they would be more likely to report moderate, rather than severe, victimization in adulthood.

Stermac and colleagues (2002) conducted a study to delineate the types of previous victimizations and childhood experiences that increase a woman's risk of sexual assault in adulthood (Stermac, Reist, Addison, & Millar, 2002). The participants were divided into three groups: women who experienced forced sexual assault, women who experienced coerced sexual assault, and women who had not experienced sexual assault. The forced group was more likely to report a higher frequency of childhood maltreatment, a more severe history of childhood maltreatment and neglect by their

parents, more sexual abuse in childhood, and more verbal sexual harassment by adults. Further, women with forced sexual assault reported more severe verbal sexual harassment and psychological maltreatment by siblings, as well as more severe physical bullying by other children, than did women with no sexual assault history. With regard to their histories with peers, women with either forced or coerced sexual assault histories reported more verbal sexual harassment by friends.

Interestingly, Maker, Kemmelmeier, and Peterson (2001) found that the experiences of child and peer sexual abuse varied with respect to revictimization. Only women who experienced child sexual abuse (prior to age 16 and the perpetrator was at least five years older than the victim), as opposed to those who experienced peer sexual abuse (perpetrator less than five years older than the victim) were more likely to be revictimized as adults. Further, the severity of child sexual abuse was not predictive of revictimization status.

In addition to prior sexual victimization, several other risk factors for sexual assault have emerged. Combs-Lane and Smith (2002) investigated risk factors for sexual assault, including alcohol use, prior victimization, and intentions to engage in risky behaviors. The authors recruited 190 college women from sororities and the psychology subject pool. Participants completed questionnaires regarding victimization and intentions to engage in risky behaviors. One hundred twenty-six women completed the six-month follow-up.

Overall, 26% of the sample reported a history of sexual victimization at time 1; 12.7% of the returning sample reported new victimizations at time 2 (Combs-Lane & Smith, 2002). Interestingly, at time 1, a significantly larger proportion of nonsorority

participants reported a history of victimization (37.5%) as compared with sorority participants (21.6%). Further, a history of sexual victimization at time 1 was not associated with higher rates of victimization at time 2. New victimization was significantly related to reported alcohol use, such that greater use predicted victimization. New victims reported triple the amount of drinking days at time 1 than did participants who were not victimized during the follow-up period. In addition, the new victimization group also reported significantly more binge drinking than did the nonvictim group. The authors found that participants' reported behavioral intentions to engage in risk-taking behaviors were related to reported actual engagement in these behaviors at time 2 (Combs-Lane & Smith, 2002).

Himelein (1995) conducted a longitudinal study to assess risk factors for sexual victimization, including prior victimization, alcohol use, consensual sex, assertiveness, and attitude scales. At time 1, 330 women completed questionnaires, but only 100 women completed the follow-up 32 months later. Overall rates of victimization were consistent with previous studies. Thirty-eight percent of participants reported victimization prior to entering college, while 29% of participants reported sexual victimization in the first two years of college. The author found that women were more likely to be victimized in college if they reported victimization in dating situations prior to college, engaged in higher levels of consensual sex, reported greater alcohol use in dating situations, or had less conservative attitudes about sexual behavior.

The ability to perceive threatening situations and cues has been hypothesized as a possible risk factor for sexual victimization (Breitenbecher, 1999). Female participants viewed either a dramatized acquaintance rape scenario (experimental condition) or a

dramatized romantic scenario (control condition). Participants completed a questionnaire on threat perception, both general threat and rape-related threat. Interestingly, women with histories of victimization did not identify more threat cues than nonvictims. It would be reasonable to assume that women who had been in a rape situation would be able to identify cues more readily. Further, at the five-month follow-up, identification of threat cues at time 1 did not correlate with new victimizations.

Similarly, Norris, Nurius, and Graham (1999) examined perception of risk of sexual assault. Female participants completed risk ratings for dating scenarios. After reading the dating scenario, women were asked to imagine how they would have felt and then they rated risk judgments along a continuum according to how they would have felt (i.e., feeling on guard, really uncomfortable, or seriously at risk). Further, participants assessed their likelihood of experiencing sexual assault compared to their peers. Prior child and adult victimization and drinking habits were also assessed. Not surprisingly, women reported needing a higher level of clear (e.g., physical pressure by the man) or ambiguous (e.g., drinking) risk factors to feel uncomfortable or at serious risk. Participants in the study reported that they were at significantly less risk of experiencing assault than other women.

Regarding previous victimization experiences, women who experienced more severe victimization required a higher level of ambiguous risk factors to feel on guard, uncomfortable, or at serious risk (Norris et al., 1999). Lower severity victims needed a higher level of clear risk factors to make the same judgments. Concerning drinking habits, women drinkers perceived themselves to be at a higher level of risk for sexual assault than did nondrinkers. Nondrinkers perceived *other* women at higher risk as

compared with drinkers' judgment. It seems that the perception of risk may be as important a risk factor for sexual assault as actually exhibiting risk factors.

Alcohol consumption and its effect on sexual assault has been studied by many researchers. In one such study, Corbin and colleagues found that women who reported severe victimization also reported consuming significantly more alcohol on a weekly basis than women who reported moderate or no victimization (Corbin, Bernat, Calhoun, McNair, & Seals, 2001). In addition, the authors reported that women in the severe victimization group expected more tension reduction, more positive change, and more sexual enhancement from alcohol consumption than did nonvictims. Additionally, more severely victimized women reported significantly more sexual activity following alcohol consumption compared with nonvictims. More severely victimized women also reported more consensual sexual partners than either moderately victimized or nonvictimized women.

In a large study of over 1000 women, researchers examined the relationship between victim and perpetrator alcohol consumption and rape (Abbey, Ross, McDuffie, & McAuslan, 1996). More severe forms of sexual assault were more likely to involve alcohol consumption. Further, the authors found that women's alcohol consumption during the sexual assault was predicted by the woman's frequency of misinterpreting sexual intent, the frequency of the woman drinking during consensual sex, and her number of dating partners; all relationships were in the positive direction.

It is clear from the previous studies that alcohol is an important risk factor for sexual assault. In order to further assess the role that alcohol plays, Ullman and colleagues examined data from the National Survey of College Women (Ullman,

Karabatsos, & Koss, 1999). Consistent with previous studies, women who reported getting drunk more frequently reported more severe victimizations and reported drinking prior to the assault more frequently. Victim and offender drinking were positively related to one another. Contrary to expected, the authors reported that offender aggression and victimization severity were greater without offender drinking.

Muehlenhard and Linton (1987) employed 341 women and 294 men to assess the relationship of risk factors for date rape. Reported behaviors were compared for recent dates and for dates that involved sexual aggression. Dates that involved sexual aggression were more likely when the daters were unfamiliar with each other, when the man initiated the date, when he paid for the date, and when he provided the transportation. Participants reported miscommunication about sex, including the men feeling led on and the women dressing more suggestively, more frequently in the dates that involved sexual aggression. Sexually aggressive date activities were more likely to include “parking” or the partners making out in a car. Consistent with other studies, these dates were characterized by heavy alcohol use by both partners.

Mynatt and Allgeier (1990) examined 125 women to determine risk factors for sexual coercion. After performing a multiple regression analysis, the authors found that women reporting more sexual activity, attending religious services less often, and greater politically liberal attitudes were more likely to have reported sexual coercion. However, this accounted for a small percentage of the variance (21%). Unfortunately, the authors did not differentiate between child sexual abuse and adult sexual assaults, nor did they include a measure of alcohol use.

Taken together, the previous studies suggested that the most important risk factors for sexual assault include drinking alcohol, behavior on dates, previous victimization, and current sexual activity. Clearly, some of these risk factors are static, or historical, in nature and are not subject to change. However, some of the variables are more dynamic in nature and could be subject to change, but only a few studies have examined interventions that targeted the reduction of risk-taking behaviors.

One study sought to reduce women's reported intention to engage in risky behaviors (e.g., using alcohol and being in isolated places on the first few dates) and to increase the perception of vulnerability to date rape (Gray, Lesser, Quinn, & Bounds, 1990). Researchers randomly assigned six social science classes to date rape interventions that included either local (more personalized) or national statistics. The remainder of the interventions were identical and included information on rape myths and risk-taking behaviors. Women in the local statistics group had a significantly higher mean difference from pre-test to post-test, such that the women reported fewer behavioral intentions to engage in risky behaviors, than did the national statistics group. Only unmarried women in the local group increased their perception of vulnerability as compared to unmarried women in the national group.

In a study with a small sample size of six women, Himelein (1999) attempted to reduce risky behaviors of women who were at high risk for being assaulted. The author determined risk status using several variables including depression, alcohol use in dating situations, sexual liberalism, consensual sexual experience, prior sexual victimization in dating, and childhood sexual abuse. The women attended five, weekly, 90-minute sessions and were followed-up with one month later. The participants' knowledge about

sexual assault increased significantly, as did their reported frequency in engaging in more precautionary dating behaviors. Clearly, the results of this study are very limited.

However, this type of program may prove promising if evaluation with a larger group of participants replicates these results.

Using a different approach, Yeater and O'Donohue (2002) evaluated a program designed to teach women about rape myths and facts, to help them identify risky behaviors and situations, and to identify behaviors that may reduce the risk of sexual assault. Researchers randomly assigned 300 women to experimental or control conditions. Women were compared based on their group and based on their victimization status (none, single victimization, or multiple victimizations). The experimental group was significantly more knowledgeable about all program aspects at the first test trial. However, the experimental group did not demonstrate as much knowledge about risk factors as they did about rape myths, as indicated by their failure to achieve a 90% correct criterion on the test. The authors tested whether women with a history of victimization would take more trials to learn material than nonvictims. They found that women with one victimization took longer to learn the material than women with multiple victimizations, contrary to their hypothesis.

Hanson and Gidycz (1993) used a similar concept, but went a step further. The authors compared women on knowledge measures and on behavioral measures. Participants in the experimental group received an acquaintance rape prevention program and then were followed-up with nine weeks later. Control participants completed the pre-test and follow-up questionnaires only. Similar to the previous study, the authors also examined results in the context of victimization status.

The authors found that women with a history of sexual victimization were significantly more likely to report a victimization experience during the course of the study than were women with no previous victimization (Hanson & Gidycz, 1993). With regard to the prevention program, women in the experimental group, with no previous victimization reported fewer instances of victimization during the study than those in the control group. The prevention program was not effective in reducing incidents of new victimization for women with moderate or severe previous victimization. However, women in the treatment group did report experiencing fewer risky situations and more overall awareness regarding sexual assault, at follow-up, than those in the control group. The groups did not differ with regard to experiences of sexual miscommunication.

Studies regarding risk-taking behaviors were generally consistent regarding the types of variables associated with date rape. There is a dearth of studies evaluating intervention and prevention programs using risk-taking behaviors as an outcome variable. This is a serious gap in the literature, as this is one of the most serious and pertinent outcome variables, aside from assessing actual incidents of sexual assault.

Rape Avoidance Strategies

Another area researchers have studied is rape avoidance; how women have avoided rape. Unlike many of the previous studies, the following studies primarily have focused on reports by women who experienced a completed or attempted stranger rape. Bart and O'Brien (1984) interviewed 94 women who had been attacked, avoided rape, or been raped. The authors sought to determine what type of avoidance strategies the women used. It is important to note, however, that 80% of the women were victims of stranger attacks, which is a disproportionately high percentage. The authors found that

women who used a greater number of strategies (e.g., fleeing, screaming, begging) were more successful in avoiding a rape. Further, women who avoided a rape were more likely to use different types of strategies, including fleeing or trying to flee, talking loudly or screaming, using physical force, or being aided by an environmental intervention (e.g., a passerby). Women who were raped were more likely to have pled with their attacker.

Similarly, among a group of over 400 women who experienced an attempted or completed rape, Clay-Warner (2002) found that women who physically resisted, fled, or threatened the attacker with a weapon were significantly less likely to be the victim of a completed rape compared with women who used other strategies (e.g., screaming or pleading). Physically resisting reduced the likelihood of rape by 52%, whereas women who pled with the rapist were more likely to be raped. The exception to the effectiveness of physical resistance occurred when the attacker used a weapon; in this case using physical resistance was not related to rape outcome.

With regard to self-defense training, in accordance with three other literature reviews (Sochting, Fairbrother, & Koch, 2004; Ullman, 1997; Ullman, 2002), this literature review did not reveal any studies that have examined the effect of self-defense training on the likelihood of rape. However, some studies have examined characteristics of women enrolled in self-defense classes. For example, Brecklin (2004) found that women enrolled in self-defense classes were more likely to have been sexually and physically abused as children. Women who took self-defense reported less acceptance of rape myths, were less sexually conservative, reported more positive instrumental traits (e.g., assertiveness), and fewer negative expressive traits (e.g., being gullible) than

women who did not participate. Further research is needed in this area to determine the effects that self-defense training may have on reducing the risk of sexual assault.

Assertiveness Training

Assertiveness has most often been investigated as a potential mediating variable within studies on sexual assault. Generally, most investigators have measured general assertiveness, as opposed to assertiveness specific to sexual or dating situations. Further, no prevention studies were located for this literature review that examined assertiveness training and its effect on sexual victimization.

At the present time the role of assertiveness in sexual assault situations is unclear. Some studies reported that assertiveness was not related to future sexual assault (Gidycz et al., 1995; Himelein, 1995). However, Greene and Navarro (1998) found that low assertiveness with the opposite sex was found to be significantly related to adult victimization. Further, Myers, Templer, and Brown (1984) found that rape victims reported significantly lower assertiveness than nonvictims.

In a study of 66 sorority members, Norris, Nuruis, and Dimeff (1996) investigated perceptions of risk and resistance using both closed-ended questionnaires and open-ended focus groups. Interestingly, many of the women acknowledged risk for sexual assault and prevention measures for other women, but did not acknowledge their own risk for sexual assault. Rather, the women asserted that they would not be “dumb enough” to get into a risky situation or that they would “just get up and leave” if they felt threatened (p. 132). When asked about alcohol consumption, the participants’ reported use was inversely correlated with both verbal assertiveness and physical resistance.

Norris and colleagues (1996) also focused on psychological barriers to resistance. The assessed psychological barriers included embarrassment, fear of rejection, and alcohol incapacitation. All barriers were inversely related to verbal assertiveness and physical resistance, but were directly related to indirect resistance (e.g., jokingly telling him he is coming on too strong). Lastly, women who experienced previous victimization reported a higher likelihood of using indirect methods of resistance and a lower likelihood of verbal assertiveness and physical resistance. Moreover, Corbin et al (2001) also found that women who reported severe victimization experiences reported less likelihood of refusing unwanted sexual behavior in the future as compared with women who had not been victimized.

Similarly, Lewin (1985) found that a majority of participants imagined that a woman would feel “concerned that she has to hurt the man (75%),” and embarrassed (68%) if refusing unwanted sexual advances. Many of the participants also reported that the woman would feel angry. Interestingly, 66% reported that the woman would feel “proud, pleased, or touched to be asked.” These types of psychological barriers to resistance, also reported in the Norris et al. (1996) article, may play an important role in the woman’s ability to assert herself in sexual or dating situations.

As is evident by this literature review, there is a paucity of studies focused solely on women and intervention or prevention efforts for sexual assault. The studies that did attempt intervention/prevention efforts focused on changing attitudes and beliefs and on increasing victim empathy. The second group of studies focused on behavioral aspects of sexual assault, such as, assertiveness levels, alcohol consumption, and prior victimization experiences. It is clear that alcohol use and prior victimizations are significant predictors

of future attacks. However, the relationship between assertiveness and future victimization status is less clear. Further complicating the issue is the fact that there are no existing studies that have investigated the effect of assertiveness training or self-defense training on women's risk for being sexual assaulted. Moreover, most of the existing intervention and prevention studies have not used sexual assault as an outcome variable for the intervention or prevention program; only a handful of studies have used incidence of sexual assault as a dependent variable.

Reduction of Sexual Assault as an Outcome Variable in Prevention Studies

Hanson and Gidycz (1993) conducted the first study to examine whether a prevention program changed the incidence of sexual assault. Three hundred sixty women participated at time 1 and 96% of those participants returned at time 2, nine weeks later. Participants in the treatment condition were exposed to knowledge about rape, rape myths and facts, social forces that affect rape, practical strategies to avoid rape, altering dating behaviors associated with rape, and improving sexual communication. The control condition did not receive any treatment. The researchers measured sexual assault experiences prior to the study and then at the nine week follow-up. Participants also completed measures assessing dating behaviors, sexual communication, and sexual assault awareness.

Consistent with many prior studies, women who experienced prior victimization were significantly more likely to report victimization during the follow-up period (Hanson & Gidycz, 1993). Regarding treatment effectiveness, women with no victimization history who were in the treatment group were significantly less likely to

report victimization during the follow-up than women with no victimization history in the control condition. However, those women who reported that they had been moderately or severely victimized prior to the study did not respond to the prevention; that is, the control and treatment conditions did not differ. Concerning the other dependent variables, the treatment condition resulted in significantly fewer dating behaviors associated with rape and more awareness than did the control group. The groups did not differ on sexual communication.

Hanson and Gidycz's (1993) study is extremely valuable; it is important, and seems intuitive, that studies designed to prevent date rape should measure the effectiveness of the prevention program on the incidence of date rape. However, none of the studies conducted prior to this study examined new incidences of date rape. The study did have some limitations. First, the control condition received no attention. Second, the researchers found that victimization status affected the outcome of the program in terms of new victimizations, but they did not examine victimization status with regard to the other dependent variables. Third, the follow-up period was relatively short.

Marx, Calhoun, Wilson, and Meyerson (2001) combined Hanson and Gidycz's 1993 program with a modified relapse prevention program. The authors included instruction on identifying high-risk situations, and training in problem solving, coping-skills, assertiveness, and communication skills. The program consisted of two two-hour sessions. All participants reported on their victimization history. Participants completed questionnaires on sexual assault experiences, mental health symptomatology, self-

efficacy with respect to behaviors in sexual situations, and response latency measures in identifying sexual coercion.

The authors found that the intervention and control conditions did not differ on revictimization rates (Marx et al., 2001). However, the authors further divided the sample into women who had been raped and those who had not been raped (but experienced other forms of sexual assault) and found that women in the treatment group had significantly lower rates of being raped during the two-month follow-up than women in the control condition. Regardless of revictimization status, women in the treatment group had greater increases in self-reported self-efficacy and greater decreases in psychological symptomatology than women in the control group. Results from this study are more promising, especially since participants that had previously been victimized responded to the intervention.

In a follow-up to Hanson and Gidycz's 1993 study, Breitenbecher and Gidycz (1998) focused more on revictimization aspects (e.g., informing participants that having been sexually assaulted once makes them more likely to be revictimized). Further, the authors included a measure of childhood sexual abuse in addition to the same measures used in their first study. Otherwise, the study was conducted in the same manner as the first study.

Similar to the previous study (Hanson & Gidycz, 1993), the authors found that women with a history of victimization were more likely to be revictimized regardless of treatment condition (Breitenbecher & Gidycz, 1998). As in the previous study, the program was ineffective in reducing the incidence of new sexual assaults among victims. As an improvement to the first study, the authors investigated the effects of victimization

history on the other dependent variables. Women previously victimized reported significantly more risk-related dating behaviors and more perceived sexual miscommunication at time 1 and time 2 compared with women with no victimization history, regardless of treatment condition. Furthermore, women with a victimization history also reported more sexual assault awareness than women without victimization histories. However, the program was not effective in increasing sexual assault awareness.

Breitenbecher and Gidycz (1998) attempted to improve on their previous study, but found many of the same results. The program was not effective in reducing the incidence of sexual assault. Moreover, women with victimization histories reported more risky behavior and more sexual miscommunication.

Breitenbecher and Scarce (1999) evaluated an existing sexual assault program and its effect on the incidence of sexual assault, but they used a longer follow-up period (seven months) than had been used previously. The program lasted one hour and consisted of both didactic and discussion components. Participants assigned to the control condition did not receive any treatment. Participants completed questionnaires on child sexual abuse, adolescent/adult sexual assault, and sexual assault knowledge. Similar to previous studies, women with victimization histories reported new victimizations more frequently than nonvictims. Additionally, the treatment did not affect the incidence of sexual assault during the follow-up. Further, no differences existed between the prior victimization group and the nonvictim group with regard to sexual assault knowledge. The treatment group did demonstrate greater knowledge at follow-up than did the control group.

In a follow-up study, Breitenbecher and Scarce (2001) examined psychological barriers to resistance. To accomplish this, researchers divided participants into small groups of four to five women and read a vignette describing a sexual situation. Group members imagined how they would feel, what they would think, and how they would respond to the situation. A discussion then followed. Participants completed measures on childhood sexual abuse experiences, adolescent/adult sexual assault experiences, dating behaviors, sexual communication, previous sexual assault training, risk perception, sexual assault knowledge, and resistance strategies.

The results were almost identical to the previous studies. The authors found that women with a history of victimization were more likely to be victimized during the seven-month follow-up and that the program was ineffective in reducing the incidence of sexual assault (Breitenbecher & Scarce, 2001). With regard to the other dependent variables, there were no differences for dating behaviors, risk perception, or resistance strategies between treatment and control groups. For both sexual communication and sexual assault knowledge, participants improved from time 1 to time 2, but the changes were not a function of group (treatment, control) membership.

Gidycz and colleagues (2001) conducted a similar study; however, the study used a large group of participants (762) and employed a pre-test and follow-ups at two and six months. The program lasted three hours and included a didactic portion, videos with discussion, role-plays to model protective behaviors, and a discussion on resistance strategies. Participants completed measures on rape empathy, dating behaviors, sexual communication, and adolescent/adult victimization. Similar to previous studies, women with a history of victimization were more likely to be victimized during the two-month

follow-up period; the program was not effective in reducing victimization incidence. However, this study did find some differences between the treatment and control conditions. Of the women who had experienced victimization during the two-month follow-up, not including rape, women who participated in the treatment condition were less likely to be assaulted during the six-month follow-up than women in the control condition.

Neither the dating behavior nor sexual communication surveys produced any significant results (Gidycz et al., 2001). There were differences in rape empathy; however, the only differences were within the treatment condition, not between the treatment conditions. Interestingly, at the two-month follow-up, participants who reported that they learned more from the program and that the facilitators were helpful and interested, had a lower likelihood of being victimized than other participants. At the six-month follow-up, participants who reported that the facilitators were helpful and interested and those that reported more interest in one of the videos used had a lower likelihood of being victimized.

Gidycz and colleagues' (2001) study produced many similar results to previous studies. However, unlike many of the previous studies that did not produced a change in the incidence of rape, this study did produce a change in the incidence of victimization. Again, this study also used a no-attention control group.

Overall, the studies that used new incidences of sexual assault as an outcome variable produced consistent results. That is, women who were previously victimized were much more likely to be victimized again and most of the prevention programs were unsuccessful in reducing that risk. Some of the limitations of these studies included

using a no-attention control group, not using pre-test scores on measures as covariates in statistical analyses, and using generally didactic interventions. However, two studies (Gidycz et al., 2001; Marx et al., 2001) that incorporated more behavioral aspects to their treatments did find some reductions in sexual assault revictimization as a function of group (treatment, control) status.

Current Study

The current study seeks to improve upon earlier limitations in the literature in several ways. First, regarding study design, many of the previous studies did not use a control group or used a control group that did not receive any attention. Using control groups in which the participants receive no “attention” from facilitators makes it difficult to reliably conclude that any changes in dependent variables are a result of the content of treatment as opposed to other factors, such as, attention from the facilitators. Further, some studies did not employ random assignment. The current study seeks to improve upon these limitations by randomly assigning all participants to the experimental group or to a treatment control condition. The control condition treatment will reflect many of the treatments studied; that is, it will focus on attitude and empathy change and increasing rape knowledge.

Another limitation of the studies is their brief follow-up period. Many studies used no follow-up period, some used only a few weeks. More importantly, except for a small group of studies, researchers who have attempted to prevent sexual assault have not assessed for incidence of sexual assault during follow-up periods. The current study will use two follow-ups, one at four weeks, and one at five to six-months following the

prevention group. Both will include the incidence of new victimizations as one of the dependent variables. Moreover, although studies have found that both alcohol use (e.g., Combs-Lane & Smith, 2003; Himelein, 1995) and previous victimization (e.g., Gidycz et al., 1993; Himelein, 1995) were predictive of new victimizations, many researchers did not include these variables in their assessments and statistical analyses. The current study will assess for both of these variables and will examine their role as moderating variables with regard to treatment efficacy. In addition to measuring the incidence of sexual assault, the current study will also assess belief in rape myths, the frequency of dating behaviors associated with date rape, sexual communication, sexual assertiveness, and sexual assertiveness self-statements (i.e., measuring psychological barriers to resisting rape).

As the literature review reflected, the attitude change studies were somewhat effective in changing attitudes. Generally they worked, but for a short period of time. The current study's experimental treatment will employ a behavioral intervention using small groups of participants. The intervention will focus on teaching and using assertiveness skills in sexual situations. Participants in the current study will have the opportunity to role-play skills and have a more direct involvement in the intervention, as opposed to simply watching facilitators engage in the targeted skills. The hope is that this will be a more effective method of teaching the skills and it will increase the likelihood that they will use the skills. Studies have shown that modeling alone has added little to the effectiveness of teaching assertion and refusal skills (McFall & Twentyman, 1973; Turner & Adams, 1977). Further, as psychological barriers (e.g., feeling embarrassed) to resistance may play an important role in preventing victimization

(e.g., Norris et al., 1996) these will be discussed and processed with participants, again in an effort to increase the likelihood that participants will be able to use the skills they have learned.

