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IDENTIFYING BEHAVIORAL RISK FACTORS FOR  
ACQUAINTANCE RAPE IN COLLEGE FEMALES

by

Sherrie Maher

A Dissertation  
Submitted to the  
Faculty of The Graduate College  
in partial fulfillment of the  
requirements for the  
Degree of Doctor of Philosophy  
Department of Psychology

Western Michigan University  
Kalamazoo, Michigan  
August 2003

## IDENTIFYING BEHAVIORAL RISK FACTORS FOR ACQUAINTANCE RAPE IN COLLEGE FEMALES

Sherrie Maher, Ph.D.

Western Michigan University, 2003

In the current study, a videotaped scenario was used to assess sexual communication skills among a sample of undergraduate women. The study was designed to identify specific communication strategies that may serve as risk or protective factors in acquaintance rape situations. Given that women with a prior sexual victimization history are at increased risk for subsequent sexual assault, the study examined whether these women exhibit particular communication skills deficits in dating situations. Using a validated videotaped vignette, 47 undergraduate women without a history of victimization (NVP) were compared to 28 women with a history of sexual assault (SVP) (assault occurring one time in either childhood or adulthood), and to 30 women who have had a repeated history of sexual assault (RVP), (assault occurring at least once in childhood and adulthood, or repeated instances in childhood and/or adulthood) on their ratings and responses on dimensions of risk depicted in a videotaped vignette. Results indicated that participants who do not have a victimization history detected more risk than women who have a history of victimization, although this finding was not statistically significant. Additional results are discussed in terms of differences in behavioral responding between the three groups. The implications of these findings as well as directions for future research are discussed.

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Sherrie Maher

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## CHAPTER 1

### INTRODUCTION

#### Overview

Acquaintance rape is a serious and widespread problem on college campuses (Emmers-Sommer & Allen, 1999; Marx & Gross, 1995; Marx, Van Wie, & Gross 1996; Pinzone-Glover, Gidycz, & Jacobs, 1998; Sawyer, Desmond, & Lucke, 1993; Yescavage, 1999). The estimated prevalence of sexual assault among college women is three times greater than among women in the general population (Pinzone-Glover et al., 1998). Koss, Gidycz, & Wisiewski (1987) found the prevalence of date rape to be as high as one in four women on college campuses. It has been posited by Russell (1984) that women in this age group have greater contact with men, which increases the likelihood of rape. Furthermore, studies indicate that more than half of these women experience more than one incident of sexual assault during their lifetime (Atkenson, Calhoun, & Morris, 1989; Cloitre, 1998; Gidycz, Coble, Latham, & Layman, 1993; Koss & Dinero, 1989; Messman & Long, 1996; Naugle & Follette, 1999; Sanders & Moore, 1999; Wyatt, Guthrie, & Notgrass, 1992). In addition to this increased risk for repeated sexual victimization, acquaintance rape is associated with a number of additional physical, psychological, and interpersonal difficulties. These difficulties include anxiety, depression, posttraumatic stress disorder, anger, substance abuse, sexual dysfunction, and damaged trust among

others (Browne & Finkelhor, 1986; Burnam et al., 1988; Petretic-Jackson & Tobin, 1996; Hanson, 1990; Resnick, Calhoun, Atkeson, & Ellis, 1981; Rothbaum & Foa, 1999). The severity of these problems becomes even greater among women who have had multiple victimization experiences (Cloitre, Scarvalone, & Difede, 1997; Follette, Polusny, Bechtle, & Naugle, 1996). These problems often require psychological interventions, which can be both time-consuming and costly to the victim.

In response to the seriousness and costliness of sexual assault among college students, many campuses have implemented prevention programs designed to reduce the occurrence of both stranger and acquaintance rape. Many of these prevention programs are aimed at changing students' attitudes and cognitions about sexual assault (Yeater & O'Donohue, 1999). The assumption is that by educating students about risks for sexual assault, behavior change will follow. While research suggests that education is sufficient for reducing sexual assault risk for some individuals, college prevention programs have not been found to be effective for reducing the prevalence of victimization among other groups (Hanson & Gidycz, 1993). In particular, women with a prior victimization history do not appear to eliminate their risk for rape as the result of campus prevention programs (Yeater & O'Donohue, 1999). One reason for this may be that the prevention programs are not targeting specific behaviors that decrease the likelihood for sexual assault.

It is therefore imperative that research studies attempt to identify behavioral risk factors for sexual assault in women. With the identification of these risk factors, sexual assault prevention programs can better target behaviors that will lead to the reduction of

sexual assault, while providing women with the needed skills to thwart future attacks. A discussion of the relevant sexual assault literature follows.

### Stranger Rape versus Acquaintance Rape

Research has suggested that the motives for stranger and acquaintance rape often differ. Stranger rape is defined as "...nonconsensual sex between individuals who do not know each other prior to the sexual act." It is posited that with stranger assault, the perpetrator has aggressive motives more so than sexual motives, and that the rape has been premeditated (Marx, Van Wie, & Gross, 1996). In acquaintance rape, where individuals know each other before the assault, the perpetrator is thought to have more of a sexual motive that is not premeditated (Marx, Van Wie, & Gross, 1996).

The type of rape (stranger vs. acquaintance) also appears to influence reports of the rape by victims. Only 5% of victims of acquaintance rape report their assault to legal authorities (Amir, 1971; Koss, Gidycz, & Wisniewski, 1987; Stormo, Lang, & Werner, 1997) and to rape crisis centers (Koss, 1985). Koss, Dinero, Seibel, & Cox (1988) reported that 73% of their sample reported the assault when it was a stranger, whereas 44% of their sample reported the rape if they knew the assailant.

It has been suggested that there may be more of a tendency to blame victims of acquaintance rape than those when women did not know their attackers (Stormo et al., 1997). Murnen, Perot, and Byrne (1989) found that in 42.1% of their sample, self-blame increased as a woman's relationship with her attacker increased in intimacy. They found

that the more women blamed themselves for the attack, the more likely they would maintain future contact with their attackers.

The type of rape may also influence how vulnerable a woman perceives she is to the threat of rape. Some findings suggest that the closer the relationship the victim had to the perpetrator the less psychologically prepared she was to fight off an attack (Koss et al., 1988). Although acquaintance rape is much more prevalent than stranger rape, women have reported that they are more afraid of, and take greater measures to prepare themselves against, an attack by a stranger than by an acquaintance (Furby, Fischhoff, & Morgan, 1990; Hickman & Muehlenhard, 1997; Warr, 1988). In other words, even though the data suggest that women are at greater risk for rape at a party than they are with a stranger, they are less prepared for unwanted sexual experiences with an acquaintance.

## CHAPTER II

### RISK FACTORS ASSOCIATED WITH ACQUAINTANCE RAPE

Logically, due to methodological and ethical issues, the origin of sexual assault is not known. Researchers could not knowingly assign some women to rape/no rape conditions. Likewise there could not be experiments that place subjects in a live rape situation. Therefore, researchers have attempted to identify what constitutes a risk factor for sexual assault using self-report and analog methodologies. It is hoped that by reducing or eliminating risk factors for sexual assault, further victimization along with post-rape trauma may be reduced (Acierno, Resnick, Kilpatrick, Saunders, & Best, 1999). Identification of these risk factors could allow for successful interventions in women who are considered high risk (Acierno et al., 1999). An overview of the sexual risk factors is provided below.

#### Age of Victim

It has been identified that women between the ages of 13 and 26 are the most vulnerable to sexual assault (Koss et al., 1987; Russell, 1984). Marx, Van Wie, and Gross (1996) hypothesized that women of this age have greater contact with men, which thus increases their risk of sexual assault. Therefore, college women comprise a high-risk group given both their age and accessibility to potential attackers.

## Prior Sexual Abuse and Revictimization

Researchers have examined the link between sexual assault and earlier incidents of sexual abuse (Browne & Finkelhor, 1986; Gidycz, Coble, Latham, & Layman, 1993; Himelein, 1995; Lundberg, Love, & Geffner, 1989; Koss & Dinero 1989). Research has shown that women with a background of childhood sexual abuse are more likely to experience rape or attempted rape than women without such a history (Cloitre, 1998; Koss & Dinero, 1989; Wyatt, Guthrie, & Notgrass, 1992). In order to further investigate this relationship, Gidycz et al., (1993) found that women who were sexually victimized over a 9-week prospective study had more child/adolescent sexual experiences than non-victimized women. Himelein (1995) found a relationship between adolescent victimization and college victimization as well as a relationship between childhood sexual abuse and adolescent victimization. Interestingly, there was not a significant relationship found between childhood sexual victimization experiences and college victimization experiences (Himelein, 1995). It was suggested that a woman's vulnerability to victimization may decrease as the time between the incident of abuse increases (Himelein, 1995).

## Post-traumatic Stress Disorder

One psychological outcome associated with sexual victimization is Post-traumatic Stress Disorder (PTSD). These symptoms include intrusive imagery, flashbacks, sleep disturbance, hyper-alertness, hyper-arousal, among others (Petretic-Jackson & Tobin, 1996). Estimates for PTSD among sexually abused subjects range from 33% to 86%

(Polusny & Follette, 1995). In a national sample, Acierno, et al., (1999) found that a diagnosis of PTSD increased the odds that an individual will experience another rape in her lifetime. Further, it has been found that the presence of PTSD symptoms places women at increased risk for future victimization (National Crime Victims Center & Crime Victims Research & Treatment Center, 1992; Wilson, Calhoun, & Bernat, 1999). Acierno et al., (1999) hypothesized that when a rape victim cognitively avoids thoughts surrounding the rape, she is less likely to detect cues associated with sexual assault and therefore less likely to escape future assaults. Cloitre (1998) suggested that symptoms of PTSD such as hyper-arousal and/or emotional numbing might interfere with a woman's ability to identify risk and to respond effectively in potentially dangerous situations. As a result of numbing/chronic arousal these women may not react appropriately to cues considered high risk for sexual victimization, placing them at further risk of sexual assault (Cloitre, 1998).

### Location

Researchers have investigated the locations where rape is likely to occur. Miller and Marshall (1987) examined a sample of 795 college men and women to determine which activities and location were associated with date rape. They found that the most common location for a date rape to occur was a private residence or apartment (55%). This was twice as likely to occur at the man's private residence than at a woman's private residence. The second most common place occurred in a residence hall (15%) or a parked car (15%). The remaining 5% of date rapes occurred at a fraternity house.

Murnen, Perot, and Byrne (1989) found similar results in that the majority of unwanted sexual intercourse occurred at the man's residence (39.4%) followed by the woman's residence (33.3%). These results suggest that a woman is more vulnerable to date rape if she is on the assailant's premises.

### Alcohol and Acquaintance Rape

Research has examined the link between alcohol and acquaintance rape (Abey, 1991; Koss & Dinero, 1989; Muehlenhard & Linton, 1987; Norris & Cubbins, 1992). Alcohol has been associated with 80% of sexual assaults (Kanin, 1984; Koss et al., 1987). Muehlenhard & Linton (1987) discovered that 55% of men in their study had been drinking alcohol when they committed a sexual assault. Additionally, Miller and Marshall (1987) reported that over half of their female sample had been under the influence of either drugs or alcohol when they were sexually assaulted. Harrington & Leitenberg (1994) found similar results among a sample of undergraduate women. Furthermore, previous studies have shown that women depicted as being under the influence of alcohol in vignettes are rated as more sexually active/available and aggressive than their non-drinking counterparts (George, Gournic, & McAfee, 1988).

Alcohol has also been involved in how victims and assailants are perceived in their culpability or responsibility for the rape. Norris and Cubbins (1992) found that when both women and men had been drinking, rape was not judged as severely as when only the woman had been drinking. In the latter case, the woman was perceived as being taken advantage of by the non-drinking man. Stormo et al., (1997) found several

interesting results in the attribution of alcohol consumption, rape and responsibility. First, they found that when both the man and woman had been clearly behaviorally impaired by drinking, the female victim was held more accountable for the rape than the perpetrator. In cases where the victim was more intoxicated than the perpetrator, he was held more responsible. Authors reasoned that this difference in alcohol consumption may elicit the appearance of the man trying to take advantage of the woman. Second, results showed that the perpetrator was held less accountable for the rape when he had been significantly impaired by his drinking versus than when he drank only non-alcoholic soft drinks. Authors suggested that respondents believed that the man was not aware of what he was doing and therefore held less responsible and blameworthy for the attack. However, there were differences in how men and women perceived the victim. The female victim was blamed for the attack more when she had been noticeably impaired than when she had not been drinking alcohol.

Although there is a strong correlation between alcohol and acquaintance rape, there still is not a clear understanding of how alcohol contributes to rape (Nurius, 1999). Abbey (1991a) suggests that consuming alcohol may interfere with the ability to discriminate cues that would warn a woman of an impending attack. Alcohol may also weaken a woman's ability to resist an attack by impairing her motor functions and cognitive processes (Abbey, 1991a; Nurius, 1999), including problem-solving ability (Nurius, 1999). In fact, completed rapes were associated more strongly with women who had been drinking than those who had not (Abbey & Ross, 1992).

What further complicates alcohol use is that it is often associated with positive experiences and memories, and often carries with it the expectation of enhancing certain social goals (such as fun with friends, meeting attractive men of the opposite sex, etc.) that are not associated with rape (Nurius, 1999). It would not be a practical solution to suggest that women should never drink in social situations. However, balance needs to be attained between both social goals and goals that protect females from sexual assault (Nurius, 1999).

