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THE RELATIONSHIP BETWEEN A SEXUAL VICTIMIZATION HISTORY AND WOMENS RESPONSES TO HIGH AND LOW RISK SITUATIONS'

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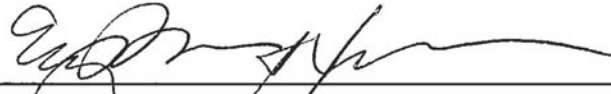
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Approved by the Thesis Committee:



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**THE RELATIONSHIP BETWEEN A SEXUAL
VICTIMIZATION HISTORY AND WOMEN'S RESPONSES
TO HIGH AND LOW RISK SITUATIONS**

BY

**THE RELATIONSHIP BETWEEN ERICA ELIZABETH NASON
B.A., PSYCHOLOGY, UNIVERSITY OF NOTRE DAME,
2006**

THESIS

Submitted in Partial Fulfillment of the
Requirements for the Degree of

**Master of Science
Psychology**

The University of New Mexico
Albuquerque, New Mexico

December, 2010

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ABSTRACT

This study evaluated the effects of a sexual victimization history, psychopathology, and sexual attitudes on the effectiveness of women's responses to high and low risk dating and social situations. Two hundred and twenty undergraduate women listened to a description of each situation, viewed a clip of an actor making a verbal prompt, and provided a videotaped, verbal response to each situation. Participants then completed measures assessing victimization status, psychopathology and sexual attitudes. Finally, participants viewed their responses and rated how effective each response was at decreasing their risk for having an unwanted sexual experience (i.e. an experience in which a woman may be verbally or physically coerced into having sexual contact of any kind with a man). Experts in the sexual violence research area also rated participants' responses using the same instructions. Regression analyses revealed that sexual attitudes were the only significant predictor of response effectiveness for both the high and low risk situations, with greater liberal sexual attitudes predicting decreased response effectiveness. However, mediational analyses indicated that liberal sexual attitudes mediated the relationship between victimization history and participants' response effectiveness to high and low risk situations. Implications for sexual assault prevention interventions are discussed.

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Introduction

The study of sexual victimization is of much importance, both because of its high prevalence rates and severe impact on victims. Research has shown federal crime statistics to be severely underestimated, with approximately three to ten rapes occurring for each incident that is actually reported (Koss, Gidycz, & Wisniewski, 1987). In addition to a failure to report incidents of victimization by most women, a number of additional factors are thought to influence the under representation of sexual victimization in national crime statistics. Such factors include the vague written or oral presentation of questions intended to assess victimization, a limited time range upon which surveys are focused, and a restricted range of events that are considered to be an incident of victimization (Koss et al., 1987).

Research has indicated that college women are at particularly high risk for sexual victimization (Koss et al., 1987; Sorenson, Stein, Seigel, Golding, & Burnam, 1987; Fisher, Cullen & Turner, 2000). Estimates of the prevalence rates within this population suggest that as many as one in ten college women have been raped (Fisher et al., 2000) and that 53.7% of college-aged women report having experienced some form of victimization, as defined by having experienced one or more victimization experiences ranging from unwanted sexual contact to rape (Koss et al., 1987).

The costs of sexual victimization are high. Physical, social, and psychological consequences have all been associated with victimization experiences. While some of the effects of victimization, such as anxiety, appear to be relatively short lived, other effects have a much more severe impact (Resick, Calhoun, Atkeson, Ellis, 1981). Depression (Ellis, Atkeson and Calhoun, 1981; Atkeson, Calhoun, Resick & Ellis, 1982), Post-

Traumatic Stress Disorder (Cloitre, Scarvalone, & Difede, 1997), sexual dysfunction (Resick et al., 1981), and impaired social adjustment (Resick, et al., 1981) are all long-term consequences associated with sexual assault.

Due to the high prevalence rates of victimization among college women, research has attempted to identify risk factors for sexual assault. A wide range of factors including alcohol use, previous sexual abuse, liberal sexual attitudes (Himelein, 1995; Yeater, Viken, McFall & Wagner, 2006), and miscommunication about sex (Muehlenhard & Linton, 1987) have been highlighted as possible risk factors for sexual victimization (Fisher et al., 2000; Himelein, 1995; Koss & Dinero, 1989). While many factors, such as those listed above, have been associated with an increased risk for victimization, the most robust predictor of future victimization is past victimization (Gidycz, Coble, Latham, & Layman, 1993; Koss & Dinero, 1989; Wyatt, Guthrie, & Notgrass, 1992). To date, the mechanisms responsible for sexual victimization and revictimization remain unclear. However, recent research has focused on two promising explanations: women's sexual risk perception and their capacity to respond effectively to sexually risky situations.

Risk Perception Deficits

Research investigating the relationship between sexual victimization and revictimization has posited that deficits in risk perception may contribute to increased risk for victimization. The empirical support for this hypothesis has been mixed, with some studies demonstrating a relationship between deficient risk perception and a history of sexual victimization and others failing to do so. These research findings follow.

In a study on college women's sexual risk perception, Norris, Nurius, and Graham (1999) asked participants to read a vignette depicting either a first or fifth date. Each

vignette varied with regard to nine dimensions of risk factors, divided into clear (e.g. physical pressure) and ambiguous (e.g. drinking alcohol) risk factors. Women then were asked to rate the point on each dimension at which they would feel “on guard,” “really uncomfortable,” and “at risk” in the vignette. Results revealed that victimized women required significantly more ambiguous risk factors to be present in the vignette before they indicated they would feel “on guard” in the situation. Interestingly, higher levels of clear risk factors needed to be present before women with less severe victimization histories indicated they would feel “really uncomfortable” or seriously at risk” in the scenario. These findings indicate that different types of risk cues may influence risk perception differently in victimized and nonvictimized women.

Wilson, Calhoun, and Bernat (1999) found that when asked to indicate the point at which the man depicted in an audiotaped date rape vignette had “gone too far,” revictimized women reporting fewer PTSD symptoms took significantly longer to identify risk than both revictimized women reporting more PTSD symptoms and nonvictimized women. The authors note that these findings are consistent with the literature in that women experiencing greater arousal symptoms associated with PTSD are likely to attend to risk across a variety of situations.

In an extension of the Wilson et al. (1999) study, women were asked to listen to the same audiotaped date rape scenario and again indicate the point at which the man depicted in the scenario had “gone too far” (Soler-Baillo, Marx, & Sloan, 2005). Consistent with previous research, this study found that victimized women took significantly longer than nonvictimized women to indicate that the man in the audio tape had “gone too far.” However, in addition to measuring women’s response latency, the

authors also measured the heart rate activity of participants as they listened to the recording. Overall, victimized and nonvictimized women's heart rates were the same over the course of the vignette; however, victimized women showed decreased physiological arousal during the initial segments of the recording. These results suggest that during the segments of the vignette in which risk is most ambiguous, and perhaps most crucial to risk perception, victimized women are less reactive physiologically to risk cues than nonvictimized women. This suggests that deficits in risk perception may be related to lower physiological arousal in women at risk for sexual victimization.

Breitenbecher (1999) asked women to watch videotaped depictions of dating vignettes and note the number of risk factors they perceived in each vignette. The women then returned after 5 months and reported any victimization experiences that occurred between Time 1 and 2. In this study, there were no group differences in identified risk factors between victimized and nonvictimized women, indicating that risk perception at Time 1 was not a predictor of Time 2 victimization.

Further, in a study by Yeater, Viken, McFall, & Wagner (2006) a sample of college men and women were presented with a series of written vignettes depicting dating and social situations. All participants were asked to rate how risky each situation was with respect to the woman described having an unwanted sexual experience. In this study, women's victimization history was unrelated to their risk ratings.

Similarly, Messman-Moore & Brown (2006) presented written vignettes depicting sexually risky dating situations to victimized and nonvictimized women. Participants were asked to indicate the point at which they would become uncomfortable in each scenario and the point at which they would leave the situation. In this study, with the

exception of women who had been victimized in childhood only, adult-only victimized, revictimized, and nonvictimized women indicated similar points at which they would become uncomfortable in the situation. Further, the point at which participants said they would leave the situation was found to be most predictive of future victimization, as measured at an 8-month follow up.

Yeater, Viken, Hoyt & Dolan (2009) also failed to find differences in risk perception between victimized and nonvictimized women. In this study, college women were instructed to read vignettes while imagining either themselves or another woman in the situation and to provide risk ratings for each vignette. Overall, women who imagined another woman rated the vignettes as being more risky than women who imagined themselves in the situations. However, victimized women did not rate the scenarios as being less risky than nonvictimized women.

Finally, in a study by Yeater, Treat, Viken and McFall (in press), undergraduate women were presented with a set of vignettes that varied on dimensions of sexual victimization risk and potential impact on women's popularity. Participants completed cognitive tasks assessing relative attention to victimization risk versus popularity impact, learning about either risk or popularity impact, and explicit classification of victimization risk. Results of the explicit classification task indicated that women with more severe victimization histories, relative to women with less severe victimization histories, classified fewer vignettes as high risk than nonvictimized women (i.e., they had a higher threshold for detecting risk). Further, these women also showed less sensitivity to victimization risk information and higher sensitivity to popularity impact information.

Taken together, it remains unclear whether deficiencies in risk perception sufficiently account for the relationship between past and future victimization. Overall, research in this area indicates that victimized women do not consistently differ in their ability to identify risk factors in a variety of stimuli. However, the wide variety of methodologies used in this research makes it difficult to draw decisive conclusions (Gidycz, McNamara, & Edwards, 2006). Further, a number of studies may have confounded women's ability to perceive risk and ability to respond by using measures that assess both processes. For example, it is important to note that Messman-Moore & Brown (2006) measured women's risk perception by asking women when they became uncomfortable and would leave the situation. Victimized and nonvictimized women provided comparable discomfort ratings but victimized women reported they would leave the situation later than nonvictimized women. Thus, these results suggest that victimized women may be able to discriminate risk but respond in ways that may increase their risk for victimization. Similarly, Wilson, Calhoun, and Bernat (1999) measured women's risk perception by asking women to indicate when a man in the audiotape had "gone too far". It is possible that women first detected risk at a point that is earlier than the point at which they decided that a man has "gone to far". Together, these findings suggest that in addition to risk perception, women's responses may also play an important role in understanding risk for victimization.

Response Effectiveness

Sexual assertiveness is a specific behavioral response that has been proposed to influence victimization risk. Specifically, higher levels of sexual assertiveness are thought to be a protective factor that decreases the likelihood that women will have an

unwanted sexual experience. In a prospective study by Greene and Navarro (1998), undergraduate women were assessed for past victimization experiences and a number of protective and risk factors associated with victimization at three points over an academic year. At Time 1, participants were asked to provide information about a number of risk and protective factors including alcohol use, attitudes about sexual activities, religiosity, and situation-specific assertiveness. Participants were also assessed for prior victimization experiences. At Times 2 and 3, participants were assessed for victimization experiences since the previous assessment and the continued presence of risk factors. Victimization experiences were found to be associated with low sexual assertiveness.