Hypotheses

The main hypotheses for the study are as follows:

Hypothesis 1: Women in the treatment condition will have a lower incidence of new victimizations, a lower frequency of risky dating behaviors, a lower frequency of sexual miscommunication, higher sexual assertiveness skills, more positive sexually assertive self-statements (making it easier to refuse) at both follow-ups as compared to the women in the control condition.

Hypothesis 2: Women in the treatment condition will have a lower frequency of risky dating behaviors, a lower frequency of sexual miscommunication, higher sexual assertiveness skills, more positive sexually assertive self-statements (making it easier to refuse) at both follow-ups than reported at pre-test.

Hypothesis 3: Women in the control condition will endorse fewer rape myths than the treatment condition at both follow-ups.

Hypothesis 4: Women in the control condition will endorse fewer rape myths at the first follow-up as compared to pre-test. However, at the second follow-up no difference is predicted in belief in rape myths as compared to pre-test.

Hypothesis 5: The effects of prior victimization on treatment success will be explored as a moderating variable. Based on previous research (e.g., Gidycz et al., 2001), it is hypothesized that treatment will be less effective for women who have a history of victimization. That is, women without a previous history of victimization will have a lower incidence of sexual assault, lower frequency of risky dating behaviors, a lower frequency of sexual miscommunication, higher sexual assertiveness skills, more positive sexually assertive self-statements at the follow-ups than women with a history of victimization.

Exploratory Hypothesis 5a: Maker et al. (2001) found that women who were sexually abused as children were more likely to be abused as adults as compared with women who were sexually abused by a peer. An exploratory moderational analysis will be conducted to determine if women abused only as a child will respond differently to treatment at both follow-ups (i.e., have a different incidence of date rape, frequency of risky dating behaviors, frequency of sexual miscommunication, sexual assertiveness skills, and sexually assertive self-statement during the follow-up periods) than women abused only in adolescence.

Exploratory Hypothesis 5b: Stermac et al (2002) and Gidycz et al (1995) found that the severity of sexual abuse in childhood or adolescence predicted the severity of sexual assault in adulthood. However, Maker et al (2001) found that severity of childhood abuse was not predictive of revictimization status. An exploratory moderational analysis will be conducted to determine if women who experienced more severe sexual abuse as an adolescent will respond to treatment differently (i.e., have a different incidence of date rape, frequency of risky dating behaviors, frequency of sexual miscommunication, sexual assertiveness skills, and sexually assertive self-statement during the follow-up periods).

Hypothesis 6: The effects of alcohol use on treatment success will be explored as a moderating variable. Based on previous research finding that alcohol is a risk factor for victimization (e.g., Combs-Lane & Smith, 2002), it is hypothesized that increased alcohol use will result in lower treatment effectiveness. That is, women with a higher score on the AUDIT, indicating less severe alcohol use, will have a lower incidence of sexual assault, lower frequency of risky dating behaviors, a lower frequency of sexual miscommunication, higher sexual assertiveness skills, more positive sexually assertive self-statements at the follow-ups than women with higher scores on the AUDIT.

CHAPTER 3

METHODOLOGY

Participants

Participants were recruited from college sororities, athletic teams, residence halls, the psychology subject pool, and the campus at large. However, all participants came from the subject pool. Attempts to gain participants from other sources were unsuccessful. Participants from the psychology subject pool received two research participation credits at the time of the prevention group and then a third credit at the first follow-up. At the five-month follow-up, participants were entered into a drawing to win one \$20 prize. There were five \$20 prizes for every 100 women who participated in the follow-up.

Two hundred and ten college women participated in this study. All married participants were excluded from participation, as they would not be currently dating. Slightly less than half of the participants were Caucasian (46.2%), 15.2% were Hispanic, 13.8% were Asian, 12.4% were African American, 3.8% were Native Hawaiian or other Pacific Islander, .5% were American Indian or Alaskan Native, and 6.2% chose "other." Most of the participants were actively dating (45.6% seriously, 29.5% casually, 23.8% not dating, 1% divorced. Most (69.5%) of the participants were freshman, 20.5% were sophomores, 6.7% were juniors, and 2.9% were seniors. Age ranged from 18 to 41 with

the average age being 19 years old. Most participants were 18-years-old (55.7%) or 19-years-old (24.3%).

Surprisingly, only 16.2% of participants reported that they had ever attended a seminar, lecture, or presentation on rape. However, 35.7% felt that they were moderately educated on the subject of rape. Slightly more than half (52.4%) of women reported that they knew a woman who had been raped.

Table 1 – Prevalence of Childhood Sexual Abuse

<i>Child Abuse Prior up to Age 14</i>	<i>Prevalence (%)</i>
Kissing and hugging in a sexual way.	19.5
Another person showing his/her sex organs to you.	10
You showing your sex organs to another person.	6.7
Another person fondling you in a sexual way.	10
You fondling another person in a sexual way.	4.8
Another person touching your sex organs.	9.5
You touching another person's sex organs.	6.2
Attempted intercourse, but without penetration.	3.3
Intercourse.	3.3

*Participants may have responded affirmatively to more than one question.

Table 2 – Prevalence of Victimization After Age 14

<i>Victimization Since Age 14</i>	<i>Sexual Coercion</i>	<i>Attempted Sexual Assault</i>	<i>Completed Sexual Assault</i>
Prevalence (%)	17.1	1.4	17.1

*Participants may have responded affirmatively to more than one question.

Measures

Rape Myth Acceptance Scale

The Rape Myth Acceptance Scale (RMAS; Burt, 1980) assesses acceptance or rejection of myths about rape (see Appendix I). The RMAS is a 19-item instrument; items are rated on a seven-point scale from 1 (“Disagree Strongly”) to 7 (“Agree Strongly”). Scores range from 19 to 103 with higher scores indicating more acceptance of rape myths. The RMAS has good internal consistency (alpha coefficient = .82-.88; Burt, 1980; Schewe & O’Donohue, 1998) and good two-week test-retest reliability ($r = .79-.88$; Schewe & O’Donohue, 1998). Regarding validity, scores on the RMAS correlate significantly with adversarial sexual beliefs ($r = .40$) and men who report more belief in rape myths also report a higher likelihood of raping ($r = .59$; Hamilton & Yee, 1990). An example item from the RMAS includes: “A woman who goes to the home or apartment of a man on their first date implies that she is willing to have sex.”

Sexual Experiences Survey

The Sexual Experiences Survey (SES; Koss & Oros, 1982) was used to assess sexual assault experiences after the age of 14 (see Appendix II). The scale is composed of 13 dichotomously scored items. Internal consistency for the items has been reported, using Cronbach's alpha, as .74 for women and .89 for men (Koss, 1989; Koss & Gidycz, 1985). Additionally, Koss and Gidycz (1985) reported a 93% item agreement rate between two administrations. Regarding the validity of self-reported sexual behavior, the self-report data from the SES were compared with responses to an interviewer several months later (Koss & Gidycz, 1985). The interview and self-report responses correlated highly ($r = .73$). Additionally, only 3% of the female participants gave answers that met the legal definition of rape initially, but were then found to have misunderstood or gave a false answer to the question.

Testa and colleagues evaluated the validity of the SES (Testa, VanZile-Tamsen, Livingston, & Koss, 2004). Independent coders evaluated interview descriptions of women's sexual assault experiences and coded the experiences as being reflective of items on the SES, unwanted sex not on the SES, or not unwanted sex. Agreement between the participants and the coders was high for rape and for coerced sex, but low for attempted rape and sexual contact incidents.

Women were classified into one of five victimization categories: sexual contact, sexual coercion, attempted rape, rape, or none (Koss & Dinero, 1989). If the subject answers yes to at least one question from each category then that subject will be classified under all the appropriate levels of victimization/victimizing history. Subjects will additionally be described by one variable, victimization status, the highest

victimization category that the subject responded to will be recorded in the status category (e.g., if a subject answers yes to coercion and to rape, the subject will be classified as rape).

Sexual Communication Survey

The Sexual Communication Survey (SCS; Hanson & Gidycz, 1993) assesses participants' perceptions of the accuracy of their communications of sexual intentions in dating situations (see Appendix III). It contains 21 items to which participants respond on a seven point scale ranging from 1 ("Never") to 7 ("Always"). Participants are also given the option to choose "N/A, I do not date." Total scores range from 21 to 147 with higher scores indicating increased incidence of perceived sexual miscommunication. An example item would be: "Do you ever end up having vaginal intercourse with your date when you don't really want to, not because you feel forced or coerced, but because of some other concern (such as wanting him to like you or being too embarrassed to talk about it)?"

Hanson and Gidycz (1993) reported an initial internal consistency of .56 and a 1-week test-retest reliability of .79. The instrument was revised to its current form and the internal consistency (.99) and the three-month test-retest reliability (.60) both improved (Breitenbecher & Gidycz, 1998). Breitenbecher and Gidycz (1998) found that women with a sexual victimization history scored significantly higher (i.e., reported a higher incidence of perceived sexual miscommunication) than women without a victimization history. However, Breitenbecher and Scarce (2001) found no difference in scores between victimized and nonvictimized women.

Dating Behavior Survey

The Dating Behavior Survey (DBS; Hanson & Gidycz, 1993) assesses the frequency with which participants report engaging in dating behaviors that are associated with date rape (see Appendix IV). It contains 15 items to which participants respond on a seven point scale ranging from 1 ("Never") to 7 ("Always"). Participants are also given the option to choose "N/A, I do not date." Total scores range from 15 to 105 with higher scores indicating a higher reported engagement in dating behaviors associated with date rape. An example item from the DBS includes: "I typically consume drugs or alcohol while on a date." The instrument has good test-retest reliability (1-week $r=.77$; 7-month $r=.73$) and internal consistency ($\alpha =.63-.66$; Hanson & Gidycz, 1993; Breitenbecher & Scarce, 2001). Breitenbecher and Gidycz (1998) found that women with victimization history scored significantly higher than women without a victimization history. However, Breitenbecher and Scarce (2001) found no difference between women with and without a history of victimization.

Sexual Assertiveness Self-Statement Test

The Sexual Assertiveness Self-Statement Test (SASST; Muehlenhard, Flarity-White, & Linton, 1990) measures women's self-statements related to sexual assertiveness (see Appendix V). The SASST consists of 33 items, including seven positive self-statements, which would make it easier for women to refuse unwanted sexual advances, and 26 negative self-statements, which would make it more difficult for women to refuse such advances. Participants rate the frequency with which they have had the thought on a scale from 0 (rarely) to 4 (very often). An example of a positive self-statement is: "I don't want to do something just because he wants to." A typical negative self-statement

item is: “I’ll lose him if I don’t have sex with him.” Scores range from 0 (least assertive) to 132 (most assertive).

Sexual Assertiveness Questionnaire

The Sexual Assertiveness Questionnaire (SAQ; Muehlenhard et al., 1990) measures women’s ability to refuse unwanted dates, kissing, petting, and sexual intercourse (see Appendix VI). Participants read 28 scenarios in which a man urges the woman to engage in unwanted dating, kissing, petting, or sexual intercourse. Situational factors are varied, such as how well the woman knows the man (e.g., acquaintance or someone she’s dating). Six scenarios involve unwanted dates, seven involve unwanted kissing, five involve unwanted petting, and ten involve unwanted sexual intercourse. The women are asked to imagine that they do not wish to engage in the behavior and then asked how they would respond. The response choices include: *I would refuse and feel comfortable doing so, I would refuse but would feel uncomfortable about doing so, I would not refuse but would feel uncomfortable because I didn’t, or I would not refuse and would feel comfortable about it (even though I didn’t want to do it)*. Scores range from 0 (low assertiveness) to 28 (high assertiveness). The measure has good internal consistency, demonstrated with two separate samples: .95 (N = 53) and .90 (N = 451). In one sample of 417 women the mean was 13.15 with a standard deviation of 5.38.

Alcohol Use Disorders Identification Test

The Alcohol Use Disorders Identification Test (AUDIT; Babor, Higgins-Biddle, Saunders, & Monteiro, 2001) is an alcohol-use screening device developed by the World Health Organization (see Appendix VII). It is a 10-item structured interview. Sample questions include: “How often do you have a drink containing alcohol?” and “How often

during the last year have you found that you were not able to stop drinking once you had started?" Items are scored from 0 to 4, with 4 indicating more severe alcohol use. Total scores on the AUDIT range from 0 to 40. Scores between 0 and 7 will be categorized as "low use," 8 and 15 will be categorized as "moderate use," 16 to 19 as "high use," and 20-40 as "severe use." The ranges are suggested by the AUDIT manual.

Acceptable reliability and predictive validity of the AUDIT have been demonstrated with a college sample (Fleming, Barry, & MacDonald, 1991; O'Hare & Sherrer, 1999). The AUDIT has an internal validity of .85 and a test-retest reliability of .64 (Maisto, Conigliaro, McNeil, Kraemer, & Kelley, 2000). Confirmatory factor analysis confirmed both a 2-factor (Dependence/Consequences and Alcohol Consumption) and 3-factor structure (Alcohol Consumption, Alcohol Dependence, and Related Consequences; Maisto et al., 2000)

Child Sexual Abuse Questionnaire

The Child Sexual Abuse Questionnaire (CSAQ; Finkelhor, 1979) assesses history of child sexual victimization. A modified version of the CSAQ will be used to assess victimization prior to the age of 15 with someone at least five years older than the victim. The CSAQ is a 9-item self-report measure. Participants respond to questions in a yes/no format. The CSAQ questions will be included in the demographics questions. In order to maintain consistency across measures, the participants will be classified in the same manner as the SES. Child sexual abuse will be categorized as sexual contact, sexual coercion, attempted rape, rape, or none.

Demographics Questionnaire

Participants completed an eight-item demographics page (see Appendix VIII). The participants answered questions about age, race, relationship status, and prior experience with rape education.

Consumer Satisfaction

Participants completed a consumer satisfaction survey at the five-month follow-up (see Appendix IX).

Experimental Design

Prior to the intervention, participants were randomly assigned to either the behavioral date rape prevention or the attitude date rape prevention condition. Participants provided informed consent and completed the eight measures described above. Participants were assigned an identification number that was placed on the questionnaires and on an envelope. Participants were instructed to place their completed questionnaires into the coded envelope to ensure confidentiality. Participants scheduled a follow-up appointment and were given a card with the date and time. They received a phone call reminder before their scheduled appointment.

Each condition was co-led by a female and male facilitator and lasted approximately 2 hours. Group facilitators consisted of trained upper-division undergraduate students and graduate students enrolled in a clinical psychology doctoral program. For the behavior condition, a male acting student role-played the male in the dating situation role-plays. Approximately fifteen hours of training were provided to group facilitators and included: readings and lectures about date rape, research

methodology, basic group counseling skills (e.g., active listening, responding appropriately to sensitive issues), and specific training on the protocols for the groups. Facilitators were provided a training manual. Further, all group facilitators who had access to data completed the Course in the Protection of Human Research Subjects.

Immediately after completing their respective experimental condition, participants completed the Rape Myth Acceptance Scale. All participants received referral materials provided by the Rape Crisis Center in Las Vegas.

One hundred and seventy-one participants returned for the first follow-up four weeks after participation in the study. They completed all measures again, except for the demographics and the CSAQ. The SES was reworded so that participants were asked to remark on experiences only for the previous four weeks. Eighty-two participants returned for the second follow-up five months following the initial group. Again, participants completed questionnaires regarding events that took place during the follow-up period only. Participants were debriefed after completing of the five-month follow-up questionnaires (APPENDIX X).

Experimental Conditions

Attitude & Knowledge Date Rape Prevention

Facilitators introduced themselves and provided the participants with a brief overview of the contents of the program (APPENDIX XI). Participants were invited and encouraged to discuss the information they were presented with throughout the program. Participants took a short quiz on their rape knowledge. Information from the quiz was used to shape discussion. The participants were then provided with definitions of sexual

assault and date rape. Following definitions, participants were presented with local and national statistics about rape. Next, participants provided the facilitators with beliefs and thoughts about rape, no matter whether they endorsed the beliefs or not. These beliefs were listed on a board or large pad of paper.

The beliefs were used to enter into a discussion about rape myths. The facilitators began with the beliefs the participants generated and “debunked” any myths that were generated. The facilitators had a list of myths and facts about date rape and any myths not generated by the participants were brought up by the facilitators and discussed. Information was presented on rape victims, specifically on rape trauma syndrome and how to help a rape victim.

Behavioral Date Rape Prevention

Facilitators introduced themselves and provide the participants with instructions for the group using a protocol form to ensure accuracy (see Appendix XII). Facilitators of the behavioral prevention were experienced in providing rape crisis counseling. First, the facilitators presented definitions and statistics about date rape.

Next, participants watched several short movie clips dramatizing a date rape scenario. The movie clips reflected different time-periods during the date (e.g., dinner, being in the woman’s apartment following the date). Following the first movie clip, the facilitators asked the group to identify the problems in the clip. Then the facilitators performed a model role-play with the female facilitator showing appropriately assertive refusal behavior. Following the model role-play each participant completed a role play. The facilitators provided feedback to the participants including, components of assertive

behavior (e.g., maintaining eye contact, using a well-modulated voice tone, and matching facial expression to verbal expression).

Following the second movie clip, participants were asked to identify thoughts that would prevent them from refusing (e.g., not wanting to be embarrassed). Participants were also provided a list of common thoughts and an example counter-cognition (e.g., embarrassment is a small price to pay for safety; Appendix XIII). The female facilitator stated a cognition that would keep her from refusing and then countered it with a counter-cognition. Then she performed the model role-play. Following the model each participant stated their cognition and counter-cognition and then role-played the scenario. This process was repeated so that each participant performed five role-plays. They received feedback from the facilitators after each role-play.

The last movie clip showed the real-life rape survivor discussing her experience. She also discussed that although there were many decisions she could have made differently, the rape was not her fault. This was discussed with participants.

CHAPTER 4

RESULTS

Pre-Test Differences

Participants in the two experimental conditions did not differ on age [$F(1, 208) = 1.243, p > .05$]. There were also no differences with regards to race [$\chi^2(6, N = 206) = 2.201, p > .05$]. Subjects did not differ, between the two conditions, with regards to pre-test scores on the Rape Myth Acceptance Scale (RMAS), the Sexual Communication Survey (SCS), the Sexual Assertiveness Self-Statement Test (SASST), the Alcohol Use Disorder Identification Test (AUDIT), the Dating Behavior Survey (DBS), the Sexual Assertiveness Questionnaire (SAQ; Table 3)

There were no pre-test differences between the groups concerning prior victimization history as assessed by the Sexual Experiences Survey (SES) and the Child Sexual Abuse Questionnaire (CSAQ; Table 4). A full 36.5% of women reported some level of sexual victimization after the age of 14, while 26.2% of women reported some level of sexual abuse prior to the age of 14.

Table 3- Pre-Test Scores in the Attitude and Behavior Conditions

	<u>Attitude</u>		<u>Behavior</u>		
	<i>N</i> =97		<i>N</i> =97		
Measure	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>F</i> (1, 192)
RMAS	43.03	14.89	41.21	13.03	.702
	<i>N</i> =105		<i>N</i> =105		
Measure	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>F</i> (1, 208)
SCS	36.83	12.43	35.88	17.05	.215
SASST	82.30	14.19	80.60	15.23	.699
AUDIT	4.58	4.38	5.42	5.24	1.59
DBS	45.25	11.36	42.55	16.95	1.84
SAQ	13.49	7.11	12.48	6.29	1.19
<i>p</i> > .05					

Table 4 - Prevalence (%) of Victimization at Pre-test

Victimization	<i>N</i> = 210		
	Attitude	Behavior	χ^2 (1)
After age 14	37	39	.021
Prior to age 14	30	25	.394

p > .05.

A series of one-way ANOVAs were conducted to determine if there were pre-test differences between victims and nonvictims on the pre-test measures (Table 5). The

ANOVAs revealed significant differences between the groups on all six measures such that victims reported more behaviors associated with date rape, more sexual miscommunication, less sexual assertiveness, fewer sexually assertive self-statements, more alcohol use, and *less* belief in rape myths.

Table 5 - Pre-Test Scores for Victims and Nonvictims

Measure	<u>Victims</u>		<u>Nonvictims</u>		<i>F</i> (1, 190)
	<i>N</i> =69		<i>N</i> =123		
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
RMAS	38.52	11.33	44.11	15.04	7.23*
Measure	<i>N</i> =76		<i>N</i> =132		<i>F</i> (1, 206)
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
SCS	43.74	12.10	32.08	14.82	33.95**
SASST	76.15	14.40	84.50	14.17	16.54**
AUDIT	7.31	5.82	3.71	3.62	30.19**
DBS	50.98	8.29	39.91	15.76	32.33**
SAQ	11.14	6.11	13.96	6.82	8.87 *
* <i>p</i> < .01		** <i>p</i> < .001			

Four-Week Follow-Up Results

Several analyses were conducted between those participants who returned (80%) for the first follow-up and those who did not (20%). A one-way (return v. nonreturn)

MANOVA was conducted to determine if any differences existed on the pre-test scales (Table 6). There were no differences on any of the dependent measures (i.e., RMAS, SASST, DBS, SCS, AUDIT, SAQ) [$F(6, 187) = .699; p > .05$]. Further, a Chi-square was conducted to determine if any differences existed between victimization status and returners/nonreturners. The Chi-square for both victimization after the age of 14 [Table 7; $\chi^2(1) = .597; p > .05$] and childhood sexual abuse [Table 8; $\chi^2(1) = .038; p > .05$] were not significant. Finally, a Chi-square was conducted to see if differences existed by group assignment (Table 9; behavior vs. attitude). The Chi-square was not significant [$\chi^2(1) = 2.41; p = .121$].

Table 6 - Pre-Test Scores for Returners and Nonreturners

Measure	<u>Return</u> N=155		<u>Nonreturn</u> N=39		F (1, 192)
	M	SD	M	SD	
RMAS	41.66	13.51	43.95	15.80	.835
SCS	35.79	14.82	39.13	16.84	1.49
SASST	81.97	14.74	78.94	14.72	1.31
AUDIT	5.04	4.79	5.24	5.17	.054
DBS	43.58	14.85	43.59	15.47	.000
SAQ	12.89	6.54	13.03	7.72	.012
$p > .05$					

Table 7 - Prevalence (%) of Victimization After Age 14

			<i>N</i> = 208
Victimization	Return	Nonreturn	χ^2 (1)
Yes	28	8.7	.597
No	52	12	

$p > .05$.

Table 8 - Prevalence (%) of Victimization Before Age 14

			<i>N</i> = 210
Victimization	Return	Nonreturn	χ^2 (1)
Yes	21	4.8	.038
No	59	15	

$p > .05$.

Table 9 - Prevalence (%) of Returning Participants

			<i>N</i> = 210
Group	Return	Nonreturn	χ^2 (1)
Attitude	38	12	2.41
Behavior	42	7.6	

$p > .05$.

Hypothesis 1: Women in the treatment condition will have a lower incidence of new victimizations, a lower frequency of risky dating behaviors, a lower frequency of sexual miscommunication, higher sexual assertiveness skills, more positive sexually assertive self-statements (making it easier to refuse) at follow-up 1 (F1) as compared to the women in the control condition.

Hypothesis 2: Women in the treatment condition will have a lower frequency of risky dating behaviors, a lower frequency of sexual miscommunication, higher sexual assertiveness skills, more positive sexually assertive self-statements (making it easier to refuse) at both follow-ups than reported at pre-test.

Table 10 – Victimization During Four-Week Follow-up Period

<i>Victimization During 4-Week Follow-up Period</i>	<i>N = 154</i>		
	<i>Sexual Coercion</i>	<i>Attempted Sexual Assault</i>	<i>Completed Sexual Assault</i>
Prevalence (%)	11.0	0.6	7.1

In order to analyze the first part of hypothesis 1 a Chi-Square was performed to assess the effects of group prevention on victimization during the 4-week follow-up period. There were no significant differences between the groups (Table 11). During the first follow-up period, 18.8% of women reported some level of new victimization.

Table 11 - Prevalence (%) of Victimization

N=154			
Victimization	Attitude	Behavior	χ^2 (1)
4-Week Follow-Up	10	19	.142

$p > .05$.

Due to the nonsignificance of the Chi-square, a post-hoc direct logistic regression was performed on F1 victimization as outcome and nine predictor variables: prevention group, teen victimization, childhood sexual abuse, and pre-test scores for the DBS, RMAS, SASST, SAQ, AUDIT, and SCS. A test of the full model with all nine predictor variables against a constant-only model was statistically significant, $\chi^2(9) = 45.42, p < .0005$, indicating that the predictors, as a set, reliably distinguished between victims and nonvictims at F1. The Hosmer and Lemeshow Goodness of Fit Test indicated a good fit for the model, $\chi^2(8) = 4.44, p = .815$. The variability explained by the model ranged between 27% (Cox & Snell R^2) and 44% (Nagelkerke R^2). The overall classification rate was impressive at 87.3%; however, the sensitivity of the model was low, only 40.7% of victims were correctly classified. On the other hand, the specificity was quite high with 98.3% of nonvictims correctly classified. The positive predictive value was 84.62% and the negative predictive value was 87.6%.

