Unwanted Sexual Experiences: Preliminary Development and Validation of a Behavioral Analog Measure for Risk Perception, Response Appraisal, and Response

Robin M. Carter-Visscher
Western Michigan University

Follow this and additional works at: https://scholarworks.wmich.edu/dissertations

Part of the Domestic and Intimate Partner Violence Commons, Health Psychology Commons, and the Social Psychology Commons

Recommended Citation
https://scholarworks.wmich.edu/dissertations/757
UNWANTED SEXUAL EXPERIENCES: PRELIMINARY DEVELOPMENT AND VALIDATION OF A BEHAVIORAL ANALOG MEASURE FOR RISK PERCEPTION, RESPONSE APPRAISAL, AND RESPONSE

by

Robin M. Carter-Visscher

A Dissertation
Submitted to the
Faculty of The Graduate College
in partial fulfillment of the requirements for the Degree of Doctor of Philosophy
Department of Psychology
Dr. Amy E. Naugle, Advisor

Western Michigan University
Kalamazoo, Michigan
August 2008
ACKNOWLEDGMENTS

I would like to express my appreciation for the many people who contributed to my dissertation. I am especially grateful to my committee chair, my mentor, and my friend, Dr. Amy Naugle. Thank you for introducing me to the risk perception literature and this specific line of research focusing on assessment of risk perception and effective responding to assist in better understanding sexual revictimization, an area of research that I am truly passionate about. I would also like to acknowledge Dr. Naugle’s significant role in my years of graduate training at Western Michigan University. She has provided invaluable support and guidance throughout my clinical and research endeavors, making my graduate training experience everything I had hoped for and preparing me well for my career as a scientist-practitioner.

I would also like to recognize the contributions of my dissertation committee members, Drs. Richard Spates, Scott Gaynor, and Mary Anderson. Thank you for your support and suggestions throughout the process. I also appreciate your flexibility around scheduling the defense, making it possible to graduate in time to begin my new job. I would also like to specifically mention the noteworthy contribution Dr. Mary Anderson made to this project first as a consultant and then as a committee member. Her knowledge about scale development and validation played a pivotal role in enhancing the process of validating this innovative measure.

Next, I would like to thank all the members of the Trauma Research Lab who assisted me with this project. It definitely took a team to complete this project, and I am
Acknowledgments—Continued

particularly thankful for all of the work Tara Adams, Tanya Douleh, Suzanne Decker, and Abby Seifert put in to run this project in my absence. Thank you for putting in those long, grueling hours of data entry to help ensure I was able to defend my dissertation so quickly after data collection was completed! Tara, I am forever appreciative of you and your dedication as my research assistant and project manager while I was on internship. You were just the person I needed to manage this project. Thank you for the numerous favors you did for me and for always doing it with a smile on your face!

I would also like to recognize my undergraduate mentor, Dr. Maria Hunt, for recognizing my potential and nurturing my growth. Your passion for the field of psychology is contagious, and I will forever be grateful for the role you have played in my academic life. It is with heartfelt gratitude that I also thank the individuals who participated in this project to date and those who will participate in the next phases of this ongoing line of research. It would not be possible without your contribution!

Finally, I would like to acknowledge my family and friends who provided so much encouragement throughout this process. Mom, Dad, Becky, Robert, Brenda, Mike, Dikla, Amanda and many others, you provided much support throughout these years and helped to make these some of the best years of my life. Last, but never least, I would like to thank my husband, Curt, for supporting me through this adventure and always being there for me through the laughter and the tears. I cannot imagine a stronger supporter than you. I could not have done it without you.