Vanzile-Tamsen, Testa, & Livingston (2005) found that although victimization history had no effect on risk perception, the behavioral responses of victimized women differed from those of nonvictimized women. In this study, women were presented with vignettes in which the degree of intimacy with the man described varied (e.g. someone they had just met or a boyfriend). Risk perception was measured by asking women to indicate their level of discomfort in each vignette. Women's behavioral intentions were measured by asking them to rate the likelihood they would perform 20 behaviors in response to each vignette. Each behavior exhibited a method of direct resistance, indirect resistance, consent, or passivity and was presented on a 7-point Likert scale. Victimized women responded to sexually risky situations with less direct forms of resistance than nonvictimized women. Of additional note, women perceived less risk and responded less proactively in situations describing a more intimate relationship with the man. That is, increased levels of intimacy with the man may inhibit women's ability to respond effectively to risk, regardless of victimization history. The authors suggested that when

women are required to respond to men who are friends or dates, the desire to maintain a relationship and avoid hurting the man's feelings may interfere with their selection of assertive responses.

In a prospective study by Livingston, Testa, & VanZile-Tamsen (2007), a sample of women were followed over the course of 2 years. During the initial assessment, women completed measures assessing lifetime victimization and sexual assertiveness, using the Refusal Assertiveness subscale of the Sexual Assertiveness Scale (Morokoff et al., 1997). One and 2-years after the initial assessment, women were asked about incidents of sexual victimization within each year period. The results of the study revealed that following a victimization experience, women showed decreased levels of sexual assertiveness. Additionally, low sexual assertiveness was shown to predict first time victimization experiences. That is, low levels of sexual assertiveness increased the likelihood of victimization while victimization, in turn, decreased levels of sexual assertiveness. This pattern indicates a reciprocal relationship between sexual assertiveness and victimization.

In addition to the woman's relationship to the male perpetrator, other contextual factors such as sexual activity have also been shown to influence women's responses to sexually risky scenarios (Yeater & Viken, in press). In this study, women were presented with vignettes describing common dating or social situations and a set of six possible responses to each vignette. These response options varied with respect to their degree of response refusal (i.e, from acquiescence to aggression). The participants were asked to select the response that was most similar to the type of response they would provide if they were actually in the situation. Overall, the responses chosen by women with more

severe victimization histories were lower in response refusal than responses chosen by nonvictimized women. In addition, as the degree of sexual activity increased in the situations, the response refusal of more severely victimized women increased less than the response refusal of nonvictimized women.

A study by Yeater, McFall and Viken (in press) similarly demonstrated the importance of contextual features on women's response effectiveness. In this study, women read vignettes depicting a variety of dating scenarios and were asked to indicate how they would respond to each situation. Women's responses were coded for effectiveness (i.e. how likely each response would be at decreasing risk of an unwanted sexual experience) by experts in the sexual violence research area. Again, results indicated that when sexual activity was depicted in the vignette, the response effectiveness of victimized women did not increase as much as that of nonvictimized women. Additionally, when alcohol was included in a scenario, the response effectiveness of victimized women decreased more than the response effectiveness of nonvictimized women.

Alternative Explanations for Victimization

In addition to deficits in risk perception and women's behavioral responses, several other factors have been associated with increased risk for victimization. For example, researchers have posited that psychopathology may predict victimization. In a prospective study examining the influence of psychological factors on sexual victimization, college women were assessed for past abuse and victimization, depressive and traumatic symptoms, and overall interpersonal functioning (Rich, Gidycz, Warkentin, Loh, & Weiland, 2005). Two months following the initial assessment, women were

reassessed for victimization experiences and psychological functioning. Depression was found to be significantly correlated with violent dating experiences, while trauma symptoms were predictive of severity of victimization for women who reported victimization at Time 2. Similarly, a prospective study by Gidycz, Hanson, and Layman (1995) found that psychological adjustment, as measured by the Beck Depression and Beck Anxiety Inventories, partially mediated women's victimization experiences. Specifically, results revealed a significant relationship between psychological adjustment at Time 1 and victimization experiences at a 3-month follow up. Additionally, prior childhood and adolescent victimization experiences predicted poor psychological adjustment at the time of the initial assessment. These results suggest that the negative psychological consequences of a victimization experience may place women at greater risk for experiencing future instances of victimization.

Results of an 8-month prospective study examining the relationship between unwanted sexual experiences and psychological, behavioral, and personality risk factors suggested that psychological adjustment is best used to predict specific types of victimization (Messman-Moore, Coates, Gaffey, & Johnson, 2008). Specifically, depression at Time 1 was found to predict future instances of sexual coercion but not rape. Similarly, symptoms of dissociation, commonly associated with PTSD, were associated with future experiences of rape but not sexual coercion. Thus, the results indicate that symptoms of psychopathology may be associated with increased risk for certain types of victimization rather than sexual victimization in general.

Previous research also has indicated that women with more liberal or permissive sexual attitudes and beliefs demonstrate deficits related to risk perception (Yeater et al.,

2006; Yeater et al., 2009). In a study by Yeater et al. (2009), a sample of college women were asked to provide ratings of the sexual risk depicted in a number of vignettes describing dating and social situations. Results of this study indicated that women with liberal sexual beliefs provided lower risk ratings for the vignettes than women with less permissive sexual attitudes. In a similar study asking participants to provide risk ratings for the same vignettes, sexual attitudes were found to be the strongest predictor of risk ratings (Yeater et al., 2006). Overall, these findings indicate that women with more liberal sexual attitudes have been shown to rate hypothetical scenarios as being less risky than women with less permissive sexual attitudes. These results suggest that women with more liberal sexual attitudes might be inclined to select less effective responses in sexually risky situations, thus increasing their risk for victimization (Yeater et al., 2006; Yeater et al., 2009).

Finally, anxiety symptoms have been shown to predict future victimization experiences (Gidycz et al., 1993), as well as to negatively impact women's behavior during interactions with male confederates (Parks, Hequembourg, & Dearing, 2008). In a study by Parks et al. (2008), women received high or low doses of alcohol and were observed interacting with male confederates. The male confederates performed 5 flirtatious behaviors (i.e. complimenting the woman's appearance or whispering in her ear) that may be interpreted as either welcome or intrusive depending on the woman's interest in the man. Women's behaviors during the interaction were coded. Results indicated that women with a history of CSA in the high alcohol dose condition exhibited more behaviors consistent with anxiety, such as face covering, than women without CSA histories. Although there are a number of hypotheses for explaining these findings, the

results suggest that anxiety may affect women's responses during heterosocial interactions.

Limitations of Past Research

The majority of research on sexual victimization has been conducted using a limited number of vignettes depicting high risk scenarios. A consequence of using a restricted range of risk is that the results of these studies may only generalize to high risk situations. Therefore, it remains unclear if the differences in response patterns between victimized and nonvictimized women are specific to high risk situations or if the differences are evident across both low and high risk situations. Indeed, researchers have called for studies using both high and low risk scenarios to evaluate whether women's responses differ across situations (Gidycz, et al., 2006). Social psychological research also has advocated for the use of a variety of stimuli in research, a method termed stimulus sampling. Stimulus sampling is particularly important when a variety of variables is relevant to and differentially affects the dependent variable (Wells & Windschitl, 1999). For example, risk cues such as alcohol consumption and location of the interaction may affect the effectiveness of women's responses to high and low risk social situations in unique and important ways. The current study adds to previous research on sexual victimization by using a selection of vignettes that contain varying degrees of victimization risk to measure women's behavioral responses.

Past research regarding risk factors for victimization also has relied heavily upon self-report measures that ask women to generate a written response or select a response from a list of behaviors that they would perform if they found themselves in a given situation. The present study attempted to extend previous research by providing a more

direct and ecologically valid method of behavioral sampling. Instead of providing a written response to sexually risky scenarios or selecting from a list response options, participants in the present study were videotaped responding verbally to videotaped verbal prompts made by a male actor. By recording women's responses within a 15 second window, participants were forced to perform the task immediately after exposure to the vignette and were not able to reflect upon or change their responses to the stimuli, thereby responding in a manner that perhaps more closely approximates behaviors emitted outside the laboratory. Additionally, the use of videotaped responses permitted access to nonverbal cues, such as body language and tone, which are not available through written or forced choice response tasks.

Research using direct observations of behavior has been used to study a wide range of interpersonal behaviors including therapeutic outcomes in Borderline Personality Disorder (Bennett, Parry, & Ryle, 2006), communication in young siblings (Howe, Petrakos, Rinaldi, & LeFebvre, 2005), adult attachment in marital relationships (Bouthillier, Julien, Dubé, Bélanger, & Hamelin, 2002), resilience in youth (Ewart, Jorgenson, Suchday, Chen, & Matthews, 2002), and play behaviors in abused and nonabused children during interactions with friends (Parker & Herrera, 1996). To date, no research using these methods has been used in the area of sexual victimization.

Study Overview

The current study uses McFall's (1982) Social Information Processing Model (SIP) as a theoretical framework for conceptualizing women's risk for sexual victimization. In this model, the likelihood of an effective response to a social task is increased when three sequential components are managed successfully. The first

component, decoding skills, requires the individual to accurately perceive and interpret relevant environmental stimuli. Next, decision skills require the individual to generate and select a response to the social task. Finally, enactment requires the individual to successfully execute the chosen response and to evaluate the intended versus actual outcome of the response. Difficulties at any point in this sequence increase the likelihood of an overall ineffective response.

The present study was a preliminary test of the enactment phase of the SIP model as it relates to women's risk for sexual victimization. The enactment phase is comprised of two components: execution of the selected behavioral response and self monitoring of the overall success of the behavior in solving the social task. In order for this study to be a true test of the enactment phase, all variables related to the decoding and decision stages of the model would need to have been held constant. However, due to the paucity of research regarding women's behavioral responses to sexually risky situations, the present work sought first to determine the extent to which individual differences existed in women's responses to high and low risk situations. In the current study, women listened to vignettes depicting low and high risk scenarios, viewed a videotape of a man verbally prompting the woman, viewed their own responses, and rated how effective each of their response were. Additionally, experts coded each response for its effectiveness in decreasing the likelihood of an unwanted sexual experience. Thus, both skills outlined at the enactment phase of the SIP model were tested.

The goals of the current study were (a) to determine the extent to which individual differences exist, specifically between victimized and nonvictimized women, in their response effectiveness to vignettes depicting high and low risk dating situations; (b) to

determine whether the level of risk depicted in the vignettes (i.e., low vs. high) affects the effectiveness of women's responses to these situations; (c) to evaluate whether there are differences between women's assessment of the effectiveness of their own responses and the assessment of their responses by experts; (d) to determine the extent to which sexual attitudes influence women's responses to these situations; and (e) to examine the impact of psychological symptoms such as depression, anxiety and PTSD on the effectiveness of women's responses to high and low risk dating situations.

Specific Hypotheses

It was expected that (a) victimized women's responses would be rated as less effective by experts than nonvictimized women's responses; (b) victimized women would be less accurate in their assessment of their own response effectiveness than nonvictimized women, as determined by the relationship between expert and self-ratings; and (c) liberal sexual attitudes would be associated with less effective responses. Because prior research on the relationship between response effectiveness and psychopathology has been limited, specific hypotheses were not made about how women's scores on a number of measures, including the BDI, TSC, and STAI would be related to the effectiveness of women's behavioral responses. Thus, these analyses were exploratory in nature.

Method

Participants

Participants were 220 undergraduate women recruited from the psychology research subject pool at the University of New Mexico. All participants were currently enrolled in psychology courses and received course credit in return for their participation.