Table 12 shows regression coefficients, Wald statistics, odds ratios, and 95% confidence intervals for odds ratios for each of the nine predictors. Three predictors were statistically significant, teen victimization, RMAS and AUDIT pre-test scores.

Participants who were sexually victimized as teenagers were 6.5 times more likely to report victimization at F1. The other two predictors, however, showed a small change in the likelihood of reporting F1 victimization. That is, more belief in rape myths at pre-test only increased the likelihood of reporting F1 victimization by 1.06. Likewise, greater reported alcohol use at pre-test only increased the likelihood of F1 victimization by 1.20.

Table 12 – Logistic Regression

Variables	<i>B</i>	Wald Chi-Square	Odds Ratio	95% Confidence Interval for Odds Ratio	
				<i>Lower</i>	<i>Upper</i>
Group	.461	0.66	1.59	0.52	4.83
Teen Victim	1.87	7.55**	6.47	1.71	24.51
Child Sex Abuse	-.85	1.96	0.43	0.13	1.40
RMAS	0.06	6.12*	1.06	1.01	1.11
SASST	0.03	2.10	1.03	0.99	1.08
DBS	0.02	0.50	1.02	0.96	1.09
SCS	0.04	2.40	1.04	0.99	1.10
AUDIT	0.18	7.46**	1.20	1.05	1.36
SAQ	-0.08	2.47	0.93	0.84	1.02
(constant)	-10.49	8.94			

* $p < .05$

** $p < .01$

Next, to show a relationship between the dependent measures at follow-up and victimization, another post-hoc, direct logistic regression was performed on the

F1 victimization as the outcome and F1 scores on the six dependent measures (DBS, SCS, SAQ, SASST, AUDIT, RMAS). A test of the full model with all six predictor variables against a constant-only model was statistically significant, $\chi^2(6) = 39.07, p < .0005$, indicating that the predictors, as a set, reliably distinguished between victims and nonvictims at F1. The Hosmer and Lemeshow Goodness of Fit Test indicated a good fit for the model, $\chi^2(6) = 6.60, p = .580$. The variability explained by the model ranged between 24% (Cox & Snell R^2) and 38% (Nagelkerke R^2). The overall classification rate was impressive at 82.6%; however, the sensitivity of the model was low, only 33% of victims were correctly classified. On the other hand, the specificity was quite high with 94% of nonvictims correctly classified. The positive predictive value was 56.3% and the negative predictive value was 85.9%.

Table 13 shows regression coefficients, Wald statistics, odds ratios, and 95% confidence intervals for odds ratios for each of the six predictors. Two predictors were statistically significant, F1SCS and F1AUDIT scores. Participants who reported more sexual miscommunication were 1.06 times more likely to report victimization at F1. Participants who reported greater alcohol use at follow-up were 1.23 times more likely to report F1 victimization.

Next, to complete the analyses for hypotheses one and two, a 2 within-subjects x 2 between-subjects MANOVA was conducted to determine the effect of time (pre-test to F1) and group (attitude & behavior) on six dependent variables: dating behaviors (DBS), sexual miscommunication (SCS), sexual assertiveness skills (SAQ), rape myth acceptance (RMAS), alcohol use (AUDIT) and sexually assertive self-statements (SASST). There was a statistically significant difference between pre-test and the four-

week follow-up on the combined dependent variables: $F(6, 139) = 20.53, p < .0005$; Wilks' Lambda = .530; partial eta squared = .470. The time by group interaction was statistically significant multivariate $F(6, 139) = 2.75, p = .015$; Wilks' Lambda = .894; partial eta squared = .106.

Table 13 – Logistic Regression

Variables	B	Wald Chi-Square	Odds Ratio	95% Confidence Interval for Odds Ratio	
				Lower	Upper
F1RMAS	0.02	1.06	1.02	0.98	1.07
F1SASST	-0.01	0.15	0.99	0.96	1.03
F1DBS	-0.01	0.04	0.99	0.94	1.05
F1SCS	0.06	7.30*	1.06	1.02	1.11
F1AUDIT	0.21	11.15**	1.23	1.09	1.39
F1SAQ	-0.01	0.07	0.99	0.92	1.06
(constant)	-4.89	4.02			

* $p < .01$

** $p < .001$

When the dependent variables were considered separately for the time by group interaction, the SCS [$F(1, 144) = 5.88; p = .017$; partial eta squared = .039] and the AUDIT [$F(1, 144) = 8.06; p = .005$; partial eta squared = .053] were statistically significant. The SASST [$F(1, 144) = 3.19; p = .076$; partial eta squared = .022] trended toward significance (Figures 1-3).

Table 14 -Mean Scores and Standard Error for Date Rape Measures as a Function of Group and Time

<i>Measure</i>	<i>Group</i>	<i>Mean</i>	<i>Std. Deviation</i>
DBSpre	Attitude	45.40	11.66
	Behavior	41.88	17.88
	Total	43.57	15.27
DBSF1	Attitude	43.61	13.84
	Behavior	40.49	17.08
	Total	41.99	15.64
RMASpre	Attitude	42.07	15.09
	Behavior	41.30	12.71
	Total	41.67	13.86
RMASF1	Attitude	34.51	13.50
	Behavior	35.12	11.63
	Total	34.83	12.52
AUDITpre	Attitude	4.42	4.44
	Behavior	5.55	5.17
	Total	5.01	4.85
AUDITF1	Attitude	4.31	4.85
	Behavior	4.32	4.18
	Total	4.32	4.50
SAQpre	Attitude	13.59	7.17
	Behavior	12.36	6.02
	Total	12.95	6.60
SAQF1	Attitude	15.41	8.78
	Behavior	15.88	7.10
	Total	15.66	7.93
SASSTpre	Attitude	83.15	14.25
	Behavior	81.36	15.43
	Total	82.22	14.85
SASSTF1	Attitude	84.21	16.14
	Behavior	85.99	15.68
	Total	85.14	15.87
SCSpre	Attitude	35.84	12.49

<i>Measure</i>	<i>Group</i>	<i>Mean</i>	<i>Std. Deviation</i>
	Behavior	35.07	17.36
	Total	35.49	15.17
SCSF1	Attitude	39.34	13.09
	Behavior	33.79	17.65
	Total	36.45	15.82

Subsequent univariate tests were performed. Subsequent tests revealed that the behavior group decreased their alcohol use scores significantly from pre-test to follow-up [$F(1, 87) = 20.91; p < .01$]. There were no other significant findings. Similarly, only the behavior group significantly improved their sexually assertive self-statements from pre-test to follow-up [$F(1, 81) = 13.13; p < .01$].

Figure 1
The Effect of Group and Time on Alcohol Use

Interestingly, upon further examination of the SCS, the attitude group reported significantly *more* sexual miscommunication from pre-test to follow-up [$F(1, 80) = 4.90$; $p < .05$]. The behavior group, however, did not report any change over time. Further, although there was no difference at pre-test between the groups, the attitude group trended toward significantly more sexual miscommunication at follow-up than did the behavior group [$F(1, 167) = 3.46$; $p < .10$].

Table 15 - Multivariate and Univariate Analyses of Group x Time for Date Rape

Measures

			ANOVA $F(1, 144)$					
		<u>MANOVA</u>	DBS	SCS	SASST	SAQ	RMAS	AUDIT
		$F(6, 139)$						
Source	df	F						
Between Subjects								
Group (G)	1	.674	1.87	1.80	.000	.125	.002	.571
Within Subjects								
Time (T)	1	20.53***	4.05**	1.27	8.13**	24.03***	56.45***	11.44***
T x G	1	2.75**	.062	5.88**	3.19*	2.42	.567	8.06**

Note. Multivariate F ratios were generated from Wilks' Lambda. MANOVA =

Multivariate Analysis of Variance. ANOVA = Analysis of Variance.

* $p < .10$

** $p < .05$

*** $p < .01$

Figure 2
The Effect of Group and Time on Sexually Assertive Self-Statements

Figure 3
The Effect of Group and Time on Sexual Miscommunication

When the results for the dependent variables were considered separately for time, all but one dependent variable (SCS) reached statistical significance (Figure 4). There was an overall reduction in reported behaviors associated with date rape: $F(1, 144) =$

4.05, $p = .046$, partial eta squared = .027. Likewise, participants reported a decrease in belief in rape myths: $F(1, 144) = 56.449$, $p < .0005$, partial eta squared = .282.

Participants reported significantly more sexually assertive self-statements, $F(1, 144) = 8.13$, $p = .005$, partial eta squared = .053 and more sexual assertiveness, $F(1, 144) = 24.03$, $p < .0005$, partial eta squared = .143. Lastly, both groups reported a significant decrease in reported alcohol use: $F(1, 144) = 11.44$, $p = .001$, partial eta squared = .074.

Figure 4
Effect of Time on Dating Behaviors, Rape Myths, and Sexual Assertiveness

Hypothesis 3: Women in the control condition will endorse fewer rape myths than the treatment condition at both follow-ups.

Hypothesis 4: Women in the control condition will endorse fewer rape myths at the first follow-up as compared to pre-test. However, at the second follow-up no difference is predicted in belief in rape myths as compared to pre-test.

Hypotheses 3 and 4 were tested within the time by group MANOVA and while there was no significant interaction between group and time with regard to the RMAS, there was a main effect for time for the RMAS such that both groups reduced their belief in rape myths from pre-test to follow-up [$F(1, 144) = 56.45; p < .001$].

Hypothesis 5: The effects of prior victimization on treatment success will be explored as a moderating variable. Based on previous research (e.g., Gidycz et al., 2001), it is hypothesized that treatment will be less effective for women who have a history of victimization. That is, women without a previous history of victimization will have a lower incidence of sexual assault, lower frequency of risky dating behaviors, a lower frequency of sexual miscommunication, higher sexual assertiveness skills, more positive sexually assertive self-statements at the follow-ups than women with a history of victimization.

To examine the effect of victimization status on treatment success a repeated measures 2 (behavior, attitude group) x 2 (victimization, no victimization) / 2 (pre-test, FI) MANOVA was conducted using the DBS, SCS, SASST, SAQ, RMAS and AUDIT as the dependent measures. There was a statistically significant difference between victims and nonvictims on the combined dependent variables: $F(6, 137) = 10.50, p < .0005$;

Wilks' Lambda = .685; partial eta squared = .315. The main effect for time was also significant on the combined dependent variables: $F(6, 137) = 17.91, p < .0005$; Wilks' Lambda = .560; partial eta squared = .440. The time by group interaction was statistically significant multivariate $F(6, 137) = 2.94, p = .01$; Wilks' Lambda = .886; partial eta squared = .114. Finally, the triple interaction time by group by victimization trended toward significance: $F(6, 137) = 1.96, p = .076$; Wilks' Lambda = .921; partial eta squared = .079. Since time and time by group were analyzed in the earlier MANOVA, no further analysis will be reported.

When examining the dependent variables separately for victimization, all but the SAQ attained significance. Victims reported significantly more behaviors associated with date rape [$F(1, 142) = 26.33, p < .0005$], more sexual miscommunication [$F(1, 142) = 26.25, p < .0005$], *less* belief in rape myths [$F(1, 142) = 9.45, p < .005$], less sexually assertive self-statements [$F(1, 142) = 9.32, p < .005$], and more alcohol use [$F(1, 142) = 16.69, p < .0005$].

When examining the dependent variables separately for the time by group by victimization three-way interaction, only alcohol use (AUDIT) was significant. Subsequent ANOVAs were performed to further examine the interaction. As the main variable of interest is victimization status, separate 2 between-subjects (attitude, behavior) x 2 within-subjects (pre-test, F1) ANOVAs were performed for victims and for nonvictims.

Table 16 - Mean Scores and Standard Deviation for Date Rape Measures as a Function of Prevention Condition, Victimization and Time

	<i>Group</i>	<i>Victimization</i>	<i>Mean</i>	<i>SD</i>	<i>N</i>
DSBpre	Attitude	Yes	52.23	10.64	22
		No	42.27	10.83	48
		Total	45.40	11.66	70
	Behavior	Yes	51.02	7.33	28
		No	36.54	20.02	48
		Total	41.88	17.88	76
	Total	Yes	51.55	8.86	50
		No	39.41	16.26	96
		Total	43.57	15.27	146
DBSF1	Attitude	Yes	51.09	10.18	22
		No	40.19	14.05	48
		Total	43.61	13.84	70
	Behavior	Yes	48.86	6.76	28
		No	35.60	19.32	48
		Total	40.49	17.08	76
	Total	Yes	49.84	8.39	50
		No	37.90	16.96	96
		Total	41.99	15.64	146
SCSpre	Attitude	Yes	41.95	11.19	22
		No	33.03	12.14	48
		Total	35.94	12.49	70
	Behavior	Yes	44.96	12.27	28
		No	29.30	17.38	48
		Total	35.07	17.36	76
	Total	Yes	43.64	11.78	50
		No	31.17	15.03	96
		Total	35.44	15.17	146
SCSF1	Attitude	Yes	43.45	9.77	22
		No	37.46	14.05	48
		Total	39.34	13.09	70
	Behavior	Yes	43.89	11.64	28

	<i>Group</i>	<i>Victimization</i>	<i>Mean</i>	<i>SD</i>	<i>N</i>
		No	27.90	17.97	48
		Total	33.79	17.65	76
	Total	Yes	43.70	10.75	50
		No	32.68	16.75	96
		Total	36.45	15.82	146
SASSTpre	Attitude	Yes	78.60	12.40	22
		No	85.24	14.67	48
		Total	83.15	14.25	70
	Behavior	Yes	75.67	14.85	28
		No	84.68	14.93	48
		Total	81.36	15.43	76
	Total	Yes	76.96	13.77	50
		No	84.96	14.73	96
		Total	82.22	14.85	146
SASSTF1	Attitude	Yes	78.72	18.13	22
		No	86.73	14.66	48
		Total	84.21	16.14	70
	Behavior	Yes	82.25	17.59	28
		No	88.17	14.19	48
		Total	85.99	15.68	76
	Total	Yes	80.70	17.73	50
		No	87.45	14.37	96
		Total	85.14	15.87	146
SAQpre	Attitude	Yes	12.45	7.08	22
		No	14.10	7.23	48
		Total	13.59	7.17	70
	Behavior	Yes	11.46	5.07	28
		No	12.88	6.50	48
		Total	12.36	6.02	76
	Total	Yes	11.90	5.99	50
		No	13.59	6.57	96
		Total	12.95	6.60	146
SAQF1	Attitude	Yes	14.41	8.06	22
		No	15.88	9.14	48

	<i>Group</i>	<i>Victimization</i>	<i>Mean</i>	<i>SD</i>	<i>N</i>
		Total	15.41	8.78	70
		Behavior	Yes	14.54	28
		No	16.67	6.44	48
		Total	15.88	7.10	76
		Total	Yes	14.48	50
		No	16.27	7.87	96
		Total	15.66	7.93	146
	AUDITpre	Attitude	Yes	6.67	22
			No	3.39	48
			Total	4.42	70
		Behavior	Yes	7.78	28
			No	4.25	48
			Total	5.55	76
		Total	Yes	7.29	50
			No	3.82	96
			Total	5.01	146
AUDITF1	Attitude	Yes	6.82	6.49	22
		No	3.17	3.39	48
		Total	4.31	4.85	70
	Behavior	Yes	5.50	5.18	28
		No	3.63	3.34	48
		Total	4.32	4.18	76
	Total	Yes	6.08	5.77	50
		No	3.40	3.35	96
		Total	4.32	4.50	146
RMASpre	Attitude	Yes	37.55	11.96	22
		No	44.15	16.01	48
		Total	42.07	15.09	70
	Behavior	Yes	37.18	8.95	28
		No	43.71	13.40	48
		Total	41.30	12.71	76
	Total	Yes	37.34	10.27	50
		No	43.93	14.96	96
		Total	41.67	13.86	146
RMASF1	Attitude	Yes	30.75	8.14	22

	Group	Victimization	Mean	SD	N
		No	36.23	15.12	48
		Total	34.51	13.50	70
	Behavior	Yes	30.90	7.90	28
		No	37.58	12.78	48
		Total	35.12	11.63	76
	Total	Yes	30.83	7.92	50
		No	36.90	13.94	96
		Total	34.82	12.52	146

There was a significant interaction for victims for group by time: $F(1, 57) = 9.46$; $p = .003$ (Figure 5). Further one-way ANOVAs revealed the nature of the interactive effects. The behavior group reported significantly less alcohol use at the first follow-up than they reported at pre-test [$F(1, 31) = 18.43$; $p < .0005$]. The two groups were not significantly different at F1 [$F(1, 57) = 1.50$; $p > .05$]. Further, the victims in the attitude group did not change significantly from pre-test to F1 [$F(1, 26) = .003$; $p > .05$].

Figure 5
Effect of Group and Time on Victims' Alcohol Use

Figure 6
Effect of Group and Time on Nonvictims' Alcohol Use

The 2 x 2 ANOVA on the AUDIT for nonvictims revealed an effect for time: $F(1, 106) = 6.34; p = .013$ (Figure 6). When examined further, the only effect that reached statistical significance was for participants in the behavioral group [$F(1, 54) = 5.56; p = .022$]. As with the victim-only subgroup, only nonvictims who were in the behavioral group reduced their reported alcohol use from pre-test to F1 (Figures 7-8).

Figure 7
Effect of Behavior Group and Time on Alcohol Use for Victims and Nonvictims

Figure 8
Effect of Attitude Group and Time on Alcohol Use of Victims and Nonvictims

Table 17 - Multivariate and Univariate Analyses of Victimization, Group and Time

			ANOVA <i>F</i> (1, 142)					
		<u>MANOVA</u>	DBS	SCS	SASST	SAQ	RMAS	AUDIT
<i>F</i> (6, 137)								
Source	df	<i>F</i>						
Between Subjects								
Group (G)	1	.491	2.11	1.17	.023	.081	.007	.135
Victim(V)	1	10.50***	26.33***	26.25***	9.32***	2.13	9.45***	16.70***
G x V	1	.769	.525	3.39*	.001	.009	.018	.258
Within Subjects								
Time (T)	1	17.91***	3.55*	.677	7.63***	20.73***	48.45***	13.22***
T x G	1	2.94***	.001	4.01**	3.95**	1.82	.350	11.87***
T x V	1	.547	.062	.382	.168	.053	.062	2.42
T x G x V	1	1.96*	.416	.604	1.11	.151	.104	6.06**

Note. Multivariate F ratios were generated from Wilks' Lambda. MANOVA =

Multivariate Analysis of Variance. ANOVA = Analysis of Variance.

* $p < .10$ ** $p < .05$ *** $p < .01$

Hypothesis 6: The effects of alcohol use on treatment success will be explored as a moderating variable. Based on previous research finding that alcohol is a risk factor for victimization (e.g., Combs-Lane & Smith, 2002), it is hypothesized that increased alcohol use will result in lower treatment effectiveness. That is, women with a higher score on the AUDIT, indicating more severe alcohol use, will have a

lower incidence of sexual assault, lower frequency of risky dating behaviors, a lower frequency of sexual miscommunication, higher sexual assertiveness skills, more positive sexually assertive self-statements at the follow-ups than women with higher scores on the AUDIT.

To examine the effect of alcohol use on treatment success, participants were divided into two groups based on their responses to the AUDIT. A median split was used to divide the participants into low alcohol use and high alcohol use. The range of reported use was 0 (no use) to 23 and the median was 3.67. Then a repeated measures 2 (behavior, attitude group) x 2 (low use, high use) / 2 (pre-test, FI) MANOVA was conducted using the DBS, SCS, SASST, SAQ, and RMAS as the dependent measures.

The overall MANOVA was significant for the effect of alcohol use [$F(5, 138) = 5.54; p < .0005$; Wilks' Lambda = .833; partial eta squared = .167]. More specifically, participants who reported low alcohol use also reported significantly less date rape behaviors (DBS), less sexual miscommunication (SCS), and more sexually assertive self-statements (SASST; Figure 9). A main effect for time was also significant, such that both low and high alcohol use participants and both groups of participants improved over time on four of the dependent measures. All participants reduced reported behaviors associated with date rape, improved their sexual assertiveness, increased their sexually assertive self-statements and reduced belief in rape myths.

Table 18 - Multivariate and Univariate Analyses of Alcohol x Group/Time for Date Rape Measures

Source	MANOVA		ANOVA <i>F</i> (1,142)				
	<i>F</i> (5, 138)		DBS	SCS	SASST	SAQ	RMAS
	df	<i>F</i>					
<u>Between Subjects</u>							
Group (G)	1	.839	4.03**	2.53	.020	.000	.016
AUDIT (A)	1	5.54***	17.19***	4.20**	5.66**	3.45	.562
G x A	1	.680	.003	.029	1.89	.404	.155
<u>Within Subjects</u>							
Time (T)	1	22.52***	3.14*	1.43	8.14***	23.55***	54.97***
T x G	1	2.32**	.002	6.05**	2.82*	2.02	.71
T x A	1	.331	.083	.063	1.36	.250	.237
T x G x A	1	.807	2.90	.877	.493	.016	.090

Note. Multivariate *F* ratios were generated from Wilks' Lambda. MANOVA = Multivariate Analysis of Variance. ANOVA = Analysis of Variance.

p* < .10 ** *p* < .05 **p* < .01

Figure 9
Effect of Alcohol Use on Dating Behaviors, Sexual Communication,
and Sexual Assertiveness

The only significant interaction effect was time by group, as this as been analyzed previously it will not be discussed further.

Exploratory Hypothesis 5a: Maker et al. (2001) found that women who were sexually abused as children were more likely to be abused as adults as compared with women who were sexually abused by a peer. An exploratory moderational analysis will be conducted to determine if women abused only as a child will respond differently to treatment at both follow-ups (i.e., have a different incidence of date rape, frequency of risky dating behaviors, frequency of sexual miscommunication, sexual assertiveness skills, and sexually assertive self-statement during the follow-up periods) than women abused only in adolescence.

Table 19 - Mean Scores and Standard Deviation for Date Rape Measures as a Function of Prevention Condition, Alcohol Use and Time

	<i>Group</i>	<i>Alcohol</i>	<i>Mean</i>	<i>SD</i>	<i>N</i>
DSBpre	Attitude	Low	42.26	11.85	45
		High	51.04	9.06	25
		Total	45.40	11.66	70
	Behavior	Low	36.24	18.11	38
		High	47.52	15.97	38
		Total	41.88	17.88	76
	Total	Low	39.50	15.24	83
		High	48.92	13.68	63
		Total	43.57	15.27	146
DBSF1	Attitude	Low	36.67	14.20	45
		High	50.72	9.95	25
		Total	43.61	13.84	70
	Behavior	Low	36.45	18.15	38
		High	44.53	15.11	38
		Total	40.49	17.08	76
	Total	Low	38.19	16.11	83
		High	46.99	13.56	63
		Total	41.99	15.64	146
SCSpre	Attitude	Low	34.48	13.40	45
		High	38.28	10.45	25
		Total	35.84	12.49	70
	Behavior	Low	31.82	18.52	38
		High	38.33	15.69	38
		Total	35.07	17.36	76
	Total	Low	33.26	15.90	83
		High	38.31	13.75	63
		Total	35.44	15.17	146
SCSF1	Attitude	Low	37.49	13.89	45
		High	42.68	11.00	25
		Total	39.34	13.09	70
	Behavior	Low	31.74	19.24	38

	<i>Group</i>	<i>Alcohol</i>	<i>Mean</i>	<i>SD</i>	<i>N</i>
		High	35.84	15.88	38
		Total	33.79	17.65	76
	Total	Low	34.86	16.07	83
		High	38.56	14.45	63
		Total	36.45	15.82	146
SASSTpre	Attitude	Low	84.16	13.85	45
		High	81.33	15.06	25
		Total	83.15	14.25	70
	Behavior	Low	86.73	13.38	38
		High	75.99	15.64	38
		Total	81.36	15.43	76
	Total	Low	85.34	13.62	83
		High	78.11	15.51	63
		Total	82.22	14.85	146
SASSTF1	Attitude	Low	84.89	16.61	45
		High	83.00	15.51	25
		Total	84.21	16.14	70
	Behavior	Low	89.45	16.13	38
		High	82.53	14.61	38
		Total	85.99	15.68	76
	Total	Low	86.98	16.45	83
		High	82.71	14.85	63
		Total	85.14	15.87	146
SAQpre	Attitude	Low	14.69	6.82	45
		High	11.60	7.50	25
		Total	13.59	7.17	70
	Behavior	Low	13.13	5.74	38
		High	11.58	6.26	38
		Total	12.36	6.02	76
	Total	Low	13.98	6.36	83
		High	11.59	6.72	63
		Total	12.95	6.60	146
SAQF1	Attitude	Low	16.27	8.82	45
		High	13.88	8.68	25

	<i>Group</i>	<i>Alcohol</i>	<i>Mean</i>	<i>SD</i>	<i>N</i>
		Total	15.41	8.78	70
	Behavior	Low	16.45	6.25	38
		High	15.32	7.90	38
		Total	15.88	7.10	76
	Total	Low	16.35	7.71	83
		High	14.75	8.18	63
		Total	15.66	7.93	146
RMASpre	Attitude	Low	42.64	16.76	45
		High	41.04	11.75	25
		Total	42.07	15.09	70
	Behavior	Low	41.58	12.80	38
		High	41.03	12.79	38
		Total	41.30	12.71	76
	Total	Low	42.16	15.00	83
		High	41.03	12.23	63
		Total	41.67	13.86	146
RMASF1	Attitude	Low	35.61	15.14	45
		High	32.52	9.86	25
		Total	34.51	13.50	70
	Behavior	Low	35.57	11.65	38
		High	34.67	11.76	38
		Total	35.12	11.63	76
	Total	Low	35.59	13.57	83
		High	33.82	11.01	63
		Total	34.82	12.52	146

To examine this hypothesis a repeated measures 2 (child sex abuse, teen abuse) x 2 (behavior, attitude)/2 (pre-test, F1) MANOVA was conducted with the DBS, SCS, SASST, SAQ, RMAS, and AUDIT as dependent measures. The MANOVA was followed with ANOVAs. There was a significant multivariate test for victim status

(child, teen): $F(6, 38) = 2.85; p = .021$; Wilks' Lambda = .689; partial eta squared = .311. When examining each dependent variable separately, two were statistically significant (DBS, RMAS). Participants abused as teens scored significantly higher on risky dating behaviors (DBS) and significantly lower on rape myth acceptance (RMAS) than participants abused as children. Two variables trended toward significance (SCS, AUDIT). Participants abused as teens reported more sexual miscommunication and more alcohol use than participants abused as children. Further, there was a significant effect for time [$F(6, 38) = 7.05; p < .0005$; Wilks' Lambda = .473; partial eta squared = .527] and the interaction time by group trended toward significance [$F(6, 38) = 2.00; p = 0.09$; Wilks' Lambda = .760; partial eta squared = .240]. Finally, the three-way interaction time by group by victim status was significant [$F(6, 38) = 2.33; p < .05$; Wilks' Lambda = .731; partial eta squared = .269].