### Victim Behaviors

Researchers have sought to investigate what behaviors are associated with sexual assault (Muehlenhard, 1988; Muehlenhard, Friedman, & Thomas, 1985; Sawyer, Desmond, & Lucke, 1993). These researchers have attempted to determine what behaviors associated with a date may lead to sexual violence. Muehlenhard et al. (1985) found that men in their sample believed that rape was justified when the man paid for all of the dating expenses, when the woman initiated the date, and when she went to his apartment. Sawyer, Desmond, and Lucke (1993) found similar results with 61% of their male sample believing that when a woman asks a man to come back to her apartment something sexual will occur. Similar results were found when a woman returns to the man's apartment, with 65.9% of men and 70.8% of women believing that sexual activity will occur. Muehlenhard (1988) found that men rated a woman depicted in a scenario as more sexually willing and even rated rape as justifiable when she asked the man out on a date, let him pay all of the dating expenses, and went to his apartment after the

completion of the date. It has been suggested that these behaviors are considered indications that the woman is willing to have sex and that if she indicates she is not interested, the man feels justified in rape because she has “led him on.” (Muehlenhard, Friedman, & Thomas, 1985).

Type of dress has been investigated as a risk factor for sexual victimization (Abbey, Cozzarelli, McLaughlin, & Harnish, 1987). Participants were asked to view photos of women wearing revealing clothing versus non-revealing clothing in different dyads. Both women and men rated the photos of women who wore revealing clothing more sexually than photos of women who wore non-revealing clothing. More recently, Workman and Freeburg (1999) examined style of dress and attribution of rape. They found that both men and women found a model who wore a short skirt as more responsible for rape than a model wearing a longer skirt.

### Risk Recognition

There is an emerging interest in identifying potential behavioral factors that are associated with increased risk for sexual victimization. Given the high rate of sexual assault among previously victimized individuals, researchers have attempted to explain why these individuals are at substantially greater risk. One possible explanation is that previously victimized women may have difficulty assessing whether a social or interpersonal situation is risky (Nagle & Follette, 1994; Wilson, Calhoun, & Bernat, 1999). Meadows, Jaycox, Webb, and Foa (1996) have found preliminary evidence to

support this notion. As the number of incidents of sexual assaults experienced in one's history increased, the number of dangerous cues identified in a rape narrative decreased.

In addition to how PTSD is presumed to interfere with risk recognition, dissociation among previously victimized women may play a similar role. For example, high levels of dissociation among repeated victims of assault may cause them to appear disoriented, distracted or unaware of the existing environment, likely placing them at greater risk when they encounter a sexual predator (Cloitre, Scarvalone, & Difede, 1997). Increased rates of alexythymia, (the difficulty labeling affective states in both themselves and possibly others), may also make it more difficult to read cues that are considered dangerous, or that contribute to future victimization (Cloitre, Scarvalone, & Difede, 1997).

In addition to the risk-recognition hypothesis, Naugle (1999) suggested that a prior victimization experience could result in an impoverished repertoire. That is, even if a woman adequately identified danger or risk, she lacked the requisite skills for effectively dealing with the situation. Both the risk-recognition problems and skills deficits may be the result of chronic hyperarousal or emotional numbing that results from prior sexual abuse experiences (Cloitre, 1998). Such autonomic difficulties may make it difficult for women to distinguish physiological changes that would normally signal a person to avoid or respond effectively to dangerous situations.

The current study is an extension of research conducted by Naugle and Follette (1994, 1999). In their preliminary studies, Naugle and Follette attempted to identify differences between victimized and non-victimized women in their ability to: (a)

discriminate aspects of risk, and (b) respond effectively to various social scenarios. A set of videotaped scenarios representing various social situations were used to assess these factors. Contrary to their hypothesis, Naugle and Follette found that women with a prior victimization history rated vignettes as depicting more risk than did women who had not been sexually victimized. However, even though they rated the scenarios as being riskier, previously victimized women were more likely to acquiesce to the offers of the men in the vignettes than were non-victimized women. This research represents several strengths and noteworthy contributions to the literature. First, the researchers developed an innovative methodology to assess potential risk factors. Second, they empirically demonstrated the importance of considering the skills-deficit hypothesis as either a competing or ancillary hypothesis to the predominating risk-recognition hypothesis. The current study aims to extend this line of research by focusing on specific skills deficits that may play a role in increased risk for acquaintance rape. We are specifically interested in using the videotaped methodology to investigate the role that sexual communication skills play in risk for sexual victimization.

## CHAPTER III

### SEXUAL COMMUNICATION

#### Misperception of Cues

Several researchers have speculated about the role that sexual miscommunication plays in sexual assault (Abbey, 1991b). Many individuals are not comfortable discussing their sexual intentions and therefore attempt to deduce their date's intentions by more indirect methods (Abbey, 1991b). Often, the subtle nature of interpersonal cues in dating relationships may result in misperceptions and miscommunication between individuals. For example, Abbey (1987) found that two-thirds of men often mistakenly interpret friendliness on the part of women as an indication of sexual interest. More than half of men and 70% of women college students report at least one occasion where another person misperceived their intentions with regard to sexual intimacy (Koss & Oros, 1982). Men were asked to rate women depicted in scenarios on how willing they appeared to have sex (Muehlenhard, 1988). Male subjects rated the woman depicted in the vignette as more sexually willing than did female subjects. For example, men's ratings of how willing the woman was for sex when the couple went to the movie almost matched women's ratings of when the couple went back to his apartment. The authors indicate that this may be evidence that men over-rate their dates' desire to engage in sexual intercourse. In examining dates that end in unwanted sexual contact, men report feeling

led on whereas women report not wanting sexual contact to occur (Muehlenhard & Linton, 1987).

There is some evidence that men may perceive the world in a sexualized manner, more so than women (Abbey, 1982, 1987; Abbey et al. 1987; Abbey & Melby, 1986). After watching videotapes of a couple behaving in either a friendly or sexual manner, men rated couples as having more sexual interest than women rating the same couple (Shotland & Criag, 1988). The authors hypothesized that if a man approaches situations with a sexualized view of the world, they may attribute sexual motives to a woman's behavior where none was intended. In another study by Kowalski (1992), men rated the behaviors of a woman in a vignette as indicating interest in sex when her behaviors either reflected little or no interest. Abbey, Cozzarelli, McLaughlin, and Harnish (1987) attempted to identify cues that men may misperceive. They found that nonverbal behaviors such as touching, eye-contact, and close personal distance were indications of sexual interest.

The discrepancies between a man and a woman's perceptions of interpersonal cues may result in unwanted sexual advances. However, this risk may be reduced if both men and women recognize the potential for miscommunication and learn effective strategies for clearly communicating their sexual intent in dating situations.

### Token Resistance

One aspect of sexual miscommunication is referred to as "perceived token resistance" (Marx, Van Wie, & Gross, 1996). This term has been used to characterize

women's responses to men's sexual pursuits within dating situations. For example, when a man expresses a sexual interest in a woman, she may initially resist his sexual advances by saying "no." However, the token resistance theory suggests that a woman's response of "no" reflects a traditional dating role expectation rather than the woman's actual intent. Token resistance, therefore, has been defined as "saying no" to a sexual encounter when in fact one means "yes." In other words, a woman may intend to engage in sexual activity/intercourse, but communicate either verbally or nonverbally to her partner that she does not. Indeed, 39.3% of a sample of 620 college women reported that they had resisted a man's sexual advances at least once when they had wanted to engage in sexual intercourse (Muehlenhard & Hollabaugh, 1988). Furthermore, Muehlenhard and Rogers (1993) reported that 62% of their male sample believed that women exhibit token resistance prior to engaging in sexual intercourse with a new partner. Contrary to this belief, the researchers found that token resistance generally occurs when a couple has been in an ongoing relationship, and the purpose is to enliven the relationship. In fact, only 5% of their sample reported partaking in token resistance with a new partner. Shotland and Hunter (1995) found that token resistance generally occurs around the 11<sup>th</sup> date for purposes of maintaining the relationship. It is important to note, however, that although women may engage in token resistance, it is more often the case that legitimate efforts to resist sexual advances are perceived as token after the fact (Marx et al., 1996).

The literature on sexual miscommunication also suggests some communication strategies that may be more effective in protecting against unwanted sexual activity. For example, there is some evidence that explicit verbal statements about sexual intentions as

well as explicit verbal resistance lead to a lesser degree of misunderstanding regarding sexual interest (Kowalski, 1992). Explicit expressions of sexual intentions are more accurately interpreted than ambiguous messages. Specifically, women who do not offer any information regarding their sexual intentions may be at particular risk for unwanted sexual advances. Murnen, Perot, and Byrne (1989) investigated women's responses to unwanted sexual activity and found that 37.1% of their sample would do nothing if they were attacked. The 25.7% who did give a strong verbal response were able to avert an attack. Since both men and women often do not indicate their consent to sexual intercourse with an overt response (Hickman & Muehlenhard, 1999), women who do not make their statements known may be in serious danger of being misinterpreted, which may lead to rape.

In sum, the problems of sexual miscommunication are twofold. First, some women provide ambiguous feedback regarding their sexual intentions in dating situations. Coupled with the fact that some men have difficulty interpreting nonverbal and verbal cues from their dating partners, sexual communication problems are exacerbated, thus leading to increased risk for sexual assault.

### Sexual Consent

Another aspect of sexual communication consists of interpersonal concern and its influence on resistance messages. Motley and Reeder (1995) investigated the various ways in which women resist once sexual intimacy has been escalated. They found that the most common resistance messages were often ambiguous. Women in the study

expressed their concern for preserving the interpersonal relationship and concern for relational consequences as reasons for using ambiguous responses. Some women stated, “He’ll think I’m frigid if I don’t give him an excuse” or “He won’t ask me out again if I don’t let him think that we might do it later.” As a result, the authors hypothesized that when faced with ambiguous responses they do not interpret them as resistance and proceeded further with the sexual activity. Men interpreted statements such as, “I’m seeing someone else” to be “She’s telling me to not interpret our sexual intimacy as a sign of her commitment to our relationship because she’s already in a serious relationship” or “She’s asking me to be discreet and ensure that her steady guy doesn’t find out about this.” The researchers stated that when faced with an ambiguous response the receiver must guess the sender’s intention. These guesses are often based on their own agenda and how they perceive the world. As mentioned earlier men often perceive the world in a sexualized manner, much more so than women. When the authors asked how men would react to a direct “no” versus an indirect “no,” the men did not confirm the fears that women had for using an ambiguous response. Instead, they stated that they would be disappointed, a reason not mentioned by the female participants.

## CHAPTER IV

### THE PRESENT STUDY

In the current study, a videotaped scenario was used to assess sexual communication skills among a sample of undergraduate women. The study was designed to identify specific communication strategies that may serve as risk or protective factors in acquaintance rape situations. Given that women with a prior sexual victimization history are at increased risk for subsequent sexual assault, the study examined whether these women exhibit particular communication skills deficits in dating situations. Using a videotaped methodology, the current study investigated differences in behavioral responding across women who had one previous sexual victimization experience, sexually revictimized women, and women with no victimization history. Identifying behavioral risk factors may allow the development of more effective prevention programs targeted at promoting specific skills to effectively decrease the likelihood of sexual victimization. It is important to note that although this study examined behavioral risk factors that are specific to previously victimized women, this focus in no way places blame on the victim for the sexual assault/rape. The responsibility for rape always lies with the perpetrator. However, the researcher believes that teaching women to maximize their effectiveness in preventing or avoiding risky situations is a worthwhile endeavor. As previously mentioned, it has been established that acquaintance rape occurs more

frequently in college populations, and for this reason, a college sample was the focus of this investigation.

### Hypotheses

Using a validated videotaped methodology, the investigator hypothesized that differences would emerge between women who have been never victimized (NVPs), women with one (single) incident of sexual victimization (SVPs), and women with a history of repeated sexual victimization (RVPs). It was believed that differences would emerge between the groups on their perceptions of risk, the likelihood of acquiescing, and on the effectiveness of their sexual communication skills.

The specific hypotheses included in the study are as follows:

*Hypothesis 1:* Both groups of participants with a history of sexual victimization would differ from those without such a history in their likelihood of acquiescing to the man's offer to go to the bedroom. RVPs would acquiesce more than SVPs and NVPs. This assumption is based on previous research by Naugle (1999) who found that when victims with a history of sexual assault were exposed to scenes that contained greater interpersonal contact or elements of social pressure, these individuals often made choices that placed them at greater risk.

*Hypothesis 2:* SVPs and RVPs would differ from NVPs in the amount of risk they perceive in the vignette. RVPs would perceive less risk than the other two groups.

*Hypothesis 3:* SVPs and RVPs would provide more ineffective responses (e.g. ambiguous) to the man in the vignette than NVPs. In addition, it was expected that RVPs

would show a greater use of ambiguous responses when compared to the other two groups.

*Hypothesis 4:* NVPs would offer responses considered more effective (e.g., direct) to the man's offer than the other two groups of sexually victimized participants.

## CHAPTER V

### METHOD

#### Participants

Female students (N=105), ranging in age from 18 to 30, were recruited from undergraduate psychology classes and through flyers posted around Western Michigan University. Forty-seven women without a history of sexual assault in either childhood or adulthood (controls), 28 women with a history of sexual assault (assault occurring one time in either childhood or adulthood), and 30 women who have had a repeated history of sexual assault (assault occurring at least once in childhood and adulthood, or repeated incidences in childhood and/or adulthood) were included in the study. Participants were compensated by receiving extra credit with a chance to win a raffle of \$50 for their participation in the study.

#### Study Variable Definitions

In order to ascertain group membership, students completed a screening questionnaire. The following definitions were used to determine a participant's victimization history (these study definitions have been used in previous research by Naugle and colleagues and are accepted as standard definitions among sexual victimization researchers):

*Childhood sexual victimization* was defined as “sexual contact including touching or being touched by another person in a sexual way without involving sexual intercourse (i.e., kissing breast or genital fondling), and attempted or completed sexual intercourse of any type (oral, anal, or vaginal) prior to age 14 by someone of any age or relationship to the subject” (Wyatt & Newcomb, 1990). Additionally, “if the perpetrator was more than 5 years older than the subject, the incident was considered child sexual abuse” (Wyatt & Newcomb, 1990). If the age difference was less than 5 years, only contact that was not desired or involved coercion was included.