Since women between the ages of 18 and 24 are at the highest risk for victimization (BJS, 1984), eligibility for participation in this study was restricted to this age range in order to ensure recruitment of the most appropriate population. The mean age of participants was 18.7 ($SD = 2.5$; range: 18-24). The majority of participants reported their ethnicity as White (52.6%, $n = 113$) while the remainder of the sample identified as Hispanic (28.8%, $n = 62$), Asian (4.2%, $n = 9$), Native American (2.3%, $n = 5$), African American (1.4%, $n = 3$), and other (10.2%, $n = 22$). Fifty-seven percent of participants were freshmen ($n = 122$), 21% ($n = 45$) were sophomores, 14% ($n = 31$) were juniors, 7% ($n = 15$) were seniors, and 1% were graduate students ($n = 2$). Five participants' data were dropped from the analyses due to missing responses on the questionnaires. Additionally, the majority of participants in this study were single (84.6%, $n = 181$). The remaining portion of the sample reported living with a partner (13.1%, $n = 28$), being married (1.9%, $n = 4$), or separated (.5%, $n = 1$).

Measures

Demographic Questionnaire (See Appendix A). This self-report measure asked participants for their age, marital status, ethnic membership, and academic status.

Sexual Experiences Survey (SES; Koss et al., 1987) (See Appendix B). The SES is a 10-item self-report questionnaire developed to measure various degrees of severity of sexual victimization (i.e., unwanted sexual contact, sexual coercion, attempted rape, and rape) since the age of 14. Koss and Gidycz (1985) reported that the SES had an internal consistency of $\alpha = .74$, a one-week test-retest reliability of $r = .93$, and a correlation of $r = .73$ with interview responses. The SES uses behaviorally specific definitions of sexual

assault and asks participants to indicate whether the event occurred by choosing one of two dichotomous response options (i.e., no or yes).

Participants' responses on the SES were used to determine the severity of past victimization experiences. The SES describes four types of unwanted sexual experiences with increasing levels of severity: (a) unwanted sexual contact, as defined by unwanted sex play that is the result of the man arguing with or pressuring the woman, using his authority, and using or threatening to use physical force; (b) sexual coercion, as defined by sexual intercourse that is the result of a woman becoming overwhelmed by the man's continued arguments or pressure, or that is the result of a man using his authority to obtain intercourse; (c) attempted rape, as defined by attempted sexual intercourse that is the result of the man threatening to use or using physical force or giving the woman alcohol or drugs to obtain sexual intercourse; and (d) rape, as defined by sexual intercourse, oral or anal intercourse, or the penetration of the woman's vagina with objects other than the penis that is the result of the man threatening to use or using physical force or giving the woman alcohol or drugs to obtain sexual intercourse. In the present study, participants were categorized by the most severe form of victimization they reported experiencing since the age of 14. Using the common scoring procedure for the SES, 30.2% of the participants reported no sexual victimization, 25.3% reported unwanted sexual contact, 19.3% reported sexual coercion, 17.3% reported attempted rape and 38% reported rape.

Sociosexuality Scale (SS; Bailey, Kirk, Zhu, Dunne & Martin, 2000) (See Appendix C). The SS is a 15-item self-report measure used to assess participants' willingness to engage in sexual activity. The SS is a composite measure made up of items

from the Sociosexuality Orientation Inventory (SOI; Simpson & Gangestad, 1991) and items from Eysenck's (1976) study of the genetics of sexual behavior. Higher scores on the SS indicate greater acceptance of liberal sexual beliefs and behaviors. Among women, the SS has an alpha coefficient of .85 whereas the alpha coefficient associated with the SOI is .70 (Bailey et al., 2000). In the present study, participants' indicated on a 4-point Likert scale, ranging from 1 (strongly agree) to 4 (strongly disagree), the extent to which they held a variety of beliefs. In the present study, participants' scores were summed after reverse scoring the appropriate items.

Beck Depression Inventory (BDI; Beck, Ward, Mendelson, Mock, & Erbaugh, 1961) (See Appendix D). The BDI is 21-item self-report measure used to assess depressive symptomology experienced by respondents within the last two weeks. Respondents are asked to select the statement that best describes how they have felt in the past two weeks from among four options. Each item describes a specific thought or behavior for which responses range from being absent or unchanged (0) to extreme (3). Previous research has shown the BDI to be a reliable measurement tool with a test-retest reliability of .86 (Groth-Marnat, 1990). Additionally, the BDI has been shown to correlate with clinician ratings of depression (Foa, Riggs, Dancu, & Rothbaum, 1993) and alternative self-report scales for depression such as the MMPI-2 depression scale (Groth-Marnat, 1990). Participants' depression score was the total score for all items.

Trauma Symptom Checklist (TSC; Briere, 1996) (See Appendix E). The TSC is a 40-item self-report measure intended to assess the extent to which participants experience PTSD symptoms. The TSC is a research instrument and not intended to be used for diagnostic purposes. For each item, participants rate how often they are experiencing a

given symptom on a scale from 0 (never) to 3 (often). The TSC has been shown to be internally consistent with an alpha level between .89 and .91 (Briere, 1996). Additionally, the TSC has been shown to accurately predict PTSD symptoms in a variety of populations (Briere, 1996). Again, participants were assigned a score based on their total for the measure's 40-items.

State and Trait Anxiety Inventory (STAI; Spielberger, Gorsuch, & Lushene, 1970) (See Appendix F). The STAI consists of two 20-item self-report questionnaires that assess state and trait anxiety separately. The state scale asks participants to rate the extent to which they are currently experiencing somatic and psychological symptoms of anxiety. Responses on this scale range from 1 (not at all) to 4 (very much so). The trait scale follows a format similar to the state scale except that it asks participants to indicate how often they experience somatic and psychological symptoms associated with anxiety. Participants respond to each item on a scale ranging from 1 (almost never) to 4 (almost always).

Among college students, the STAI has shown good internal consistency. Both the state and trait subscales have shown alpha levels of .90 within this population (Spielberger, 1983). Additionally, test-retest reliability of the trait anxiety scale has been shown to be high ($r = 0.8$), while the test-retest reliability of the state scale has been shown to be relatively low ($r = 0.35$), as would be expected. In the present study, participants received separate scores for the state and trait scale, which were the sums for each of the scales.

Stimuli (See Appendix G). The stimuli used in the current study were 10 vignettes taken from a 44-item inventory developed by Yeater, McFall, and Viken (in press) that

describe a wide range of problem situations that undergraduate women might face when dating or interacting socially with men. Variation in the presence of known risk factors was present across vignettes. Thus, the vignettes describe different types of situations (e.g., date, party, bar, school event), relationships with the man (e.g., boyfriend, acquaintance, stranger), putative risk factors for sexual victimization (e.g., alcohol use, sexual activity prior to or during the date), and contextual cues that might signal an impending assault (e.g., man making verbal threats to obtain sexual activity, touching the woman without her consent, attempting to isolate the woman socially, attempting to get the woman intoxicated).

Several criteria were used to select the vignettes for the present work. First, vignettes were excluded if they contained elements that would make their use inappropriate due to the format of the study (i.e., videotaped prompts from a man), such as items describing explicit sexual activity between the man and woman. Second, vignettes in which the potential perpetrator was a stranger also were excluded because previous research indicates that the majority of sexual assaults occur with a man who is known to the victim (Testa & Livingston, 1999). Further, women have demonstrated greater difficulty responding assertively to sexually coercive behavior when the man is known to the woman compared to when he is a stranger (Vanzile-Tamsen et al., 2005). Finally, a number of vignettes were excluded because they contained factors that were not the focus of the current study, such as interactions with girlfriends, interactions that occurred in a large group of people, and situations that focused primarily on the non-verbal behavior of the man. For example, vignettes in which a man dances provocatively

with a woman but does not speak were excluded because they did not allow the man to make a verbal prompt in the video clip.

From the remaining vignettes, five high and five low risk vignettes were selected using normative risk ratings provided by undergraduate women in a separate study (Yeater, Treat, Viken, & McFall, in press). In this study, undergraduate women were asked to read the vignettes and rate each situation on a 5-point Likert scale ranging from 1 (not risky) to 5 (completely risky). A paired samples t-test showed a significant difference between the mean risk ratings for high and low risk vignettes [$t(9) = 33.418, p < .001$; low risk: $M = 2.69, SD = .21, \text{range} = 2.47\text{-}2.93$; high risk: $M = 4.11, SD = .13, \text{range} = 3.97\text{-}4.27$].

For the purposes of the current study, the vignettes were translated into a script (see Appendix G for an example), videotaped, and presented to participants on a computer screen using Windows Movie Maker. Each vignette began with an audio clip of a female narrator presenting the basic background information described in the vignette. After the background information was presented, a male actor appeared on the screen and verbally prompted the woman. For example, in a vignette in which it is clear that the woman is romantically interested in the man depicted but is not yet ready to have sex with him, the actor says, "Look, I'm really committed to this relationship and if you were too, you'd be willing to have sex with me." After the verbal prompt, a still photo of the actor's face remained upon the screen. At this point, the woman responded directly to the actor as though it were a real life conversation. This sequence was repeated for each of the ten vignettes. It is important to note that the same man was the actor in each vignette. Although this may have limited ecological validity, it increased internal validity by

controlling for confounding factors such as attractiveness and acting ability, which would likely vary among men. Additionally, the actor was an experienced researcher who has worked in the lab for several years and was accepted to graduate school out of state before data collection began. This eliminated the possibility that participants would encounter the actor outside of the laboratory after completion of the study.

Post-task Questionnaire (See Appendix H). This ten-item questionnaire asked participants to rate, using a 6-point Likert scale, how effective they thought their response was in avoiding an unwanted sexual experience with scores ranging from 1 (I did not perform this response effectively at all) to 6 (I performed this response very effectively). An unwanted experience was defined as one in which you may be verbally or physically coerced into having sexual contact of any kind with a man. Participants completed the questionnaire while viewing each of their own videotaped responses. Each item on the questionnaire corresponded with one of the vignettes presented in this study and participants were instructed to complete each item immediately after viewing the corresponding video. This instrument was used to obtain participants' self-ratings of their response effectiveness. Additionally, experts used this instrument to rate how effective participants' responses were in decreasing their risk of having an unwanted sexual experience.

Procedure

Upon arriving at the lab, research participants were met by a research assistant who presented information about the study and obtained informed consent. Participants were given an opportunity to ask questions and were made aware that they could choose to withdraw from the study at any point without penalty.

In the first stage of the experiment, participants were seated in a private assessment room four feet from a computer screen and instructed to listen to recorded narration describing each vignette and to imagine themselves in each situation. Participants then watched video of a man providing a verbal prompt. Before beginning the task, participants were instructed by the experimenter to give a verbal response when the video of the man froze into a still image. They were asked to respond directly to the image on the screen and to react as if they were actually in the situation. Each response was recorded with a webcam and saved onto the hard drive of the computer. Windows Movie Maker was programmed to play each vignette and record the response for 15 seconds before beginning the next vignette. This process was repeated ten times until participants had viewed and responded to each vignette.