Table 20 - Prevalence (%) of Victimization

		N=47
Sexual Abuse Only	42.6	
Teen Abuse Only	57.4	

Upon examination of each of the dependent variables, three were significant for the main effect of time (SAQ, RMAS, AUDIT) and one trended toward significance (SASST). Participants reported significantly more sexual assertiveness, less belief in rape myths, less alcohol use, and more sexually assertive self-statements from pre-test to follow-up.

Table 21 - Multivariate and Univariate Analyses of Victim Status, Group and Time

			ANOVA $F(1, 43)$					
		<u>MANOVA</u>	DBS	SCS	SASST	SAQ	RMAS	AUDIT
		$F(6, 38)$						
Source	df	F						
Between Subjects								
Group	1	.319	0.27	1.83	0.03	0.11	0.15	0.08
Victim(V)	1	2.85**	10.43***	3.31*	2.64	0.00	4.03**	3.53*
G x V	1	.639	1.18	2.06	1.86	0.00	0.87	0.04
Within Subjects								
Time (T)	1	7.046***	0.51	0.10	29.78***	8.42***	29.78***	10.98***
T x G	1	2.00*	0.53	6.28**	8.13***	1.59	0.61	1.84
T x V	1	1.06	0.44	1.59	3.27	0.04	0.12	1.48
T x G x V	1	2.33**	0.16	0.11	0.03	0.13	0.07	11.93***

Note. Multivariate F ratios were generated from Wilks' Lambda. MANOVA =

Multivariate Analysis of Variance. ANOVA = Analysis of Variance.

* $p < .10$ ** $p < .05$ *** $p < .01$

Figure 10
Effect of Time on Belief in Rape Myths, Alcohol Use, and Sexual Assertiveness

Among teen abuse and child abuse participants, there was an effect for time by group for the SCS [$F(1, 43) = 6.28; p = .016$; partial eta squared = .127] and the SASST [$F(1, 43) = 8.13; p = .007$; partial eta squared = .159]. Participants in the Attitude group reported significantly *more* sexual miscommunication from pre-test to follow-up [$F(1, 28) = 4.27; p = .048$; partial eta squared = .132], while participants in the behavioral group trended toward reported *less* sexual miscommunication [$F(1, 28) = 2.93; p = .098$; partial eta squared = .095]. Regarding sexually assertive self-statements (SASST), only participants in the behavioral group reported more sexually assertive self-statements from pre-test to follow-up [$F(1, 26) = 10.0; p = .004$; partial eta squared = .278].

Figure 11
Effect of Group and Time on Child & Teen Victims' Sexual Miscommunication

Figure 12
Effect of Group and Time on Child & Teen Victims' Sexually Assertive Self-Statements

When examining each dependent variable separate for the three-way interaction, only the AUDIT was significant [$F(1, 43) = 11.93$; $p < .001$; partial eta squared = .217]. To further examine the three-way interaction, two 2 (attitude, behavior) / 2 (pretest, F1) ANOVAs were conducted for child sexual abuse only and teen abuse only

participants. For child sexual abuse only participants, there was an effect for time only for participants in the attitude group [$F(1, 12) = 4.48; p = .056$], such that participants reported significantly less alcohol use at F1 than at pre-test. There was a trend toward significance for the interaction of group by time [$F(1, 22) = 3.34; p = .081$].

Figure 13
Effect of Group and Time on Alcohol Use of Participants Abused as Children Only

Interestingly, the subsequent tests revealed the exact opposite finding for the teen abuse only participants. There was a highly significant interactive effect of group and time [$F(1, 32) = 10.68; p = .003$] and a main effect for time [$F(1, 32) = 11.42; p = .002$]. When examined further, the behavioral group decreased their reported alcohol use from pre-test to F1 [$F(1, 17) = 16.83; p = .001$]. Therefore, for participants abused as children only, their alcohol use decreased only if they were in the attitude group, while participants who were abused as teens only decreased their use only if they were in the behavior group.

Figure 14
Effect of Group and Time on Alcohol Use of Participants Assaulted
as Teens Only

Exploratory Hypothesis 5b: Stermac et al (2002) and Gidycz et al (1995) found that the severity of sexual abuse in childhood or adolescence predicted the severity of sexual assault in adulthood. However, Maker et al (2001) found that severity of childhood abuse was not predictive of revictimization status. An exploratory moderational analysis will be conducted to determine if women who experienced more severe child sexual abuse and more severe sexual abuse as an adolescent will respond to treatment differently (i.e., have a different incidence of date rape, frequency of risky dating behaviors, frequency of sexual miscommunication, sexual assertiveness skills, and sexually assertive self-statement during the follow-up periods).

Participants were divided into those who reported experiencing coercion and those who experienced an attempted or completed sexual assault. Then a 2 between (group) x 2 between (sexual assault severity) / 2 (time) MANOVA was completed for all

six dependent measures. The only significant multivariate effect was for time: $F(6, 40) = 9.53; p < .0005$; Wilks' Lambda = .412; partial eta squared = .588. While severity [$F(6, 40) = 2.16; p = .067$; Wilks' Lambda = .755; partial eta squared = .245] and time by group [$F(6, 40) = 1.96; p = .095$; Wilks' Lambda = .773; partial eta squared = .227] effects trended toward significance.

When examining each dependent variable for significance for main effect for time, the SAQ [$F(1, 45) = 6.77; p = .013$; partial eta squared = .131], the RMAS [$F(1, 45) = 38.96; p < .0005$; partial eta squared = .464], and the AUDIT [$F(1, 45) = 7.43; p = .009$; partial eta squared = .142] reached statistical significance. The SASST trended toward significance [$F(1, 45) = 2.94; p = .093$; partial eta squared = .061]. All participants improved their scores on the measures over time, such that they increased sexual assertiveness and sexually assertive self-statements and decreased alcohol use and belief in rape myths.

The trended effect for severity revealed only one dependent variable that trended toward significance [$F(1, 45) = 3.19; p = .081$; partial eta squared = .066]. Participants who reported more severe levels of victimization (attempt/complete) reported *more* sexually assertive self-statements than participants who reported less severe victimization (coercion). The time by group trend was examined for each dependent variable; only the AUDIT reached statistical significance [$F(1, 45) = 9.10; p = .004$; partial eta squared = .168], such that those in the behavioral group decreased their alcohol use over time (Figure 15).

Figure 15
Effect of Group and Time on the Alcohol Use Of Victims

Five-Month Follow-Up

As with the four-week follow-up, several analyses were conducted between those participants who returned (39%) for the first follow-up and those who did not. A one-way (return v. nonreturn) MANOVA was conducted to determine if any differences existed on the pre-test scales (Table 22). There were no differences on any of the dependent measures (i.e., RMAS, SASST, DBS, SCS, AUDIT, SAQ) [$F(6, 187) = 1.24$; $p > .05$]. Further, a Chi-square was conducted to determine if any differences existed between victimization status and returners/nonreturners. The Chi-square for both victimization after the age of 14 [Table 5; $\chi^2(1) = 1.73$; $p > .05$] and childhood sexual abuse [Table 23; $\chi^2(1) = .917$; $p > .05$] were not significant. Finally, a Chi-square was conducted to see if differences existed by group assignment (Table 24; behavior vs. attitude). Interestingly, the Chi-square *was* significant such that people who were in the

behavior group were more likely to return for the five-month follow-up [$\chi^2 (1) = 5.78; p = .016$].

Table 22 - Pre-Test Scores for Returners and Nonreturners for Five-Month Follow-up

Measure	<u>Return</u> N=74		<u>Nonreturn</u> N=120		F (1, 192)
	M	SD	M	SD	
RMAS	41.04	13.50	42.78	14.29	.710
SCS	35.49	15.77	37.07	14.97	.490
SASST	82.66	13.94	80.56	15.23	.925
AUDIT	4.26	4.31	5.58	5.12	3.46
DBS	41.15	14.86	45.08	14.85	3.21
SAQ	13.61	6.90	12.49	6.68	1.25

$p > .05$

Table 23 - Prevalence (%) of Victimization After Age 14

Victimization			N = 208
	Return	Nonreturn	$\chi^2 (1)$
Yes	12	24.5	1.73
No	27.4	36.1	

$p > .05$

Table 24 - Prevalence (%) of Victimization Before Age 14

			<i>N</i> = 210
Victimization	Return	Nonreturn	χ^2 (1)
Yes	8.6	17.6	.917
No	30.5	43.3	

$p > .05$.

Table 25 - Prevalence (%) of Returning Participants for Five-Month Follow-up

			<i>N</i> = 210
Group	Return	Nonreturn	χ^2 (1)
Attitude	15.2	34.8	5.78
Behavior	23.8	26.2	

$p = .016$.

Hypothesis 1: Women in the treatment condition will have a lower incidence of new victimizations, a lower frequency of risky dating behaviors, a lower frequency of sexual miscommunication, higher sexual assertiveness skills, more positive sexually assertive self-statements (making it easier to refuse) at the five-month follow-up (F2) as compared to the women in the control condition.

Hypothesis 2: Women in the treatment condition will have a lower frequency of risky dating behaviors, a lower frequency of sexual miscommunication, higher

Hypothesis 2: Women in the treatment condition will have a lower frequency of risky dating behaviors, a lower frequency of sexual miscommunication, higher sexual assertiveness skills, more positive sexually assertive self-statements (making it easier to refuse) at both follow-ups than reported at pre-test.

Table 26 - Victimization During Five-Month Follow-up

<i>Victimization During 5-Month Follow-up Period</i>	<i>N = 82</i>		
	<i>Sexual Coercion</i>	<i>Attempted Sexual Assault</i>	<i>Completed Sexual Assault</i>
Prevalence (%)	13.4	1.2	8.5

*Participants were scored for the most severe level of victimization only.

In order to analyze the first part of hypothesis 1 a Chi-Square was performed to assess the effects of group prevention on victimization during the 5-month follow-up period. There were no significant differences between the groups (Table 27). During the four-week follow-up period, 18.3% of women reported some level of new victimization.

Table 27 - Prevalence (%) of Victimization Between Groups

<i>N=82</i>			
<i>Victimization</i>	<i>Attitude</i>	<i>Behavior</i>	$\chi^2 (1)$
5-Month Follow-Up	4.9	13.4	.628

$p > .05$.

Due to the nonsignificance of the Chi-square, a post-hoc direct logistic regression was performed on F2 victimization as outcome and nine predictor variables: prevention group, teen victimization, childhood sexual abuse, and pre-test scores for the DBS, RMAS, SASST, SAQ, AUDIT, and SCS. A test of the full model with all nine predictor variables against a constant-only model was not statistically significant, $\chi^2(9) = 7.938, p = 0.54$, indicating that the predictors, as a set, did not reliably distinguished between victims and nonvictims at F2. Table 28 shows regression coefficients, Wald statistics, odds ratios, and 95% confidence intervals for odds ratios for each of the nine predictors.

Table 28 – Five-Month Follow-up Logistic Regression

Variables	<i>B</i>	Wald Chi-Square	Odds Ratio	95% Confidence Interval for Odds Ratio	
				<i>Lower</i>	<i>Upper</i>
Group	0.97	1.73	2.62	0.62	11.03
Teen Victim	0.54	0.44	1.71	0.35	8.29
Child Sex Abuse	-0.11	0.81	0.90	0.19	4.36
RMAS	-0.03	0.86	0.97	0.92	1.03
SASST	-0.01	0.23	0.99	0.94	1.04
DBS	-0.03	0.77	0.97	0.90	1.04
SCS	0.04	1.10	1.04	0.96	1.13
AUDIT	0.08	1.18	1.09	0.94	1.26
SAQ	0.01	0.08	1.01	0.92	1.12
(constant)	-0.89	0.10			

$p > .05$

Next, to examine whether F1 dependent measures were predictive of F2 victimization, another post-hoc direct logistic regression was performed on the F2 victimization as the outcome and F1 scores on the six dependent measures (DBS, SCS, SAQ, SASST, AUDIT, RMAS) and F1 victimization. A test of the full model with all seven predictor variables against a constant-only model was not statistically significant, $\chi^2(7) = 11.52, p = .118$, indicating that the predictors, as a set, did not reliably distinguish between victims and nonvictims at F2. Conversely, the Hosmer and Lemeshow Goodness of Fit Test indicated a good fit for the model, $\chi^2(7) = 8.31, p = .306$. The variability explained by the model ranged between 16% (Cox & Snell R^2) and 29% (Nagelkerke R^2). The overall classification rate was impressive at 87.7%; however, the sensitivity of the model was low, only 22% of victims were correctly classified. On the other hand, the specificity was quite high with 98% of nonvictims correctly classified. The positive predictive value was 66.7% and the negative predictive value was 88.7%.

Table 29 shows regression coefficients, Wald statistics, odds ratios, and 95% confidence intervals for odds ratios for each of the six predictors. One predictor was statistically significant, F1AUDIT scores. Participants who reported greater alcohol use at the four-week follow-up were 1.33 times more likely to report F2 victimization. Victimization at the four-week follow-up trended toward significance. Participants who reported victimization at the four-week follow-up were 5.63 times more likely to report new victimization at the five-month follow-up.

Table 29 – Five-Month Follow-up Logistic Regression

Variables	<i>B</i>	Wald Chi-Square	Odds Ratio	95% Confidence Interval for Odds Ratio	
				<i>Lower</i>	<i>Upper</i>
FIRMAS	-0.02	0.23	0.98	0.90	1.07
F1SASST	-0.02	0.26	0.98	0.92	1.05
F1DBS	-0.02	0.31	0.98	0.90	1.06
F1SCS	0.01	0.04	1.01	0.93	1.10
F1AUDIT	0.29	5.29**	1.33	1.04	1.70
F1SAQ	0.06	0.84	1.07	0.93	1.22
F1Victimization	1.73	2.59*	5.63	0.69	46.05
(constant)	-1.60	0.17			

* $p < .10$ ** $p < .05$

Next, to complete the analyses for hypotheses one and two, a 2 within-subjects x 2 between-subjects MANOVA was conducted to determine the effect of time (pre-test to F2) and group (attitude & behavior) on six dependent variables: dating behaviors (DBS), sexual miscommunication (SCS), sexual assertiveness skills (SAQ), rape myth acceptance (RMAS), alcohol use (AUDIT) and sexually assertive self-statements (SASST). There was a statistically significant difference between pre-test and follow-up 2 on the combined dependent variables: $F(6, 65) = 9.17, p < .0005$; Wilks' Lambda = .542; partial eta squared = .458. The time by group interaction trended toward statistical

When the dependent variables were considered separately for the time by group interaction, only the AUDIT [$F(1, 70) = 6.18; p = .015$; partial eta squared = .081] was statistically significant. The RMAS [$F(1, 70) = 3.14; p = .081$; partial eta squared = .043] trended toward significance (Figures 16-17). Subsequent univariate tests were performed. Subsequent tests revealed that the behavior group decreased their alcohol use scores significantly from pre-test to follow-up [$F(1, 49) = 8.64; p < .001$]. There were no other significant findings. Interestingly, both the attitude [$F(1, 27) = 28.45; p < .005$] and the behavior group [$F(1, 45) = 12.52; p < .001$] reduced their beliefs in rape myths, although the attitude group reduced their beliefs to a greater degree.

Figure 16
The Effect of Group and Time on Alcohol Use

Figure 17
The Effect of Group and Time on Beliefs in Rape Myths

When the results for the dependent variables were considered separately for time, only the SCS and AUDIT failed to reach statistical significance (Figure 18). There was an overall reduction in reported behaviors associated with date rape: $F(1, 70) = 3.91, p = .052$, partial eta squared = .053. Likewise, participants reported a decrease in belief in rape myths: $F(1, 70) = 38.87, p < .0005$, partial eta squared = .357. Participants reported significantly more sexually assertive self-statements, $F(1, 70) = 12.60, p = .001$, partial eta squared = .153 and more sexual assertiveness, $F(1, 70) = 13.55, p < .0005$, partial eta squared = .162.

Table 30 - Mean Scores and Standard Error for Date Rape Measures as a Function of Group and Time

<i>Measure</i>	<i>Group</i>	<i>Mean</i>	<i>Std. Deviation</i>
DBSpre	Attitude	42.56	10.70
	Behavior	40.27	17.21
	Total	41.13	15.06
DBSF2	Attitude	40.85	13.65
	Behavior	36.53	15.97
	Total	38.15	15.18
RMASpre	Attitude	42.22	14.82
	Behavior	40.22	13.00
	Total	40.97	13.64
RMASF2	Attitude	32.85	13.12
	Behavior	35.00	11.33
	Total	34.19	11.99
AUDITpre	Attitude	3.95	4.03
	Behavior	4.57	4.55
	Total	4.33	4.34
AUDITF2	Attitude	4.41	3.35
	Behavior	3.38	3.81
	Total	3.76	3.66
SAQpre	Attitude	15.07	7.71
	Behavior	12.91	6.38
	Total	13.72	6.94
SAQF2	Attitude	17.85	8.98
	Behavior	16.04	7.22
	Total	16.72	7.91
SASSTpre	Attitude	81.61	13.79
	Behavior	83.23	14.29
	Total	82.62	14.03
SASSTF2	Attitude	90.48	11.68
	Behavior	87.18	15.01
	Total	88.42	13.86
SCSpre	Attitude	37.17	13.18

<i>Measure</i>	<i>Group</i>	<i>Mean</i>	<i>Std. Deviation</i>
	Total	88.42	13.86
SCSPre	Attitude	37.17	13.18
	Behavior	35.08	17.23
	Total	35.86	15.77
SCSF2	Attitude	35.96	12.23
	Behavior	34.44	17.62
	Total	35.01	16.34

Table 31 - Multivariate and Univariate Analyses of Group x Time for Date Rape

Measures

ANOVA <i>F</i> (1, 70)								
<u>MANOVA</u>			DBS	SCS	SASST	SAQ	RMAS	AUDIT
<i>F</i> (6, 65)								
Source	df	<i>F</i>						
Between								
Subjects								
Group (G)	1	.441	0.93	0.27	0.09	1.50	0.00	0.05
Within Subjects								
Time (T)	1	9.17***	3.91**	0.27	12.60***	13.55***	38.87***	1.20
T x G	1	1.98*	0.55	0.03	1.86	0.50	3.14*	6.18**

Note. Multivariate *F* ratios were generated from Wilks' Lambda. MANOVA =

Multivariate Analysis of Variance. ANOVA = Analysis of Variance.

**p* < .10

** *p* < .05

****p* < .01

Figure 18
Effect of Time on Dating Behaviors, Rape Myths, and Sexual Assertiveness

In order to more fully examine the effect of time on treatment success, a second MANOVA was conducted to determine if there were any differences between the four-week follow-up scores and the five-month follow-up scores. There was no statistically significant difference on the combined dependent variables for time [$F(6, 65) = 0.79, p = .583$; Wilks' Lambda = 0.93; partial eta squared = 0.07], group [$F(6, 65) = 0.97, p = 0.45$; Wilks' Lambda = 0.92; partial eta squared = 0.08] or for time by group [$F(6, 65) = 0.66, p = .682$; Wilks' Lambda = 0.94; partial eta squared = 0.06]. Thus, the changes in behaviors and attitudes persisted over time.

Table 32 - Multivariate and Univariate Analyses of Group x Time for Date Rape

Measures

			ANOVA $F(1, 70)$					
	<u>MANOVA</u>		DBS	SCS	SASST	SAQ	RMAS	AUDIT
	$F(6, 65)$							
Source	df	F						
Between Subjects								
Group (G)	1	0.97	2.88	1.45	0.03	0.51	0.41	1.97
Within Subjects								
Time (T)	1	0.79	2.33	0.53	0.05	0.16	0.09	0.01
T x G	1	0.66	0.08	0.46	2.14	0.23	0.07	0.52

Note. Multivariate F ratios were generated from Wilks' Lambda. MANOVA =

Multivariate Analysis of Variance. ANOVA = Analysis of Variance.

$p > .05$

Hypothesis 3: Women in the control condition will endorse fewer rape myths than the treatment condition at both follow-ups.

Hypothesis 4: Women in the control condition will endorse fewer rape myths at the first follow-up as compared to pre-test. However, at the second follow-up no difference is predicted in belief in rape myths as compared to pre-test.

Hypotheses 3 and 4 were tested within the time by group MANOVA, which trended toward significance with the attitude group reducing their belief in rape myths to a greater degree from pre-test to F2 than the behavior group. Thus, the predicted rebound in belief in rape myths was not confirmed.

Hypothesis 5: The effects of prior victimization on treatment success will be explored as a moderating variable. Based on previous research (e.g., Gidycz et al., 2001), it is hypothesized that treatment will be less effective for women who have a history of victimization. That is, women without a previous history of victimization will have a lower incidence of sexual assault, lower frequency of risky dating behaviors, a lower frequency of sexual miscommunication, higher sexual assertiveness skills, more positive sexually assertive self-statements at the follow-ups than women with a history of victimization.

To examine the effect of victimization status on treatment success a repeated measures 2 (behavior, attitude group) x 2 (victimization, no victimization) / 2 (pre-test, F2) MANOVA was conducted using the DBS, SCS, SASST, SAQ, RMAS and AUDIT as the dependent measures. Similar to the four-week follow-up results, there was a statistically significant difference between victims and nonvictims on the combined dependent variables: $F(6, 63) = 0.95, p = .011$; Wilks' Lambda = .775; partial eta squared = .225. Similar to the four-week follow-up, the main effect for time was significant [$F(6, 63) = 7.67, p < .0005$; Wilks' Lambda = .578; partial eta squared = .422]. Unlike the four-week follow-up, the triple interaction time by group by

victimization was not significant: $F(6, 63) = 1.14, p = .352$; Wilks' Lambda = .902; partial eta squared = .098. Since the effect of time was analyzed in the earlier MANOVA, no further analysis will be reported.

When examining the dependent variables separately for victimization the DBS [$F(1, 68) = 4.84, p = .031$], the AUDIT [$F(1, 68) = 5.83, p = .018$], and the SCS [$F(1, 68) = 5.40, p = .023$] attained significance. The SAQ [$F(1, 68) = 3.17, p = .080$] and the RMAS [$F(1, 68) = 3.23, p = .077$] trended toward significance. Victims reported significantly more risky dating behaviors, more sexual miscommunication, more alcohol use, less sexual assertiveness, and *less* beliefs in rape myths as compared to nonvictims.

Hypothesis 6: The effects of alcohol use on treatment success will be explored as a moderating variable. Based on previous research finding that alcohol is a risk factor for victimization (e.g., Combs-Lane & Smith, 2002), it is hypothesized that increased alcohol use will result in lower treatment effectiveness. That is, women with a higher score on the AUDIT, indicating more severe alcohol use, will have a lower incidence of sexual assault, lower frequency of risky dating behaviors, a lower frequency of sexual miscommunication, higher sexual assertiveness skills, more positive sexually assertive self-statements at the follow-ups than women with higher scores on the AUDIT.