Robin M. Carter-Visscher
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>ACKNOWLEDGMENTS</th>
<th>..........................................................</th>
<th>ii</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIST OF TABLES</td>
<td>..................................................................................</td>
<td>vii</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>..................................................................................</td>
<td>viii</td>
</tr>
<tr>
<td>INTRODUCTION</td>
<td>..................................................................................</td>
<td>1</td>
</tr>
<tr>
<td>Prevention Efforts</td>
<td>..........................................................................</td>
<td>2</td>
</tr>
<tr>
<td>Risk Factors</td>
<td>..................................................................................</td>
<td>6</td>
</tr>
<tr>
<td>Risk Perception</td>
<td>..................................................................................</td>
<td>9</td>
</tr>
<tr>
<td>Defining Risk Perception</td>
<td>.......................................................................</td>
<td>14</td>
</tr>
<tr>
<td>Behavioral Resistance Strategies</td>
<td>...................................................................</td>
<td>16</td>
</tr>
<tr>
<td>Program of Research</td>
<td>.........................................................................</td>
<td>19</td>
</tr>
<tr>
<td>Reexamining the Literature</td>
<td>.....................................................................</td>
<td>24</td>
</tr>
<tr>
<td>Current Study</td>
<td>..................................................................................</td>
<td>28</td>
</tr>
<tr>
<td>Phase Three</td>
<td>..................................................................................</td>
<td>28</td>
</tr>
<tr>
<td>METHODS</td>
<td>..................................................................................</td>
<td>34</td>
</tr>
<tr>
<td>Participants</td>
<td>..................................................................................</td>
<td>34</td>
</tr>
<tr>
<td>Validity and Reliability Group</td>
<td>.......................................................................</td>
<td>34</td>
</tr>
<tr>
<td>Multidimensional Scaling (MDS) Group</td>
<td>....................................................................</td>
<td>36</td>
</tr>
<tr>
<td>Measures</td>
<td>..................................................................................</td>
<td>37</td>
</tr>
<tr>
<td>Personal Data Survey (PDS; Naugle, 1999)</td>
<td>...............................................................</td>
<td>37</td>
</tr>
<tr>
<td>Written Vignettes</td>
<td>..........................................................................</td>
<td>39</td>
</tr>
</tbody>
</table>
Table of Contents—Continued

Vignette Rating Questionnaire: Risk Perception, Response Appraisal, and Response (VRQ) .......................................................................................................................... 42

Level of Risk in Dating Situations (LRDS) ............................................................... 43

Cognitive Appraisal of Risky Events (CARE; Fromme, Katz, & Rivet, 1997) ............................................................................................................................. 45

Barriers to Responding to Sexual Aggression (BRSA; Nurius et al., 2000) ............................................................................................................................... 46

Sexual Assertiveness Scale for Women (SAS; Morokoff et al., 1997) .... 47

General Assertiveness (Morokoff et al., 1997) ...................................................... 48

Marlowe-Crowne Social Desirability Scale (M-C SDS; Crowne & Marlowe, 1964) ..................................................................................................................... 48

Risk in Intimacy Inventory (RII; Pilkington & Richardson, 1988) ........ 49

Relationship Assessment Scale (RAS; Hendrick, 1988) ........................................ 50

 Procedures .................................................................................................................. 50

Validity and Reliability Raters .................................................................................. 51

MDS Group .................................................................................................................. 52

Data Analytic Procedures .......................................................................................... 52

RESULTS ..................................................................................................................... 55

Convergent and Discriminant Validity ..................................................................... 55

Internal Structure ....................................................................................................... 61

Reliability ..................................................................................................................... 65

DISCUSSION ............................................................................................................... 72

Convergent and Discriminant Validity ..................................................................... 72

Internal Structure ....................................................................................................... 76
LIST OF TABLES

1. Means and Standard Deviations for Measures Used to Assess Convergent and Discriminant Validity .......................................................... 56

2. Intercorrelations Among the Risk Perception, Response Appraisal, and Response Subscales of the VRQ and the CARE: Risky Sexual Activities Scale, BRSA, and SAS: Refusal Scale ........................................... 56

3. Intercorrelations Among the Risk Perception Subscale of the VRQ and LRDS Subscales ........................................................................ 58

4. Intercorrelations of Risk Perception Subscale of VRQ and Aggressive and Illegal Behaviors Subscale of the CARE ........................................... 58