The vignettes were arranged to alternate between high and low risk situations, beginning with a low risk vignette, until all ten vignettes had been presented. Prior to data collection, each vignette was assigned randomly to its presentation position within this sequence. Thus, the stimuli were presented to all participants in a fixed order. Although a random presentation of the vignettes for each participant would have been optimal, this option was logistically too complicated and increased the chance of experimenter error while arranging or labeling the video clips. Specifically, in order for complete randomization to occur for each participant, each clip would have needed to be manually aligned in order for participants to view the vignettes in the same order as they were viewed in originally. Additionally, the post-task questionnaire would have needed to be matched to the vignette presentation order for each participant.

After participants completed the videotaped portion of the study, they alerted a research assistant by ringing a bell. At this time, they were led to another assessment room where they completed the packet containing each of the self-report measures described above except the Post-Test Questionnaire. While the participant completed these questionnaires, a research assistant arranged the recorded clips of the participants' responses on a storyboard using Windows Movie Maker. Each response was arranged to play after the vignette it was elicited by. Once participants completed their questionnaires, they again rang a bell to alert a research assistant who led them back to the original assessment room containing the computer.

When the participants were again seated in front of the computer, the vignettes were played in the original order presented to them. This served to remind participants of the context of each vignette to which they responded. After viewing each vignette, participants watched their recorded response. They then rated, using a 6-point Likert scale, how effective they thought their response was in avoiding an unwanted sexual experience. An unwanted experience was defined as one in which the participant may be verbally or physically coerced into having sexual contact of any kind with a man. Again, this process was repeated ten times until the participant reviewed all vignettes and responses and provided a rating for each response.

Once the participant completed the three stages of the study outlined above, they were debriefed as to the purpose of the study and given an opportunity to ask questions of the experimenter. The entire task took approximately 45 minutes to complete. When all questions had been addressed, the participant received one research credit in return for her participation in the study.

Because videotaping raises additional ethical considerations due to the collection of identifying information; extra steps were taken to ensure the confidentiality of participants. Each participant received two subject numbers: one assigned to their recorded video data and the other assigned to the written packet of questionnaires. The PI and faculty advisor were the only individuals with access to a master key linking the subject numbers. The master key was stored under password protection on two computers.

Expert Ratings

The expert raters in this study were an assistant professor and a group of four advanced doctoral students in clinical psychology with a strong background in trauma and sexual victimization research. Expert raters were asked to rate a subset of participants' responses and received training by the PI prior to viewing the videotapes. Training consisted of an hour long meeting during which each rater received the coding materials and discussed the guidelines for assigning ratings as described in Appendix I. Each rater received a disc containing video of 80-90 randomly assigned responses from different participants for each vignette. Raters were instructed to view and consider the context of the vignette prior to rating any responses and to take frequent breaks to protect against fatigue. Additionally, experts were instructed to take into account the clip in its entirety, including the content of the response, tone of voice, nonverbal cues, and pauses prior to responding. Experts were asked to rate, using a 6-point Likert scale, how effective participants' responses were in decreasing their risk of having an unwanted sexual experience (1 = completely ineffective, 2 = moderately ineffective, 3 = slightly ineffective, 4 = slightly effective, 5 = moderately effective, 6 = completely effective). An

unwanted experience was defined as one in which the participant may be verbally or physically coerced into having sexual contact of any kind with a man. Experts were blind to participants' victimization history and self-ratings.

Each response was rated independently by two expert raters. Intraclass correlation coefficients (ICCs) were obtained to measure reliability between raters. Results indicated that the level of agreement between each pair of raters was within an acceptable range ($\alpha = .86-.78$).

Data Analytic Approach

Multiple regression analyses were used to test the association between the predictor variables and women's response effectiveness to the high and low risk vignettes. Victimization history, sexual attitudes, depression, anxiety, and PTSD symptoms were simultaneously entered into the equation as continuous predictors. Given that no specific predictions were made with respect to interactions among the predictors, they were not included in the analyses. Separate regression analyses were conducted for the high and low risk vignettes. Additionally, Pearson product-moment correlations were used to assess the relationship between experts' effectiveness ratings of participants' responses to the low and high risk vignettes and participants' own ratings of their response effectiveness to the same items.

Results

Summary Variables

Participants were assigned four main scores: (a) two mean effectiveness ratings, as assigned by experts, for the low and high risk vignettes, and (b) two mean effectiveness ratings, as assigned by the participant, for the low and high risk vignettes.

An expert effectiveness score was obtained by averaging the ratings of each expert for each response. These scores were then averaged across high and low risk vignettes to create mean scores that were used in the analyses. Participant effectiveness scores were obtained in the same way. Additionally, six continuous predictors (i.e., victimization history, depression symptoms, trauma symptoms, sociosexuality, state anxiety, and trait anxiety) were obtained and included in initial analyses.

Preliminary Analyses

Table 1 presents participants' mean scores for each of the self-report measures, their means for self and expert ratings for the high and low risk vignettes, and the zero-order correlations between the self-report measures and effectiveness ratings. Because of the lack of significant correlations associated with trait anxiety (see Table 1), this variable was dropped from all additional analyses. Independent samples t-tests indicated that victimized and nonvictimized women did not differ with regard to age, year in college, ethnicity, or state anxiety measures. Chi-squared analyses revealed no significant differences in marital status between victimized and nonvictimized women. However, victimized women, as compared to nonvictimized women, had higher sociosexuality scores ($M = 48.04$, $SD = 5.34$ versus $M = 44.75$, $SD = 6.15$), $t(211) = 3.7$, $p < .001$), higher depression scores ($M = 9.74$, $SD = 7.3$ versus $M = 5.35$, $SD = 5.68$), $t(209) = -4.22$, $p < .001$), and higher trauma symptom scores ($M = 31.88$, $SD = 18.54$ versus $M = 17.82$, $SD = 15.43$) $t(109) = -5.13$, $p < .001$). These findings of group differences are consistent with past research that has found more liberal sexual attitudes (Himelein, 1995) and higher levels of depression (Ellis et al., 1981; Atkeson et al., 1982) and trauma symptoms (Cloitre et al., 1997) among women with victimization histories.

Response Effectiveness

In all, the predictors accounted for 6.7% of the variance in effectiveness ratings for responses to high risk vignettes, $F(5,174) = 2.49, p = .033$, and for 11.3% of the variance in effectiveness ratings for responses to low risk vignettes, $F(5,173) = 4.39, p = .001$. R^2 values of .07 and .11 are considered to be small effect sizes (Cohen, 1988).

Sexual attitudes, as measured by the SS, was the only significant predictor for the high ($\beta = .016, t = -2.87, p = .005$) and low risk vignettes ($\beta = .009, t = -3.424, p = .001$). In both cases, the responses of participants reporting more liberal sexual attitudes were rated as less effective by experts than the responses of participants with more conservative attitudes. No additional predictor reached significance in either model (see Tables 2 and 3).

Post-Hoc Analyses

Post-hoc analyses also were conducted to assess the impact of trauma symptoms, depression, victimization history, and state anxiety on participants' response effectiveness to high and low risk vignettes once sociosexuality was removed from the model. Again, two separate analyses for the high and low risk effectiveness ratings were conducted, with depression, anxiety, victimization history, and PTSD symptoms included as the continuous predictors. Overall, the model for the high risk vignettes was not significant, accounting for 3.8% of the variance in the effectiveness of women's responses, $F(4,177) = 1.74, p = .142$. The variables in the low risk model approached significance, accounting for 2.9% of the variance in women's response effectiveness, $F(4,176) = 2.35, p = .056$. The only predictor in this model to approach significance was

victimization history ($\beta = -.073, p = .063$), indicating that the responses of more severely victimized women were rated as less effective by experts.

Given the well documented relationship between victimization history and response effectiveness and the high correlations between sociosexuality, victimization status, and response effectiveness, mediational analyses were conducted to determine if sociosexuality mediated the relationship between victimization history and response effectiveness. MacKinnon's (2008) approach for a single mediator model was followed and separate models were created for the effectiveness ratings for the high and low risk vignettes. For the high risk vignettes, victimization history significantly predicted sociosexuality ($\beta = .313, p = .001$), sociosexuality significantly predicted response effectiveness ($\beta = -.151, p = .035$), and victimization history significantly predicted response effectiveness ($\beta = -.173, p = .012$). When sociosexuality was included in the model testing the relationship between victimization and response effectiveness, the relationship between victimization and response effectiveness became nonsignificant ($\beta = -.125, p = .078$) indicating a fully mediated model. A Sobel's test (Sobel, 1982) was conducted to evaluate the significance of the indirect effect of the mediator, and the results verified the significance of the model ($z = -1.97, p = .05$).

For the low risk vignettes, a fully mediated model was again found, with victimization history significantly predicting sociosexuality ($\beta = .313, p < .001$), sociosexuality significantly predicting response effectiveness ($\beta = -.287, p < .001$), and victimization history significantly predicting response effectiveness ($\beta = -.21, p = .002$). Again, when sociosexuality was included in the model testing the relationship between victimization and response effectiveness, the relationship between victimization and

response effectiveness became nonsignificant ($\beta = -.121, p = .077$). A Sobel's test again confirmed that this model was significant ($z = -3.23, p < .001$).

In order to determine the direction of the relationship between sexual victimization and sexual attitudes, mediational models predicting the opposite relationship between sexual attitudes and victimization were also performed. Results indicated that the models for both high and low risk vignettes were nonsignificant when victimization history was hypothesized to mediate the relationship between sexual attitudes and response effectiveness. For high risk vignettes, sexual attitudes significantly predicted victimization history ($\beta = .31, p \leq .001$), victimization did not predict response effectiveness ($\beta = -.13, p = .078$), and sociosexuality predicted response effectiveness both with ($\beta = -.151, p = .035$) and without ($\beta = -.19, p = .005$) the inclusion of victimization history. A Sobel test indicated a nonsignificant model ($z = 1.65, p = .09$).

Again, similar results were obtained for the low risk model. Results indicated that sexual attitudes significantly predicted victimization history ($\beta = .31, p < .001$), victimization predicted response effectiveness ($\beta = -.12, p = .017$), and sociosexuality predicted response effectiveness both with ($\beta = -.29, p < .001$) and without ($\beta = -.32, p < .001$) the inclusion of victimization history. Again, a Sobel's test was nonsignificant for this model ($z = 1.65, p = .10$).

Self-Monitoring

Pearson product-moment correlations were used to evaluate undergraduate women's ability to assess their own response effectiveness to high and low risk situations. Overall, experts' ratings of responses for both high ($M = 4.17, SD = .54$) and low risk vignettes ($M = 3.53, SD = .74$) were lower than the undergraduate women's

ratings of the same responses ($M = 4.51$, $SD = .75$ and $M = 3.72$, $SD = .89$, respectively). The differences between these ratings were significant for the high risk, $t(209) = 6.88$, $p < .001$) and low risk, $t(210) = 3.23$, $p = .001$) vignettes (see Figure 2). Paired samples t -tests also were used to examine differences in undergraduate and expert ratings. Results indicated that both undergraduates and experts rated women's responses to low risk vignettes as significantly less effective than their responses to high risk vignettes (experts: $t(213) = 13.86$, $p < .001$; undergraduates: $t(206) = 12.77$, $p < .001$). However, expert and self ratings were significantly correlated (high risk: $r = .451$, $p < .001$; low risk: $r = .495$, $p < .001$). Interestingly, victimized women provided self ratings that were more highly correlated with expert ratings (high risk: $r = .47$, $p < .001$; low risk: $r = .51$, $p < .001$) than nonvictimized women (high risk: $r = .362$, $p = .004$; low risk: $r = .45$, $p < .001$). However, Fisher's z transformation (Fisher, 1915) indicated that the differences between these correlations were not significant.