Table 33 - Mean Scores and Standard Deviation for Date Rape Measures as a Function of Prevention Condition, Victimization and Time

	<i>Group</i>	<i>Victimization</i>	<i>Mean</i>	<i>SD</i>	<i>N</i>
DSBpre	Attitude	Yes	48.00	5.66	9
		No	39.83	11.69	18
		Total	42.56	10.70	27
	Behavior	Yes	48.93	4.55	14
		No	36.36	19.36	31
		Total	40.27	17.21	45
	Total	Yes	48.57	4.91	23
		No	37.63	16.90	49
		Total	41.13	15.06	72
DBSF2	Attitude	Yes	41.22	7.46	9
		No	40.67	16.08	18
		Total	40.85	13.65	27
	Behavior	Yes	43.21	7.93	14
		No	33.52	17.79	31
		Total	36.53	15.97	45
	Total	Yes	42.43	7.65	23
		No	36.14	17.36	49
		Total	38.15	15.18	72
SCSpre	Attitude	Yes	41.22	8.03	9
		No	35.14	14.91	18
		Total	37.17	13.18	27
	Behavior	Yes	45.93	9.61	14
		No	30.17	17.68	31
		Total	35.08	17.23	45
	Total	Yes	44.09	9.14	23
		No	32.00	16.79	49
		Total	35.86	15.77	72
SCSF2	Attitude	Yes	38.78	12.84	9
		No	35.56	15.03	18
		Total	35.93	14.23	27
	Behavior	Yes	39.57	10310	14

	<i>Group</i>	<i>Victimization</i>	<i>Mean</i>	<i>SD</i>	<i>N</i>
		No	32.13	19.83	31
		Total	34.44	17.62	45
	Total	Yes	39.26	10.98	23
		No	33.02	18.09	49
		Total	35.01	16.34	72
SASSTpre	Attitude	Yes	82.78	13.53	9
		No	81.02	14.28	18
		Total	81.61	13.79	27
	Behavior	Yes	78.64	12.80	14
		No	85.30	14.64	31
		Total	83.23	14.29	45
	Total	Yes	80.26	12.94	23
		No	83.73	14.41	49
		Total	82.62	14.03	72
SASSTF2	Attitude	Yes	87.56	11.95	9
		No	91.94	11.60	18
		Total	90.48	11.68	27
	Behavior	Yes	85.86	14.47	14
		No	87.77	15.45	31
		Total	87.18	15.01	45
	Total	Yes	86.52	13.28	23
		No	89.31	14.18	49
		Total	88.42	13.86	72
SAQpre	Attitude	Yes	12.11	7.62	9
		No	16.56	7.52	18
		Total	15.07	7.71	27
	Behavior	Yes	11.57	5.39	14
		No	13.52	6.78	31
		Total	12.91	6.38	45
	Total	Yes	11.78	6.19	23
		No	14.63	7.14	49
		Total	13.72	6.94	72
SAQF2	Attitude	Yes	15.67	7.94	9
		No	18.94	9.48	18

	<i>Group</i>	<i>Victimization</i>	<i>Mean</i>	<i>SD</i>	<i>N</i>
		Total	17.85	8.98	27
		Behavior	Yes	14.29	14
		No	16.84	7.41	31
		Total	16.04	7.22	45
		Total	Yes	14.83	23
		No	17.61	8.20	49
		Total	16.72	7.91	72
	AUDITpre	Attitude	Yes	6.31	9
			No	2.77	18
			Total	3.95	27
		Behavior	Yes	6.13	14
			No	3.86	31
			Total	4.57	45
		Total	Yes	6.20	23
			No	3.46	49
			Total	4.33	72
AUDITF2	Attitude	Yes	5.33	3.84	9
		No	3.94	3.10	18
		Total	4.41	3.35	27
	Behavior	Yes	4.79	3.98	14
		No	2.74	3.61	31
		Total	3.38	3.81	45
	Total	Yes	5.00	3.95	23
		No	3.18	3.45	49
		Total	3.76	3.66	72
RMASpre	Attitude	Yes	37.11	7.42	9
		No	44.78	17.00	18
		Total	42.22	14.82	27
	Behavior	Yes	36.36	6.85	14
		No	41.97	14.75	31
		Total	40.22	13.00	45
	Total	Yes	36.65	6.92	23
		No	43.00	15.50	49
		Total	40.97	13.64	72
RMASF2	Attitude	Yes	30.33	6.00	9

	<i>Group</i>	<i>Victimization</i>	<i>Mean</i>	<i>SD</i>	<i>N</i>
		No	34.11	15.53	18
		Total	32.85	13.12	27
	Behavior	Yes	31.50	7.88	14
		No	36.58	12.37	31
		Total	35.00	11.33	45
	Total	Yes	31.04	7.08	23
		No	35.67	13.51	49
		Total	34.19	11.99	72

To examine the effect of alcohol use on treatment success, participants were divided into two groups based on their responses to the AUDIT. A median split was used to divide the participants into low alcohol use and high alcohol use. The range of reported pre-test use by participants who returned for the five-month follow-up was 0 (no use) to 16 and the median was 3.00. Then a repeated measures 2 (behavior, attitude group) x 2 (low use, high use) / 2 (pre-test, F2) MANOVA was conducted using the DBS, SCS, SASST, SAQ, and RMAS as the dependent measures.

The overall MANOVA was significant for the effect of alcohol use [$F(5, 65) = 2.64; p = .031$; Wilks' Lambda = .831 partial eta squared = .169]. More specifically, participants who reported low alcohol use also reported significantly less sexual assertiveness (SAQ; Figure 21) and more sexual miscommunication (SCS; Figure 22).

Table 34 - Multivariate and Univariate Analyses of Victimization, Group and Time

			ANOVA $F(1, 68)$					
		<u>MANOVA</u>	DBS	SCS	SASST	SAQ	RMAS	AUDIT
$F(6, 63)$								
Source	df	F						
Between Subjects								
Group	1	.271	.299	.017	.214	1.06	.000	.048
Victim(V)	1	3.05***	4.84**	5.40**	.818	3.17*	3.23*	5.83**
G x V	1	.243	.924	.800	.229	.220	.004	.026
Within Subjects								
Time (T)	1	7.67***	6.22**	.978	10.83***	11.90***	30.23***	2.60
T x G	1	1.20	.202	.033	.607	.001	2.04	3.63*
T x V	1	1.35	3.25*	1.83	.033	.026	.770	2.89*
T x G x V	1	1.14	.664	.737	1.99	.261	.445	1.91

Note. Multivariate F ratios were generated from Wilks' Lambda. MANOVA =

Multivariate Analysis of Variance. ANOVA = Analysis of Variance.

* $p < .10$ ** $p < .05$ *** $p < .01$

Table 35 - Multivariate and Univariate Analyses of Alcohol x Group/Time for Date Rape Measures

			ANOVA $F(1, 68)$				
		<u>MANOVA</u>	DBS	SCS	SASST	SAQ	RMAS
		$F(6, 63)$					
Source	df	F					
Between Subjects							
Group (G)	1	.438	.074	.183	.126	1.09	.864
AUDIT(A)	1	2.64**	2.02	4.05**	1.36	11.49***	.794
G x A	1	1.92	2.22	4.75**	1.20	.426	7.06***
Within Subjects							
Time (T)	1	11.38***	6.56**	1.27	14.32***	12.96***	34.91***
T x G	1	.374	.012	.002	.295	.012	1.56
T x A	1	.905	1.33	1.87	2.30	.122	.019
T x G x A	1	.535	.260	.155	1.47	.073	.840

Note. Multivariate F ratios were generated from Wilks' Lambda. MANOVA =

Multivariate Analysis of Variance. ANOVA = Analysis of Variance.

* $p < .10$

** $p < .05$

*** $p < .01$

Figure 19
Effect of Alcohol Use on Sexual Assertiveness

Figure 20
Effect of Alcohol Use on Sexual Miscommunication

Table 36 - Mean Scores and Standard Deviation for Date Rape Measures as a Function of Prevention Condition, Alcohol Use and Time

	<i>Group</i>	<i>Alcohol</i>	<i>Mean</i>	<i>SD</i>	<i>N</i>
DSBpre	Attitude	Low	37.40	13.52	10
		High	45.28	7.44	18
		Total	42.46	10.51	28
	Behavior	Low	41.16	13.20	13
		High	39.91	18.78	32
		Total	41.84	15.78	50
	Total	Low	39.53	13.17	23
		High	41.84	15.78	50
		Total	41.11	14.96	73
DBSF2	Attitude	Low	31.00	21.93	10
		High	44.06	7.76	18
		Total	39.39	15.46	28
	Behavior	Low	36.00	12.06	13
		High	36.75	17.47	32
		Total	36.53	15.97	45
	Total	Low	33.83	16.81	23
		High	36.75	17.47	32
		Total	37.63	15.73	73
SCSpre	Attitude	Low	27.70	14.07	10
		High	41.14	11.09	18
		Total	36.34	13.66	28
	Behavior	Low	37.85	17.50	13
		High	33.95	17.27	32
		Total	35.08	17.23	45
	Total	Low	33.43	16.57	23
		High	36.54	15.61	50
		Total	35.56	15.57	73
SCSF2	Attitude	Low	23.70	16.79	10
		High	40.78	11.12	18
		Total	34.68	15.53	28
	Behavior	Low	32.54	13.29	13

	<i>Group</i>	<i>Alcohol</i>	<i>Mean</i>	<i>SD</i>	<i>N</i>
		High	35.22	19.24	32
		Total	34.44	17.62	45
	Total	Low	38.70	15.22	23
		High	37.22	16.86	50
		Total	34.53	16.74	73
SASSTpre	Attitude	Low	85.44	17.72	10
		High	79.06	12.81	18
		Total	81.34	13.61	28
	Behavior	Low	79.71	11.36	13
		High	84.66	15.26	32
		Total	83.23	14.29	45
	Total	Low	82.20	12.94	23
		High	82.64	14.54	50
		Total	82.50	13.97	73
SASSTF2	Attitude	Low	94.20	17.82	10
		High	86.67	8.68	18
		Total	89.36	12.91	28
	Behavior	Low	91.00	12.01	13
		High	85.63	15.98	32
		Total	87.18	15.01	45
	Total	Low	92.39	15.53	23
		High	86.00	13.71	50
		Total	88.01	14.19	73
SAQpre	Attitude	Low	18.60	7.20	10
		High	12.61	7.39	18
		Total	14.75	7.76	28
	Behavior	Low	16.00	6.88	13
		High	11.66	5.82	32
		Total	12.91	6.39	45
	Total	Low	17.13	6.98	23
		High	12.00	6.37	50
		Total	13.62	6.95	73
SAQF2	Attitude	Low	22.10	8.44	10
		High	15.06	8.38	18

	<i>Group</i>	<i>Alcohol</i>	<i>Mean</i>	<i>SD</i>	<i>N</i>
		Total	17.57	8.93	28
	Behavior	Low	19.23	7.63	13
		High	14.75	6.75	32
		Total	16.04	7.22	45
	Total	Low	20.48	7.94	23
		High	14.86	7.30	50
		Total	16.63	7.90	73
RMASpre	Attitude	Low	34.70	8.19	10
		High	46.11	15.89	18
		Total	42.04	14.57	28
	Behavior	Low	44.85	16.98	13
		High	38.34	10.75	32
		Total	40.22	13.00	45
	Total	Low	40.43	14.53	23
		High	41.14	13.23	50
		Total	40.92	13.55	73
RMASF2	Attitude	Low	26.80	8.09	10
		High	36.27	13.95	18
		Total	32.89	12.87	28
	Behavior	Low	37.77	10.76	13
		High	33.88	11.53	32
		Total	35.00	11.33	45
	Total	Low	33.00	10.99	23
		High	34.74	12.37	50
		Total	34.19	11.90	73

Exploratory Hypothesis 5a: Maker et al. (2001) found that women who were sexually abused as children were more likely to be abused as adults as compared with women who were sexually abused by a peer. An exploratory moderational analysis will be conducted to determine if women abused only as a child will respond differently to treatment at both follow-ups (i.e., have a different incidence

of date rape, frequency of risky dating behaviors, frequency of sexual miscommunication, sexual assertiveness skills, and sexually assertive self-statement during the follow-up periods) than women abused only in adolescence.

To examine this hypothesis a repeated measures 2 (child sex abuse, teen abuse) x 2 (behavior, attitude)/2 (pre-test, F2) MANOVA was conducted with the DBS, SCS, SASST, SAQ, RMAS, and AUDIT as dependent measures. The MANOVA was followed with ANOVAs. There was a significant multivariate test for victim status (child, teen): $F(6, 12) = 3.16; p = .042$; Wilks' Lambda = .387; partial eta squared = .613. When examining each dependent variable separately, one was statistically significant (RMAS) and two trended toward significance (SCS, DBS). Participants who were abused as children only reported a significantly higher belief in rape myths than did participants abused as teens only. However, those participants abused as children only reported significantly *less* sexual miscommunication and *fewer* behaviors associated with date rape as compared with those abused as teens only. Unlike the four-week follow-up, there were no significant effects for time, time by group, or time by group by victim status.

Table 37- Prevalence (%) of Victimization

	N=21
Sexual Abuse Only	30.1
Teen Abuse Only	61.9

Table 38 - Multivariate and Univariate Analyses of Victim Status, Group and Time

			ANOVA $F(1, 17)$					
		<u>MANOVA</u>	DBS	SCS	SASS	SAQ	RMAS	AUDIT
		$F(6, 12)$	T					
Source	df	F						
Between Subjects								
Group	1	.618	.076	.307	.002	.667	.034	2.04
Victim(V	1	3.16**	3.59*	3.20*	1.81	.103	8.18**	.855
G x V	1	.848	.014	1.33	.075	.040	.155	1.59
Within Subjects								
Time (T)	1	2.15	2.21	.290	3.31*	5.45**	5.58**	1.27
T x G	1	1.17	.453	4.07*	.271	.256	.017	.833
T x V	1	1.21	.899	.186	4.73	2.97	.242	.007
T x G x	1	.432	.616	.002	.084	1.14	.051	.088

Note. Multivariate F ratios were generated from Wilks' Lambda. MANOVA =

Multivariate Analysis of Variance. ANOVA = Analysis of Variance.

* $p < .10$ ** $p < .05$ *** $p < .01$

Figure 21
Effect of Victim Status on Belief in Rape Myths, Sexual
Miscommunication, and Date Rape Behaviors

Exploratory Hypothesis 5b: Stermac et al (2002) and Gidycz et al (1995) found that the severity of sexual abuse in childhood or adolescence predicted the severity of sexual assault in adulthood. However, Maker et al (2001) found that severity of childhood abuse was not predictive of revictimization status. An exploratory moderational analysis will be conducted to determine if women who experienced more severe child sexual abuse and more severe sexual abuse as an adolescent will respond to treatment differently (i.e., have a different incidence of date rape, frequency of risky dating behaviors, frequency of sexual miscommunication, sexual assertiveness skills, and sexually assertive self-statement during the follow-up periods).

Due to the large attrition rate, the hypothesis was not explored at the five-month follow-up. Only 15 women reported some level of victimization at the five-month follow-up.

Consumer Satisfaction

Participants completed a consumer satisfaction questionnaire at the five-month follow-up. Participants rated how uncomfortable the group made them feel from 1 (not at all) to 5 (tremendously). Most (85%) participants rated the group as making them feel “a lot” or “tremendously” uncomfortable. However, 40% of participants also reported that they enjoyed the group “a lot” or “tremendously.” Sixty-five percent of the women reported that they learned “a lot” or “a tremendous amount.” Lastly, 73% of participants reported that they would be “likely” or “very likely” to use the information.

Table 39 – Consumer Satisfaction

Question	Uncomfortable	Enjoyed	Learned	Likely to Use Information	Total
Mean	4.39	3.32	3.65	3.81	15.16

A total consumer satisfaction score was obtained by summing the individual items, then a one-way ANOVA was performed to determine if there were any differences in satisfaction as a function of treatment group. The ANOVA was significant [$F(1, 77) = 5.49, p = .022$] such that behavioral participants ($M = 15.68$) reported greater overall satisfaction with the treatment than did attitude participants ($M = 14.41$). Regarding individual items, there was no difference between the groups with regard to how uncomfortable participants felt [$F(1, 77) = 2.65, p = .108$]. However, behavior participants reported that they enjoyed the treatment significantly more [$F(1, 77) = 5.18, p = .026$], learned significantly more [$F(1, 77) = 7.64, p = .007$], and would be

significantly more likely to use the information [$F(1, 77) = 4.74, p = .033$] than the attitude participants.

Table 40 - Mean Consumer Satisfaction Between Groups

	<i>Group</i>	<i>Mean</i>	<i>SD</i>	<i>N</i>
Overall Satisfaction	Attitude	14.41	2.83	32
	Behavior	15.68	2.01	47
Uncomfortable	Attitude	4.56	0.67	32
	Behavior	4.28	0.83	47
Enjoyment	Attitude	3.06	0.84	32
	Behavior	3.49	0.80	47
Learned	Attitude	3.31	1.03	32
	Behavior	3.87	0.77	47
Use	Attitude	3.47	1.27	32
	Behavior	4.04	1.06	47

CHAPTER 5

DISCUSSION

Most of the studies that examine date rape prevention or treatment programs have focused on changing attitudes and beliefs toward rape, that is, participants were exposed to rape statistics and rape myth debunking sessions. However, participants did decrease rape-supportive attitudes, the changes often rebounded by follow-up (e.g., Franier et al., 1994) or no follow-up was conducted (e.g., Fischer, 1986). Previous studies have consistently found that prior victimization (e.g., Himelein, 1995) and alcohol use (e.g., Ullman et al., 1999) are significant risk factors for sexual assault. However, there is a dearth of studies that have sought to address risk factors for sexual assault. Further, a paucity of studies exist that have examined the role of assertiveness and those that do exist have found conflicting results (e.g., Gidycz et al., 1995; Myers et al., 1984).

Surprisingly, only six studies have been conducted that examined prevention programs and used actual post-treatment sexual assault as an outcome variable (Breitenbecher & Gidycz, 1998; Breitenbecher & Scarce, 1999; Breitenbecher & Scarcer, 2001; Gidycz et al., 2001; Hanson & Gidycz, 1993; Marx et al., 2001). Overall, these studies found that women who were victimized at the outset of the prevention were less likely to benefit from the prevention than those women who had not been victimized. Two of the studies that incorporated behavioral aspects in their prevention found a

reduction in sexual revictimization as a function of group (treatment vs. control; Gidycz et al., 2001; Marx et al., 2001).

The current study sought to examine the effectiveness of a behavioral prevention and its effect on several factors associated with the risk of date rape, as well as the most important variable, new victimizations. At the outset of this project, several hypotheses were proposed. Generally, the hypotheses proposed that those participants in the behavior group would benefit more from the treatment than those in the attitude group. Overall, some of the hypotheses were confirmed; however, there were some unexpected results. Each of the results will be discussed in turn.

Participants were randomly assigned in order to reduce or eliminate any possible pre-prevention differences. In fact, the results confirmed that no significant differences existed on the pre-test measures, or on the demographic variables between the attitude and behavior group participants. Prevalence rates of sexual assault were consistent with previous studies (e.g., Koss et al., 1987; Turner, 1999). Thirty-seven percent of participants reported some level of sexual victimization after the age of 14, while 26% reported sexual abuse prior to age 14. Therefore, the participants used in this study were similar to the participants employed in extant research literature.

Previous research has found that victims and nonvictims differ on the degree to which they engage in behaviors associated with date rape (e.g., Breitenbecher & Gidycz, 1998). The current study found similar results; victims and nonvictims differed on every pre-test questionnaire. Consistent with other studies (e.g., Breitenbecher & Gidycz, 1998; Muehlenhard & Linton, 1987), victims reported engaging in more behaviors associated with date rape (e.g., drinking on the first few dates) and more sexual

miscommunication (e.g., saying “yes” when she really means “no”) than nonvictims. Furthermore, victims reported significantly less sexual assertiveness than did nonvictims. Again, this is consistent with previous research (e.g., Myers et al., 1984). Lastly, victims reported a significantly greater use of alcohol at the outset of the study. Many studies have found a relationship between greater alcohol use and increased risk of victimization (e.g., Himelein, 1995; Koss & Dinero, 1989).

Conversely, victims endorsed *fewer* beliefs in rape myths than did nonvictims. Previous studies have compared men and women on their acceptance of rape myths (e.g., Ellis et al., 1992, Kopper, 1996) and consistently found that women endorse fewer rape myths than men do. However, there has been a paucity of research investigating differences between victims and nonvictims. Interestingly, Carmody and Washington (2001) found no difference in rape myth acceptance as a function of victimization status. Intuitively it makes sense that victims would not subscribe to rape myths to the same degree as nonvictims, as they may have experienced the situations that they are reporting about on the rape myth surveys.

Follow-up Retention

Four-Week Follow-up

Previous date rape treatment studies have done well in retaining participants. For example, Gidycz and colleagues (2001) retained 98% of their participants for the two-month follow-up and 80% for their six-month follow-up. Combs-Lane and Smith (2002) were not as successful; they retained 66% of their participants over a five and one-half-month follow-up. Breitenbecher and Scarce (1999) attained one of the highest retention

rates over the longest follow-up period. Eighty-two percent of their participants returned for the seven-month follow-up. Many of these studies were able to offer participants cash compensation for the longer follow-up periods.

Participants earned partial credit for their required subject pool participation for an introductory psychology course at the time of the initial prevention group. If they returned for the four-week follow-up, participants earned the remainder of the required credits. However, the follow-up period extended beyond the semester closing of the subject pool. Many of the participants who did not return were scheduled for these later dates. The attrition rate for the four-week follow-up was low; 80% of the participants returned. In addition to earning subject pool credit, the success of the retention rate at the four-week follow-up was also attributed to scheduling the participants for the four-week follow-up at the time of the prevention group and providing each participant with a reminder card. Further, each participant was called and/or e-mailed to remind her of the follow-up appointment. There were no differences between the participants who returned for the four-week follow-up and those who did not on any of the pre-test measures, prior victimization, and treatment group assignment.

Five-Month Follow-up

Although, every effort was made to personally contact every participant for the five-month follow-up, only 39% of participants returned for the five-month follow-up. The large attrition rate can be attributed to several factors. First, the four-week follow-up was conducted during the same semester as the prevention groups; therefore, participants were able to earn credit for the subject pool for their introductory psychology classes. Second, at the five-month follow-up, the only external incentive for participants to return

was the lottery drawing for a \$20 prize. Previous studies in this topic area that achieved better participant retention rates (e.g., 80-98%) were able to pay each participant for returning for the longer follow-up period (K.H. Breitenbecher, personal communication, August 12, 2005). Additionally, even though multiple pieces of contact information was collected for each participant (i.e., address, e-mail, cell phone, home phone) many of the participants' e-mail addresses and phone numbers were not in service.

Despite the large attrition rate, there were no pre-test differences between the groups among the participants who did return. The only difference between the groups was that participants in the behavioral group were more likely to return than those participants in the attitude group. This result may prove beneficial in future studies, such that these participants may be more willing to commit to spending more time participating in the prevention and would also be more likely to return for follow-ups, possibly even longer follow-ups (e.g., one year follow-up).

Effectiveness of Treatment

Four-Week Follow-up

Hypothesis one, that women in the behavior group would improve significantly more than those in the attitude group, and hypothesis two, that the behavior group would improve from pre-test to follow-up, were partially confirmed. It was hypothesized that women in the behavior group would report fewer new victimizations at the four-week follow-up than would women in the attitude group. However, there were no differences between the groups with regard to sexual victimization at the four-week follow-up. This could be due to the relatively low base rate for victimization, as only 29 of the 170

participants who returned for the first follow-up reported any sexual victimization during the four-week follow-up period.

Partially due to this result, a post-hoc logistic regression was performed to determine if any of the pre-test variables were predictive of victimization at the four-week follow-up. Not surprisingly, women who reported teen victimization were six and one-half times more likely to report victimization at the four-week follow-up than were women who did not report teen victimization. Many other studies have reported similar results (e.g., Casey & Nurius, 2005; Gidycz et al., 1993; Himelein, 1995). Interestingly, Maker and colleagues (2001) found the opposite result; only women who were abused as children, and not those who were abused as teens, were more likely to be victimized as adults. Greater belief in rape myths and greater reported alcohol use were also predictive of victimization at four-week follow-up, but the effects were small.

In order to determine if a relationship between four-week follow-up scores on the dependent measures were related to post-treatment victimization at the four-week follow-up, another logistic regression was performed. Although four-week follow-up scores on sexual miscommunication and alcohol use were significant predictors, the effects were also small.

Three variables were differentially affected by treatment group over time: alcohol use, sexually assertive self-statements, and sexual miscommunication. Participants in the behavioral group significantly decreased their alcohol use from pre-test to the four-week follow-up. Participants in the attitude group did not report a significant change in their alcohol use from pre-test to the four-week follow-up. Behavior group participants reported a significant increase in sexually assertive self-statements from pre-test to the

four-week follow-up, while attitude group participants did not report any change in their sexually assertive self-statements. Interestingly, attitude group participants reported a significant increase in their sexual miscommunication from pre-test to the four-week follow-up. Participants in the behavior group did not report any change in their sexual miscommunication.

The measure of alcohol use was included in this study to determine whether it was a moderator of treatment success. However, no a priori hypothesis was made regarding the effect of treatment on reported alcohol use. The significant reduction in alcohol usage for behavioral group participants might be attributable to the first role-play participants practiced. Participants viewed a video clip during which the male character offers the female character a glass of champagne that he had already ordered. She refuses the drink and then he tries to persuade her to drink by telling her, for example, how expensive the champagne was and that she could have one glass. She eventually drinks the champagne. When discussing the role-play, many of the participants reported that they thought the female character gave in to the pressure because she felt guilty and wanted to impress her date.