5. Intercorrelations Among the Risk Perception, Response Appraisal, and Response Subscales of the Vignette Rating Questionnaire and the RAS ........ 59

6. Intercorrelations Among the Risk Perception, Response Appraisal, and Response Subscales of the Vignette Rating Questionnaire and the RII ....... 60

7. Intercorrelations Among the Risk Perception, Response Appraisal, and Response Subscales of the Vignette Rating Questionnaire and the M-C SDS ................................................................. 60

8. Weirdness Index and Individual Salience Weights ...................................... 63

9. Vignette Segment Means and Standard Deviations, Test-Retest Reliability, Internal Consistency, and Mean Inter-Item Correlations ........................ 65

10. Immediate and Delayed Alternate Forms Reliability Correlations ............ 70
LIST OF FIGURES

1. Two-Dimensional Configuration of Written Vignettes ........................................ 62
2. Individual Salience Weights Plot ........................................................................ 64
INTRODUCTION

Rape has been defined as nonconsensual sexual penetration of another by force or threat of force (Benson, Charlton, & Goodhart, 1992). Contrary to the media's depiction of a stranger breaking into a woman's house in the middle of the night or abducting a woman from a dark parking lot and raping her, research has indicated that rape is more frequently committed by an acquaintance or steady dating partner than by a stranger. Rape committed by an individual known to the victim has been referred to as acquaintance rape; while date rape, a subset of acquaintance rape, refers to rape between two individuals in a dating relationship (Marx, Van Wie, & Gross, 1996). Although the exact prevalence of acquaintance and date rape is unknown, rates as high as 80–90% have been reported on college campuses and in the general public (Dunn, Vail-Smith, & Knight, 1999; Russell, 1986). The term “unwanted sexual experiences” has been used frequently in the literature to describe a variety of sexual encounters, both consensual and nonconsensual, where some form of sexual behavior occurred that was unwanted by at least one individual involved in the encounter. For purposes of the proposed study, the term “unwanted sexual experiences” will refer to all instances of unwanted sexual contact with an acquaintance including rape.

Several researchers have found evidence that rape and other forms of unwanted sexual experiences are prevalent on college campuses. Muehlenhard and Linton (1987) found 78% of female college students reporting unwanted sexual experiences with 15% reporting at least one incident of rape. Koss, Dinero, Seibel, and Cox (1988) compared
stranger and acquaintance rape and found that 85% of their sample reported being raped by someone they knew. Furthermore, 70% of acquaintance rapes were perpetrated by a romantic acquaintance. When considering sexually aggressive behavior other than rape, Koss et al. found approximately 54% of women and 25% of men reporting involvement in at least one incident of sexual assault. In a more recent study, the Center for Disease Control and Prevention collected data from a nationally representative sample of female college students and found 20% reporting that they had been forced to engage in sexual intercourse at least once during their life (Brener, McMahon, Warren, & Douglas, 1999).

Consequences of unwanted sexual experiences include posttraumatic stress, fear, anxiety, depression, suicidal ideation and suicide attempts, dissociation, anger, substance abuse, lowered self-esteem, sexual dissatisfaction, and sexual dysfunction (Arata & Burkhart, 1996; Kilpatrick, Best, Veronen, Amick, Villeponteaux, & Ruff, 1985; Koss, Dinero, Seibel, & Cox, 1988; Layman, Gidycz, & Lynn, 1996; Resick, 1993; Sanders & Moore, 1999; Shapiro & Schwarz, 1997; Tanzman, 1992). Most of these responses return to pre-assault levels within one year of the assault. However, fear, anxiety, and sexual dissatisfaction tend to be more persistent (Ellis, 1983; Steketee & Foa, 1987).

Prevention Efforts

Information about risk factors has been used to guide researchers in development and examination of college sexual assault education programs designed to reduce the incidence of sexual victimization. Hanson and Gidycz (1993) developed a prevention program for women with sexual victimization histories. Results suggested that the program was effective at reducing incidence of sexual assault among women with no
victimization histories but ineffective for previously victimized women. Breitenbecher and Gidycz (1998) modified this program based on hypothesized mechanisms of revictimization including dissociation, depression, anxiety, learned helplessness, dependency, and low self-esteem. Participants attended one session for the program and returned for a follow-up at the end of the academic quarter. Results indicated that the program was unsuccessful in reducing incidence of sexual assault, regardless of victimization history. In addition, dating behaviors, sexual communication and sexual assault awareness remained unchanged.