*Adolescent/adult sexual victimization* was defined as “attempted or completed forced sexual intercourse, including oral, anal, and vaginal penetration by penis, mouth/tongue, finger, or other object”(Naugle, 1999).

*Revictimization* was defined as “at least one incident of childhood sexual victimization and at least one incident of adolescent or adult victimization” or “two or more incidents of childhood sexual victimization and/or two or more incidents of adolescent or adult victimization”(Naugle, 1999).

*No history of sexual victimization* was defined as having experienced neither childhood sexual victimization nor adolescent/adult sexual victimization.

### Sample Characteristics

*Demographics.* The mean age of the participants for the entire sample was 20.19 years (SD = 2.15) with approximately 81% of the sample between the ages of 18 and 21. Thirty three percent were undergraduate sophomores, 32% were undergraduate juniors,

18.6% were first year students, and 14.4% were undergraduate seniors in college. The majority of students were White (81.4%), 5.2% were African-American, 4.1% were Asian or Pacific Islander, 4.1% were Hispanic or Latino, 1% were Native American, and 4.2% comprised the rest. Most participants (57.7%) identified themselves as single and currently dating, 30.9% identified themselves as single and not dating, 5.2% were living with a partner, 3.1% were engaged to be married, and 3.1% reported that they were already married. The majority of participants identified themselves as heterosexual (93.3%), 5.7% identified a bi-sexual orientation, and 1.0% identified a homosexual orientation. No significant differences emerged between victimized and non-victimized participants on any of the demographic variables.

#### Victimization Characteristics

Among the 58 participants with a victimization history, 12% ( $n = 7$ ) reported experiencing child sexual abuse only, 36% ( $n = 21$ ) reported experiencing adolescent/adult sexual victimization only, and 52% ( $n = 30$ ) reported being revictimized.

#### Childhood Sexual Victimization

For participants who reported any history of childhood sexual victimization ( $n = 33$ ), 36% ( $n = 12$ ) endorsed other non-relative (e.g. boyfriend) as the perpetrator, 21% ( $n = 7$ ) endorsed another relative (e.g. uncle, cousin) as the perpetrator, 12% ( $n = 4$ ) endorsed their sibling as the perpetrator, 9% ( $n = 3$ ) participants endorsed their father or stepfather as the perpetrator, 9% ( $n = 3$ ) endorsed a neighbor as the perpetrator, 6% ( $n =$

2) endorsed a stranger as the perpetrator, 3% ( $n = 1$ ) endorsed their mother as the perpetrator, and 3% ( $n = 1$ ) endorsed a teacher, club leader, or camp counselor as the perpetrator. It must be noted that participants could endorse more than one perpetrator, which indicates that these categories are not mutually exclusive. The mean age of onset for sexual abuse experienced in childhood was 8.40 years ( $SD = 3.68$ ). The mean duration of sexual abuse experiences in childhood was 22.22 months with a range of one incident to victimization that occurred for 5 years. Frequencies for the occurrence of childhood sexual victimization experiences are listed in Table 1. Of the participants who reported childhood sexual abuse experiences 10.7% indicated that the perpetrator used some degree of physical force to coerce her into sexual activity.

Table 1  
Frequency of Occurrence for Childhood Sexual Victimization Experiences

	Percent	<u>N</u>
Once during childhood	40.7%	11
Two or three times during childhood	33.3%	9
Several times per year	14.8%	4
Once per month	7.4%	2
Daily	3.7%	1

#### Adolescent/Adult Sexual Victimization

Of the participants who indicated abuse as an adolescent or adult, these individuals reported a total of 112 incidents where 50% ( $n = 56$ ) reported incidents of

abuse by a boyfriend, former boyfriend, or date, 34% ( $n = 38$ ) reported incidents by a friend or acquaintance, 7% ( $n = 8$ ) reported abuse by a stranger, 4.5% ( $n = 5$ ) reported incidents by a co-worker, 1.8% ( $n = 2$ ) reported abuse by someone other than the immediate family, 1.8% ( $n = 2$ ) reported incidents by a neighbor, 1.8% ( $n = 2$ ) reported incidents by a perpetrator that was (other-non-relative), and .9% ( $n = 1$ ) reported incidents of abuse by a relative other than the immediate family. Please note that these frequencies are not to be considered mutually exclusive since a participant could report more than one perpetrator. Participants with an adult and/or adolescent sexual victimization history reported a mean age of onset for these experiences as 16.91 years ( $SD = 1.92$ ). The mean duration for sexual abuse that occurred in adolescence or adulthood was 8.85 months with a range from a single incident to victimization that occurred for six years. The frequencies of occurrence for adolescents and adult sexual victimization are displayed in Table 2.

Table 2

Frequency of Occurrence for Adolescent/Adult Sexual Victimization Experiences

	Percent	$n$
Once since their 14 <sup>th</sup> birthday	30.4%	17
Two or three times since their 14 <sup>th</sup> birthday	41.1%	23
Once per year	7.1%	4
Several times per year	8.9%	5
Once per month	8.9%	5
Daily	3.6%	2

Participants with a victimization history 33.3% ( $n = 19$ ) reported that the perpetrator used physical force to coerce the participant into sexual activities. Over half 60.9% ( $n = 14$ ) of the RVPs reported that their perpetrator used physical force to complete these acts. Victimized participants 38.6% ( $n = 22$ ) reported that the perpetrator used alcohol at the time of the assault, and 36.8% ( $n = 21$ ) reported that they were under the influence of alcohol. Ten women (17.5%) reported feeling afraid of being seriously injured or killed during the assault.

## Measures

### Personal Data Survey (PDS; Naugle, 1999)

The Personal Data Survey (PDS) is a self-report inventory designed by Naugle (1999) to gather standard demographic information such as age, ethnicity, relationship status, current sexual practices, and attitudes about sex.. In addition, the PDS assesses the subjects' victimization experiences using behaviorally specific questions from several well-validated research instruments: *National Women's Study Victimization Screening*, *Wyatt Sexual History Questionnaire*, and the *Sexual Experiences Survey*.

1. *Sexual Experiences Survey* (SES; Koss & Oros, 1982). This 12-item survey is used to assess participants' experiences regarding various forms of both sexual aggression and victimization. This scale was normed on 3,862 college men and women and has a test-retest value of .93 after one week (Koss & Gidycz, 1985).

2. Wyatt Sexual History Questionnaire (WSHQ; Wyatt, 1988). This questionnaire is a self-report instrument that asks questions regarding previous childhood sexual abuse, age of onset for the abuse, identity of the perpetrator, presence of alcohol, and the amount of force used by the perpetrator (Wyatt, 1985; Wyatt & Newcomb, 1990)

3. National Women's Study Victimization Screening (NWSVS; Resnick, Kilpatrick, Dansky, Saunders, & Best, 1993). This instrument was developed to identify the risk factors for rape, physical assault, and posttraumatic stress disorder (PTSD) in a national sample of 3,006 women (Acierno, Resnick, Kilpatrick, Saunders, & Best, 1999).

Sexual Assertiveness Scale (SAS; Morokoff et al., 1997)

This is a self-report questionnaire that uses a 5-point Likert scale to evaluate an individual's ability to be sexually assertive with dating partners.

Rape Myth Acceptance Scale (RMAS; Burt, 1980)

This scale consists of 19 items and utilizes a Likert scale format. It was designed to measure the individual's beliefs regarding cultural myths and stereotypes pertaining to rape, rape victims, and rapists.

Sexual Communication Survey (SCS; Hanson & Gidycz, 1993)

This is a self-report questionnaire that uses a 7-point Likert scale to measure an individual's perceptions regarding their ability to communicate sexual intentions clearly

in dating situations. This instrument evaluated the differences in ability to respond to potentially high risk dating situations.

Dating Behavior Survey (DBS; Hanson & Gidycz, 1993)

This is a self-report questionnaire that is designed to measure the degree to which participants' engage in risky behaviors in dating situations. This instrument evaluated differences in high risk dating behavior.

MMPI-II (K-Scale)

Items from the K-scale were selected to determine subjects' tendency to deny symptoms.

PTSD Symptom Scale-Self Report (PSS-SR; Foa, Riggs, Dancu, & Rothbaum, 1993)

This 17-item questionnaire is a brief screening measure of Posttraumatic stress symptoms (Foa, et al., 1993). The authors report excellent convergent validity with the Structured Clinical Interview for DSM-III-R PTSD Module (SCID; Spitzer & Williams, 1986) high test-retest reliability, good concurrent validity, and adequate internal consistency. This instrument will be used to evaluate the degree to which participants may be experiencing post-traumatic stress disorder symptoms.

### Videotaped Vignette (Maher, 2003)

This vignette was developed by the author for use in this study. The video segment includes a man and a woman who have met at the bar after an English exam. The two return to the man's home after a few drinks at the bar. There is mild physical contact in which the man gives the female a foot massage. At the conclusion of the segment the man sexually propositions the woman. (See Appendix A for script.)

### Vignette Rating Questionnaire (VRQ; Naugle, 1999)

This measure was modified from Naugle (1999) for use in this study. The VRQ was designed to measure participants' reactions to the vignette as well as their ratings of the dimensions of risk and social pressure depicted in the vignette. In addition, participants were asked to provide a rating of how realistic they perceive each vignette to be using a 5-point Likert rating scale. The VRQ asked participants to rate various dimensions of their reactions to the videotaped situation. Using a 7-point rating scale participants were asked to rate the level of interpersonal risk they perceive in the vignette, the degree of social pressure or degree of supportiveness they perceived to be represented by the man in the vignette, their level of comfort, their level of anxiety, their level of sexual arousal, and the degree to which they were romantically interested in the man represented in the vignette.

### Behavioral Assessment of Risk Recognition (BARR) Coding System (Naugle, 1999)

The coding system for the BARR was designed to assess the behavioral responding on the part of the participants. The BARR coding system originally was developed by Naugle (1999) and was utilized in previous research. The coding system used in the current study is a modification of the original BARR coding system (Appendix B). Specifically, the coding system includes categories for determining whether a participant's response clearly declines the advances of the man depicted in the vignette, clearly accepts the advances, or is an ambiguous response. The coding system was also designed to classify additional explicit statements given by participants regarding social pressure, identification of potential positive and negative consequences, utilization of other people in dealing with the situation, and identification of additional risk factors represented in the vignette. Given that this study introduced videotaping of subjects' responses as a method for gathering data, the original BARR coding system was revised to capture both verbal and nonverbal responses for each subject.

The current study utilized three doctoral students in clinical psychology to code each subject's response. All three coders were blind to the victimization status of each participant. Cohen's Kappa coefficient (Cohen, 1965) was utilized to calculate agreement because it is especially suited for categorical data (Kazdin, 1982). When agreement surpasses the expected chance level ( $k = 0$ ),  $k$  will exceed 0 and approaches a maximum of +1.00 (Kazdin, 1982). Using kappa to calculate the agreement between the coders, the inter-rater reliability was 0.657. According to Kazdin (1982), generally a

kappa of 0.80 is considered excellent inter-rator reliability. Kappa values for each of the coding categories can be viewed in Table 3.

There appears to be excellent agreement for coding categories that contain verbal responses (e.g., subject refers to the duration of the relationship in arriving at her decision,  $\underline{k} = 0.959$ ). However, the coding categories for nonverbal responses often yielded unacceptable levels of agreement (e.g. voice volume,  $\underline{k} = 0.193$ ). One reason for this occurrence may be that as nonverbal behavior becomes more complex, the more difficult it became for coders to reach agreement. Due to this variability each coder was compared to all other coders, and values were chosen based on which pair of coders obtained the highest agreement. These values are listed in Table 4.

## Procedure

### Validation of the Videotaped Vignette

*Expert Raters.* In order to ensure the validity of the scenario, five expert raters were chosen to review the script before the video went into production. Raters were chosen based on their knowledge, expertise, and reputation in the sexual victimization community. Expert raters reviewed the vignette based on the following criteria: Realism, Interpersonal Risk, Interpersonal Benefit, Social Support, Relevance to Assessing Risk Factors, and Relevance to Assessing Communication Skills. The information obtained aided in establishing the validity of the vignette rather than basing it on face valid decisions made by the experimenter. Based on expert ratings, the vignette appeared to be a good test of the variables utilized in this study (see Table 5).