A one way analysis of variance (ANOVA) also was conducted to compare the effects of victimization history on women's self-ratings of response effectiveness to the high and low risk situations. The results revealed that there were no significant differences between victimized and nonvictimized women's effectiveness ratings for the low risk situations, $F(4, 207) = 1.61$, $p = .174$. However, there was a significant effect of victimization history on women's effectiveness ratings for the high risk situations, $F(4, 205) = 2.67$, $p = .033$. Using the Tukey HSD test, post-hoc comparisons revealed that women reporting rape provided effectiveness ratings for high risk situations ($M = 4.27$, $SD = .75$) that were significantly lower ($p = .017$) than women reporting no victimization experiences ($M = 4.70$, $SD = .70$).

In order to determine the extent to which differences in self-ratings were related to expert ratings, correlations between experts' effectiveness ratings and the self ratings of women who reported rape and nonvictimized women were examined. For high risk situations, the self-ratings of women reporting rape were significantly correlated with experts' effectiveness ratings ($r = .353, p = .008$). Similarly, the self-ratings of nonvictimized women and experts' effectiveness ratings also were significantly correlated ($r = .362, p = .004$). However, a Fisher's z transformation (Fisher, 1915) indicated that the differences between these correlations were not significantly different.

Discussion

Summary of Findings

The present study examined the effects of a sexual victimization history, psychopathology, and sexual attitudes on women's behavioral responses to high and low risk social situations. The use of videotaped stimuli and the collection of participants' videotaped, verbal responses are novel approaches and extend previous work on women's ability to respond to situations associated with risk for sexual victimization. Additionally, the vignettes used in this study contained varying levels of risk and depicted a variety of contextual features allowing for separate analyses to examine women's responses to high and low risk situations. By including both high and low risk vignettes, it was possible to determine whether any observed deficits in response effectiveness were specific to certain types of situation or consistently present.

In general, women provided more effective responses to high risk than to low risk vignettes, regardless of victimization history. It is likely that when risk cues are ambiguous, women may be less likely to perceive and react to risk. Because the majority

of low level risk situations do not escalate into high risk situations, it makes sense that women may often fail to respond to situations in which risk is not clear. However, during interactions in which victimization risk increases, it is important for women to respond effectively to early risk cues in order to avoid an unwanted sexual experience. Thus, if women require clear indicators of risk prior to reacting in an effective manner, prevention programs aimed at encouraging women to respond in ways that decrease their risk might consider focusing also on helping women manage low risk situations that could become more risky over time.

The results of this study indicate that liberal or permissive sexual attitudes and beliefs are associated with decreased response effectiveness. While previous research has demonstrated a relationship between liberal attitudes and deficits in risk perception (Yeater et al., 2006; Yeater, et al., 2009), the current study is the first to find a similar relationship between sexual attitudes and response effectiveness. In fact, sexual attitudes were the only significant predictor of response effectiveness in the regression analysis. Thus, the hypothesis that liberal sexual attitudes or beliefs would be associated with less effective behavioral responses was supported. However, other factors, including depression, anxiety, PTSD, and victimization history did not have a significant impact on the effectiveness of women's responses when sexual attitudes were included in the analyses. The lack of findings related to psychopathology may be reflective of the relatively low levels of symptom endorsement among this nonclinical sample of women.

Interestingly, even when sociosexuality was removed from the model, victimization history did not become a significant predictor of women's response effectiveness to high or low risk vignettes. Specifically, although victimization was

significantly correlated with response effectiveness, this relationship was not evident in the regression models. These findings are inconsistent with past research that has documented a relationship between victimization status and response effectiveness. One possible explanation for this finding is that nonvictimized women may be able to select appropriate responses when presented with a list of options but are less able to generate those responses when asked to do so. Given these results, the hypothesis that more severe sexual victimization would be linked directly to decreased response effectiveness was not supported.

The mediational analyses indicated that sexual attitudes fully mediated the relationship between victimization history and response effectiveness for both the high and low risk vignettes. This too is a novel finding, and one that has yet to be identified in the research literature. Specifically, women with more severe victimization histories who adhered to more liberal sexual attitudes provided less effective responses to the high and low risk vignettes. When the model was tested using victimization status as a mediator between sexual attitudes and response effectiveness, the results were not significant. It is important to note that although these results imply a causal relationship between these variables, these findings, in isolation, are not sufficient to confirm a causal relationship between sexual victimization, sexual attitudes, and response effectiveness. However, one possibility consistent with these findings is that the impact of victimization history may affect a woman's beliefs and attitudes which in turn may affect her response effectiveness. Thus, future research is needed to examine the relationships between victimization history, sexual attitudes, and response effectiveness. Specifically,

prospective studies are necessary to determine the extent to which liberal sexual attitudes precede, or are a consequence of, victimization experiences.

Finally, the results of this study indicated that after viewing their responses to high and low risk vignettes, undergraduate women provided effectiveness ratings that were consistent with expert ratings. Although women reporting sexual victimization histories rated effectiveness more consistently with the ratings of experts than nonvictimized women, these differences were not significantly different. Thus, the hypothesis that victimized women would be less effective in recognizing their response effectiveness was not supported in the current study. While these results suggest that deficits at this stage of the SIP model may not contribute to increased risk of victimization, asking women to rate the effectiveness of their responses prior to viewing them would test this stage of the model more directly.

Interestingly, the only observed differences in women's self-ratings were between women reporting rape and nonvictimized women. In this case, nonvictimized women rated their responses as more effective than women who reported rape. Since the level of agreement between expert and self-ratings were similar for both groups of women, it is likely that both groups are accurately rating the effectiveness of their responses. Specifically, women who reported rape are both providing less effective responses and reporting lower effectiveness self-ratings. This suggests that women are providing relatively accurate effectiveness ratings, regardless of victimization history status.

Limitations

While there was a significant amount of variability in the content of women's responses for each vignette, the videotaped stimuli generally elicited a limited range of

facial expressions, body language cues, and voice tones. As a result, expert ratings of the behavioral samples obtained in the current study relied heavily on the content of the verbal response given by each participant. Given the important role such cues may play in communication, future research should attempt to obtain a wider range of these nonverbal cues. Explicitly instructing participants to consider their nonverbal behaviors or using stimuli that evoke a more emotional response from participants may help to achieve this goal. Nonetheless, the current study contributes significantly to the sexual victimization literature as it is the first study to collect women's videotaped, verbal responses to ecologically valid stimuli.

Because this study provided women with an opportunity to view their responses prior to rating them, the results of the self-monitoring component of this study may not generalize to real life situations. That is, in real life dating and social situations, women do not have the ability to directly observe their own behaviors. Instead, women must rely on contextual cues, such as the reactions of those around them, to determine how effective a behavior is and which future behaviors they should select in order to increase their chances of achieving a desired outcome. By asking women to rate how effective their responses were without first seeing them, future research could extend our understanding of individual differences in women's ability to self-monitor their behaviors.

Potential Prevention Implications

In the event that sexual attitudes and beliefs do indeed play an important role in contributing to women's risk for sexual victimization, sexual victimization prevention programs might benefit by including educational interventions addressing the connection

between liberal beliefs and attitudes and women's behavioral approaches to sexually risky situations. For example, women with liberal sexual attitudes may benefit from interventions modeling sexual assertiveness skills that might reduce risk for victimization while maintaining other interpersonal goals, such as developing and maintaining romantic relationships.

Additionally, the findings of the current study indicate the importance of emphasizing effective behavioral strategies for women to adopt in sexually risky or ambiguous situations. Specifically, a focus on behavioral rehearsal with feedback may help women to improve the effectiveness of their responses to similar real life situations. For example, in future research, women could be asked to provide responses to the vignettes and receive immediate feedback about the effectiveness of their responses. Women could then continue to provide responses and receive feedback until their responses were rated as effective. Such an approach could also be used prospectively, where women are followed over time to examine whether training decreased victimization rates.

To date, the results of one study have provided support for this idea. compared In a sample of college women with prior victimization histories, women were randomly assigned to a sexual assault prevention intervention or a no intervention control group (Marx, Calhoun, Wilson, & Meyerson, 2001). Women receiving the intervention were presented with possible response strategies for sexually risky situations, discussed possible responses to a number of hypothetical situations, and observed group leaders model effective responses to these situations. Results indicated that women receiving this intervention were significantly less likely to have experienced rape at a 2-month follow-

up. This suggests that the behavioral strategies modeled in the intervention may have helped women respond effectively in sexually risky situations. Interestingly, there were no group differences with regard to risk recognition at follow-up.

Given the promising findings and important prevention implications of the current study, future research should continue to examine the impact of behavioral feedback on decreasing women's victimization risk. Future research in this area may have a significant impact on our understanding of mechanisms contributing to risk for sexual victimization and has the potential to improve programs aimed at decreasing this risk.

Appendix A: Demographics Questionnaire

INSTRUCTIONS: For each of the questions below, either fill in the blank or place an “✓” in the appropriate box.

1. Age _____

2. Marital Status

[01] Single

[02] Married

[03] Separated

[04] Divorced

[05] Living Together

[06] Widowed

3. Year in College

[01] Freshman

[02] Sophomore

[03] Junior

[04] Senior

[05] Graduate Special

[06] Graduate Student

4. Race

[01] Asian

[02] African American

[03] Hispanic/Latino

[04] White/Caucasian

[05] Native American

[06] Other _____

Appendix B: Sexual Experiences Survey (SES)

INSTRUCTIONS: Please place an “✓” or fill in the blank for each of the following questions. Please read each question carefully. The following questions are **ONLY** about sexual experiences you may have had **SINCE YOU WERE FOURTEEN YEARS OLD**.

1. Have you ever given in to sex play (fondling, kissing, or petting, but not intercourse) when you didn't want to because you were overwhelmed by a man's continual arguments and pressure? **(Since you were fourteen)**

[01] No **(If no, skip directly to question #2)**

[02] Yes

How many times have you had this experience since you were fourteen years old?

1 2-4 5-7 8-10 11 or more

How many different men has the experience described in question #1 happened with since you were fourteen years old?

1 2-4 5-7 8-10 11 or more

2. Have you ever had sex play (fondling, kissing, or petting, but not intercourse) when you didn't want to because a man used his authority (boss, teacher, camp counselor, supervisor) to make you? **(Since you were fourteen)**

[01] No **(If no, skip directly to question #3)**

[02] Yes

How many times have you had this experience since you were fourteen years old?

1 2-4 5-7 8-10 11 or more

How many different men has the experience described in question #2 happened with since you were fourteen years old?

1 2-4 5-7 8-10 11 or more

3. Have you had sex play (fondling, kissing, or petting, but not intercourse) when you didn't want to because a man threatened or used some degree of physical force (twisting your arm, holding you down, etc.)? **(Since you were fourteen)**

[01] No **(If no, skip directly to question #4)**

[02] Yes

How many times have you had this experience since you were fourteen years old?

1 2-4 5-7 8-10 11 or more

How many different men has the experience described in question #3 happened with since you were fourteen years old?