Breitenbecher and Scarce (1999) evaluated the effectiveness of an existing sexual assault education program that was designed and implemented by rape education specialists at a large Midwestern university. The 1-hour education program was designed to reduce incidence of sexual assault by increasing knowledge of issues such as prevalence of sexual assault on college campuses, rape myths, and sex role socialization practices. Results suggested that participants’ knowledge of sexual assault was increased and then maintained over a 7-month period. However, this program failed to reduce the incidence of sexual assault. The program was later modified to include an additional component targeting psychological barriers to resistance (Breitenbecher & Scarce, 2001). This component included asking participants to read vignettes describing sexual assault-related situations, imagine themselves in the situation, and generate behavioral response strategies to reduce risk of an unwanted sexual experience. Additional outcome variables such as dating behaviors associated with sexual assault, sexual communication, risk perception, resistance strategy and others were evaluated. Consistent with previous studies, the program did not assist in reducing incidence of sexual assault. Sexual assault
knowledge also remained unchanged. The authors suggest that failure of these programs to reduce incidence of sexual assault in previously victimized women may indicate that a one-session prevention program may be too brief to influence risk-related behaviors and/or responses to unwanted sexual advances. They also suggest that issues targeted by the programs may not be directly related to risk for sexual assault and call for continued program evaluation.

Yeater and O’Donohue (2002) used an information-based prevention program to compare previously victimized and nonvictimized women’s abilities to learn sexual assault-related material, to perceive risk, and to respond in high-risk situations. The program consisted of three segments. In the first segment, participants were taught facts regarding rape in order to assist them in identifying rape myths and misperceptions. Participants then learned to identify 10 risky behaviors and 10 risk-reducing behaviors in the second and third segments. For each segment, participants were trained to criterion of 90% accuracy. Results suggested that women, regardless of victimization history, needed more than one trial to learn the information taught in the prevention program. This finding provides support for Brietenbecher and Scarce’s assertion that a brief, one-time prevention effort may not be powerful enough to influence behavior change. However, this study did not evaluate whether learning sexual assault-related information to 90% accuracy reduced incidence of experiencing sexual victimization.

Marx, Calhoun, Wilson, and Meyerson (2001) developed a sexual revictimization prevention program that added a skills training component to the Hanson and Gidycz psychoeducation program. This new component targeted risk perception, problem solving, coping, assertiveness, and communication skills. Participants viewed a
videotaped scenario that included situational risk factors related to acquaintance rape. In order to target the above skills, the scenario was intermittently paused and participants were verbally prompted to identify risk factors related to sexual victimization and to discuss behaviors that might be effective in avoiding the acquaintance rape that is ultimately portrayed in the videotaped scenario. Participants also completed a worksheet where they listed risk factors that were related to their personal victimization experiences. This worksheet was later used to discuss risk recognition and behavioral skills that could be used in the future to assist in avoiding unwanted sexual experiences. At a 2-month follow-up, results indicated that rates of overall revictimization and risk recognition did not differ for individuals in the intervention and control groups. However, fewer participants in the intervention group (12%) reported experiencing rape compared to participants in the control group (30%). Additionally, participants who exhibited greater risk recognition skills at follow-up were less likely to report rape experiences than those exhibiting poorer risk recognition skills. While the results of this study suggest an association between risk perception and revictimization, the study did not assess risk perception skills prior to implementing the prevention program. Therefore, this study provides no evidence of an increased ability to recognize risk following participation in this program.