Table 3

## Kappa Values for Individual Coding Categories

Coding Category	Kappa Value (k)
1) Subject does not follow rules for response	0.738
2) Subject explicitly acquiesces to offer or accepts the offer	1.0
3) Subject explicitly declines the offer	0.559
4) Subject offers an ambiguous decision to the offer	0.528
5) Subject proposes an alternative option to the man's offer	0.814
6) Subject identifies other risk factors depicted in the scene (i.e., alcohol, social isolation, not knowing the man, misinterpretation of intentions)	0.919
7) Subject labels the potential consequences as positive	1.0
8) Subject labels the potential consequences as negative	0.741
9) Subject explicitly recognizes social pressure contingencies	1.0
10) Subject identifies a general rule for what an individual would do in a similar situation.	0.375
11) Subject rationalizes or justifies her decision by extrapolating information not shown in the vignette.	0.529
12) Subject explicitly refers to issues of personal safety	0.757
13) Subject expresses a desire to avoid negative social consequences	1.0
14) Subject appeals to her own or others' experiences to arrive at her decision	0.795
15) Subject refers to the duration of the relationship in arriving at her decision.	0.959
16) Subject comments on the ineffectiveness of the man's strategy	0.757
17) Subject indicates that she has a boyfriend	1.0
18) Subject leaves open the possibility of a future relationship	0.841
19) Subject indicates or alludes to the possibility of a future relationship.	0.841
20) Subject indicates a nonverbal statement or behavioral course of action.	0.694
21) Subject comments on the qualities of the man depicted in the vignette.	0.795
22) Coder Decision (Did subject say yes or no)	1.0
23) Eye Contact	0.379
24) Smiles	0.534
25) Voice Volume	0.193
26) Voice Inflection	0.272
27) Fluency of Speech	0.199
28) Position of Head/Neck	0.443
29) Laughs	0.795
30) Subject touches face or puts hands on face (at some point during the clip)	0.785
31) Subject plays with or touches hair (at some point during the clip)	0.808
32) Winks (at some point during the clip)	1.0
33) Raises Eyebrows (at some point during the clip)	0.694
34) Subject performs other nonverbal behaviors during the segment	0.449

Table 4

Kappa Values by Coder Pairs (e.g. Coder A vs. B; A vs. C; B vs. C)

Coding Category	AB	AC	BC
1) Rules	0.738	—	—
2) Accept	1	1	1
3) Decline	0.348	0.539	0.344
4) Ambiguous	0.383	0.455	0.528
5) Alternative Option	0.790	0.666	0.814
6) Risk	0.919	0.840	0.840
7) Positive	1	—	—
8) Negative	0.322	0.741	0.493
9) Pressure	1	0.662	0.662
10) Rule	0.015	0.375	0.237
11) Extra	0.375	0.321	0.529
12) Safety	0.757	0.543	0.391
13) Social Consequences	1	—	—
14) Other	0.657	0.795	0.795
15) Duration	0.919	0.918	0.959
16) Ineffectiveness	0.680	0.757	0.595
17) Boyfriend	1	0.662	0.662
18) Future Relationship	0.718	0.841	0.773
19) Contraception	1	—	—
20) Nonverbal	0.694	0.594	0.594
21) Qualities of the man	0.386	0.657	0.795
22) Coder Decision	—	—	1
23) Eye Contact	0.379	0.320	0.314
24) Smiles	0.531	0.534	0.488
25) Volume	0.193	—	—
26) Inflection	0.152	0.260	0.272
27) Fluency	—	0.199	—
28) Position of Head	0.316	0.443	0.329
29) Laugh	0.736	0.795	0.708
30) Touches Face	0.694	0.785	0.590
31) Plays with hair	0.729	0.808	0.936
32) Winks	1	1	1
33) Brows	0.551	0.605	0.694
34) Other	0.449	0.164	0.290

Table 5

Summary of Expert Rater Data for Vignette (n=5)

Realism Rating (1=entirely realistic; 5=not at all realistic)	Interpersonal Risk Rating (1=extremely risky; 8=not at all risky to 8 scale)	Interpersonal Benefit Rating (1=extremely likely; 5=not at all likely)	Supportive Rating (1=extremely supportive; 5=not at all supportive)	Relevance to Assessing Risk Factors (1=extremely relevant; 5=not at all relevant)	Relevance to Assessing Communication skills (1=extremely relevant; 5=not at all relevant)
<u>M</u> 1.8	<u>M</u> 2.8	<u>M</u> 4	<u>M</u> 4.6	<u>M</u> 2.2	<u>M</u> 2.6

Participant Selection

Prior to entering the classroom, the investigator approached undergraduate psychology instructors and obtained permission to solicit participants for the study. Extra credit was made available to students for participating in the study, and instructors offered alternative extra credit opportunities to alleviate any pressure to participate in the current study. The investigator then made a general announcement regarding the study to each approved classroom (Appendix C). Informational flyers were passed out (see Appendix D) and interested students made an appointment with either the student investigator and/or approved research assistant from the Trauma Research lab on the main campus of Western Michigan University. Participants were allowed to arrange a time that was convenient for them.

## Research Procedure

The research study took place in the Research Commons area of the Trauma Research Laboratory in 2505 Wood Hall. Upon arriving for their appointment, subjects were greeted by the student research assistant. The subject was then escorted to a private experimental room containing a table, chair, VCR and monitor, and video camera. At the beginning of the session, the study was explained in full and the participant had the opportunity to provide informed consent. At this point each participant was assigned a subject number. This code number was used to keep track of the data collected for each individual participant. Therefore, the participant's name was not associated with their data in any way.

Upon obtaining informed consent (see Appendix E), the participants were given instructions regarding the first portion of the experimental task (see Appendix F; Instructions have been modified from Naugle, 1999). The participants were asked to view a 5-minute videotaped vignette depicting a dating scenario (see Appendix A). The vignette represented a role-play of a social interaction that could occur in the real world and that contained material specific to sexual communication. However, no explicit sexual material or physically coercive interactions were included. The scenario ends with the man propositioning the woman. Following the vignette, the subsequent message appeared on the video monitor: "Say what you would say in this situation, now." Each subject was instructed to verbally respond to the situation they had just watched. These verbal responses were videotaped in order to later analyze the verbal data provided. Additionally, subjects were asked to complete a brief questionnaire about their reactions

to each videotaped situation. Participants viewed the vignette and complete the rating questionnaire individually with a research assistant present.

After completing the vignette rating form, the student research assistant asked the participant, “Based on what you said after watching the scenario, was your intention to go to the bedroom, yes or no?” If the participant stated “No,” the research assistant then asked, “Pretend for a moment that you did want to go to the bedroom with the guy. What would you say to him? Remember to say what you would actually say if you were in this situation.” The participant’s verbal response was again videotaped. If after the ‘yes or no’ prompt the participant said “Yes,” the research assistant followed up by saying “Pretend for a moment that you did not want to go to the bedroom with the guy. What would you say to him? Remember to say what you would actually say if you were in this situation.” Again, the participant’s verbal response was videotaped. Participants were then asked about their willingness to allow their videotaped data to be utilized in future research projects. If participants agreed to allow their data to be utilized, they indicated their consent in writing (see Appendix G). Participants were then given a list of referral sources (See Appendix H) with their code number written in the top right hand corner. Each subjects was given her code number in case she felt initial pressure by the researcher to allow her data to be used in future studies. This enabled her to call the researchers at a later date should she change her mind about where her data could be used. Without this code number it would not have been possible to identify the subject.

Following viewing and responding to the videotaped scenario, subjects were asked to answer eight paper and pencil measures. These measures took approximately 45 minutes to complete. Subjects were then dismissed.

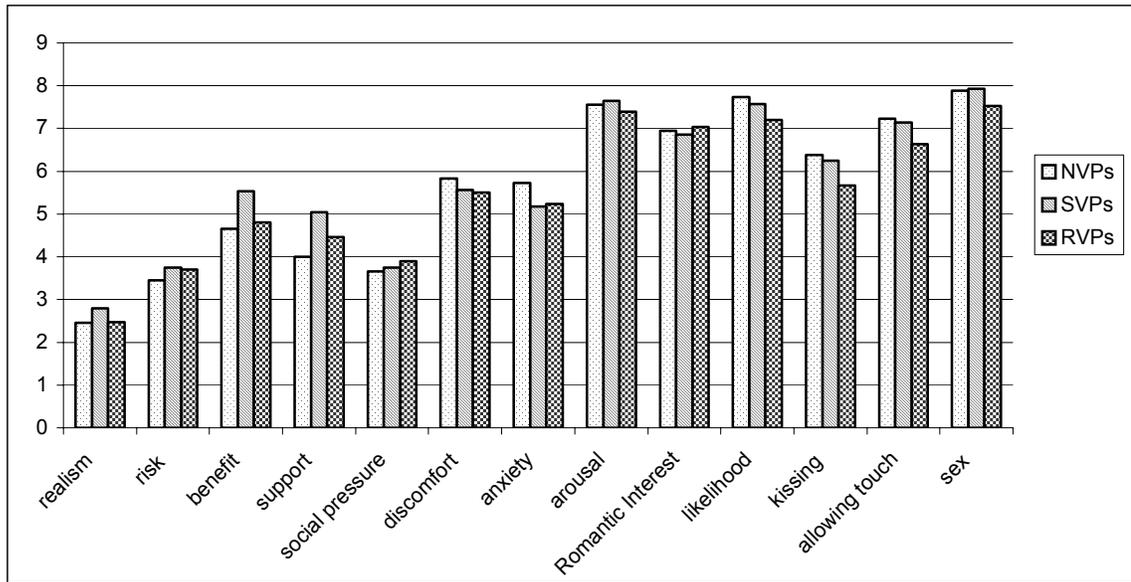
Following data collection, the investigator scored and entered all data from the paper and pencil measures into a computer database. Again, only subject code numbers were used to track the data. Information collected from the Personal Data Survey (PDS) was used to determine placement of subjects into their respective groups (i.e., non-victimized, victimized, and revictimized). The videotaped data was viewed and coded by three research assistants. A coding system modified from previous research (Naugle, 1999; Appendix B) was used to code and analyze the videotaped responses of the participants.

## CHAPTER VI

### RESULTS

#### Differences on Ratings of the Videotaped Vignette

Independent sample t tests were conducted to assess differences on VRQ Ratings across victimized and non-victimized participants. Given that there were no differences between single and revictimized participants on these ratings, these two groups were combined to form the victimized group VP ( $n = 58$ ). Contrary to what was hypothesized there were no differences between VPs and NVs on their ratings of risk depicted in the vignette. However, both VP and NVP groups rated the vignette as moderately risky. Although not statistically significant, VPs indicated that they were more likely to join the man in the bedroom than NVP's ( $F = 8.409$ ;  $p = 0.067$ ). This finding supports the first hypothesis in that VPs would be more likely to acquiesce than NVPs. The only statistically significant finding was that NVPs rated the man in the vignette as more supportive than VPs ( $F = 2.275$ ,  $p = 0.014$ ). The mean ratings for all VRQ items are displayed in Figure 1 and summarized in Table 6.



Note: The scale for the Realism rating is from 1 to 5 (1 = entirely realistic; 5 = not at all realistic). For all other rating scales items range from 1 to 8 (e.g., 1 = extremely risky; 8 = not at all risky).

Figure 1. Participant VRQ Ratings for the Vignette by Victimization Status.

Table 6  
Summary of VRQ Data Between NVPs, SVPs, and RVPs

VRQ Category	NVP		SVP		RVP		p
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	
Realistic	2.45	.85	2.79	.92	2.47	.78	0.295
Interpersonal Risk	3.45	1.25	3.79	1.38	3.70	1.47	0.573
Interpersonal Benefit	4.66	1.66	5.54	1.79	4.80	1.32	0.074
Support	4.00	1.35	5.04	1.79	4.47	1.55	0.017*
Social Pressure	3.66	1.82	3.75	1.67	3.90	1.63	0.838
Discomfort	5.83	1.80	5.57	1.83	5.50	2.06	0.721
Anxiety	5.72	1.83	5.18	1.70	5.23	1.87	0.348
Arousal	7.55	0.95	7.64	1.10	7.40	1.07	0.657
Romantic Interest	6.94	1.49	6.86	1.65	7.03	1.25	0.901
Likelihood of Joining Male	7.74	0.64	7.57	0.92	7.20	1.61	0.602
Arousal	7.55	0.95	7.64	1.10	7.40	1.07	0.095
Kissing	6.38	1.76	6.25	2.15	5.67	2.07	0.284
Allowing Touch	7.23	1.03	7.14	1.51	6.63	1.88	0.191
Sexual Intercourse	7.89	0.48	7.93	0.26	7.52	1.21	0.093

\* denotes a statistically significant result

Analyses of Participant Behavioral Responses to the Videotape Vignette

The BARR Categorical Coding System was utilized to analyze the behavioral responses for subjects across all victimization status. Since this system makes use of categorical data (e.g., “Yes,” “No,” or “Ambiguous”) normality of data across groups cannot be assumed. Therefore, chi-square analysis, a non-parametric technique, was deemed the best statistical strategy for analyzing the data. None of the subjects explicitly accepted the man’s offer to go to the bedroom. The only category that approached statistical significance was the category, “Subject plays with hair or touches hair, glasses, or earrings.” NVPs were more likely to touch their hair, glasses or earrings at some point in the clip than VPs ( $\chi^2(2, N = 104) = 3.357; p = 0.06$ ). The chi-square analyses for the vignette coding categories are shown in Table 7.

Table 7

Chi-Square Analyses on BARR Differences Between VPs and NVPs for the Vignette

Coding Category	Percent Yes in Each Group				
	VPs	NVPs	$\chi^2$	df	p
1) Subject does not follow rules for response	34.5	21.3	2.219	1	0.136
3) Subject explicitly declines the offer	84.5	87.2	0.160	1	0.689
4) Subject offers an ambiguous decision to offer	63.8	66	0.053	1	0.817
5) Subject proposes an alternative option to the man’s response	17.2	27.7	1.730	2	0.421
6) Subject identifies other risk factors in scene	41.4	40.4	0.010	1	0.921
8) Subject labels the potential consequences as negative	5.2	4.3	0.048	1	0.826
9) Subject explicitly recognizes social pressure contingencies	0	2.1	1.246	1	0.264
10) Subject identifies a general rule for what an individual should do in a similar situation.	13.8	17	0.209	1	0.647
11) Subject extrapolates info not shown in the vignette	13.8	14.9	0.026	1	0.873
12) Subject explicitly refers to issues of personal safety	8.6	12.8	0.476	1	0.490

Table 7 — Continued

Coding Category	Percent Yes in Each Group				
	VPs	NVPs	$\chi^2$	df	p
14) Subject appeals to her own or others' experience	3.4	2.1	0.163	1	0.686
15) Subject refers to the duration of the relationship	41.4	38.3	0.103	1	0.749
16) Subject comments on the ineffectiveness of the man's strategy	8.6	12.8	0.476	1	0.490
17) Subject indicates that she has a boyfriend	0	2.1	1.246	1	0.264
18) Subject leaves open the possibility of a future relationship	8.6	14.9	1.009	1	0.315
20) Subject indicates a nonverbal statement or behavioral course of action	8.6	8.5	0.000	1	0.984
21) Subject comments on the qualities of the man depicted in the vignette	3.4	2.1	0.163	1	0.686
22) Coder decision (whether they thought subject said no)	96.6	95.7	1.394	2	0.498
23) Eye-contact					
No/little eye-contact	3.5	8.7	1.385	2	0.500
Some avoidance of eye-cont	40.4	34.8			
Appropriate eye-contact	56.1	56.5			
24) Smiles					
No smiling	43.9	47.8	0.219	2	0.896
Some smiling	36.8	32.6			
Smiles throughout response	19.3	19.6			
25) Volume					
Soft; barely audible	22.4	8.7	4.628	2	0.099
Easily audible	77.6	89.1			
Loud, over normal	0	2.2			
26) Inflection					
Voice goes up like a question	5.2	2.2	0.624	1	0.430
Appropriate inflection	94.8	97.8			
27) Fluency					
Frequent use of ahs, ums, oh	19.6	24.1	1.523	2	0.467
Moderate non-fluent speech	0	2.2			
Minor or no use of expletives	75.9	78.3			
28) Head position					
Tilts head to the side	1.7	0	1.785	2	0.410
Head position is straight	69.0	60.9			
29) Laughs					
Yes	69.0	69.6	0.004	1	0.948
No	31.0	30.4			
30) Touches Face					
Yes	6.9	8.7	0.117	1	0.732
No	93.1	91.3			
31) Plays w/ hair, glasses etc.					
Yes	87.9	97.8	3.537	1	0.060*
No	12.1	2.2			

Table 7 — Continued

Coding Category	Percent Yes in Each Group				
	VPs	NVPs	$\chi^2$	df	p
32) Winks					
Yes	100	95.7	2.571	1	0.109
No	0	4.3			
33) Raises Eyebrows					
Yes	41.4	41.3	0.000	1	0.994
No	58.6	58.7			
34) Other behaviors					
Yes	56.9	54.3	0.068	1	0.795
No	43.1	45.7			

\* approaching significance.