1 2-4 5-7 8-10 11 or more

***The following questions are about sexual intercourse. By sexual intercourse, we mean penetration of a woman's vagina, no matter how slight, by a man's penis. Ejaculation is not required. Whenever you see the words sexual intercourse, please use this definition.*

4. Have you had a man attempt sexual intercourse (get on top of you and insert his penis) when you didn't want to by threatening or using some degree of force (twisting your arm, holding you down, etc.) but intercourse did not occur? (**Since you were fourteen**)

[01] No (**If no, skip directly to question #5**)

[02] Yes

How many times have you had this experience since you were fourteen years old?

1 2-4 5-7 8-10 11 or more

How many different men has the experience described in question #4 happened with since you were fourteen years old?

1 2-4 5-7 8-10 11 or more

5. Have you had a man attempt sexual intercourse (get on top of you and insert his penis) by giving you alcohol or drugs, but intercourse did not occur? (**Since you were fourteen**)

[01] No (**If no, skip directly to question #6**)

[02] Yes

How many times have you had this experience since you were fourteen years old?

1 2-4 5-7 8-10 11 or more

How many different men has the experience described in question #5 happened with since you were fourteen years old?

1 2-4 5-7 8-10 11 or more

6. Have you given in to sexual intercourse when you didn't want to because you were overwhelmed by a man's continual arguments or pressure? **(Since you were fourteen)**

[01] No **(If no, skip directly to question #7)**

[02] Yes

How many times have you had this experience since you were fourteen years old?

1 2-4 5-7 8-10 11 or more

How many different men has the experience described in question #6 happened with since you were fourteen years old?

1 2-4 5-7 8-10 11 or more

7. Have you had sexual intercourse when you didn't want to because a man used his position of authority (boss, teacher, counselor, supervisor)? **(Since you were fourteen)**

[01] No **(If no, skip directly to question #8)**

[02] Yes

How many times have you had this experience since you were fourteen years old?

1 2-4 5-7 8-10 11 or more

How many different men has the experience described in question #7 happened with since you were fourteen years old?

1 2-4 5-7 8-10 11 or more

8. Have you had sexual intercourse when you didn't want to because a man gave you alcohol or drugs? **(Since you were fourteen)**

[01] No **(If no, skip directly to question #9)**

[02] Yes

How many times have you had this experience since you were fourteen years old?

1 2-4 5-7 8-10 11 or more

How many different men has the experience described in question #8 happened with since you were fourteen years old?

1 2-4 5-7 8-10 11 or more

9. Have you had sexual intercourse when you didn't want to because a man threatened or used some degree of physical force (twisting your arm, holding you down, etc.) to make you? **(Since you were fourteen)**

[01] No **(If no, skip directly to question #10)**

[02] Yes

How many times have you had this experience since you were fourteen years old?

1 2-4 5-7 8-10 11 or more

How many different men has the experience described in question #9 happened with since you were fourteen years old?

1 2-4 5-7 8-10 11 or more

10. Have you had sexual acts (anal or oral intercourse or penetration by objects other than the penis) when you didn't want to because a man threatened or used some degree of physical force (twisting your arm, holding you down, etc.)? **(Since you were fourteen)**

[01] No

[02] Yes

How many times have you had this experience since you were fourteen years old?

1 2-4 5-7 8-10 11 or more

How many different men has the experience described in question #10 happened with since you were fourteen years old?

1 2-4 5-7 8-10 11 or more

Appendix C: Sociosexuality Scale

INSTRUCTIONS: For each of the statements below, circle the number that best represents your beliefs or opinions. Feel free to be honest when answering. There are no “right” answers. Please make sure to read the scale correctly.

1. It is better not to have sexual relations until you are married.

Strongly Agree	Agree	Disagree	Strongly Disagree
1	2	3	4

2. Virginity is a girl’s most valuable possession.

Strongly Agree	Agree	Disagree	Strongly Disagree
1	2	3	4

3. Sex without love (impersonal sex) is highly unsatisfactory.

Strongly Agree	Agree	Disagree	Strongly Disagree
1	2	3	4

4. I believe in taking my pleasures where I can find them.

Strongly Agree	Agree	Disagree	Strongly Disagree
1	2	3	4

5. Absolute faithfulness to one’s partner throughout life is nearly as silly as celibacy.

Strongly Agree	Agree	Disagree	Strongly Disagree
1	2	3	4

6. Sometimes sexual feelings overpower me.

Strongly Agree	Agree	Disagree	Strongly Disagree
1	2	3	4

7. Group sex appeals to me.

Strongly Agree	Agree	Disagree	Strongly Disagree
1	2	3	4

8. If I were invited to take part in an orgy, I would accept.

Strongly Agree	Agree	Disagree	Strongly Disagree
1	2	3	4

9. I can imagine myself being comfortable and enjoying “casual” sex with different partners.

Strongly Agree	Agree	Disagree	Strongly Disagree
1	2	3	4

10. I would have to be closely attached to someone (both emotionally and psychologically) before I could feel comfortable and fully enjoy having sex with him or her.

Strongly Agree	Agree	Disagree	Strongly Disagree
1	2	3	4

11. It would be difficult for me to enjoy having sex with someone I did not know very well.

Strongly Agree	Agree	Disagree	Strongly Disagree
1	2	3	4

12. I could enjoy having sex with someone I was attracted to, even if I didn't feel anything emotionally for him or her.

Strongly Agree	Agree	Disagree	Strongly Disagree
1	2	3	4

13. The thought of an illicit sex affair excited me.

Strongly Agree	Agree	Disagree	Strongly Disagree
1	2	3	4

14. Sex without love is ok.

Strongly Agree	Agree	Disagree	Strongly Disagree
1	2	3	4

15. The thought of a sex orgy is disgusting to me.

Strongly Agree	Agree	Disagree	Strongly Disagree
1	2	3	4

Appendix D: Beck Depression Inventory (BDI)

INSTRUCTIONS: Choose one statement from among the group of four statements in each question that best describes how you have been feeling during the **past 2 weeks**. Circle the number beside your choice.

1	<p>0 I do not feel sad. 1 I feel sad. 2 I am sad all the time and I can't snap out of it. 3 I am so sad or unhappy that I can't stand it.</p>	8	<p>0 I don't feel I am any worse than anybody else. 1 I am critical of myself for my weaknesses or mistakes. 2 I blame myself all the time for my faults. 3 I blame myself for everything bad that happens.</p>
2	<p>0 I am not particularly discouraged about the future. 1 I feel discouraged about the future. 2 I feel I have nothing to look forward to. 3 I feel that the future is hopeless and that things cannot improve.</p>	9	<p>0 I don't have any thoughts of killing myself. 1 I have thoughts of killing myself, but I would not carry them out. 2 I would like to kill myself. 3 I would kill myself if I had the chance.</p>
3	<p>0 I do not feel like a failure. 1 I feel I have failed more than the average person. 2 As I look back on my life, all I can see is a lot of failure. 3 I feel I am a complete failure as a person.</p>	10	<p>0 I don't cry any more than usual. 1 I cry more now than I used to. 2 I cry all the time now. 3 I used to be able to cry, but now I can't cry even though I want to.</p>
4	<p>0 I get as much satisfaction out of things as I used to. 1 I don't enjoy things the way I used to. 2 I don't get any real satisfaction out of anything anymore. 3 I am dissatisfied or bored with everything.</p>	11	<p>0 I am no more irritated by things than I ever am. 1 I am slightly more irritated now than usual. 2 I am quite annoyed or irritated a good deal of the time. 3 I feel irritated all the time now.</p>
5	<p>0 I don't feel particularly guilty. 1 I feel guilty a good part of the time. 2 I feel quite guilty most of the time. 3 I feel guilty all of the time.</p>	12	<p>0 I have not lost interest in other people. 1 I am less interested in other people than I used to be. 2 I have lost most of my interest in other people. 3 I have lost all of my interest in other people.</p>
6	<p>0 I don't feel I am being punished. 1 I feel I may be punished. 2 I expect to be punished. 3 I feel I am being punished.</p>	13	<p>0 I make decisions about as well as I ever could. 1 I put off making decisions more than I used to. 2 I have greater difficulty in making decisions than before. 3 I can't make decisions at all anymore.</p>
7	<p>0 I don't feel disappointed in myself. 1 I am disappointed in myself. 2 I am disgusted with myself. 3 I hate myself.</p>	14	<p>0 I don't feel that I look any worse than I used to. 1 I am worried that I am looking old or unattractive. 2 I feel that there are permanent changes in my appearance that make me look unattractive. 3 I believe that I look ugly.</p>

15	<p>0 I can work about as well as before. 1 It takes an extra effort to get started at doing something. 2 I have to push myself very hard to do anything. 3 I can't do any work at all.</p>	19	<p>0 I haven't lost much weight, if any, lately. 1 I have lost more than five pounds. 2 I have lost more than ten pounds. 3 I have lost more than fifteen pounds. (Score 0 if you have been purposely trying to lose weight.)</p>
16	<p>0 I can sleep as well as usual. 1 I don't sleep as well as I used to. 2 I wake up 1-2 hours earlier than usual and find it hard to get back to sleep. 3 I wake up several hours earlier than I used to and cannot get back to sleep.</p>	20	<p>0 I am no more worried about my health than usual. 1 I am worried about physical problems such as aches and pains, or upset stomach, or constipation. 2 I am very worried about physical problems, and it's hard to think of much else. 3 I am so worried about my physical problems that I cannot think about anything else.</p>
17	<p>0 I don't get more tired than usual. 1 I get tired more easily than I used to. 2 I get tired from doing almost anything. 3 I am too tired to do anything.</p>	21	<p>0 I have not noticed any recent change in my interest in sex. 1 I am less interested in sex than I used to be. 2 I am much less interested in sex now. 3 I have lost interested in sex completely.</p>
18	<p>0 My appetite is no worse than usual. 1 My appetite is not as good as it used to be. 2 My appetite is much worse now. 3 I have no appetite at all anymore.</p>		

Appendix E: Trauma Symptom Checklist (TSC-40)

INSTRUCTIONS: Please circle the number that corresponds to how often you have experienced the following in the past month

0 =

Never 3 = Often

1. Headaches	0	1	2	3
2. Insomnia (trouble getting to sleep)	0	1	2	3
3. Weight loss (without dieting)	0	1	2	3
4. Stomach problems	0	1	2	3
5. Sexual problems	0	1	2	3
6. Feeling isolated from others	0	1	2	3
7. "Flashbacks" (sudden, vivid, distracting memories)	0	1	2	3
8. Restless sleep	0	1	2	3
9. Low sex drive	0	1	2	3
10. Anxiety attacks	0	1	2	3
11. Sexual overactivity	0	1	2	3
12. Loneliness	0	1	2	3
13. Nightmares	0	1	2	3
14. "Spacing out" (going away in your mind)	0	1	2	3
15. Sadness	0	1	2	3
16. Dizziness	0	1	2	3
17. Not feeling satisfied with your sex life	0	1	2	3
18. Trouble controlling your temper	0	1	2	3
19. Waking up early in the morning and can't get back to sleep	0	1	2	3
20. Uncontrollable crying	0	1	2	3
21. Fear of men	0	1	2	3
22. Not feeling rested in the morning	0	1	2	3
23. Having sex that you didn't enjoy	0	1	2	3
24. Trouble getting along with others	0	1	2	3
25. Memory problems	0	1	2	3
26. Desire to physically hurt yourself	0	1	2	3
27. Fear of women	0	1	2	3
28. Waking up in the middle of the night	0	1	2	3
29. Bad thoughts or feelings during sex	0	1	2	3
30. Passing out	0	1	2	3
31. Feeling that things are "unreal"	0	1	2	3
32. Unnecessary or over-frequent washing	0	1	2	3
33. Feelings of inferiority	0	1	2	3
34. Feeling tense all the time	0	1	2	3
35. Being confused about your sexual feelings	0	1	2	3
36. Desire to physically hurt others	0	1	2	3
37. Feelings of guilt	0	1	2	3
38. Feelings that you are not always in your body	0	1	2	3
39. Having trouble breathing	0	1	2	3
40. Sexual feelings when you shouldn't have them	0	1	2	3