Following the video clip, participants role-played a similar scenario during which the male actor tried to persuade the participants to agree to drinking alcohol after she initially declined the drink. The participants practiced saying no, in an appropriately assertive manner, to his pressure. Practicing a peer-pressure situation and receiving feedback from the group facilitator on improving assertiveness may have caused these participants to use these skills in refusing alcohol. It appears that the behavioral

prevention was more effective than the attitude group in decreasing this important risk factor.

The behavior group also increased their sexually assertive self-statements from pre-test to the four-week follow-up. This was a hypothesized result; the behavior group focused on helping women to increase their sexual assertiveness in dating situations. The role-plays were designed to mirror real-world situations in which the male tries to persuade the female to engage in activities that she does not feel comfortable with, including drinking, attending a fraternity party, engaging in kissing and petting, and further sexual activity. Participants were asked to refuse all of the advances by the male actor in an appropriately assertive manner. Participants were encouraged to use direct eye contact, a well-modulated voice, and a firm voice tone. They were encouraged to avoid fidgeting, looking down, and appearing unsure of her decision.

Following the first role-play, participants learned to identify cognitions that might inhibit them from resisting the attempts of the male actor. For example, women may feel embarrassed to refuse alcohol or worry that she is hurting her date's feelings when she refuses to attend a fraternity party. After identifying her thought and describing to the group, she was also asked to counteract that cognition. For example, if she stated she would feel embarrassed, she may say that embarrassment is a small price to pay for her safety. It seems that this piece, identifying cognitions and counter-cognitions, could have caused the significant improvement sexually assertive self-statements.

It is interesting to note, though, that *both* groups improved equally over time on a measure of behavioral sexual assertiveness. It is unclear why the attitude group would report more sexual assertiveness at the four-week follow-up as compared with pre-test

scores. Clearly, the behavioral group was focused on changing assertive behaviors, but the attitude group did not address this issue. It is possible that this result is attributable to problems with the measure of behavioral sexual assertiveness. The questionnaire is really measuring intent, rather than actual behaviors, as it requires the participants to respond to somewhat complex hypothetical scenarios. It could be that both groups changed their intentions toward sexual assertiveness; however, a more precise measure of actual behavior may reveal differences between the groups in sexual assertiveness.

The attitude group reported an *increase* in their sexual miscommunication from pre-test to the four-week follow-up, while the behavior group reported no change. The failure of the behavior group to improve their sexual communication could be due to several reasons. First, sexual communication is a difficult concept to measure, in part because there are two people communicating (Hanson & Gidycz, 1993). Further, it could be that the key to improving sexual communication lies with the male aggressor. Koss (1989) suggests that women are communicating clearly, but that the male aggressor ignores this communication. An earlier study also failed to find differences in sexual communication at follow-up between the treatment group and the control group (Hanson & Gidycz, 1993). It is puzzling, though, that the attitude group reported significantly more miscommunication at the four-week follow-up than they reported at pre-test. Irrespective of the difficulties in explaining these findings, the behavior group's performance on follow-up was superior to that of the attitude group's performance on this measure of sexual miscommunication.

Both the behavior and attitude groups reduced the frequency of reported behaviors associated with date rape. This was a somewhat unexpected result, as the

attitude group did not focus on the reduction of behaviors, *per se*. The focus of the attitude group was to change thoughts and beliefs related to rape. Although many previous studies have sought to reduce rape-supportive attitudes and beliefs, most have not assessed for a corresponding change in behaviors. However, Shultz and colleagues (2000) assessed for a change in attitudes and behavioral *intentions* to engage in risky dating behaviors. They found a reduction in rape myth acceptance from pre-test to follow-up; however, participants in the treatment group did *not* report significantly less *intentions* to engage in risky dating behaviors as compared to the control group participants. Himelein (1999) found an increased frequency in more precautionary dating behaviors; however, the prevention specifically targeted this area and included behavioral exercises in assertiveness and communication. Conversely, Gray and colleagues (1990) conducted an prevention that included content similar to the current study's attitude group (i.e., rape myths and statistics) and did find a reduction in behavioral *intentions* to engage in risky behaviors. In the current study, the attitude participants learned some didactic information that may have helped them to reduce their behaviors (e.g., debunking rape myths and learning about the frequency of rape).

Hypothesis three, that attitude participants would decrease their beliefs in rape myths more than behavior participants, was not confirmed. However, hypothesis four, that attitude participants would decrease their beliefs in rape myths from pre-test to four-week follow-up was confirmed. Both groups significantly decreased their acceptance of rape myths over time. Many studies have examined beliefs in rape myths by men and women and several have found a reduction in rape myths at the first follow-up (e.g., Dallager & Rosen, 1993; Foubert, 2000). Interestingly though, two studies found that

participants in the treatment and control groups both decreased their beliefs in rape myths (Foubert & Marriott, 1997; Lenihan et al., 1992). It is difficult to explain such a result if the control group is a standard no-treatment control group because a no-treatment group would normally not be expected to be affected by demand characteristics. On the contrary, in the current study both groups were treatment groups that addressed date rape. Therefore, it seems that the participation in the role-plays and learning assertive behaviors is enough to affect beliefs and attitudes about rape. Further, participants in the behavior group viewed a brief movie clip of the date rape victim discussing her date rape situation. The victim explains that, although she made some poor decisions, she did not deserve to be raped. Co-facilitators discussed this briefly in the groups so that participants would not take on a victim-blaming attitude, thus debunking some rape myths.

Five-Month Follow-up

As in the four-week follow-up, there were no differences between the groups with regard to sexual victimization at the five-month follow-up. Again, potential group differences would have been difficult to detect due to the low retention rate and the fact that only 15 women reported new victimizations. Further, significantly more women from the behavior group than from the attitude group returned for the five-month follow-up, creating unequal sample sizes.

Two logistic regressions were performed on the five-month follow-up data. First, pre-test variables were tested to determine if they predicted victimization at the five-month follow-up. Unlike the four-week follow-up, the model was not significant; the predictors did not reliably predict new victimizations. It is important to consider,

however, that pre-test variables changed significantly from pre-test to the four-week follow-up as a result of the preventions, so that the pre-test scores were no longer a valid measure of behavior during the five-month follow-up period. Therefore, a second logistic regression was performed to determine if four-week follow-up scores on the dependent variables would predict victimization during the five-month follow-up period. Only alcohol use was a significant predictor. Participants who reported more alcohol use at the four-week follow-up were 1.33 times more likely to report victimization during the five-month follow-up.

When examining the effects of group by time, alcohol usage was the only dependent measure manifesting a statistically significant effect. Participants in the behavior group reported a significant reduction in alcohol usage from pre-test to five-month follow-up. The attitude group participants did not report any decrease in their alcohol usage. This is consistent with the four-week follow-up data. Interestingly, the four-week follow-up effect of attitude participants reporting more sexual miscommunication from pre-test scores disappeared at the five-month follow-up. Further, behavior participants no longer reported more sexually assertive self-statements than attitude participants did. Similar to the four-week follow-up, both groups improved over time on several variables. Both groups reported significantly fewer risky dating behaviors, fewer beliefs in rape myths, more sexual assertiveness, and more sexually assertive self-statements.

In order to further examine these results, four-week follow-up scores were compared with five-month follow-up scores to determine if there was any rebound in the reported changes. There were no differences between the four-week follow-up and the

five-month follow-up on any of the dependent measures. Therefore, the differences that existed at the four-week follow-up were maintained during the longer, five-month follow-up period. Clearly, this is an important result as many of the previous date rape treatment studies have failed to include a follow-up or included only a short follow-up period (e.g., two months). It also suggests that long-lasting change may be possible after a short prevention program.

Hypothesis three, that attitude participants would decrease their beliefs in rape myths more than behavior participants was confirmed. There was a trend toward significance at the five-month follow-up for the interactive effect of group and time. Attitude participants reported a greater decrease in their beliefs in rape myths from pre-test to the five-month follow-up as compared with behavioral participants. However, hypothesis four, that attitude participants would report a rebound in the beliefs in rape myths from the four-week follow-up to the five-month follow-up was not confirmed. Attitude participants maintained their reduction in belief in rape myths.

It is difficult to hypothesize why the expected rebound did not occur. Many other studies that have found this effect used a similar style for their intervention (e.g., Franier et al., 1994; Heppner et al., 1995) in terms of content and length. However, one difference is notable. All the studies located for this literature review that focused on reducing rape supportive attitudes and beliefs included either men only or men and women in the treatment groups. It is possible that having a female-only group facilitates the change process and helps solidify changes. Several studies have found that women endorse rape myths to a lesser degree than men do (e.g., Ellis et al., 1992), therefore it

could be that when the treatment groups are co-ed, men's higher belief in rape myths negatively affects the women in the group.

Effect of Victimization Status and Treatment

Four-Week Follow-up

It was hypothesized that prior victimization would moderate treatment success for all dependent variables. This hypothesis was partially confirmed. A significant three-way interaction was found for victimization status, treatment group, and time on the measure of alcohol utilization. When victims and nonvictims were examined separately it was found that for both groups, alcohol use decreased from pre-test to four-week follow-up only if the participants were in the behavior group. The victims in the behavior group reported a much larger decrease from pre-test to the four-week follow-up than nonvictims did. Further, although victims in the behavioral group reported significantly greater alcohol use at the pre-test than nonvictims in the behavior group did, this difference disappeared at follow-up. This is an intriguing finding, as the hypothesis was in the opposite direction (i.e., that treatment would be less effective for victims). Treatment has generally not been as effective for victims as compared with nonvictims (e.g., Breitenbecher & Gidycz, 1998; Hanson & Gidycz, 1993); therefore, this result is important as it suggests that victims improved more than nonvictims if the behavioral prevention is used.

There was a main effect for victimization status, such that victims reported significantly more risky dating behaviors, more sexual miscommunication, less sexually assertive self-statements, more alcohol use, and *fewer* beliefs in rape myths at the four-

week follow-up. This was not surprising as victims and nonvictims reported similarly significant differences on these variables at the outset of the study.

Five-Month Follow-up

The triple interaction among time, group, and victimization status for alcohol use was not significant at the five-month follow-up, nor was the time by group interaction on any measure. It is likely that these nonsignificant findings at the five-month follow-up were due to the attrition of participants. Eighty percent of participants returned for the four-week follow-up, while only 40% returned for the five-month follow-up. Just as in the four-week follow-up, there were significant differences between victims and nonvictims at the five-month follow-up. Victims reported engaging in significantly more risky dating behaviors, more sexual miscommunication, less sexual assertiveness, more alcohol use, and *less* belief in rape myths. This is consistent with the pre-existing differences found at pre-test.

Effect of Alcohol Use and Treatment

Four-Week Follow-up

Hypothesis six, that alcohol use would moderate treatment success, was not confirmed. The only significant finding regarding alcohol use was that participants who reported less alcohol use also reported fewer behaviors associated with date rape, less sexual miscommunication, and more sexually assertive self-statements. The relationship between alcohol and sexual assault is a complicated one. Testa and Parks (1996) provided several mechanisms by which alcohol and sexual assault could be related. First, although there is a positive relationship between alcohol use and sexual victimization,

there may be a third variable that explains the relationship. Second, the effects of alcohol on the body, such as ability to resist, interpret social cues, and use good judgment may explain the increase in sexual assault. Third, it may be more of an indirect effect, due to the setting (e.g., bar) or men's perception of women who drink. As Testa and Parks (1996) pointed out, it is difficult to fully examine this finding in light of the complicated relationship between sexual assault and alcohol use.

Five-Month Follow-up

At the five-month follow-up, the only significant finding was that participants who reported significantly more alcohol use reported fewer sexually assertive self-statements and more sexual miscommunication. This is generally consistent with the four-week follow-up data; however, the dependent measures affected by alcohol use differed at the four-week follow-up. Dating behaviors, sexual miscommunication, and sexually assertive self-statements were different between those who reported more alcohol use and those who reported less alcohol use at the four-week follow-up.

Effect of Child versus Teen Victimization on Treatment Outcome

Four-Week Follow-up

An exploratory hypothesis was tested to determine whether there were any differences in treatment success between women who were abused only as children and women who were assaulted only as teenagers. Fascinatingly, there was a treatment by victimization status by time effect for alcohol use. Participants who were abused as children reported decreased levels of alcohol use from pre-test to the four-week follow-up only if they were in the attitude group. On the other hand, participants who were

assaulted as teenagers reported decreased levels of alcohol use from pre-test to the four-week follow-up only if they were in the behavior group.

One possible explanation for these differences is the difference in content between the groups. Studies have found that engaging in risky behaviors is related to victimization for teens or college age women (e.g., Muchlenhard & Linton, 1987). The behavior group in the current study focused on increasing sexual assertiveness and decreasing risky dating behaviors. This could explain why the teen-only victimization group was differentially affected. Alternatively, for women abused only as children, the risky behaviors may not be as much of a factor in determining current victimization, as children do not have the power and freedom to choose to engage in risky dating behaviors.

There was a group by time interaction on three of the dependent measures for participants abused as either a teen or as a child. This was similar to the entire group of participants (i.e., nonvictims and victims). Participants abused as teens and those abused as children decreased sexual miscommunication only if they were in the behavior group. Participants in the attitude group reported *increased* sexual miscommunication. Further, those in the behavior group reported increased sexually assertive self-statements. It seems that the behavioral group was, at least partially, equally effective for victims and nonvictims, which is an improvement over many previous studies.

Five-Month Follow-up

Unlike the four-week follow-up, the group by time interaction and the triple interaction of time, group, and victimization status were not significant. Again, a probable explanation for the lack of findings is the reduced sample size and thus the

reduced statistical power. Consistent with the four-week follow-up, women who were abused only as children reported significantly beliefs in rape myths, less sexual miscommunication, and fewer risky dating behaviors than women who were abused only during their teenage years.

Effect of Severity of Victimization on Treatment Outcome

Four-Week Follow-up

A second exploratory hypothesis was tested to determine if the severity of prior abuse would affect the efficacy of treatment. There was a trend toward significance for the group by time interaction for alcohol use. Participants who were in the behavioral group tended to decrease their alcohol use over time more than participants in the attitude group. This is consistent with many of the other results of the current investigation. Further, the only effect for severity of abuse was on the measure of sexually assertive self-statements. Women who reported more severe levels of victimization reported *more* sexually assertive self-statements. As this was an exploratory hypothesis, it is difficult to posit an explanation for this result. It could be that women who have experienced attempted or completed sexual assaults have a first-hand understanding of the trauma that results from a sexual assault, and therefore, have developed more assertive self-statements. Due to the large attrition rate, this hypothesis was not tested at the five-month follow-up.

Summaries

Four-Week Follow-up Summary

Eighty percent of the participants returned for the four-week follow-up. There were no pre-test differences between those participants who returned and those who did not. Overall, the behavior group was more effective for participants than the attitude group: women in the behavior group reported less alcohol use, more sexually assertive self-statements, more sexual assertiveness, less risky dating behaviors, and less beliefs in rape myths at the four-week follow-up as compared with pre-test scores. Further, victims in the behavior group reported a greater decrease in alcohol use than did nonvictims in the behavior group from pre-test to the four-week follow-up. Victims in the behavior group also reported significantly more sexually assertive self-statements as compared with victims in the attitude group. Victims in the behavior group reported less sexual miscommunication from pre-test to the four-week follow-up as compared with victims in the attitude group. Lastly, those participants abused only as teenagers decreased their alcohol use from pre-test to the four-week follow-up only if they were in the behavior group.

Participants in the attitude group reported some level of change, but not in as many areas as the behavior group. Women in the attitude group reported more sexual assertiveness, less risky dating behaviors, and fewer beliefs in rape myths at the four-week follow-up than at pre-test. On the other hand, they also reported more sexual miscommunication at the four-week follow-up than during the pre-test assessment. Finally, participants abused only as children reduced their alcohol use only if they were in the attitude group.

Five-Month Follow-up Summary

Approximately 40% of participants returned for the five-month follow-up. There were no pre-test differences between those participants who returned and those who did not return. The results at the five-month follow-up was generally consistent with the findings obtained at the four-week follow-up. Participants in the behavioral group continued to report a reduction in their alcohol use, a decrease in their beliefs in rape myths, a decrease in engaging in risky dating behaviors, an increase in sexually assertive self-statements, and an increase in sexual assertiveness. Although women in the attitude group manifested some improvements subsequent to treatment, the changes were not as extensive as those obtained by behavioral group participants. The attitude group participants reported a significant decrease in risky dating behaviors, more sexually assertive self-statements, and more sexual assertiveness. Attitude participants reported slightly more of a reduction in beliefs in rape myths than did the behavioral group. As discussed previously, many date rape intervention studies have not used follow-ups or have used relatively short follow-up periods, so it is encouraging that the women in this study maintained the changes over five months.

The other, more complex, hypotheses were not confirmed at the five-month follow-up. This is likely due to the large reduction in sample size that produced a corresponding reduction in power.

Consumer Satisfaction

Overall, participants were satisfied with both of the treatment groups. However, behavior participants reported enjoying the group significantly more, learning

significantly more, and that they would be significantly more likely to use the information learned than the attitude group. This could explain why participants from the behavior group were significantly more likely to return for the five-month follow-up. This may be an advantage for future studies that examine this type of prevention. Behavioral group participants may be more likely to commit more time to the prevention and may be more likely to return for lengthier follow-up periods.

Limitations & Future Directions

There were several limitations to this study, which may help explain why some of the hypotheses were not supported. First, the prevention was a one-time only treatment. It may be that for some of the variables to be affected, it would take multiple sessions over a longer period of time. Many of the constructs being measured were behaviors or thoughts that the participants have likely engaged in for long periods of time and it may be unreasonable to assume that they can be changed with a two-hour prevention. Future studies should examine a more in-depth prevention program to determine whether that enhances the obtained outcomes. Perhaps multiple sessions over a longer period of time would prove to be more effective.

Regarding the frequency of abuse during the follow-up periods, it is important to consider that the measurement of sexual assault together with the prevention group may have sensitized women to labeling victimization. Participants may be more vigilant in analyzing sexual encounters and may be more likely to label experiences as assault. Thus, women may have labeled experiences differently at the outset of the study compared with how they label experiences at each follow-up.

In regards to substance use, participants were assessed only for alcohol use in this study and although it seems that alcohol use was the variable that was most prominently affected, it was only weakly related to victimization at the four-week follow-up. Illicit drug use seems to be related to sexual assault (Erickson & Rapkin, 1991; Muehlenhard & Linton, 1987); therefore, future studies should include a measure of illicit drug use. Further, it may be that a better or more in-depth measure of alcohol use would provide a better picture of the relationship between alcohol use and victimization.

Another possible explanation for the lack of many significant differences between groups is that differences were difficult to detect because both groups received legitimate preventions. Additionally, since participants abused only as children reported reduced alcohol use from pre-test to the four-week follow-up only if they were in the attitude group, it seems that it may be beneficial to combine both treatment approaches, so that participants are exposed to both pieces. A future study could examine the individual treatments compared with a combination treatment.

Women in the behavior group performed their role-plays with a male actor in order to increase, as much as possible, the generalizability of the role plays to in vivo situations. However, it was still a contrived situation, so it would be useful to try to examine real-world applications. For example, during the follow-up a more open-ended interview probing for the application of assertiveness skills may help to assess how the participants have applied what they learned.

Interestingly, during the debriefing at her last follow-up, one participant asked if she could learn her individual scores on the dependent measures. An interesting study would be to add this piece in; tell the participants how they scored relative to a mean

score. This may help the participants to internalize what they learn in the groups to a greater degree because they would understand where their behaviors and cognitions fall relative to a mean. Some participants may think that they are being safe, when they are actually engaging in a high number of risky behaviors. However, as the logistic regression revealed, most of the dependent measures were not related to victimization status, so the utility of this approach is not fully supported.

Despite multiple efforts to recruit participants from the campus at large, sororities, and athletic teams, all participants were eventually secured through the psychology subject pool. Introductory psychology students must participate in three hours of experiments to complete their requirement. Therefore, their motivation may be different from that of a woman who chooses to participate without the mandate. Further, participants from the subject pool may be different from other women who would volunteer to participate. Perhaps, women who have previously been victimized would volunteer more frequently than women who have not been victimized.

Lastly, the large attrition at the five-month follow-up could explain many of the nonsignificant findings obtained in those analyses. Many of the previous date rape intervention studies that have used longer follow-up periods (e.g. Breitenbecher & Scarce, 1999) were able to pay participants for their time. Unfortunately, the current study was unable to pay every participant and participants had already earned their subject pool credit for their psychology class. Future studies should plan incentives for participants to continue to come back for longer follow-up periods.

Summary & Conclusions

Consistent with many previous studies, previous victimization was the strongest predictor of new victimizations. Overall, both treatment groups were effective over time and they persisted over five months. Participants decreased their reported risky behaviors, belief in rape myths, and increased their assertiveness. However, the behavior group was more effective in increasing sexually assertive self-statements and for reducing alcohol use than the attitude group. Previous studies have found that, if treatment was effective, it was not effective for victims (e.g., Hanson & Gidycz, 1993). The proposed moderation of victimization was only found for alcohol use in the current study. However, the relationship was not as predicted. Among behavioral group participants, victims reduced their alcohol usage more than nonvictims did. No moderation was found for alcohol use. Finally, victim status (teen, child) was found to moderate treatment success with regard to alcohol use.

In conclusion, the treatments were successful and the participants were very satisfied with the treatments they received. The attitude group was more successful than the behavioral group on two measures. First, attitude group participants reported significantly less beliefs in rape myths at the five-month follow-up than behavioral group participants did. Second, participants abused only as children reduced their alcohol usage from pre-test to the four-week follow-up only if they were in the attitude group. The behavioral group was superior to the attitude group, as changes on more of the dependent measures occurred among behavioral group participants (e.g., alcohol usage). Therefore, although the behavioral group was more successful on more measures, it seems that a

combination of treatments, combining knowledge, thoughts, and behaviors, might be the most effective treatment for most participants.

APPENDIX I

RAPE MYTH ACCEPTANCE SURVEY

For the statements which follow, please circle the number that best indicates your opinion-what you believe. If you strongly disagree you would answer "1"; if you strongly agree you would answer "7"; if you feel neutral you would answer "4"; and so on.

	Disagree Strongly	Disagree somewhat	Disagree slightly	Neutral	Agree slightly	Agree somewhat	Agree strongly
1) A woman who goes to the home or apartment of a man on their first date implies that she is willing to have sex.	1	2	3	4	5	6	7
2) Any female can get raped.	1	2	3	4	5	6	7
3) One reason that women falsely report a rape is that they frequently have a need to call attention to themselves.	1	2	3	4	5	6	7
4) Any healthy woman can successfully resist a rapist if she really wants to.	1	2	3	4	5	6	7
5) When women go around braless or wearing short skirts or tight tops, they are just asking for trouble.	1	2	3	4	5	6	7
6) Women who get raped while hitchhiking get what they deserve.	1	2	3	4	5	6	7

7) A woman who is stuck-up and thinks she is too good to talk to guys on the street deserves to be taught a lesson.	1	2	3	4	5	6	7
8) Many women have the unconscious wish to be raped, and may then unconsciously set up a situation in which they are likely to be attacked.	1	2	3	4	5	6	7
9) If a woman gets drunk at a party and has intercourse with a man she's just met there, she should be considered "fair game" to other males at the party who want to have sex with her too, whether she wants to or not.	1	2	3	4	5	6	7
10) In the majority of rapes, the victim is promiscuous or has a bad reputation.	1	2	3	4	5	6	7
11) If a girl engages in necking or petting and she lets things get out of hand, it is her own fault if her partner forces sex on her.	1	2	3	4	5	6	7

Please use the following key to answer the next two questions.

Circle the number that shows what fraction you believe to be true.

	Almost None	A few	Some	About Half	Many	A lot	Almost All
12) What percentage of women who report a rape would you say are lying because they are angry and want to get back at the man they accuse?	1	2	3	4	5	6	7
13) What percentage of reported rapes would you guess were merely invented by women who discovered they were pregnant and wanted to protect their own reputation?	1	2	3	4	5	6	7

Please use the following key to answer the next question.

	Never	Rarely	Some- times	Half the time	Often	Usually	Always
14) A person comes to you and claims they were raped. How likely would you be to believe their statement if the person were:							
Your best friend?	1	2	3	4	5	6	7
An Indian Woman	1	2	3	4	5	6	7

A neighborhood woman?	1	2	3	4	5	6	7
A young boy?	1	2	3	4	5	6	7
A black woman?	1	2	3	4	5	6	7
A white woman?	1	2	3	4	5	6	7

APPENDIX II

SEXUAL EXPERIENCES SURVEY

Since the age of 14, have you:

1. Had sexual intercourse with a man when you both wanted to?	YES	NO
2. Had a man misinterpret the level of sexual intimacy you desired?	YES	NO
3. Been in a situation where a man became so sexually aroused that you felt it was useless to stop him even though you did not want to have sexual intercourse?	YES	NO
4. Had sexual intercourse with a man even though you didn't really want to because he threatened to end your relationship otherwise?	YES	NO
5. Had sexual intercourse with a man when you didn't really want to because you felt pressured by his continual argument?	YES	NO
6. Found out that a man had obtained sexual intercourse with you by saying things that he didn't really mean?	YES	NO
7. Been in a situation where a man used some degree of physical force (twisting your arm, holding you down, etc.) to try to make you engage in kissing or petting when you didn't want to?	YES	NO
8. Been in a situation where a man tried to get sexual intercourse with you when you didn't want to by threatening to use physical force (twisting your arm, holding you down, etc.) if you didn't cooperate, but for various reasons sexual intercourse did not occur?	YES	NO
9. Been in a situation where a man used some degree of physical force (twisting your arm, holding you down, etc.) to try to get you to have sexual intercourse with him when you didn't want to, but for various reasons sexual intercourse did not occur?	YES	NO
10. Had sexual intercourse with a man when you didn't want to because he threatened to use physical force (twisting your arm, holding you down, etc.) if you didn't cooperate?	YES	NO

11. Had sexual intercourse with a man when you didn't want to because he used some degree of physical force (twisting your arm, holding you down, etc.)?	YES	NO
12. Been in a situation where a man obtained sexual acts with you such as anal or oral intercourse when you didn't want to by using threats or physical force (twisting your arm, holding you down, etc.)?	YES	NO
13. Have you ever been raped?	YES	NO

APPENDIX III

SEXUAL COMMUNICATION SURVEY

The following questions refer to sexual communication. Please indicate by circling the corresponding number which best describes your typical behavior on the **first few dates** you have with a man. If you do not date, please respond "N/A" (non applicable) to the questions.