### Self-Report Data

#### Sexual Assertiveness Scale

In order to determine whether differences among the three groups existed on sexual assertiveness, one-way ANOVAs were conducted on the total scores and subscales of the SAS. The results were statistically significant for the SAS total score ( $F(2,100) = 7.288, p = 0.017$ ) indicating that the groups were different with respect to their sexual assertiveness. Post-hoc analyses utilizing the Tukey test with significance set at the 0.05 level was used to examine this finding as well as subsequent findings using ANOVA. Post-hoc differences were found between NVPs and RVPs, with NVP's achieving the highest total score ( $M = 67.30, SD = 8.67$ ) and RVPs ( $M = 61.27, SD = 10.31$ ) scoring the lowest which indicated that RVPs had lower levels of sexual assertiveness. On the subscales of the SAS, statistical significance ( $F(2,102) = 3.691, p = 0.03$ ) was found for the Refusal Subscale with NVPs scoring ( $M = 25.74; SD = 3.83$ ) higher than RVPs ( $M = 22.97; SD = 5.88$ ), indicating that they have a greater ability to refuse than RVPs.

Statistical significance ( $F(2,102) = 4.422, p = 0.024$ ) was also found for the STD-Pregnancy Prevention subscale, with NVPs scoring higher ( $M = 25.47; SD = 6.00$ ) than RVPs ( $M = 21.57; SD = 6.51$ ) which indicates that NVPs are more likely to use prevention methods. Additionally statistical significance was not found for the Initiation subscale ( $F(2,102) = 0.381, p = 0.672$ ) indicating that the groups did not differ on their initiation of sexual behavior. The results of the analyses are shown in Table 8 and displayed in Figure 2.

### Sexual Communication Scale

One-way ANOVA was used to examine results of the total score on the SCS scale to determine whether there were differences in how the three groups communicate sexually. Statistical significance was found for the total score ( $F(2,100) = 6.622, p = 0.012$ ) indicating that all three groups were different with regards to their sexual communication. Pos-hoc analyses utilizing the Tukey test indicated that NVPs ( $M = 55.04, SD = 6.27$ ) achieved higher scores than RVPs ( $M = 50.53; SD = 7.60$ ). Therefore, NVPs had a greater ability to clearly communicate sexual intentions in a dating situation more so than RVPs. The results of the analyses are shown in Table 8 and displayed in Figure 2.

### Rape Myth Acceptance Scale

No statistically significant differences emerged on the RMAS ( $F(2,99) = 2.317, p = 0.126$ ). However, the SVP group ( $M = 37.00, SD = 8.71$ ) and the RVP groups ( $M =$

40.93,  $SD = 11.76$ ) obtained lower scores than the NVP group ( $M = 42.43$ ,  $SD = 11.73$ ). This signifies that participants with a victimization history are less likely to accept rape myths than NVPs. The results of the analyses are shown in Table 8 and displayed in Figure 2.

#### MMPI-2, K-scale

In order to determine whether groups differed in how favorably they attempted to present themselves, a one-way ANOVA was conducted on the T-scores of the MMPI-2. Results were not statistically significant which indicated that all three groups ( $F(2,97) = 1.849$ ,  $p = 0.163$ ) did not differ on how they attempted to present themselves. The results of the analyses are shown in Table 8 and displayed in Figure 2.

#### Dating Behavior Scale

A one-way ANOVA was performed to examine the differences among scores on the Dating Behavior Scale. This analysis revealed no significant differences among groups ( $F(2,102) = 1.680$ ,  $p = 2.54$ ) indicating that all three groups were similar with regards to the amount of risky behavior participants reported that they engage in their dating behavior practices. The results of the analyses are shown in Table 8 and displayed in Figure 2.

## PTSD Symptom Scale Self-Report

A one-way ANOVA was conducted to examine differences in post-traumatic symptoms across victimization status. Results on the total score were not statistically significant ( $F(2,102) = 2.079, p = 1.54$ ) indicating that the groups did not differ in terms of their overall PTSD symptoms. Statistical significance ( $F(2,102) = 3.709, p = 0.042$ ) was found for the item that measured Intrusive Images/Memories between NVPs ( $M = 1.00, SD = 0.00$ ) and RVPs ( $M = 1.31, SD = 0.63$ ) indicating that revictimized subjects experienced more intrusions of memories from their trauma than never victimized participants. The results of the analyses are shown in Table 8 and displayed in Figure 2.

Table 8

Summary of Self-Report Data Between NVPs, SVPs, and RVP's

Self-Report Test	NVP		SVP		RVP		F	p
	M	SD	M	SD	M	SD		
SAS Total	67.30	8.67	62.33	8.27	61.27	10.31	7.288	0.017*
SAS Refusal Subscale	25.74	3.83	23.96	3.91	22.97	5.88	3.691	0.030*
SAS Initiation Subscale	16.17	3.12	16.52	2.62	16.73	2.41	.381	0.672
SAS STD/Pregnancy Prevention Subscale	25.47	6.00	22.29	6.03	21.57	6.51	4.422	0.024*
SCS: Total Score	55.04	6.27	52.46	5.80	50.53	7.60	6.622	0.012*
RMAS: Total Score	42.43	11.73	37.00	8.71	40.93	11.76	2.317	0.126
DBS: Total Score	45.49	11.26	48.32	9.21	49.90	11.52	1.680	2.54
PSS-SR: Total Score	1.72	4.48	2.07	5.65	4.17	6.10	2.079	1.54
MMPI-2 K-scale	49.58	8.85	46.32	10.57	45.52	9.62	1.849	2.42

\* denotes a statistically significant result.

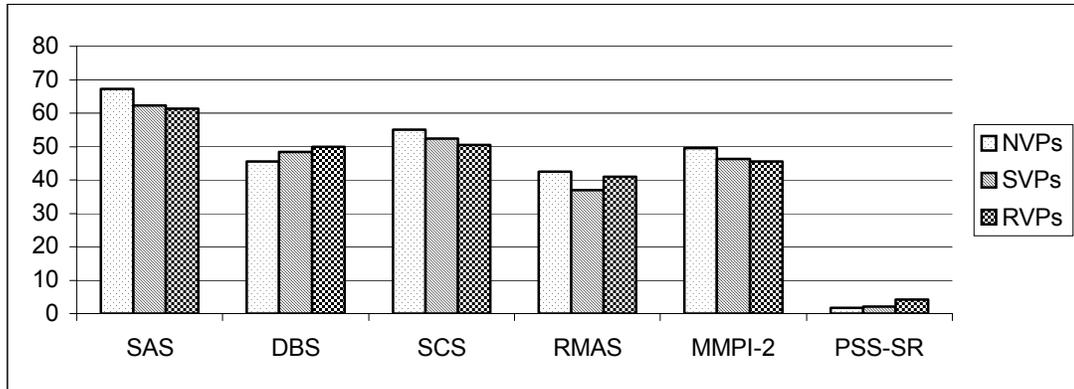


Figure 2. Participant Self-Report Measures by Victimization Status.

### Summary of Data on Sexual Activity Across Victimization Status

In addition to the hypotheses presented the investigator was interested in the number of sexual partners participants reported across victimization status. A one-way ANOVA was performed to examine the differences among groups on the number of sexual partners from past 30 days to past 5 years. No differences were found between groups in the number of sexual partner's they reported in the past 30 days ( $F(2, 102) = 2.029, p = 0.137$ ). Significant differences began to emerge at 6 months between the groups ( $F(2, 102) = 5.123, p = 0.006$ ). Participants with a repeated victimization history reported a greater number of partners ( $M = 1.70; SD = 1.60$ ) than NVPs ( $M = 0.85; SD = 0.88$ ). After 5 years, these differences became even more significant ( $F(2, 102) = 8.892, p = 0.000$ ) with RVPs reporting an even greater number of sexual partners ( $M = 6.40; SD = 7.78$ ) than NVPs ( $M = 1.87, SD = 1.84$ ).

## CHAPTER VII

### DISCUSSION

The purpose of this study was to identify behavioral risk factors that place college women at increased risk for sexual assault and revictimization for those with a history of assault. This study also refined an existing coding system in an attempt to capture behavioral differences in responding among groups. In addition, this study sought to replicate the findings found in Naugle (1999), which developed and utilized a videotape methodology. Using a similar method, it was anticipated that differences would emerge among women with various assault histories on their perception of risk, likelihood of acquiescing, and the effectiveness of communication skills. More specifically, it was hypothesized that differences would emerge on the likelihood of acquiescence to the man's offer to go to the bedroom. It was expected that SVPs and RVPs would be more likely to join the man in the bedroom than NVPs. Second, that RVPs would perceive less risk compared to NVPs and SVPs.

Although, all three groups rated the vignette as moderately risky, the SVP group and RVP group recognized the least amount of risk as compared to the NVP group. Therefore, this study was not able to replicate findings from Naugle (1999) which found that women with a victimization history perceived more risk than women without such a history. Another hypothesis stated that SVPs and RVPs would provide more ambiguous or ineffective responses than NVPs, with NVPs providing more direct responses to the

man in the vignette. Unfortunately this study was not successful in determining differences among the groups for these hypotheses. The following sections summarize the results with regards to the specific hypotheses of the study. In addition the limitations of the study as well as future directions for research are discussed.

### Videotaped Stimulus Methodology

This study utilized a videotaped stimulus methodology, which sought to examine acquiescence, risk recognition, and effectiveness of individual responses given a history or absence of history for sexual assault. A strength of this study is that it sought actual samples of behavior from individuals, rather than relying solely on self-report. Expert raters as well as participants were utilized to rate the vignette on several factors such as realism, interpersonal risk, interpersonal benefit, support, relevance to assessing risk factors, and relevance to assessing communication skills. Expert raters and subjects both agreed that the vignette contained a moderate amount of risk. As such, no differences were found between subjects on the level of perceived risk in the vignette. There are several possibilities for the lack in finding differences between subjects. One reason for this may be that individuals with a victimization history may not have difficulty detecting risk as once believed. A second reason may be that the vignette is not similar enough to real life situations in which one encounters sexual assault. Participants viewed the 5 minute vignette, which is far shorter in duration than a real life scenario such as meeting a classmate at the bar, having several drinks, and then returning to his home, a process that would last several hours. In essence one could liken it to having just met the man,

and within 5 minutes he has sexually propositioned them, an offer most women have been socially reinforced to say no. It is possible that the vignette created more of an obvious social pressure instead of a subtle dilemma for the subjects to encounter. Another reason may be that the vignette may not have been representative of real life examples of acquaintance rape. It is possible that this process happens in quite a different manner than the one developed in this study. There is a possibility that differences between subjects could have emerged if the vignette had an earlier scene in which the man and woman are at the bar and he asks her to go home with him. With this scenario subjects might have said no earlier in the evening. In fact, anecdotally some subjects made the comment that given the choice they would not have returned to the man's home. A final reason may be that the laboratory situation produced demand characteristics (e.g. social desirability) in which women felt they should respond to the man in the vignette by saying no.

#### Reliability of Coding System

The coding system developed for this study was not successful in yielding differences among NVP, SVP, and RVP groups. Coders did not agree on items where increased subjectivity was required. In addition, agreement was greater on verbal content items more than subjective nonverbal behavioral items. For example, voice volume received an agreement level of only 0.193. However, there were some nonverbal behaviors in which agreement was reached. For example, in the presence/absence of the subject winking, coders reached perfect agreement. Whether or not the subject played

with her hair also obtained an excellent agreement of 0.936. Although the existing coding system did not capture behavioral differences among participants as anticipated, this does not mean that differences did not exist. Anecdotally, during training of the coders, we were able to identify victimization status of participants beyond base rate predictions. Therefore, the subjects' videotaped responses could be re-analyzed using an alternative coding system such as Paul Ekman's system of facial analysis of emotion (Ekman, 1982). In addition, it would be interesting to operationally define what the coding trainers were attending to in their identification of victimized participants. More specifically, to which verbal and nonverbal features of participants' responses did coders attend.