Appendix F: State-Trait Anxiety Questionnaire

INSTRUCTIONS: A number of statements which people have used to describe themselves are given below. Read each statement and then circle the appropriate number to the right of the statement to indicate how you feel *right now*, that is, *at this moment*. There are no right or wrong answers. Do not spend too much time on any one statement but give the answer which seems to describe your present feelings best.

	not at all	somewhat	moderately so	very much so
1. I feel calm	1	2	3	4
2. I feel secure	1	2	3	4
3. I am tense	1	2	3	4
4. I feel strained	1	2	3	4
5. I feel at ease	1	2	3	4
6. I feel upset	1	2	3	4
7. I am presently worrying over possible misfortunes	1	2	3	4
8. I feel satisfied	1	2	3	4
9. I feel frightened	1	2	3	4
10. I feel comfortable	1	2	3	4
11. I feel self-confident	1	2	3	4
12. I feel nervous	1	2	3	4
13. I am jittery	1	2	3	4
14. I feel indecisive	1	2	3	4
15. I am relaxed	1	2	3	4
16. I feel content	1	2	3	4
17. I am worried	1	2	3	4
18. I feel confused	1	2	3	4
19. I feel steady	1	2	3	4
20. I feel pleasant	1	2	3	4

(Appendix F, continued)

INSTRUCTIONS: A number of statements which people have used to describe themselves are given below. Read each statement and then circle the appropriate number to the right of the statement to indicate how you *generally* feel. There are no right or wrong answers. Do not spend too much time on any one statement but give the answer which seems to describe how you generally feel.

	almost never	sometimes	often	almost always
21. I feel pleasant	1	2	3	4
22. I feel nervous and restless	1	2	3	4
23. I feel satisfied about myself	1	2	3	4
24. I wish I could be as happy as others seem to be	1	2	3	4
25. I feel like a failure	1	2	3	4
26. I feel rested	1	2	3	4
27. I am "calm, cool and collected"	1	2	3	4
28. I feel that difficulties are piling up so that I cannot overcome them	1	2	3	4
29. I worry too much over something that doesn't really matter	1	2	3	4
30. I am happy	1	2	3	4
31. I have disturbing thoughts	1	2	3	4
32. I lack self-confidence	1	2	3	4
33. I feel secure	1	2	3	4
34. I make decisions easily	1	2	3	4
35. I feel inadequate	1	2	3	4
36. I am content	1	2	3	4
37. Some unimportant thoughts runs through my mind and bothers me	1	2	3	4
38. I take disappointments so keenly that I can't put them out of my mind	1	2	3	4
39. I am a steady person	1	2	3	4
40. I get in a state of tension or turmoil as I think over my recent concerns and interests	1	2	3	4

Appendix G : Stimuli

Scenario #1 (*Low Risk Vignette*)

Narrator: You've not been out on a date in several months. You've been feeling particularly lonely lately. You go out to a bar to have a drink with your girlfriends. An attractive guy that you've seen around campus comes over and asks to buy you a drink. He hangs around and after awhile he starts to touch your arms and back and makes a few sexually suggestive comments.

(blank screen)

Actor: You're looking awfully sexy, what are you looking so hot for tonight?

(freeze frame on actor)

Scenario #2: (*High Risk Vignette*)

Narrator: You're at a party drinking and dancing with your girlfriends. A guy you recognize as being popular on campus comes up to you and starts dancing. He's very attractive, but you've heard that he is a player. He's been a gentleman to you throughout the night and you've had a really good time.

(blank screen)

Actor: Do you want to go to my place to talk?

(freeze frame on actor)

Scenario #3 (*Low Risk Vignette*)

Narrator: You go out on a date with a guy that you've liked for some time. After dinner, the guy suggests that you stop by a party that his friends are having that night. While at the party, you notice that his friends drink a lot and make several rude comments about women. At the end of the date, he takes you home.

(blank screen)

Actor: I had a really good time tonight and I was wondering if maybe you'd like to go out again.

(freeze frame on actor)

Scenario #4: (*High Risk Vignette*)

Narrator: You've been dating a guy for several months that you really like. Over the past few weeks, he's been putting increasing pressure on you for the relationship to become more sexual. The two of you return home from a date and are making out. You think that if you let him take your shirt off he will calm down and stop pressuring you. After you let him do this, he tries to take your pants off. You tell him "no".

(blank screen)

Actor: Well, you must want to have sex if you let me take your shirt off.

(freeze frame on actor)

Scenario # 5 (*low risk vignette*)

Narrator: You go out on a date with a guy you've gone out with several times. When he drives you home, he tells you that he's really and asks you if he can spend the night at your

place. You have not had sex with him and you are not ready to take your relationship to that level. You remind him that you are not ready to have sex with him yet.

(blank screen)]

Actor: I know that you're not ready to have sex. I really just want to sleep in the same bed and cuddle with you tonight.

(freeze frame on actor)

Scenario #6: *(High Risk Vignette)*

Narrator: You're at a party with your girlfriends. You notice that your girlfriends, who are wearing revealing clothing and making sexual comments to the guys, are getting a lot of attention at the party. You also notice that your friends start hooking up with these guys and going off to the bedrooms in the house. A guy that you've been attracted to for some time comes over and starts flirting with you. You talk to him for awhile.

(blank screen)

Actor: Do you want to go to one of the bedrooms?

(freeze frame on actor)

Scenario #7 *(Low Risk Vignette)*

Narrator: You are taking an upper division economics course that is quite difficult. You begin to fall behind in the course and realize rather late in the semester that if you don't do really well on the final exam you will fail the course. You go to the TA's office hours to get some help. He's very sympathetic and willing to help you do better.

(blank screen)]

Actor: I can help you do better on the final exam. Do you think you'd be able to come to my house this weekend for a study session?

(freeze frame on actor)

Scenario #8: *(High Risk Vignette)*

Narrator: You return home from a date with a guy that you really like. The two of you have gone out a couple of times and have kissed and touched each other before. You watch TV for a while and start to kiss and take each other's clothes off. Soon you only have your underwear on. You're not ready to have sex with this guy.

(blank screen)

Actor: I want the two of us to take our clothes off and just hold each other.

(freeze frame on actor)

Scenario #9 *(Low Risk Vignette)*

Narrator: You're at a party with your girlfriends. A guy that you have a crush on has been paying you a lot of attention throughout the evening by getting you drinks and telling you how beautiful and sexy you look. You and your girlfriends are getting ready to leave, and you ask them to wait for a few minutes until you find this guy and tell him goodbye. You return 15 minutes later and find that your friends have already left.

(blank screen)

Actor: Hey, I thought you'd left already. What happened?

(freeze frame on actor)

Scenario #10 (*High Risk Vignette*)

Narrator: You have been dating a guy for about a month and you really like him. He's very attractive and a lot of women on campus want to date him. You feel special that he's chosen to date you and not someone else. One night, you're making out with him and things start to get pretty hot. You tell him you don't want to have sex with him yet, but you can tell he's really into it.

(blank screen)

Actor: Look, I'm really committed to this relationship and if you were too, you'd be willing to have sex with me.

(freeze frame on actor)

Appendix H: Post Test Questionnaire

INSTRUCTIONS: You will now view each vignette again. This time, at the end of each vignette, you will watch the response you gave to the man. For each vignette, we would like you to rate, using a 6-point Likert scale, how effective you thought your response was in avoiding an unwanted sexual experience (1= completely ineffective, 2 = moderately ineffective, 3 = slightly ineffective, 4 = slightly effective, 5 = moderately effective, 6 = completely effective). An unwanted experience will be defined as one in which you may be verbally or physically coerced into having sexual contact of any kind with a man. Please assign ratings of 1-3 to responses that will either increase or fail to decrease risk and ratings of 4-6 to responses that are likely to decrease risk.

ITEM 1. In this scenario you haven't been on a date in a while and have felt lonely. While at a bar with your girlfriends, an attractive guy asks to buy you a drink. When he starts touching your back and making sexually suggestive comments, how effective was your response?

I did not
perform this
response
effectively at
all

1

2

3

4

5

6

I performed
this response
very
effectively

ITEM 2. In this scenario, you've been drinking and you're out dancing when a popular guy with a reputation as a player starts flirting and dancing with you. He's been a gentleman and at the end of the evening he asks you to come back to his room. How effective was your response in this scenario?

I did not
perform this
response
effectively at
all

1

2

3

4

5

6

I performed
this response
very
effectively

ITEM .3 In this scenario, you go out to dinner and a party with a guy you've liked. At the party his friends drink a lot and say rude things about women. When he asks you out again, how effective is your response?

I did not
perform this
response
effectively at
all

*1**2**3**4**5**6*

I performed
this response
very
effectively

ITEM 4. In this scenario, you've been dating a guy who has been putting increasing pressure that the relationship becomes more sexual. You have returned from a date and let him take your shirt off because you think this will help him stop pressuring you. Instead, he tries to take your pants off and you don't let him. When he said that you must want to have sex if you took your shirt off, how effective was your response?

I did not
perform this
response
effectively at
all

*1**2**3**4**5**6*

I performed
this response
very
effectively

ITEM 5. In this scenario, you've gone out with a guy you like a couple times but are not ready to have sex with him yet. When he drives you home from a date, he says he's tired and would like to stay the night. When he asks to sleep in your bed and cuddle for the night, how effective was your response?

I did not
perform this
response
effectively at
all

*1**2**3**4**5**6*

I performed
this response
very
effectively

ITEM 6. In this scenario, you have just returned from a date with a guy you like and are kissing on the couch. You are kissing each other and end up wearing only your underwear. You are not ready to have sex with him. When he says he just wants for you to both take your clothes off and hold each other, how effective was your response?

I did not
perform this
response
effectively at
all

*1**2**3**4**5**6*

I performed
this response
very
effectively

ITEM 7. In this scenario, you have fallen behind in your economics course and have realized you need to do well on the final or you will fail the course. When you meet with the TA he says he can help you on the final. When he asks if you could come to his house over the weekend for a study session, how effective was your response?

I did not
perform this
response
effectively at
all

*1**2**3**4**5**6*

I performed
this response
very
effectively

ITEM 8. In this scenario you are at a party with your girlfriends who start to hook up with guys and disappear to various bedrooms in the house. A guy you are attracted to comes over and starts flirting with you. When he asks if you want to go to one of the bedrooms to talk, how effective was your response.