		Never	Almost never	Some of the time	About half of the time	Most of the time	Almost all of the time	Always	Non applicable (I do not date.)
1.	Do you speak openly to your date about the issue of birth control?	1	2	3	4	5	6	7	N/A
2.	Do you speak openly to your date about the issue of sexually transmitted diseases?	1	2	3	4	5	6	7	N/A
3.	Do you ever say "yes" to something when you really mean "no"?	1	2	3	4	5	6	7	N/A
4.	Do you ever say "no" to something sexual when you really mean "yes"?	1	2	3	4	5	6	7	N/A

		Never	Almost never	Some of the time	About half of the time	Most of the time	Almost all of the time	Always	Non applicable (I do not date.)
5.	Do you ever end up allowing your date to <u>hold your hand</u> when you don't really want to, not because you feel forced or coerced, but because of some other reason (such as wanting him to like you or being too embarrassed to talk about it)?	1	2	3	4	5	6	7	N/A
6.	Do you ever end up allowing your date to <u>put his arms around you</u> when you don't really want to, not because you feel forced or coerced, but because of some other reason (such as wanting him to like you or being too embarrassed to talk about it)?	1	2	3	4	5	6	7	N/A

		Never	Almost never	Some of the time	About half of the time	Most of the time	Almost all of the time	Always	Non applicable (I do not date.)
7.	Do you ever end up allowing your date to <u>kiss you</u> when you don't really want to, not because you feel forced or coerced, but because of some other reason (such as wanting him to like you or being too embarrassed to talk about it)?	1	2	3	4	5	6	7	N/A
8.	Do you ever end up allowing your date to <u>touch your breasts</u> when you don't really want to, not because you feel forced or coerced, but because of some other reason (such as wanting him to like you or being too embarrassed to talk about it)?	1	2	3	4	5	6	7	N/A

		Never	Almost never	Some of the time	About half of the time	Most of the time	Almost all of the time	Always	Non applicable (I do not date.)
9.	Do you ever end up allowing your date to <u>touch your genitals</u> when you don't really want to, not because you feel forced or coerced, but because of some other reason (such as wanting him to like you or being too embarrassed to talk about it)?	1	2	3	4	5	6	7	N/A
10.	Do you ever end up allowing your date to <u>perform oral sex with you (you as the recipient)</u> when you don't really want to, not because you feel forced or coerced, but because of some other reason (such as wanting him to like you or being too embarrassed to talk about it)?	1	2	3	4	5	6	7	N/A

		Never	Almost never	Some of the time	About half of the time	Most of the time	Almost all of the time	Always	Non applicable (I do not date.)
11.	Do you ever end up allowing your date to <u>performing oral sex (you as the administrator)</u> when you don't really want to, not because you feel forced or coerced, but because of some other reason (such as wanting him to like you or being too embarrassed to talk about it)?	1	2	3	4	5	6	7	N/A
12.	Do you ever end up allowing your date to <u>vaginal intercourse</u> when you don't really want to, not because you feel forced or coerced, but because of some other reason (such as wanting him to like you or being too embarrassed to talk about it)?	1	2	3	4	5	6	7	N/A

		Never	Almost never	Some of the time	About half of the time	Most of the time	Almost all of the time	Always	Non applicable (I do not date.)
13.	Do you ever want to <u>hold</u> your date's <u>hand</u> , but not actually do it, because of some concern (such as fear that he will think badly of you or that your reputation might be damaged)?	1	2	3	4	5	6	7	N/A
14.	Do you ever want to <u>put</u> your arms <u>around</u> your <u>date</u> , but not actually do it, because of some concern (such as fear that he will think badly of you or that your reputation might be damaged)?	1	2	3	4	5	6	7	N/A
15.	Do you ever want to <u>kiss</u> your <u>date</u> , but not actually do it, because of some concern (such as fear that he will think badly of you or that your reputation might be damaged)?	1	2	3	4	5	6	7	N/A

	Never	Almost never	Some of the time	About half of the time	Most of the time	Almost all of the time	Always	Non applicable (I do not date.)
16. Do you ever want your date to <u>touch your breasts</u> , but not actually do it, because of some concern (such as fear that he will think badly of you or that your reputation might be damaged)?	1	2	3	4	5	6	7	N/A
17. Do you ever want your date to <u>touch your genitals</u> , but not actually do it, because of some concern (such as fear that he will think badly of you or that your reputation might be damaged)?	1	2	3	4	5	6	7	N/A
18. Do you ever want to <u>touch your date's genitals</u> , but not actually do it, because of some concern (such as fear that he will think badly of you or that your reputation might be damaged)?	1	2	3	4	5	6	7	N/A

		Never	Almost never	Some of the time	About half of the time	Most of the time	Almost all of the time	Always	Non applicable (I do not date.)
19.	Do you ever want your date to <u>perform oral sex with you</u> (you as the <u>recipient</u>), but not actually do it, because of some concern (such as fear that he will think badly of you or that your reputation might be damaged)?	1	2	3	4	5	6	7	N/A
20.	Do you ever want to <u>perform oral sex with your date</u> (you as the <u>administrator</u>), but not actually do it, because of some concern (such as fear that he will think badly of you or that your reputation might be damaged)?	1	2	3	4	5	6	7	N/A
21.	Do you ever want to have <u>vaginal intercourse</u> , but not actually do it, because of some concern (such as fear that he will think badly of you or that your reputation might be damaged)?	1	2	3	4	5	6	7	N/A

APPENDIX IV

DATING BEHAVIOR SURVEY

The following questions refer to dating behavior. Please indicate by circling the corresponding number which best describes your typical behavior on the first few dates you have with a man. If you do not date, please respond "N/A" (non applicable) to the questions.

	Never	Almost never	Some of the time	About half of the time	Most of the time	Almost all of the time	Always	Non applicable (I do not date.)
1. Men that I go out with initiate the first few dates (as <u>me</u> out).	1	2	3	4	5	6	7	N/A
2. On the first few dates, I consume alcohol or drugs.	1	2	3	4	5	6	7	N/A
3. On the first few dates that we have, my date and I do things that allow us to spend time alone together (such as spending time along together in my room or his room).	1	2	3	4	5	6	7	N/A
4. On the first few dates that we have, my date consumes alcohol or drugs.	1	2	3	4	5	6	7	N/A

		Never	Almost never	Some of the time	About half of the time	Most of the time	Almost all of the time	Always	Non applicable (I do not date.)
5.	On the first few dates, I consume enough alcohol or drugs to become drunk or high.	1	2	3	4	5	6	7	N/A
6.	On the first few dates that we have, I allow the man to plan what we do.	1	2	3	4	5	6	7	N/A
7.	On the first few dates that we have, my date and I spend part of the time "parking" (kissing or other sexual activity in a car).	1	2	3	4	5	6	7	N/A
8.	I pay for my own expenses on the first few dates I have with a man.	1	2	3	4	5	6	7	N/A
9.	On the first few dates, my date consumes enough alcohol or drugs to become drunk or high.	1	2	3	4	5	6	7	N/A
10.	On the first few dates, I provide my transportation.	1	2	3	4	5	6	7	N/A
11.	On the first few dates, my date and I choose group activities (i.e., double date).	1	2	3	4	5	6	7	N/A

		Never	Almost never	Some of the time	About half of the time	Most of the time	Almost all of the time	Always	Non applicable (I do not date.)
12.	On the first few dates, I have at times “blacked out” (lost consciousness, can’t remember what happened) from drugs or alcohol.	1	2	3	4	5	6	7	N/A
13.	On the first few dates, my date and I choose activities that I suggest.	1	2	3	4	5	6	7	N/A
14.	Before I go out with a man for the first time, I try to find out about him.	1	2	3	4	5	6	7	N/A
15.	If a man makes sexist remarks on the first few dates that we have, I stop dating him.	1	2	3	4	5	6	7	N/A

APPENDIX V

SEXUAL ASSERTIVENESS SELF-STATEMENT TEST

In situations like role-plays, an inner dialogue might go through your mind. You might think of the pros and cons of saying yes or no.

Below is a list of things you might say to yourself during the role-plays or similar situations in your life. Read each item and decide how frequently you have thought a similar thought during the role-plays or real-life situations.

- 0 = never had the thought
- 1 = rarely had the thought
- 2 = sometimes had the thought
- 3 = often had the thought
- 4 = very often had the thought

1. I may feel bad afterwards.
2. I'll lose him if I don't have sex with him.
3. I know him well.
4. It will bring us closer.
5. I don't want to get pregnant.
6. Everyone else is doing it.
7. I don't want to make him angry.
8. I will enjoy it.
9. I might get a disease.
10. He kisses good.

11. I don't want to disappoint him.
12. How will he react?
13. I'll feel bad if I don't go further.
14. If he really want to, I'll go ahead.
15. It wouldn't be fair to him if I stopped now.
16. He's so persuasive.
17. I don't want to do something just because he wants to.
18. I hope he doesn't get upset.
19. I'll feel uncomfortable.
20. I don't want him to think I'm a child.
21. I think I can trust him.
22. How can I stop him without offending him?
23. I'm ready for a new experience.
24. It will be exciting and fun.
25. He's nice to me.
26. We have done everything else, why not?
27. I must stick by my decision.
28. He doesn't know me.
29. I want to be spontaneous.
30. If he wants this so much, I shouldn't stop him.
31. He's such an important person.
32. It feels good.
33. I can't stop him.

APPENDIX VI

SEXUAL ASSERTIVENESS QUESTIONNAIRE

Please answer the following questions as honestly as possible. If you do not wish to answer a particular question, you may skip it. If you do not want to answer any of these questions, you may skip them all.

SAQ DIRECTIONS

Read each situation carefully. Decide which of the four responses (A through D below) you would be most likely to make if the situation actually happened to you. Mark the response you select in the appropriate box and color in the box on the answer sheet supplied. Try to consider each situation separately, not letting your reaction to one situation influence your reaction to other ones.

Response Choices

- A - I would refuse and would feel comfortable about doing so.
- B - I would refuse but would feel uncomfortable about doing so.
- C - I would not refuse but would feel uncomfortable because I didn't.
- D - I would not refuse and would feel comfortable about it (even though I really didn't want to do it).

1. You and a guy you must see on a continual basis (e.g., coworker, classmate, etc.) are talking. He asks you about your plans for the weekend and you say that you don't have any plans so far. He says, "Well, would you like to go out with me?" You really don't want to, but you don't want to hurt his feelings because you must see him frequently.
2. You have been out with a guy you really like. He wants a goodnight kiss at the end of the evening. You really don't want to kiss him.
3. You have been dating a guy for awhile. He wants to make love with you. You don't want to, but your friends think you should. Now you are on a date with him and he wants to make love.
4. You have been out with a guy that you have been friends with for quite awhile. You both had a good time and as he walks you to your door, he tries to kiss you goodnight. You like him as a friend but you have no romantic attraction to him and do not want to kiss him.

5. A guy who occasionally comes by to see you asks you out. One of your friends, who thinks he is wonderful, hears your conversation. She urges you, with him standing there listening, to go out with him. You still do not want to go out with him.
6. You have been on a date with a guy you only mildly like. He wants a goodnight kiss at the end of the evening. You really don't want to kiss him.
7. You have been seeing a friend for awhile. You have never kissed him but your friends think you should. Now you are out with him and he tries to kiss you. You don't want to kiss him.
8. A guy you have been friends with for awhile has kissed you goodnight the last few times you have been out together. You decide that you still want to be friends with him but you don't want him to kiss you anymore. Now you have been out with him and are returning home. He tries to kiss you.
9. You are with a guy you like a lot, and whom you have been dating for awhile. He says he wants to make love to you. You don't want to and tell him so. He says it will bring you closer together. You do want to be close to him, but you still don't want to make love with him. He says it hurts his feelings that you don't care enough about him to make love with him.
10. You have been dating a guy for awhile and you have made out with him the last few times you have been out together. You decide that you still want to date him but you don't want to make out with him anymore. Now you are returning home from a date with him and he wants to make out with you.
11. You have been out with a guy you really like and now you are back at your apartment. He starts to make out with you. You really like him, but you don't want to make out with him.
12. You are on a date with a guy you have been dating for awhile. The last few times you have been on a date with him you have made love together. You decide that you still want to date him but you don't want to make love to him anymore. Now you are returning home from the date and he wants to make love.
13. You are out with a guy you really like. He wants to have sex with you, but you tell him "No." He says, "Come on, you know you want to."
14. You have been out with a guy you only mildly like and now you are back at your apartment. He starts to make out with you. You don't want to make out with him.
15. You have been to a movie with a guy you must see on a continual basis (e.g., coworker, classmate, etc.). At your front door, he tries to kiss you goodnight. You have no romantic attraction to him and you do not want to kiss him. You also don't want to hurt his feelings because you must see him frequently.

16. A guy you have been on a date with asks you out. You did not really have a good time with him when you went out with him and you don't want to go out with him again.
17. You have gone to a party with a person you must see on a continual basis (e.g., coworker, classmate, etc.) and on the way home he kisses you. He comes into your apartment with you and tries to start making out with you. You don't want to. He says, "But you let me kiss you on the way home." You don't want to hurt his feelings because you must see him frequently.
18. You and your boyfriend have been arguing for an hour when he decides that you should quit arguing and make up by making love. You are still upset and do not want to make love to him right now.
19. A guy you don't know very well asks you out to dinner. You don't really want to go, but he knows you are free that evening.
20. Suppose that the guy who asks you out to dinner is someone you know quite well, but you still don't really want to go.
21. You are on your second date with a guy you only mildly like. You are making out on the couch at his apartment and he wants to move to his bed because he says it will be more comfortable. You don't really want to.
22. Suppose the guy you are making out with is a guy you really like a lot. Now he wants to move from the couch to his bed. You don't really want to.
23. You are at your boyfriend's apartment making out on the bed. You have never had sex with him and you don't want to now. He wants to have sex with you and says, "If you really love me you'll have sex with me."
24. You are making out with a guy you like a lot, but don't want to have sex with. He says you have gotten him excited and should finish what you started.
25. You have just finished dinner with a person you must see on a continual basis (e.g., coworker, classmate, etc.). The two of you are sitting on the couch making out. He says he would like to make love to you. You don't want to, but you don't want to hurt his feelings because you must see him frequently.
26. You have been out with a friend. You come home and ask him inside, and he tries to make out with you. You like him as a friend, but you have no romantic attraction to him.
27. You have been dating a guy for awhile. He wants to make out with you. You don't want to, but your friends think you should. Now you are on a date with him and he wants to make out.

28. You and a guy you only mildly like are talking. He asks you about your plans for the weekend and you say that you don't have any plans so far. He says, "Well would you like to go out with me?" You really don't want to.

APPENDIX VII

ALCOHOL USE DISORDERS IDENTIFICATION TEST

AUDIT					
Instructions: Place an X in one box that best describes your answer to each question.					
Questions	Never	Monthly or less	2-4 times a month	2-3 times a week	4 or more times a week
1. How often do you have a drink containing alcohol?					
2. How many drinks containing alcohol do you have on a typical day when you are drinking?					
3. How often do you have six or more drinks on one occasion?					
4. How often during the last year have you found that you were not able to stop drinking once you had started?					
5. How often during the last year have you failed to do what was normally expected of you because of drinking?					
6. How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?					
7. How often during the last year have you had a feeling of guilt or remorse after drinking?					

8. How often during the last year have you been unable to remember what happened the night before because of your drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily
9. Have you or someone else been injured because of your drinking	No		Yes, but not in the last year		Yes, during the last year
10. Has a relative, friend, doctor, or other health care worker been concerned about your drinking or suggested you cut down?	No		Yes, but not in the last year		Yes, during the last year

APPENDIX VIII

DEMOGRAPHICS

1. Age: _____

2. Race:

- a) American Indian or Alaska Native
- b) Black or African American
- c) Native Hawaiian or Other Pacific Islander
- d) Asian
- e) White
- f) Hispanic
- g) Some Other Race _____

3. Your Relationship Status:

- a) single, but dating seriously
- b) single, dating casually
- c) single, not dating
- d) engaged
- e) married
- f) divorced
- g) widowed

4. Year in School:

- a) freshman
- b) sophomore
- c) junior
- d) senior
- e) graduate student

5. How educated do you feel you are on the subject of date rape?

Not very educated 1 2 3 4 5 6 7 Very educated

6. Have you ever attended a seminar, lecture, or presentation on rape/date rape?

Yes No

7. Have you ever volunteered or worked with an agency devoted to educating people about sexual assault?

Yes No

8. Do you know any woman who has been raped?

Yes No

9. Did you have any of the following experiences before the age of 15 with someone who was at least 5 years older than you? (circle any that apply)

- a. Kissing and hugging in a sexual way.
- b. Another person showing his/her sex organs to you.
- c. You showing your sex organs to another person.
- d. Another person fondling you in a sexual way.
- e. You fondling another person in a sexual way.
- f. Another person touching your sex organs.
- g. You touching another person's sex organs.
- h. Attempted intercourse, but without penetration.
- i. Intercourse.

APPENDIX IX

CONSUMER SATISFACTION QUESTIONNAIRE

1. How much did the intervention make you feel uncomfortable:

not at all	a little	somewhat	a lot	tremendously
1	2	3	4	5

2. How much did you enjoy this intervention:

not at all	a little	somewhat	a lot	tremendously
1	2	3	4	5

3. How much do you feel you learned:

nothing	a little	some	a lot	tremendous amount
1	2	3	4	5

4. How likely are you to use the information you learned today?

Not at all likely	Somewhat likely	Don't know	Likely	Very likely
1	2	3	4	5

5. What did you like the least:

6. What did you like the most:

7. What would you add:

8. Are there any other comments you would like to add:

APPENDIX X

PARTICIPANT DEBRIEFING SCRIPT

To be given at the last follow-up.

For participants in the attitude/knowledge prevention:

You have participated in the attitudinal/knowledge based prevention program. Previous research has shown this intervention to be somewhat effective in changing attitudes and knowledge toward date rape in the short-term. However, often those attitudes change back after several months. This change in attitudes may or may not help to prevent the occurrence of date rape.

The other intervention was an experimental behavioral prevention group. It is unknown at this time if the behavioral prevention will help to prevent date rape and its associated behaviors. If you are interested in receiving the behavioral prevention, please contact the experimenter, Shera Bradley, at shera@unlv.nevada.edu. If the behavioral prevention works better than the group you participated in, you will have an opportunity to participate in the behavioral group.

For participants in the behavioral prevention:

You have participated in the experimental behaviorally based prevention program. The goal of this group was to increase assertiveness skills and the ability to apply them in dating/sexual situations.

The other group being evaluated was an attitudinal/knowledge based prevention program. Previous research has shown this intervention to be somewhat effective in changing attitudes and knowledge toward date rape in the short-term. However, often those attitudes change back after several months. This change in attitudes may or may not help to prevent the occurrence of date rape.

It is unknown at this time if either prevention will help to reduce date rape and its associated behaviors. If you are interested in participating in the attitude prevention, please contact the experimenter, Shera Bradley, at shera@unlv.nevada.edu. If the attitude prevention works better than the group you participated in, you will have an opportunity to participate in the attitude group.

APPENDIX XI

ATTITUDE & KNOWLEDGE DATE RAPE INTERVENTION GROUP

BRIEF VERSION

- I. Informed Consent**
- II. Schedule first follow-up for approximately 4 weeks out-give them the reminder card**
 - a. Attitude/Control group will schedule follow-ups on the 5's (e.g., 5:05, 5:15)
 - b. Behavioral group will schedule on the 10's (e.g., 5:00, 5:10)
 - c. Inform participants of how important it is for them to return for the follow-up-it is a necessary part of the study-the groups will be for naught if they don't come back, etc.
- III. Give them surveys & envelope**
 - a. Number the envelope & the first page of survey packet
 - b. Tell them to fill them out & place in envelope when done & give to you
 - c. Record their name & number on sheet you will be given
 - d. Attitude/control group give even participant numbers (e.g., 002, 004)
 - e. Behavior group give odd numbers (e.g., 001, 003)
 - f. Make sure to note where the previous day participants left off & continue in numerical order
- IV. After everyone is checked in (informed consent done)-randomly assign to groups & direct them which room to go to**
- V. Turn tape recorder on & make sure to label the tape**
- VI. Introduction**

First Researcher=> "Hello, my name is _____."

Second Researcher=> "And my name is _____. We are going to be facilitating the group today."
- VII. Provide a Brief Overview of Program Contents**

"It is our goal today to provide everyone with very important information about date rape in our society. We will be involving several different components during our time today; we will present local definitions of sexual assault and date rape accompanied with local and national statistics of this phenomenon. We will then open up the discussion to allow each of you the opportunity to talk about some of the things that you have heard about rape. We will discuss each one, and present other beliefs that may not be brought up in group. We will also present information of things that effect survivors of rape, and how to help if you know someone who has been affected by rape. Finally we will provide local resource numbers that offer rape crisis services to the community."

"Are there any questions?"

VIII. Date Rape Quiz

"We will begin by having each of you take a short Date Rape Quiz, to introduce you to some of the facts and myths associated with Date Rape."

1. Discuss Quiz Results

Rape Quiz

1. The rate at which statistics show rapists commit another rape is:
 - a. 10%
 - b. 56%
 - c. 67%
 - d. 78%
2. Women are raped by someone they have reported having a prior relationship with
 - a. 1/2 of the time
 - b. 1/4 of the time
 - c. 1/3 of the time
 - d. 2/3 of the time
3. The rape victim is selected because?
 - a. *She is young and good looking*
 - b. ***She is alone and vulnerable***
 - c. *She provoked the attack*
 - d. *She dressed in a manner to provoke the attack*
4. What percentage of rapes are ever reported?
 - a. 10%
 - b. 50%
 - c. 75%
 - d. 90%
5. Often women do not report rape for all of the reasons listed **except**
 - a. *Reaction of family and friends*
 - b. *Police reactions*
 - c. ***She lied***
 - d. *Fear of reprisal*
6. A sexual assault in a college community is most likely to happen when?
 - a. *Summer break*
 - b. *The first week of school*
 - c. ***The first six to eight weeks of school***
 - d. *Spring Break*
7. In the State of Nevada a rape happens every
 - a. ***10 hours, 4 minutes***
 - b. *12 hours*
 - c. *Day*
 - d. *72 hours*
8. The average rapist rapes how many times before being caught?
 - a. *Once*
 - b. *12 times*

- c. *25times*
 - d. *40times*
9. Most rapes happen during what time of day?
- a. *Midnight*
 - b. ***Between 6p.m. and 6a.m.***
 - c. *Noon*
 - d. *Between 6a.m. and 6p.m.*
10. How many rapes involve more than one assailant?
- a. *10%*
 - b. *37%*
 - c. ***43%***
 - d. *89%*
11. Which of the following are effects of the date rape drug Rohypnol?
- a. *Fast-acting sedative*
 - b. *Disinhibition*
 - c. *Impaired judgment*
 - d. *Anterograde amnesia (remembering events after ingesting the drug)*
 - e. ***All of the above***
12. Women who were sexually victimized during childhood are:
- a. *More likely to be raped*
 - b. *Less likely to be raped*
 - c. *More likely to experience attempted rape*
 - d. ***Both a and c***
13. Which of the following is not a risk factor for date rape?
- a. *Lifestyle*
 - b. *Alcohol consumption*
 - c. *Prior sexual victimization*
 - d. ***Ethnicity***
14. **True or False:** When women resist rape they tend to suffer more physical injuries.

IX. Definition of Sexual Assault & Date Rape

"Now that you have heard some of the facts about date rape we will give you Nevada's legal definitions"

1. Definitions

"Perpetrator" means a person who commits a sexual assault.

NRS 200.364

"Sexual Penetration" means cunnilingus, fellatio, or any intrusion, however slight, of any part of a person's body or any object manipulated or inserted by a person into the genital or anal openings of the body of another, including sexual intercourse in its ordinary meaning.

NRS 200.364

"Victim" means a person who is subjected to a sexual assault.

NRS 200.364

Sexual Assault: A person who subjects another person to sexual penetration, or who forces another person to make a sexual penetration on himself or another, or on a beast, against the will of the victim or under conditions in which the perpetrator knows or should know that the victim is mentally or physically

incapable of resisting or understand the nature of his conduct, is guilty of sexual assault.