### Risk Recognition

This study hypothesized that women who had not experienced sexual victimization would differ in the amount of risk they perceived in the vignette than women who had experienced some or repeated instances of sexual victimization. Further, that women with a victimization history would not identify risk factors found in the environment such as (e.g., presence of alcohol, short duration of relationship) than women who have never experienced victimization. The inability to recognize situations as containing risk may place women in danger for future victimization. It has been hypothesized that symptoms associated with PTSD (e.g., re-experiencing, hyperarousal, and avoidance/numbing/dissociation) may interfere with a woman's ability to detect risk in her environment through dissociation, or through an inability to regulate one's affect

(Cloitre, 1998). When an individual faces a situation similar to her prior sexual trauma she may dissociate by removing herself cognitively and emotionally from the current circumstance (e.g., a sexual encounter) (Cloitre, 1998). At the time of her assault, this behavior was protective in nature, and allowed her to survive the attack (Wagner & Linehan, 1998). However, several years after an assault this reaction is no longer protective and can actually place the woman at greater risk (Wagner & Linehan, 1998). If a woman with a victimization history experiences a high level of dissociation she may be unaware of her environment and especially to cues that may forewarn her to the specific risks of her environment, rendering her much more vulnerable to sexual victimization (Cloitre, 1998).

In this study, both victimized and non-victimized participants rated the vignette as moderately risky. Although most subjects indicated that they would not join the man in the bedroom, nonvictimized participants were the least likely of all three groups to acquiesce. This finding was not significant, but approached significance. In addition, few subjects commented on additional risk factors in the video such as lack of familiarity with the man, absence of roommates, or presence of alcohol, however these also did not approach statistical significance.

### Behavioral Deficits

It was also hypothesized that women with a history of victimization would be more likely to acquiesce (or join the man in the bedroom) than never victimized subjects. It was believed that victimized women, given their inadequate learning history, would not

have the skills to adequately extricate themselves from the situation than women without such a learning history. Therefore, it was hypothesized that RVPs and SVPs would exhibit greater skill deficits than NVPs. However, this study did not accurately determine this answer, in part due to the inadequacy of the coding system in capturing behavioral responding. The coding system was developed to determine an appropriate behavioral response. It was believed that an effective behavioral response would comprise of steady eye contact, appropriate voice tone/volume, minimal amounts of dysfluency, holding head in the upright position, with a minimization of distracting behaviors such as playing with hair, winking, raising eyebrows, etc. However, coders were not able to reach agreement on several categories to indicate the occurrence/nonoccurrence of these behaviors.

Although the results of this study were inconclusive, given the inadequacy of the coding system, it is still probable that focusing on behavior change and assertiveness could decrease future incidences of assault. Future sexual assault programs should incorporate behavioral components such as assertiveness training to their agenda with an emphasis on in session practice of situations similar to what a woman may face. A recent study utilizing a manual for a sexual assault prevention program with college-aged women (Yeater, 2002) failed to show improvements in decreasing revictimization using psycho-education alone. Rape prevention programs that use education as it's primary mode of transmission of information have not failed altogether. Hanson and Gidycz (1993), the first researchers to attempt to empirically validate that sexual prevention programs can decrease the incidence of future assault found that psycho-education did

lower the rate of victimization among never-victimized women. Unfortunately, this program did not reduce the incidence of women with a history of victimization.

### Future Directions for Research

Additional studies have been planned to assess behavioral risk factors that place women at risk for future sexual assault. In order to accomplish, a sample of men from several populations and locations in the country will be asked to view videotape responses of women videotaped from this study. They will be asked to rate various dimensions of female subjects' behavior as well as identify victimization status. In essence they will be asked whether they can "pick out" or select potential victims. The current study determined whether participants' responses were effective by rating their responses by coders. Future studies will rate participants responses by the actual men who women will come in contact with (college men) or by the actual men who have been incarcerated for rape. This information will prove to be valuable in determining what behavioral responses are important to modify in order to escape or avoid sexual assault. For example, it may be more important to men that women should have good eye-contact, voice volume, and clear communication of the woman's intent as indicative of an effective response. There is a possibility that given the situation of finding oneself in the basement-an assertive response or an aggressive response for that matter may not be important. An aggressive rapist might commit the crime regardless of how assertive the woman's no is in response to his offer to go to the bedroom.

It would be interesting to determine whether findings from Naugle (1999) could be replicated using the same vignettes from that study. It is possible that these vignettes would have better identified differences in behavioral responding given the subtle nature of each vignette. One of the additional issues of this study is that the vignette represented only one level of risk. Victimized subjects may respond differently to varying levels of risk be that either higher or lower amounts of risk.

Future studies could also modify the existing vignette so that there are two points where a subject can make a decision. For example, the scene could begin with the couple meeting at the bar. After a few drinks the man could invite the woman to his home before going on to a party. The participant could make the decision to stay at the bar or to leave with the man. A decision point could occur when the man asks the woman to the bedroom. It is possible that multiple decision points would better discriminate between victimized and never victimized women. The decision to venture to an isolated place, such as the man's home, has been shown by research to be a risk factor for sexual assault since there is an expectation that sexual intercourse will occur (Sawyer, Desmond, & Lucke, 1993). It is possible that women with a victimization history may be more likely, or less likely to go to the man's home if given a scenario where they are given a choice to make a decision earlier in the process.

## Conclusion

Prior research has indicated that if a woman is unable to detect risk in her environment and she does not have the necessary skills to remove herself from a

dangerous situation, she may become more vulnerable to assault (Cloitre, 1998). However, most studies have not adequately addressed this issue given the constraints of testing these theories *in vivo*. Previous studies used handwritten accounts of a man and woman on a date, and then asked participants to respond. The advent of audiotape and subsequently videotape methodology has brought sexual assault/rape research one-step closer to the natural setting. This may provide psychology with the needed answers to help women reduce the incidence of the trauma of rape and its after effects, such as PTSD, that often last a lifetime. The results of the current study indicate that women with an abuse history are able to identify risk in their environment, although slightly less than women who have never been victimized. However, given the constraints of the study it is still uncertain whether these women would identify risk soon enough in advance to remove themselves from a potentially dangerous situation. In addition, even though all women studied were able to determine a certain level of risk, it is uncertain, whether these women would be able to effectively respond to dangerous cues in the environment. Therefore, studies should continue to assess for risk recognition, focusing on the amount of risk detected in a situation, and onset of when risk is first noticed.

A final note, perpetrators of sexual assault are ultimately responsible for their actions. This study sought to identify behavioral risk factors that may serve to lower one's risk for future assault. It is recognized that future studies using men to rate the current study's responses will play a key role in determining this answer.

Appendix A  
Vignette Script

## VIGNETTE SCRIPT

INTRODUCTION: It's the beginning of the semester and you have just finished your first English Exam. At the local campus bar you recognize a guy you know casually from class. You talk together, while enjoying several drinks. You both decide to go back to his house to see his circa '70's basement.

MAN: "I'm really glad you decided to come over—I just felt that the night shouldn't end just yet.

WOMAN: "I actually was really excited to see your circa 70's basement."

MAN: "I'm especially proud of the brown paneling and 8 track stereo."

WOMAN: "I can hardly wait."

MAN: "Well, let's get inside, it's cold out here."

They enter the home.

WOMAN: "So do you have any roommates?"

MAN: "Yeah, I live with 3 other guys. There's Alex, he's a psych major, John who's a business major, and Phil who's an art major—he's also in a band."

WOMAN: "Wow that's really cool.....are they here?"

MAN: "No, Phil's at his girlfriend's, and the other two are at a party. We could go over there later if you like."

WOMAN: "That might be fun...so...let's see this famous basement."

MAN: "Would you like another beer?"

WOMAN: "Don't you think we've had enough?"

MAN: "Well how about some hot chocolate or coffee or something?" "I have Jamaican Blend."

WOMAN: "No thanks."

MAN: "I'm a freak about coffee, I feel like I couldn't survive those 8 o'clock classes without it."

WOMAN: "I'm actually more of a hot chocolate girl myself."

MAN: "Are you sure you don't want some?.....It's not a problem."

WOMAN: "No I'm fine." "So what kind of 8 tracks do you have?"

MAN: "What's really cool is that 8 tracks are so cheap, you can go to a garage sale and get them for like.... 20 cents."

The two start looking at his collection.

WOMAN: "HMMMMMM Neil Sedaka, the Village People... Ohhhh! ABBA that's awesome!"

MAN: "I think that the Village People are Phil's favorite. He likes to lift weights to that."

WOMAN: "That's kind of strange."

MAN: "Yeah."

The man puts on a tape and the two begin to listen. They sit side by side on the couch, with each stretching their legs out.

MAN: "So what did you say your major was again?"

WOMAN: "I'm Art major" pause "I never asked you what yours was."

MAN: "Pre-med."

WOMAN: "So you must know a lot about the human body."

MAN: "You could say that. In fact I just learned that there are pressure points on the foot that can help you relax, like that." He snaps his fingers.

WOMAN: "That sounds really good right now."

MAN: "Well take off your shoes and I'll show you."

The woman tilts her head with uncertainty. [Note: the camera does not show her face.]

MAN: "Come on, I don't bite."

WOMAN: "Well....., O.K." She removes her shoe from the foot closest to him.

The man starts to massage her foot.

WOMAN: “Oh my gosh that really does feel good..... you weren’t kidding.”

MAN: “Massage is actually one of my specialties.” [He continues to massage her feet and legs.]

The woman stretches her head back.

WOMAN: “Ohhhh.....I think I’m in love.”

MAN: “You know I noticed you right away tonight and I noticed you looking at me too.”

WOMAN: “There was a clock behind your head.”

MAN: “Ahh you like to tease me, don’t you.”

WOMAN: “It’s fun....., I don’t know why, but it is.”

MAN: “Well, do you want me to stop?” [He threatens in a friendly manner and takes his hands off of her.]

WOMAN: “Oh no.....please...continue.” [She motions to her legs]

MAN: “You know I’m good at lots of other things as well.”

WOMAN: “Like what?”

MAN: “Well we could go into the bedroom and find out.”

[The scene ends.]

The screen goes black and the statement appears that says either,

“SAY WHAT YOU WOULD ACTUALLY SAY IN THIS SITUATION, NOW”

Appendix B  
Coder Rating Sheet

## Coder Rating Sheet

**Coder:** \_\_\_\_\_ **Subject#:** \_\_\_\_\_

	1. Subject does not follow rules for response
	2. Subject explicitly acquiesces to offer or accepts the offer
	3. Subject explicitly declines the offer
	4. Subject offers an ambiguous decision to the offer
	5. Subject proposes an alternative option to the male's offer
	6. Subject identifies other risk factors depicted in the scene (i.e., alcohol, social isolation, not knowing the male, misinterpretation of intentions).
	7. Subject labels the potential consequences as positive
	8. Subject labels potential consequences as negative
	9. Subject explicitly recognizes social pressure contingencies
	10. Subject identifies a general rule for what an individual would do in a similar situation.
	11. Subject rationalizes or justifies her decision by extrapolating information not shown in the vignette.
	12. Subject explicitly refers to issues of personal safety
	13. Subject expresses desire to avoid negative social consequences.
	14. Subject appeals to her own or others' experiences to arrive at her decision.
	15. Subject refers to the duration of the relationship in arriving at her decision.
	16. Subject comments on the ineffectiveness of the man's strategy
	17. Subject indicates that she has a boyfriend
	18. Subject leaves open the possibility of a future relationship
	19. Subject indicates or alludes to the use of contraceptives or protection from disease
	20. Subject indicates a nonverbal statement or behavioral course of action
	21. Subject comments on qualities of the male depicted in the vignette

22. Coder opinion: Do you think the subject said yes or no? Please circle. Yes      No

**Behavioral data** *(Please circle the correct response)*

- 23. Eye Contact**  
1 = No or very little eye contact  
2 = Some avoidance of eye contact  
3 = Appropriate eye contact during the interaction
- 24. Smiles**  
1 = No smiling throughout the response.  
2 = Some use of smiling (1 to 2 smiles) throughout the response.  
3 = Subject smiles during the entire response.
- 25. Voice Volume**  
1 = Soft; barely audible  
2 = O.K. easily audible  
3 = Loud, over normal volume
- 26. Voice Inflection**  
1 = Voice goes up like a question at the end.  
2 = O.K. uses appropriate inflection
- 27. Fluency of Speech**  
Long pauses, hesitations, repetitions, and use of ah, oh, um and other expletives are considered non-fluent speech.  
1 = Frequent use of ah, oh, and um or frequent pauses  
2 = Moderate non-fluent speech  
3 = Minor or no use of expletives (ahs, ohs, or ums)
- 28. Position of Head/Neck**  
1 = Tilts head to the side  
2 = Head position is straight
- 29. Laughs** (at some point in the clip)  
1 = yes  
2 = no
- 30. Subject touches face or puts hand on face** (at some point in the clip)  
1 = yes  
2 = no
- 31. Subject plays with or touches hair, glasses, or earrings** (at some point in the clip)  
1 = yes  
2 = no
- 32. Winks** (at some point in the clip)  
1 = yes  
2 = no
- 33. Raises Eyebrows** (at some point in the clip)  
1 = yes  
2 = no
- 34. Subject performs other nonverbal behaviors during the segment**  
1 = yes  
2 = no

Appendix C  
Oral Recruitment Script

## ORAL RECRUITMENT SCRIPT

“Hello my name is \_\_\_\_\_ and I am here to ask your help in a project that I am conducting to look at factors that place women at risk for having unwanted sexual experiences. The purpose of this study is to look at factors that place women at risk for having unwanted sexual experiences. I am interested in seeing how people assess and respond to cues in the social environment in order to identify situations, environmental cues, and specific behaviors that are particularly dangerous and may make an individual more vulnerable to sexual assault. The results from this study will aid in the identification of potential risk factors associated with unwanted sexual experiences and will allow for the development of better rape prevention programs.