I did not
perform this
response
effectively at
all

*1**2**3**4**5**6*

I performed
this response
very
effectively

ITEM 9. In this scenario, you are at a party with your girlfriends and a guy you like has been getting you drinks and saying nice things to you. You are ready to leave with your girlfriends but ask them to leave while you say goodbye to this guys. However, your girlfriends leave without you. When the guy asks you what happened, how effective was your response?

I did not
perform this
response
effectively at
all

*1**2**3**4**5**6*

I performed
this response
very
effectively

ITEM 10. In this scenario, you have been dating a guy for about a month but are not ready to have sex with him. You really like him and the two of you are making out. When he says that if you were committed to the relationship you'd have sex with him, how effective was your response?

I did not
perform this
response
effectively at
all

*1**2**3**4**5**6*

I performed
this response
very
effectively

Appendix I: Rater Instructions

You have received a set of videotaped responses to ten vignettes selected from the Roleplaying Inventory of Social Knowledge (RISK). Responses to each vignette have been divided into 4 subsets containing approximately 20 responses each. Each subset begins with a videotaped presentation of the original vignette. You are being asked to assess the effectiveness of each response in decreasing the woman's risk of having an unwanted sexual experience. An unwanted experience is defined as one in which the participant may be verbally or physically coerced into having sexual contact of any kind with a man. Please use the following scale in assigning effectiveness ratings to the responses using the following scale:

- 1 = completely ineffective
- 2 = moderately ineffective
- 3 = slightly ineffective
- 4 = slightly effective
- 5 = moderately effective
- 6 = completely effective

- Begin by viewing the vignette you are about to code. As you watch the scenario, make sure that you understand the situation and the request that is being made of the woman.
- Watch the all of the responses in Subset 1 of the vignette you are working on *before* you begin coding. This will give you a sense of the range of responses given by participants for each situation.
- After you have viewed the responses from Subset 1, return to the beginning of the video and assign an effectiveness rating to each response. The number of Likert scales in your Rater's packet for each subset will match the number of responses you have in each subset. Repeat these steps for each subset of the ten vignettes.
- When making your ratings, consider the entire duration of a woman's response clip as her response. Clips have been edited from the moment the vignette ended to the end of the woman's response.
- There is not much time between responses. If you find that you need more time to consider the effectiveness of a response, please pause the video. This will ensure that each response receives your full attention.
- If you become fatigued, please take a break before continuing to code. Additionally, to avoid becoming fatigued, please complete no more than 2 consecutive subsets (this will be approximately 40 responses) in the same sitting. In addition, please complete a subset before taking a break.
- When making your effectiveness ratings, please ignore the lighting of the video and motions that are the result of participants' swiveling in the desk chair. These variables are the result of the filming environment and will vary across videos.
- If you have questions about any portion of the rating process, please contact Erica Nason before proceeding.

Table 1 Means and Correlations among Outcome Measure

Variable	Mean	SD	1	2	3	4	5	6	7	8	9
1. BDI	8.45	7.15	--								
2. TSC	27.76	18.78	.778**	--							
3. SS	45.72	6.1	.151*	.208**	--						
4. SES	4.87	1.6	.362**	.465**	.248**	--					
5. STAI1	44.06	5.94	-.272**	-.168*	-.128	-.017	--				
6. STAI2	46.36	5.41	.099	.108	-.082	.121	.371**	--			
7. SELF1	3.72	.89	-.2**	-.174*	-.139*	-.093	.203**	-.013	--		
8. SELF2	4.51	.75	-.274**	-.269**	-.188**	-.17*	.283**	.108	.401**	--	
9. EXP1	3.53	.74	-.066	-.127	-.344**	-.198**	.123	-.05	.495**	.177*	--
10. EXP2	4.17	.54	-.132	-.119	-.153*	-.159*	.053	-.017	.293**	.451**	.496**

Note: BDI = Beck Depression Inventory; TSC = Trauma Symptom Checklist; SS= Sociosexuality Survey; SES = Sexual

Experiences Survey; STAI1 = State and Trait Anxiety Inventory, State Scale; State and Trait Anxiety Inventory, Trait Scale;

SELF1 = Self rating score, low risk vignettes; SELF2 = Self rating score, high risk vignettes; EXP1 = Expert rating score, low

risk vignettes; EXP2 = Expert rating, high risk vignettes; * $p < .05$; ** $p < .01$

Table 2**Summary of Multiple Regression Analysis for Variables Predicting Response Effectiveness to the High Risk Vignettes (N = 181)**

Analysis and Variables	<i>B</i>	<i>SE B</i>	β
Full Model			
SS	-.02*	.01	-.18*
SES	-.042	.03	-.12
BDI	-.00	.01	-.02
TSC	.00	.00	.00
STAI-state	.00	.03	.03
Post Hoc Analyses			
SES	-.06*	.03	-.17*
BDI	-.00	.01	-.02
TSC	.00	.00	-.01
STAI-state	.00	.01	.05

Note: $R^2 = .07$, ($p = .03$) for the full model; $R^2 = .04$, ($p = ns$) for the post hoc model.

BDI = Beck Depression Inventory; TSC = Trauma Symptom Checklist; SS =

Sociosexuality Survey; SES = Sexual Experiences Survey; STAI-state = State and Trait

Anxiety Inventory, State Scale

* $p < .05$; ** $p < .01$

Table 3**Summary of Hierarchical Regression Analysis for Variables Predicting Response Effectiveness to the Low Risk Vignettes (N = 178)**

Analysis and Variables	<i>B</i>	<i>SE B</i>	β
Full Model			
SS	-.03	.01	-.26**
SES	-.05	.04	-.11
BDI	.02	.01	.153
TSC	-.00	.01	-.09
STAI-state	.02	.01	.11
Post Hoc Analyses			
SES	-.07	.04	-.16
BDI	.02	.01	.16
TSC	-.01	.01	-.13
STAI-state	.02	.04	.14

Note: $R^2 = .09$, ($p = .00$) for the full model; $R^2 = .05$, ($p = .056$) for the post hoc model.

BDI = Beck Depression Inventory; TSC = Trauma Symptom Checklist; SS =

Sociosexuality Survey; SES = Sexual Experiences Survey; STAI-state = State and Trait

Anxiety Inventory, State Scale

* $p < .05$; ** $p < .01$

Figure 1 Mediated models for response effectiveness in high and low risk scenarios.

β coefficients for direct paths are above the path and mediated effects are below the path.

Note: SS= Sociosexuality Survey; SES = Sexual Experiences Survey; EXP = experts' effectiveness rating.

* $p < .05$; ** $p < .01$.

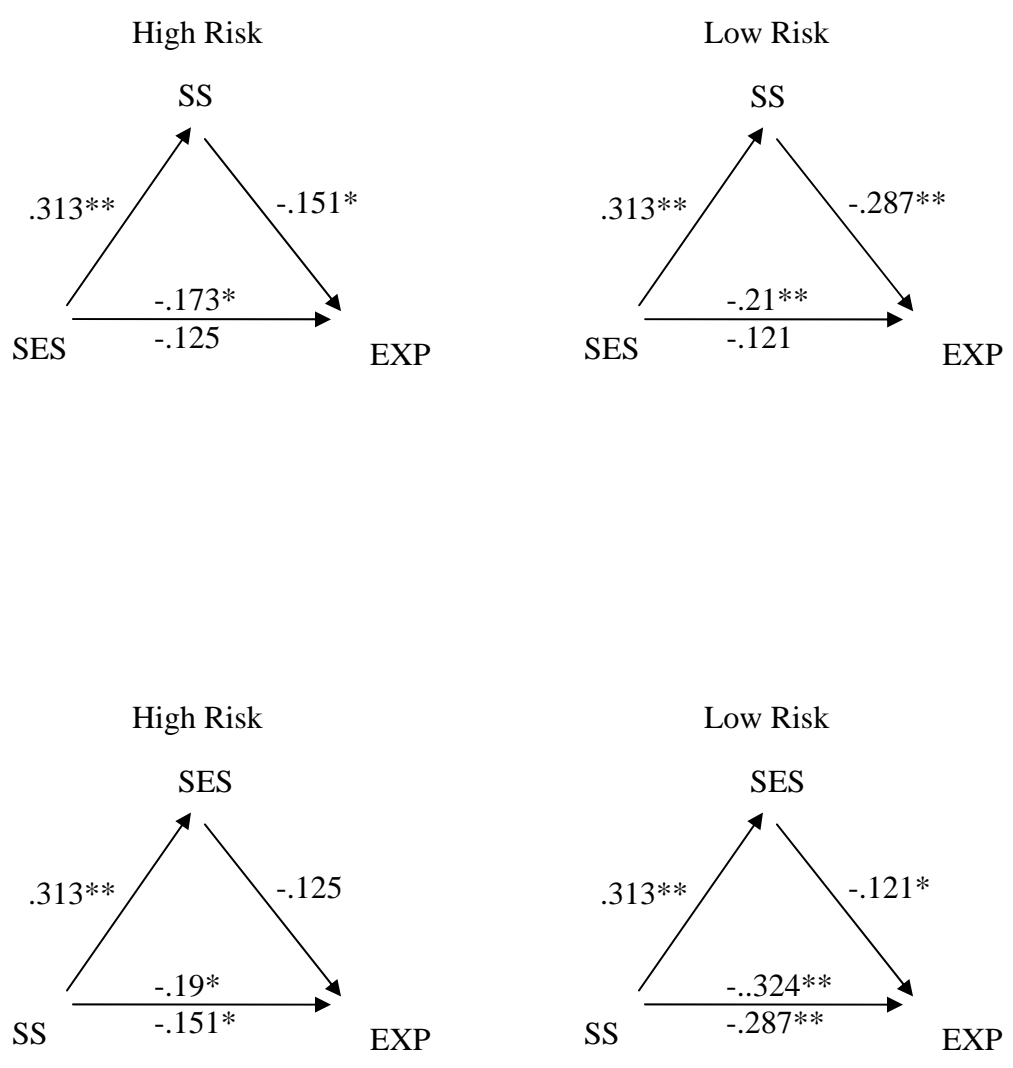
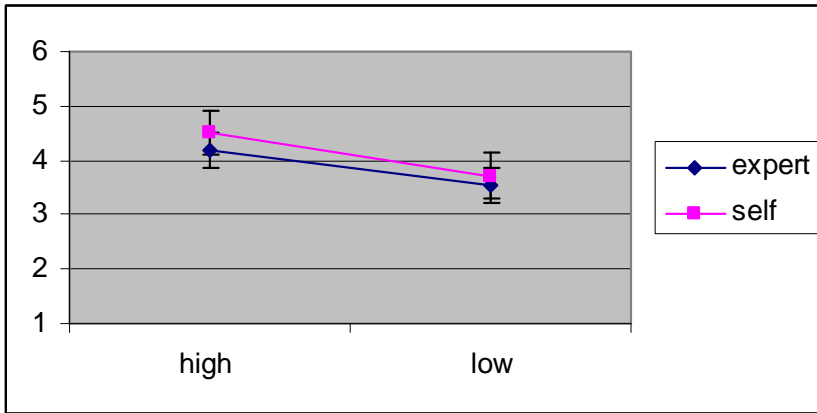


Figure 2 *Self and Expert Mean Ratings for Low and High Risk Situations*



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