NRS 200.366

2. Definitions & Examples

Stranger Rape

Rose, age 25, was accosted at knife point in a shopping mall parking lot and forced by a stranger into his car. He drove her to a rural area, raped her, stabbed her five times, set the car on fire, and left her. Although severely injured, she survived

The Rape Victim: Clinical & Community Intervention; Koss & Harvey, 1991

Acquaintance Rape

Susan, age 23, went to the door of her house to find a man she recognized from one of her college classes. She opened the door to let him in the house, whereupon he threw her on the sofa and raped her.

The Rape Victim: Clinical & Community Intervention; Koss & Harvey, 1991

Date Rape

Diana, age 50, was vacationing in the Caribbean. She spent some of her time learning sailing and walking along the beach with a fellow guest. At a hotel dance, she danced with this man, and he asked her to walk outside. Once on the beach, this 6'4" man asked to have sex and forced her to cooperate by holding her down. Diana was too afraid to resist.

The Rape Victim: Clinical & Community Intervention; Koss & Harvey, 1991

Multiple Rape

Ann, age 21, was at a friend's home with a group of her peers. There were three men, one other woman and herself present. When the other woman left, the three men raped her.

The Rape Victim: Clinical & Community Intervention; Koss & Harvey, 1991

Marital Rape

It is no defense to a charge of sexual assault that the perpetrator was, at the time of the assault, married to the victim, if the assault was committed by force or by the threat of force.

NRS 200.373

A woman recently had a gynecological surgery. Two days after she came home from the hospital, her husband forced her to have sexual intercourse. This caused her to hemorrhage; she was re-hospitalized.

The Rape Victim: Clinical & Community Intervention; Koss & Harvey, 1991

Seduction vs. Rape

One of the key questions in the issue of date rape is the difference between seduction and rape: the man feels he has merely seduced a woman, convinced her; the woman feels that she has been raped, coerced. A useful distinction to keep in mind is that seduction involves no force, implied or otherwise. Seduction occurs when a woman is cajoled into agreeing to have sex; the word is "agreeing." Acquaintance rape often occurs when seduction fails and the man

goes ahead and has sex with the woman anyway, despite any protest and without her agreement.

The Rape Victim: Clinical & Community Intervention; Koss & Harvey, 1991

“Are there any questions?”

X. Local & National Statistics

“Knowing the definitions of rape, we can now look at the occurrence of rape being reported, it should be noted however that **less than 1 in 10 women who are raped will report the crime.**”

Facts and Statistics about Rape

Occurrence in the United States

- **Somewhere in America, a woman is raped every 2 minutes, according to the U.S. Department of Justice.**
- In 1996, 307,000 women were the victim of rape, attempted rape, or sexual assault.
 - *National Crime Victimization Survey, Bureau of Justice Statistics, U.S. Department of Justice, 1997.*
- Between 1995 and 1996, more than 670,000 women were the victims of rape, attempted rape, or sexual assault.
 - *National Crime Victimization Survey, Bureau of Justice Statistics, U.S. Department of Justice, 1997.*
- 1,871 sexual assaults occur everyday in the United States.
- An estimated 302,091 women are forcibly raped each year.
 - *National Violence Against Women Survey; available <http://ncjrs.org/pdffiles/172837.pdf>*
- **1 in 6 women are victims of completed or attempted rape during their lifetime.**
 - *National Violence Against Women Survey; available <http://ncjrs.org/pdffiles/172837.pdf>*
- **1 in 4 to 1 in 5 women victims of completed or attempted rape occurred during their college career.**
 - *National Institute of Justice, National College Women Sexual Victimization Study*
- 1 in 5 high school girls have been physically or sexually assaulted.

Occurrence in Nevada

- In 2003 there were 723 forcible rapes, 148 attempted rapes reported in Nevada.

- *Crime & Justice in Nevada 2003; available*
<http://nvrepository.state.nv.us/CrimeJustice/2003CrimeJustice.pdf>
- **There is one rape every 10 hours, 4 minutes in the state of Nevada.**
 - *Crime & Justice in Nevada 2003; available*
<http://nvrepository.state.nv.us/CrimeJustice/2003CrimeJustice.pdf>

Occurrence in the Las Vegas Area

- In 2003 there were 612 forcible rapes reported in the Las Vegas/ Henderson area.
 - *Crime & Justice in Nevada 2003; available*
<http://nvrepository.state.nv.us/CrimeJustice/2003CrimeJustice.pdf>

Occurrence at UNLV

- In 2003 there were 4 forcible sex offenses reported on the UNLV campus.
 - *UNLV Annual Campus Safety and Security Report available:*
<http://www.unlv.edu/studentlife/dps/report.htm>

Situational Facts & Statistics

- One of every four rapes takes place in a public area or in a parking garage.
- 68% of rapes occur between the hours of 6p.m. and 6a.m.
- In 29% of rapes, the offender used a weapon.
- **A sexual assault will most like happen within the first six to eight weeks of the first semester of college.**

Rates of Reporting Rape

- **Less than 1 in 10 women who are raped will report the crime.**
- The sooner the intervention the shorter the period of recovery.
 - *Nursdept:\word\er\sexasfac*
- 12% of victims that report do so within 24 hours.
 - *National Women's Study*
- 4% report more than 24 hours after rape.
 - *National Women's Study*

Victim Facts & Statistics

- The Majority of rape victims are between the ages of 11 and 24.

- While 9 out of 10 rape victims are women; men and boys are also victimized by this crime.
- Almost 40% of victims are raped more than once.
 - Nursdept:\word\er\sexasfac

Offender Facts & Statistics

- **In 9 out of 10 completed & attempted rapes, the victim knew the offender.**
 - *National Institute of Justice, National College Women Sexual Victimization Study*
- The average rapist rapes 40 times before being apprehended.
 - Nursdept:\word\er\sexasfac

“Are there any questions?”

XI. Group Discussion

a. Rape Myths

- “We would now like to open the discussion to you. Can you think of anything about rape that you have been told, or have heard in passing. These do not have to be things that you believe.”
 - i. Will be Written on Board or Large Paper
- “Many of the things that you have shared are what are termed “RAPE MYTHS”.
- **A rape myth is a prejudiced, stereotyped, or false belief about rape, rape victims and a rapist.**
- For every rape myth there is a “RAPE TRUTH.”
 - i. “Debunk” rape myths

b. Introduce Additional Rape Myths for Discussion

Myth	Fact
Offender Myths	
Women are sexually assaulted by strangers	majority of those who report a sexual assault are aquatinted with the assailant (more that 80% of the time)
When men are sexually aroused, they need to have sex or they will get “ blue balls .” Also, once they get turned on, men can’t help themselves from forcing sex on a woman.	Men don’t physically need to have sex after becoming aroused anymore than women do. Moreover, men are still able to control themselves even after becoming sexually excited.
Sexual assault is caused by men with uncontrollable sex drives . It is primarily a sexual crime.	“Rape is primarily an act of violence with sex as the weapon” Sexual assault is an act of power, control, and violence.
Men who sexually assault are perverted or pathologically sick	generally very normal; Most (more that 60%) are married or otherwise involved in an

Myth	Fact
	established sexual relationship
Sexual assault is a one time only crime . Men just do it once and then stop.	Child sexual abusers, rapists, exhibitionists and other convicted perpetrators are found to be repeat offenders. A rapist will rape again and again- until caught. FBI Uniform Crime Report statistics show that 78% of all rapists are recidivists.
More sexual assaults are biracial : Men of color are naturally violent and want to sexually assault white women	The overwhelming majority (more than 90%) involves persons of the same race or culture
Men cannot sexually assault their wives .	Men DO sexually assault their wives. Married women can be sexually abused & forced into sex against their will. Spousal rape is against the law in NV & carries the same penalties as any other rape.
Victim Myths	
Men can't be raped	Approximately 92,700 men are raped each year in the U.S.
Women lead men on. Sometimes they are just asking to be raped .	No one ever asks to be raped.
A woman can't be raped against her will. Anyone can stop rape if they really want to stop it.	Anytime someone forces sexual activity, it is rape. Rape victims can face threats of force, be under the influence of drugs/alcohol, or even be asleep.
It's not really rape if the victim isn't a virgin .	Rape is rape, even if the women isn't a virgin, even if she willingly had sex with the man before.
Women lie about being raped, especially when the accuse men they date or other acquaintances.	Not reported falsely anymore than any other major crime
Women are somehow responsible for sexual assault. They provoke it by the way the dress or by their actions.	Sexual assault victims range from 2 months to 92 years. Anyone can be a victim
women fantasize about it, so secretly they must want to be raped.	Women who fantasize about rape are really fantasizing about giving up responsibility for sexual initiation. Fantasy is NOT reality. There is a big difference between IMAGINING a situation where you can control the scenario, and actual rape where you are forced against your will into a brutal, humiliating, and violent act with the fear and risk of death. Women do not "secretly" want to be victimized and/or terrorized any more than men do.
Women often do not report rape	The decision to report or not depends on

Myth	Fact
because they know they provoked it.	several factors, including the anticipated reactions of family and friends.
Nice girls don't get raped. Bad girls shouldn't complain.	Rape can happen to women of all ages, races, or socioeconomic groups. Being raped has nothing to do with a woman's past sexual experiences or lack of them.
It is best not to tell anyone if you are raped.	Women who keep their feelings and thoughts bottled up inside tend to be more likely to have long-lasting negative psychological effects from the rape.
A prostitute will not be traumatized by rape. After all, having sex is her job.	Anyone can be raped, if she did not consent to the sex-it is rape.
Situational Myths	
Rapes are usually reported .	Rape is probably one of the most underreported crimes in the United States today, with educated estimates that between 50-90% of rape cases go unreported.
Because of a few violent incidents, the issue of rape tends to be over dramatized .	Over one-third of all women in this country will be sexually assaulted or abused during their lifetimes.
Rape is always a one-on-one encounter.	Only 57% of rapes involve only one assailant. 16% involve 2 rapists and 27% involve 3 or more rapists.
Rape is "No Big Deal"	About 1 in 3 women who are injured during a rape or physical assault require medical care. <ul style="list-style-type: none"> o also can experience mental health problems & are more likely to engage in harmful behaviors to cope with the trauma, such as drinking, smoking or using drugs
A women who gets raped deserves it, especially if she agreed to go to the man's house or ride in his car .	No one, male or female, deserves to be raped. Being in a man's house or car does not mean a woman has agreed to have sex with him.
Women who don't fight back haven't been raped.	You have been raped when you are forced to have sex against you will, whether you fight back or not.
If there's no gun or knife , you haven't been raped.	It's rape whether the rapist uses a weapon of his fists, verbal threats, drugs, alcohol, physical isolation, your own diminished physical or mental state, or simply the weight of his body to overcome you.
If a women lets a man buy her dinner or pay for a movie or drinks she owes him sex.	No one owes sex as a payment to anyone else, no matter how expensive the date.
Agreeing to kiss or neck or pet with a	Anyone has the right to say "no" to sexual

Myth	Fact
man means that a woman has agreed to have intercourse with him.	activity, regardless of what has preceded it, and to have that "no" respected.
Most assaults take place in dark alleys, only in big cities and in "bad" neighborhoods, or only happen to women who hitchhike.	50% of all sexual assaults take place in private residence, and 2/3 of these attacks occur in the victim's own home
Survivor Myths	
A person who has really been sexually assaulted will be hysterical .	There is no "right way" to react to sexual assault. Sexual assault victims can be calm, hysterical, withdrawn, angry, in denial, or in shock.
Victims of sexual assault are always bruised, battered, and seriously injured & hysterical afterwards. Otherwise, it obviously was not a REAL assault/Rape/Crime.	The use of a weapon or threat of death is more than enough to immobilize a person with fear. The assault is then committed without inflicting injuries Also refer to Rape Trauma Syndrome
Being a victim of sexual assault means that the victim will never be the same again.	While sexual assault DOES have a profound impact on one's life, follow-up studies with sexual assault victims have shown that most are able to recover from & integrate the assault & return to a normal life. Also refer to RTS

XII. Rape Victim Information

"When a woman is raped it is important to remember that she has gone through an intense emotional experience. There is **no right or wrong way to act and each woman will express herself in her own way**. It should be remembered that a great number of people hold the rape myths that we just discussed as rape truths, and therefore a rape victim will need someone to listen and understand what they are going through. Although every rape victim that you meet will be unique, each will have one thing in common, Rape Trauma Syndrome."

a. Rape Trauma Syndrome

Rape Trauma Syndrome (RTS)

Although every survivor you encounter will be unique, each will have one thing in common: Rape Trauma Syndrome (RTS). Identified by Ann Wolbert Bugress and Lynda Lytle Holmstrom, RTS is a cluster of emotional responses to the extreme, stress experienced by the survivor during the sexual assault. More specifically, RTS is a response to the profound fear of death that almost all survivors experience during the assault. RTS occurs in two phases:

- **The Acute (Initial) Phase**, which usually lasts anywhere from a few days to a few weeks after the attack
- **The Reorganization Phase**, which usually lasts anywhere from a few weeks to several days after the attack.

Often, the end of the Acute Phase will overlap the beginning of the Reorganization Phase. Each phase is characterized by particular emotional and physical concerns that most survivors experience.

The Acute Phase

During this phase, the survivor experiences a complete disruption of her life, responding to the fear of death she experienced. She may display any of a number of disparate emotional responses. She may cry, shout, swear, laugh nervously, discuss the weather, or sit calmly. Her responses may vary depending on any one of a number of external circumstances. **No response is inappropriate!**

However, responses fall into one of two main styles:

- Expressed
- Controlled

If a survivor uses the **Expressed** style, she openly displays her emotions. She may be agitated and restless, talk a lot, cry, swear, shout, laugh. Any emotion is appropriate—because she has her own way of responding.

If a survivor uses the **Controlled** style, she contains her emotions. Most of the survivor's energy is directed toward maintaining composure. She may sit calmly, respond to questions in a detached, logical way, and downplay her fear, sadness, anger, and anxiety.

Both of these styles of emotional response reflect different ways of dealing with a crisis. She may also exhibit characteristics of both styles.

- In general, the survivor's initial response to the assault will be shock and disbelief.
- may appear numb.
- provides an emotional "time-out" during which the survivor can acknowledge and begin to process the myriad components of the experience.
- If the assault was particularly terrifying or brutal, the survivor may experience an extreme shock response and completely block out the assault.
- Following the shock and disbelief may experience a variety of emotions or mood swings.
- may feel angry, afraid, lucky to be alive, humiliated, dirty, vengeful, degraded.
- All of these responses are normal.
- whatever she's feeling is valid because she's feeling it

Physical concerns of the Acute Phase

- general soreness throughout her body.
- pain in the specific areas of the body that were targeted during the assault.
- probably disruption in her usual sleeping and eating patterns.

The Reorganization Phase

During this phase of RTS, the survivor reorganizes herself and life after the sexual assault. Basically, she learns to cope again.

Several factors influence the survivor's ability to reorganize her life after the sexual assault:

- **Personality.** What coping mechanisms does she already possess? How successfully has she coped with stress and trauma in the past?
- **Support System.** Does she have a strong system of friends and family for emotional support? Are they treating her with empathy? Does she feel she can go to them?
- **Existing Life Problems.** Does she have a drinking or drug problem? Is she experiencing a divorce or other break-up? Does she have emotional or psychological problems? Even if the survivor had these life problems under control prior to the assault, the trauma of the assault may reactivate them.
- **Prior Sexual Victimization.** Was the survivor assaulted previously, especially within the last two years? If so, recovery may be much more difficult.

Emotional Concerns of the Reorganization Phase

The concerns the survivor has may fall into any one of four groups:

- **Social Concerns**
 - may feel an increased distrust toward others in general and an increased suspicion of men in particular
 - may have a shorter temper, easily break into tears.
 - Some reactions may be the result of a specific component of the assault. For example, if the survivor was assaulted while alone, she may want to be with other people constantly.
- **Psychological Concerns**
 - Denial of the effects of the assault, or of the assault itself,
 - Denial may be a component of the survivor's recovery, since it gives her space to catch her breath before beginning the stressful task of processing and resolving the trauma.
 - Denial that lasts longer than a few hours or days, however, is detrimental to her recovery.
 - Depression, guilt, and a general loss of self-esteem

- Remind her that she is in no way responsible for the assault and that nothing she did could ever justify the violence she has experienced.
- may experience phobic reactions to stimuli that remind her of the assault of her assailant. Phobic reactions are extreme manifestations of anxiety. For example, if the survivor was assaulted outdoors, she may be afraid to leave the house. If the assailant had alcohol on his breath, this odor may remind her of the assault and make her nauseous.
- **Sexual Concerns**
 - The assault may disrupt the sexual life of the survivor because sex, which usually involves pleasure, was instead used as a weapon to humiliate, control and punish.
 - take some time for the survivor to disassociate the sexual assault from consensual sex.
 - She may experience physical pain during sex, have difficulty relaxing, or be generally indifferent to sex.
 - At the other extreme, she may desire sex all the time.
 - Most likely, her behavior will fall between these two extremes.
 - If the survivor was a virgin at the time of the assault, she may have a heightened fear of their first consensual sexual encounter.
 - The survivor may be concerned about her partner's reaction to her. She may wonder if her partner will feel differently toward her.
- **Physical Concerns**
 - gynecological/genital problems.
 - Sexually transmitted diseases
 - pregnancy.

XIII. How To Help a Rape Victim

a. Elicit responses from group for this

- **Listen.** This may include memories of the rape or random events of the day, whatever it is she has chosen to speak to you because she trusts you and knows that you will listen.
- **Don't ask what happened.** She will tell you when and if she is ready.
- **Speak in lower tones.** She has just gone through a very rough emotional experience any interaction she has now should be calm and inoffensive.
- **Don't tell anybody.** She has come to you because she trusts you with her very personal experience; it is her decision to let people know.
- **Make your self available.** Rape victims are often afraid to be alone. They may want to talk, have you listen, or just be in the presence of someone they trust.
- **Understand that rape is never the victims fault.** Rape produces many feelings of guilt; you must know that the only person to blame is the attacker.

- **Become available to help in every aspect of her life.** A rape victim often feels helpless and needs assistance with many things big and small in order to gain confidence and eventually control over her life.
- **Do not judge.** It is your job to listen and support.
- **Provide refuge.** Allowing her to feel secure will be essential to a resolution.
- **Be comforting.** Victims have many different emotions after a traumatic event like rape; she will need someone to be understanding of those emotions.
- **Be patient and compassionate.** Recovery and stability will take time.
- **Empower her to take action.** Encourage her to seek counseling.
- **Allow her to be independent.** Avoid your initial feelings of overprotection and vengeance she is trying to regain herself after being degraded physically and emotionally.
- **Be understanding of her choices with regard to the resolution of the rape.** These decisions are hers to make, as long as she is making decisions she is moving in the right direction.
- **Do not let your feeling interfere with her making her own decisions.** Help her with her feelings; let someone else help you with yours.

“Are there any questions?”

XIV. Local Resource Numbers

“We would like to make sure that each of you has the appropriate contact information to the rape crisis center. This will be an important number to have in the event that you, or a friend, are put in a situation in which you feel that you were raped or survived an attempted rape. We strongly recommend that if that does happen to you that you find someone to talk to.”

1. The Rape Crisis Center
741 Veteran's Memorial Drive
Las Vegas, Nevada 89101
(702) 385-2153
www.therapeccrisiscenter.org
2. Sexual Assault Hotline
 - a. Local 702-366-1640
 - b. Rural 1-800-752-4528
 - c. Tri-state 1-800-553-7273

“Are there any questions?”

XV. Have Rape Crisis Center pamphlets out for them to take if they want

XVI. Post Questionnaires-Rape Myth Acceptance Questionnaire

- a. They will have their participant numbers on their reminder cards-they should put their number on the post-RMAS

- b. Turn in to you when done & you put into their envelope

XVII. Give each participant a receipt

XVIII. Pack up all equipment-make sure follow-up schedule is in its folder

APPENDIX XII

PROCEDURE BEHAVIORAL GROUP

XIX. Informed Consent

XX. Schedule first follow-up for approximately 4 weeks out-give them the reminder card

- a. Attitude/Control group will schedule follow-ups on the 5's (e.g., 5:05, 5:15)
- b. Behavioral group will schedule on the 10's (e.g., 5:00, 5:10)
- c. Inform participants of how important it is for them to return for the follow-up-it is a necessary part of the study-the groups will be for naught if they don't come back, etc.

XXI. Give them surveys & envelope

- a. Number the envelope & the first page of survey packet
- b. Tell them to fill them out & place in envelope when done & give to you
- c. Record their name & number on sheet you will be given
- d. Attitude/control group give even participant numbers (e.g., 002, 004)
- e. Behavior group give odd numbers (e.g., 001, 003)
- f. Make sure to note where the previous day participants left off & continue in numerical order

XXII. After everyone is checked in (informed consent done)-randomly assign to groups & direct them which room to go to

XXIII. Turn tape recorder on & make sure to label the tape

XXIV. Introduction

First Researcher=> "Hello, my name is _____."

Second Researcher=> "And my name is _____. We are going to be facilitating the group today."

XXV. Brief intro stats date rape & define

- a. A person who subjects another person to sexual penetration, or who forces another person to make a sexual penetration on himself or another, or on a beast, against the will of the victim or under conditions in which the perpetrator knows

or should know that the victim is mentally or physically incapable of resisting or understand the nature of his conduct, is guilty of sexual assault.

- b. 1 in 6 women are victims of completed or attempted rape during their lifetime.**
 - i. National Violence Against Women Survey; available <http://ncjrs.org/pdffiles/172837.pdf>*
- c. 1 in 4 to 1 in 5 women victims of completed or attempted rape occurred during their college career.**
 - i. National Institute of Justice, National College Women Sexual Victimization Study*
- d. Somewhere in America, a woman is raped every 2 minutes, according to the U.S. Department of Justice.**
- e. There is one rape every 10 hours, 4 minutes in the state of Nevada.**
 - i. Crime & Justice in Nevada 2003; available <http://nvrepository.state.nv.us/CrimeJustice/2003CrimeJustice.pdf>*

XXVI. Procedure for group

- a. Brief intro to video
 - i. True Story
 - ii. Katie & Victor's first date
 - iii. Katie is a virgin
- b. Show first video clip
 - i. Katie & Victor at dinner-push alcohol
- c. Elicit 2-3 alternative responses (referring to the video) from group
 - i. Also refer to prepared list
- d. Group facilitators will model first response
- e. Take turns having each participant model the response
 - i. Provide feedback
 - 1. positive first, then negative
- f. Discuss cognitive barriers to resistance
 - i. Elicit from group
 - ii. Refer to prepared list of barriers
 - iii. Provide the counter cognition
- g. Second video clip
 - i. Frat party
- h. Facilitators model role-play
 - i. Begin with "I'm hesitant to resist because..., but..." then counter the cognition
 - ii. Then model response to second video clip
- i. Participants take turns role-playing
 - i. Provide feedback
 - 1. positive first, then negative
- j. continue with this method

***** point out components of assertive behavior (Your Perfect Right p. 49)

- i. Eye contact-relaxed, steady gaze at other person, looking away occasionally
- ii. Body posture-stand up, active, erect posture, while facing the other person directly
- iii. Facial expression-should match-don't smile while angry
- iv. Voice tone, inflection, volume-level, well modulated, conversational statement-firm
- v. Timing-never too late
- k. Rest of video clips 3-8
 - i. Dancing in her dorm-beginning of touching
 - ii. Light back on, tickling, holding her wrist
 - iii. Yells at her, tease, baby, up against wall
 - iv. Victor gets in her bed & says he'll leave in the am
- l. **Show last clip of real Katie talking about her mistakes, but not her fault**

XXVII. Have Rape Crisis Center pamphlets out for them to take if they want

XXVIII. Post Questionnaires-Rape Myth Acceptance Questionnaire

- a. They will have their participant numbers on their reminder cards-they should put their number on the post-RMAS
- b. Turn in to you when done & you put into their envelope

XXIX. Give each participant a receipt

XXX. Pack up all equipment-make sure follow-up schedule is in its folder

APPENDIX XIII

RESPONSES

- No
- No & suggest doing something else.
- I would rather....
- No thank you
- I don't drink.
- Stop touching me.
- I want to leave.
- I want you to leave.
- You leave, if he won't.
- If he persists with kissing, etc.-be firm & clear-say no & then stop.
- If you don't want your clothes removed-be firm.
- Call police

Cognitions	Counter cognitions
Want him to like you	Want him to respect your wishes
Too embarrassed to talk about it	Embarrassment small price to pay for your safety
Fear he will think badly of you	If he's not respecting you & want you want-why is it important what he thinks
Fear that your reputation might be damaged	Don't want him to determine your behavior
He "didn't do anything"	If you are uncomfortable-you have can stop & leave at any time
Thoughts about having a relationship with him	There are other guys to have relationship with that will be respectful
Don't want to make a big deal	If you feel uncomfortable & someone not listening-that is important
How will I get home?	If he drove, can always: call a friend, take a taxi.
Don't want to look stupid, prude, etc.	Protecting yourself & your body is not stupid
Don't want to feel guilty	You have a right to decide what you want/don't want to do
Don't have a "good" reason	If you feel uncomfortable-that's enough of a "reason"

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