In order to better understand this phenomena, I need the help of female students who are willing to volunteer approximately one hour of their time to come to the Trauma Research Lab located in Wood Hall. If you choose to participate in the study, you will be asked to watch a videotaped vignette, approximately 5 minutes in length. The vignette will be a role-played representation of a male and female on a date. There are no explicit sexual material or physically coercive interactions included on this tape. At the end of the videotaped vignette you will be asked to verbally respond to the scenario you just watched. Your responses will be videotaped so that the researcher can look more closely at the information you provide. In addition, you will be asked to fill out a brief questionnaire regarding your reactions to the videotape. You will then be asked to complete several questionnaires that will explicitly ask details regarding your current and previous (child/adolescent) sexual experiences both wanted and unwanted.

To ensure privacy and to allow you to answer as honestly as possible all the information you provide will be kept completely confidential. You will sign a consent form, which will be kept separate from your questionnaire in a locked file cabinet. From there a number will be assigned to you to ensure that your name will not be associated with the information you provide during the study in any way. Remember participation in this study is completely voluntary and you may refuse to participate or withdraw without any effect on your grade in this class or your relationship to Western Michigan University and the Psychology Department. If you are interested in participating please schedule an appointment with me. You may also call and leave a message at 387-4485. Any message that you leave will be kept private and confidential. Extra-credit opportunities will be provided by your instructor. By participating you will have four chances to win \$50 in a raffle. I am available to answer any further questions here or outside of class. Thank you for your time.”

Appendix D  
Recruitment Flyer

RECRUITMENT FLYERS

**EXTRA CREDIT RESEARCH  
OPPORRTUNITY**

If you are a female between the ages of 18 and 29, you are invited to participate in a research project investigating the effects of sexual experiences on sexual communication. This study involves 1 session that will last approximately one hour in length. You must be willing to answer questions about your sexual experiences, watch a videotape of an interaction between a male and female on a date, and have your reaction videotaped. Extra-credit opportunities will be provided for by your instructor.

Please contact Sherrie Maher, M.A by phone at 387-4485 or email at [sherrie.maher@wmich.edu](mailto:sherrie.maher@wmich.edu) with questions or to make an appointment.

Appendix E

Consent Document and HSIRB Approval

## CONSENT DOCUMENT

### “Identifying Behavioral Risk Factors for Acquaintance Rape in College Women”

Principal Investigator: Amy Naugle, Ph.D.

Student Investigator: Sherrie Maher, M.A.

I have been invited to participate in a research project entitled “Identifying Behavioral Risk Factors for Acquaintance Rape in College Women” designed to analyze behavioral risk factors for sexual assault in female undergraduates with various sexual histories. It is the purpose of this project to see how people assess and respond to cues in the social environment in order to identify situations, environmental cues, and specific behaviors that are particularly dangerous and may make an individual more vulnerable to sexual assault. The results from this study will aid in the identification of potential risk factors associated with unwanted sexual experiences that will allow for the development of better rape/sexual assault prevention programs. This research is being conducted by Amy Naugle, PhD and Sherrie Maher, M.A and will serve as Sherrie Maher’s dissertation project.

I have been asked to attend a single 1 hour session at the Trauma Research Lab located at 2505 Wood Hall. If I choose to participate, I will be asked to view a videotaped vignette, approximately 5 minutes in length, of a role-played representation of a social interaction that may occur in the real world (a male and female on a date). There are no explicit sexual material or physically coercive interactions included on the tape. I will be asked to watch the vignette as if I were the female in the scenario. I will be asked to verbally respond and have my responses videotaped at the completion of the vignette in order to allow the researchers to look more closely at the information I provide. Once this has been completed, I will be asked to answer 8 questionnaires regarding general information about myself, such as my age, race, as well as more personal detailed questions about my current and previous (child/adolescent) sexual experiences both wanted and unwanted. My responses will be kept completely confidential.

As in all research, there may be unforeseen risks to the participant. If an accidental injury occurs, appropriate emergency measures will be taken; however, no compensation or treatment will be made available to me except otherwise specified in this consent form. A potential risk of my participation is that I may experience some discomfort while revealing personal information about my sexual history on the questionnaires. I may also experience discomfort from the content of the video or by having my responses videotaped. In all cases I may refuse to participate or quit from the study at any time and for any reason without effect on regular course grade or relationship with Western Michigan University or the Psychology Department. If I become significantly upset

Sherrie Maher, M.A or Amy Naugle, Ph.D. are prepared to provide crisis counseling and to make a referral if I need further counseling about this topic. I will be responsible for the cost of therapy should I choose to pursue it. All subjects will receive a referral list at the end of the study.

I may benefit from this study by receiving extra-credit for my participation. All of the information collected from me will be kept strictly confidential. My name will not be associated with any of the data. That means that my name will not appear on any papers on which this information will be recorded. The consent form will be kept separate from the questionnaire materials/videotapes and I will be assigned a code number. Electronic data will be stored on disc in the Trauma Research Lab (2505 Wood Hall) with a backup copy in the primary investigator's office (3524 Wood Hall). All data will be retained for at least three years in a locked file cabinet in the Trauma Research Lab (2505 Wood Hall). I will not be personally identified in any reports or publications that may result from this study.

If I have any questions or concerns about this study, I may contact either Amy Naugle, Ph.D at 387-4726 or Sherrie Maher, M.A at 387-4485. I may also contact the chair of Human Subjects Institutional Review Board at 387-8293 or the vice president for research at 387-8298 with any concerns that I have.

This consent document has been approved for use for one year by the Human Subjects Institutional Review Board as indicated by the stamped date and signature of the board chair in the upper right corner. Subjects should not sign this document if the corner does not have a stamped date and signature.

My signature below indicates that I have read and/or had explained to me the purpose and the requirements of the study and I agree to participate. My signature also indicates that I am at least 18 years of age.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

Consent obtained by: \_\_\_\_\_  
Initials of Researcher

\_\_\_\_\_  
Date

A copy of the Human Subjects Institutional Review Board (HSIRB) approval letter is on file in The Graduate College

Appendix F  
Instructions for Participants

## INSTRUCTIONS FOR PARTICIPANTS

Welcome the individual and verify that she is there regarding the study.

Please be seated and make yourself comfortable while I explain the study. (Review consent document with participant, obtain signature).

To ensure privacy and to allow you to answer as honestly as possible all the information you provide will be kept completely confidential. The consent document will be kept separate from your questionnaires in a locked file cabinet. From there a number will be assigned to you to ensure that your name will not be associated with the information you provide during the study in any way. Remember participation in this study is completely voluntary and you may refuse to participate or withdraw without any effect on your grade in your class or in your relationship to Western Michigan University and the Psychology Department. Extra-credit opportunities will be provided by your instructor. In addition you will have four chances to win \$50 in a raffle.”

“I now need you to carefully read and sign the consent document. As you are reading, if you have any questions, please feel free to ask me.” (obtain participant’s signature)

### **Instructions to participants for viewing the videotapes**

“First we are going to show you a videotaped vignette, approximately 5 minutes in length. This vignette is a role-play of a social interaction that could occur in the real world. At the end of the videotape you will be asked to verbally respond to the scenario you just watched. I will videotape your response so that we can look more closely at the information you provide at a later date. Please make your response as quickly as possible, remember there are no right answers. Also, remember all information will be kept strictly confidential. After watching the scenario, we will ask you to fill out a brief questionnaire about your reactions to the videotaped vignette. Before showing you the scenario let me again explain what we are asking you to do. While you are watching the videotaped scenario, I want you to watch as though you are the woman in the situation. When the videotape stops, I want you to respond to the scene again as though you are the woman in the situation. At the end of the scene you will see a prompt that says **“SAY WHAT YOU WOULD ACTUALLY SAY IN THIS SITUATION NOW?”** When this prompt appears, I will stop the video and you will say out loud what you would actually say in this situation. After you have completed your out-loud response, please complete the following rating questionnaire for the scenario you just watched and responded to. Are there any questions before we get started?”

### **Instructions to participants for giving alternative response**

Now that you have completed the rating questionnaire, let me ask you a question.

**“BASED ON WHAT YOU SAID FOLLOWING THE SITUATION, WAS YOUR INTENTION TO GO TO THE BEDROOM, YES OR NO?”**

*If the participant states “NO” say:*

Pretend for a moment that you did want to go to the bedroom with the guy, what would you say to him? I will again videotape your response. Remember to say what you would actually say if you were in the situation.

*If the participant states “YES” say:*

Pretend for a moment that you did not want to go to the bedroom with the guy, what would you say to him? I will again videotape your response. Remember to say what you would actually say if you were in the situation.

Second response is taped.

Go over permission to use data form with participant. Obtain participant’s signature.

### **Instructions to participants for screening questionnaire and questionnaires**

“The next part of the study involves answering a brief questionnaire along with a few other questionnaires regarding some of your personal experiences. The items on these questionnaires include sensitive questions about some of your past sexual experiences. Some of the questions included in this questionnaire may cause you some discomfort. You always have the option of not answering a particular question or withdrawing from participation at any time. The screening questionnaire will take approximately 15 minutes, the other questionnaires will take approximately 30 minutes. Your name will not be associated with the data in any way. I will leave you to complete the questionnaire. Please let me know when you are finished.”?

Appendix G  
Permission to Use Data Form

### Permission To Use Data Form

The principal investigator anticipates a future study that will involve examining the male's role in sexual miscommunication. In this future study, undergraduate males will be shown actual videotapes of females' responses to the videotaped scenario you just responded to. A selected sample of female responses that represent explicit acquiescent responses, explicit refusal responses, and ambiguous responses will be included in the future study. The male participants will be asked to determine: 1) if a female has consented and 2) if she has not consented to the sexual interaction; and 3) whether the videotape is an example of "perceived token resistance." In order to complete this future study, we would like your permission to use your videotaped response, should it be needed in the future research. Remember, in no way will your refusal to include your videotaped responses result in any penalty on regular course grade or relationship to Western Michigan University or the Psychology Department. If you choose to allow us to include your videotaped response, you are free to change your mind at any time. Once you have completed this form you will be given your code number. This is the only way you can be identified. You will need this number when you contact us, if you change your mind.

YES, I would allow videotaped responses to be used in future research. Please endorse all the instances that you are willing to have your videotape shown to:

- College males at Western Michigan University.
- College males at another university in Michigan.
- College males at another university outside of Michigan.
- Incarcerated males in Michigan.
- Incarcerated males outside of the state of Michigan.

NO, I would not allow videotaped responses to be used in future research.

My signature below indicates that I have read and/or had explained to me the purpose of this document.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

Consent obtained by: \_\_\_\_\_  
Initials of Researcher

\_\_\_\_\_  
Date

Appendix H  
Resource Sheet

## RESOURCE SHEET

### **Referral List**

Places that can provide a range of mental health services

#### **Outpatient Services:**

- WMU Psychology Clinic 387-8302
- WMU Counseling Center 387-1850
- Delano Clinic 226-5600
- Child & Family Psychological Services 372-4140
- Family & Children Services 344-0202
- Pine Rest Christian Mental Health Services 343-6700
- Augestesen, Kamerman, & Stark Psychological Services 324-6099
- Gryphon Place 381-1510
- YWCA Sexual Assault Program 345-3036
- Gryphon HELPLINE 381-HELP (381-4357)

#### **Inpatient Services:**

- Borgess Medical Center (Behavioral Medicine Unit) 226-4858
- Borgess Emergency 226-1010
- Bronson Center for Women 341-6100

## REFERENCES

- Abbey, A. (1982). Sex differences in attributions for friendly behavior: Do males misperceive female's friendliness? *Journal of Personality and Social Psychology*, *42*, 830–838.
- Abbey, A. (1987). Misperceptions of friendly behavior as sexual interest: A survey of naturally occurring incidents. *Psychology of Women Quarterly*, *11*, 173–194.
- Abbey, A. (1991a). Acquaintance rape and alcohol consumption on college campuses: How are they linked? *Journal of American College Health*, *39*, 165–169.
- Abbey, A. (1991b). Misperception as an antecedent of acquaintance rape: A consequence of ambiguity in communication between women and men. In A. Parrot & L. Bechhofer (Eds.), *Acquaintance rape: The hidden crime* (pp.96–112). New York: Wiley. 1991.
- Abbey, A., Cozzerelli, C. McLaughlin, K., & Harnish, R.J (1987). The effects of clothing and dyad sex compositions on perceptions of sexual intent: Do women and men evaluate these cues differently? *Journal of Applied Social Psychology*, *17*, 108–126.
- Abbey, A., & Melby, C. (1986). The effects of non-verbal cues on genders differences in perceptions of sexual interest. *Sex Roles*, *15*, 283–298.
- Abbey, A., & Ross, L.T. (1992, August). *Role of alcohol in understanding misperception in sexual assault*. Paper presented at the Hundredth Annual Meeting of the American Psychological Association, San Francisco.
- Acierno, R., Resnick, H., Kilpatrick, D.G., Saunders, B., & Best, C.L. (1999). Risk factors for rape, physical assault, and posttraumatic stress disorder in women: Examination of differential multivariate relationships. *Journal of Anxiety Disorders*, *13*, 541–563.
- Amir, M. (1972). The role of the victim in sex offenses. In Resnik, H.L., & Wolfgang, Marvin E. (Eds.), *Sexual behaviors: Social clinical, and legal aspects* (p. 448). Oxford, England: Little, Brown.
- Atkeson, B.M., Calhoun, K.S., Resick, P.A., & Ellis, E.M. (1982). Victims of rape: Repeated assessment of depressive symptoms. *Journal of Consulting and Clinical Psychology*, *50*, 96–102.

- Atkeson, B.M., Calhoun, K.S., & Morris, K.T. (1989). Victim resistance to rape: The relationship of previous victimization, demographics, and situational factors. *Archives of Sexual Behavior, 18*, 497–507.
- Browne, A., & Finkelhor, D. (1986). Impact of child sexual abuse: A review of the research. *Psychological Bulletin, 99*, 66–77.
- Burnam, A.M., Stein, J.A., Siegel, J.M., Sorenson, S.B., Forsythe, A.B., & Telles, C.A. (1988). Sexual Assault and Mental Disorders in a Community Population. *Journal of Consulting and Clinical Psychology, 56*, 843–850.
- Burt, M.R. (1980). Cultural myths and supports for rape. *Journal of Personality and Social Psychology, 38*, 217–230.
- Cloitre, M. (1998). Sexual revictimization risk factors and prevention. In V. M. Follette & J.I. Ruzek (Eds.), *Cognitive behavioral therapies for trauma* (pp. 278–304). New York: Guilford Press.
- Cloitre, M., Scarvalone, P., Difede, J. (1997). Posttraumatic stress disorder, self-and interpersonal dysfunction among sexually retraumatized women. *Journal of Traumatic Stress, 10*, 437–452.
- Cohen, J. (1965). Some statistical issues in psychological research. In B.B. Wolman (Ed.), *Handbook of Clinical Psychology*. New York: McGraw-Hill.
- Ekman, P. (1982). Methods for measuring facial action. In K.R. Scherer and P. Ekman (Eds.), *Handbook of methods in Nonverbal Behavior Research* (pp 45–90). Cambridge: Cambridge University Press.
- Emmers-Sommer, T.M., & Allen, M. (1999). Variables related to sexual coercion: A path model. *Journal of Social and Interpersonal Relationships, 16*, 659–678.
- Foa, E.B., Riggs, D.S., Dancu, C.V., & Rothbaum, B.O. (1993). Reliability and validity of a brief instrument for assessing posttraumatic stress disorder. *Journal of Traumatic Stress, 6*, 459–473.
- Follette, V.M., Polusny, M.M., Bechtle, A.E., & Naugle A.E. (1996). Cumulative trauma effects: The impact of child sexual abuse, adult sexual assault, and spouse abuse. *Journal of Traumatic Stress, 9*, 15–25.
- Furby, L., Fischhoff, & Morgan, M. (1990). Preventing rape: How people perceive the options for assault prevention in E. Viano (Ed.), *The victimology research handbook* (pp. 227–259). New York: Garland.

- George, W.H., Gournic, S.J., & McAfee, M.P. (1988). Perceptions of postdrinking female sexuality: Effects of gender, beverage choice, and drink payment. *Journal of Applied Social Psychology, 18*, 1295–1317.
- Gidycz, C.A., Coble, C.N., Latham, L., & Layman, M.J. (1993). Sexual assault experience in adulthood and prior victimization experiences. *Psychology of Women Quarterly, 17*, 151–168.
- Hanson, K. (1990). The psychological impact of sexual assault on women and children: A review. *Annals of Sex Research, 3*, 187–232.
- Hanson, K.A., & Gidycz, C.A. (1993). Evaluation of a sexual assault prevention program. *Journal of Consulting and Clinical Psychology, 61*, 1046–1052.
- Harrington, N.T., & Leitenberg, H. (1994). Relationship between alcohol consumption and victim behaviors immediately preceding sexual aggression by an acquaintance. *Violence and Victims, 9*, 315–324.
- Hickman, S.E. & Muehlenhard, C.L. (1999). By the semi-mystical appearance of a condom: How young women and men communicate sexual consent in heterosexual situations. *Journal of Sex Research, 36*, 258–272.
- Hickman, S.E. & Muehlenhard, C.L. (1997). College women's fears and precautionary behaviors relating to acquaintance and stranger rape. *Psychology of Women Quarterly, 21*, 527–547.
- Himelein, M.J. (1995). Risk factors for sexual victimization in dating: A longitudinal study of college women. *Psychology of Women Quarterly, 19*, 31–48.
- Kanin, E.J. (1984). Date rape: Unofficial criminals and victims. *Victimology, 9*, 95–108.
- Kazdin, A.E. (1982). *Single-Case Research Designs: Methods for Clinical and Applied Settings*. New York: Oxford University Press.
- Koss, M.P. (1985). The hidden rape victim: Personality, attitudinal, and situational characteristics. *Psychology of Women Quarterly, 9*, 193–212.
- Koss, M.P., & Dinero, T.E. (1989). Discriminant analysis of risk factors for sexual victimization among a national sample of college women. *Journal of Consulting and Clinical Psychology, 57*, 242–250.

- Koss, M.P., Dinero, T.E., Seibel, C.A. (1988). Stranger and acquaintance rape: Are there differences in the victim's experience? *Psychology of Women Quarterly*, 12, 1–24.
- Koss, M.P., & Gidycz, C.A. (1985). Sexual experiences survey: Reliability and validity. *Journal of Consulting and Clinical Psychology*, 53, 422–423.
- Koss, M.P., Gidycz, C.A., & Wisiewski, N. (1987). The scope of rape: Incidence and prevalence of sexual aggression and victimization in a national sample of higher education students. *Journal of Consulting and Clinical Psychology*, 55, 162–170.
- Koss, M.P., & Oros, C.J. (1982). Sexual experiences survey: A research instrument investigating sexual aggression and victimization. *Journal of Consulting and Clinical Psychology*, 55, 455–457.
- Kowalski, R.M. (1992). Nonverbal behaviors and perceptions of sexual intentions: Effects of sexual connotativeness, verbal response, and rape outcome. *Basic and Applied Social Psychology*, 13, 427–455.
- Lundberg-Love, P.G., & Geffner, R. (1989). Date rape: Prevalence, risk factors, and a proposed model. In Pirog-Good, Maureen A. and Stets, Jan, (Eds.), *Violence in dating relationships: Emerging social issues* (pp. 169–184). New York: Praeger Publishers.
- Marx, B. & Gross (1995). Date rape: An analysis of two contextual variables. *Behavior Modification*, 19, 451–563.
- Maher, S.L. (Writer/Producer). (2003). *Identifying the Behavioral Risk Factors for Acquaintance Rape in College Females* [Videotaped vignette]. Unpublished doctoral dissertation, Western Michigan University, Kalamazoo, MI.
- Marx, B.P., Van Wie, V., & Gross, A.M. (1996). Date rape risk factors: A review and methodological critique of the literature. *Aggression and Violent Behavior*, 1, 27–45.
- Meadows, E. Jaycox, L.H., Webb, S. & Foa, E.B (1996). Risk recognition in narratives of rape experiences. In S.M. Orsillo & L. Roemer (Chairs), *The use of narrative methodologies to explore cognitive and emotional dimensions among women with post-traumatic stress disorder*. Symposium conducted at the meeting of the Association for the Advancement of Behavior Therapy, New York.
- Messman, T.L, & Long, P.J. (1996). Child sexual abuse and its relationship to revictimization in adult women: A review. *Clinical Psychology Review*, 16, 397–420.

- Miller, B., & Marshall, J.C. (1987). Coercive sex on the university campus. *Journal of College Student Personnel*, 28, 38–47.
- Morokoff, P.J., Quina, K., Harlow, L.L., Whitmire, L., Grimley, D.M. Gibson, P.R., & Burkholder, G.J. (1997). Sexual assertiveness scale (SAS) for women: Development and validation. *Journal of Personality and Social Psychology*, 73, 780–804.
- Motley, M.T. & Reeder, H.M. (1995). Unwanted escalation of sexual intimacy: Male and female perceptions of connotations and relational consequences of resistance messages. *Communication Monographs*, 62, 355–382.
- Muehlenhard, C.L. (1988). Misinterpreted dating behaviors and the risk of date rape. *Journal of Social and Clinical Psychology*, 6, 20–37.
- Muehlenhard, C.L., & Hollabaugh, L.C. (1988). Do women sometimes say no when they mean yes? The prevalence correlates of women's token resistance to sex. *Journal of Personality and Social Psychology*, 54, 872–879.
- Muehlenhard, C.L., Friedman, D.e., & Thomas, C.M. (1985). Is date rape justifiable: The effects of dating activity, who initiated, who paid, and men's attitude toward women. *Psychology of Women's Quarterly*, 9, 297–310.
- Muehlenhard, C.L., & Linton, M.A. (1987). Date rape and sexual aggression in dating situations: Incidence and risk factors. *Journal of Counseling Psychology*, 34, 186–196.
- Muehlenhard, C.L., & Rogers, C.S. (1993). Token resistance to sex: New perspectives on an old stereotype. *Psychology of Women Quarterly*, 22, 443–463.
- Murnan, S.K., Perot, A., & Byrne, D. (1989). Coping with unwanted sexual activity: Normative responses, situational determinants, and individual differences. *Journal of Sex Research*, 26, 85–106.
- National Victim Center and Crime Victims Research and Treatment Center (1992). *Rape in America: A report to the nation*. National Victim Center and Crime Victims Research and Treatment Center, Arlington, VA.
- Naugle, A. E. (1999). *Identifying behavioral risk factors for repeated victimization using video-taped stimulus materials*. Unpublished doctoral dissertation, University of Nevada, Reno.

- Naugle, A. E., & Follette, W. C. (1994, November). *An empirically derived functional analytic conceptualization of revictimization*. Paper presented at the annual meeting of the Association for the Advancement of Behavior Therapy, San Diego.
- Norris, J., & Cubbins, L.A. (1992). Dating drinking and rape: Effects of victim's and assailant's alcohol consumption on judgments of their behavior and traits. *Psychology of Women Quarterly, 16*, 179–191.
- Nurius, P.S. (1999). Risk perception for acquaintance sexual aggression: A social cognitive perspective. *Aggression and Violent Behavior, 5*, 63–78.
- Petretic Jackson, P.A., & Tobin, S. (1996). The rape-trauma syndrome and hidden victims. In T.L. Jackson (Ed.), *Acquaintance Rape: Assessment, Treatment, & Prevention* (93–143). Professional Sarasota, FL: Resource Press, 1996.
- Polusny, M.A., & Follette, V.M. (1995). Long term correlates of child abuse: Theory and review of the empirical literature. *Applied and Preventive Psychology, 4*, 143–166.
- Pinzone-Glover, H.A., Gidycz, C.A., & Jacobs, C.D., (1998). An acquaintance rape prevention program: Effects on attitudes toward women, rape-related attitudes, and perceptions of rape scenarios. *Psychology of Women Quarterly, 22*, 605–621.
- Resnick, H., Kilpatrick, D.G., Dansky, B.S., Saunders, B.E., & Best, C.L. (1993). Prevalence of civilian trauma and posttraumatic stress disorder in a representative national sample of women. *Journal of Consulting and Clinical Psychology, 61*, 984–991.
- Rothbaum, B.O., & Foa, E.B. (1999). Reclaiming your life after rape: Cognitive-behavioral therapy for posttraumatic stress disorder. The Psychological Corporation: New York.
- Russell, D.E. (1984). Sexual exploitation. Beverly Hills, CA: Sage.
- Sanders, B., & Moore, D.L. (1999). Childhood maltreatment and date rape. *Journal of Interpersonal Violence, 1*, 115–124.
- Sawyer, R.G., Desmond, S.M., Lucke, G.M, (1993). Sexual communication and the college student: implications for date rape. *Health Values, 17*, 11–20.
- Shotland, R.L. & Craig, J.M. (1988). Can men and women differentiate between friendly and sexually interested behavior? *Social Psychology Quarterly, 51*, 66–73.

- Shotland, R.L., & Hunter, B.A. (1995). Women's "token resistant" and compliant sexual behaviors are related to uncertain sexual intentions and rape. *Personality & Social Psychology Bulletin*, 21, 226–236.
- Spitzer, R.L., & Williams, J.B.W. (1986). Structured Clinical Interview for DSM-III-R Nonpatient version. New York: Biometrics Research Department, New York State Psychiatric Institute.
- Stormo, K.J., Lang, A.R. & Werner, G.K.S. (1997). Attributions about acquaintance rape: the role of alcohol and individual differences. *Journal of Applied Social Psychology*, 27, 279–330.
- Wagner, A.W., & Linehan, M.M. (1998). Dissociative Behavior. In V.M. Follette, J.I. Ruzek, & F.R. Abueg (Eds.), *Cognitive-behavioral therapies for trauma* (pp. 191–225). New York: Guilford.
- Warr, M. (1985). Fear of rape among urban women. *Social Problems*, 32, 238–250.
- Warr, M. (1988). Rape, burglary, and opportunity. *Journal of Quantitative Criminology*, 4, 275–288.
- Wilson, A.E., Calhoun, K.S., & Bernat, J.A. (1999). Risk recognition and trauma-related symptoms among sexually revictimized women. *Journal of Consulting and Clinical Psychology*, 67, 705–710.
- Workman, J.E. & Freeburg, E.W. (1999). An examination of date rape, victim dress, and perceiver variables within the context of attribution theory. *Sex Roles*, 41, 261–277.
- Wyatt, G.E. (1985). The sexual abuse of Afro-American and White American women in childhood. *Child Abuse and Neglect*, 9, 507–519.
- Wyatt, G.E. (1988). The relationship between childhood sexual abuse and adolescent sexual functioning in Afro-American and white American women. *Annals New York Academy of Sciences*, 528, 111–122.
- Wyatt, G.E., Guthrie, D., & Notgrass, C.M. (1992). Differential effects of women's child sexual abuse and subsequent sexual revictimization. *Journal of Consulting and Clinical Psychology*, 60, 167–173.
- Wyatt, G.E., & Newcomb, M. (1990). Internal and external mediators of women's sexual abuse in childhood. *Journal of Consulting and Clinical Psychology*, 58, 758–767.

- Yeater, E.A. (2002). An evaluation of a skills-based bibliotherapy approach for the prevention of sexual assault among college-aged women. *Dissertation Abstracts International: Section B: The Sciences & Engineering*, 63, 1056.
- Yeater, E.A., & O'Donohue, W. (1999). Sexual assault prevention programs: current issues, future directions, and the potential efficacy of intervention with women. *Clinical Psychology Review*, 19, 739–771.
- Yescavage, K. (1999). Teaching women a lesson: sexually aggressive and sexually non-aggressive men's perceptions of acquaintance and date rape. *Violence Against Women*, 5, 796–812.