Efforts to reduce sexual revictimization incidence through prevention programs have generally proved unsuccessful. One potential reason for this finding is that the issues targeted in prevention programs may not be directly related to sexual revictimization (Breitenbecher & Scarce, 1999) because the mechanisms of sexual revictimization are not yet well understood (Messman & Long, 1996; Messman-Moore &
Long, 2003). In light of this, it is suggested that factors influencing behavior be analyzed before developing, implementing and evaluating interventions (Mahoney, Thombs, & Howe, 1995).

Risk Factors

In view of the prevalence and significant consequences of sexual victimization, researchers have explored risk factors for sexual assault. Risk factors associated with both the perpetration and the experience of sexual assault have been investigated. Exploring risk factors for the experience of sexual victimization has the potential to appear as though researchers are blaming the victims for their experiences. However, it is recognized that the responsibility of sexual assault ultimately lies with perpetrators. Studying risk factors related to experiencing unwanted sex can provide researchers with important information about what women might be able to do to protect themselves, and this information can be used in prevention programs for women. For this reason, the following discussion focuses on risk factors related to women’s experience of sexual victimization.

Researchers have identified individual and situational risk factors for unwanted sexual experiences. Individual risk factors refer to personal variables, such as an individual’s sexual history, that put the individual at increased risk for encountering unwanted sexual experiences. A history of childhood sexual abuse has received substantial empirical support as a risk factor for unwanted sexual experiences. Russell (1986) found that over 60% of women who experienced childhood sexual assault (CSA) were revictimized after the age of 14 while only 35% of women with no history of CSA
reported experiencing rape or attempted rape as an adult. Similarly, Maker, Kemmelmeier, and Peterson (2001) found CSA to be the only reliable predictor of adult sexual assault (ASA), with 66% of women with a CSA history experiencing ASA compared to only 38% of women without a CSA history. Approximately 72% of college women with a history of CSA have reported experiencing revictimization as adults (Stevenson & Gajarsky, 1991).

Gidycz, Hanson, and Layman (1995) prospectively examined rates of unwanted sexual experiences for college women with CSA or adolescent sexual abuse histories. They found that 54% of women with sexual abuse histories were revictimized at a 3-month follow-up contrasted with only 32% of women without such histories. Siegel and Williams (2003) compared a variety of sexual abuse histories and found combined CSA and adolescent sexual abuse histories to increase the risk for adult revictimization. Increasing rates of approximately 28, 38, 50, and 75% were reported for participants with no CSA, CSA before the age of 13 only, SA as an adolescent only, and combined CSA and adolescent sexual abuse histories, respectively. These results illustrate the increased risk for adult sexual revictimization as the number of prior victimization experiences increases. Individuals who have experienced both CSA and ASA have also been found to report experiencing a cumulative effect of psychological distress and interpersonal problems compared to individuals who have had a single victimization experience (Arata, 1999; Banyard, Williams, & Siegel, 2001; Classen, Field, Koopman, Nevill-Manning, & Spiegel, 2001; Follette, Polusny, Bechtle, & Naugle, 1996; Messman-Moore, Long, & Siegfried, 2000).
Situational risk factors refer to environmental variables related to unwanted sexual experiences that may increase the likelihood that a situation would lead to sexual assault. Muehlenhard and Linton (1987) identified several situational risk factors associated with sexual assault. First, the victims knew the perpetrators. In fact, one year was the mean length of time the individuals had known each other before the assault. The power differential in the relationship was another situational risk factor. The man’s initiating the date, paying for expenses, and driving on the date was also associated with increased risk for sexual assault. Dating activity or location was also a risk factor for unwanted sexual experiences. Dating activities with sexual implications and/or isolated locations were considered risky. For example, “parking,” being alone at the man’s apartment, and going to a party were associated with sexual aggression.

Miscommunication regarding both individuals’ intentions to engage in sexual behavior was associated with men feeling “led on” by women, thereby increasing the risk for sexual victimization. Finally, heavy alcohol or drug use was a risk factor for unwanted sexual experiences. Additional investigations have also found evidence supporting alcohol expectancies, use, and abuse as risk factors for sexual assault (Corbin, Bernat, Calhoun, McNair, & Seals, 2001; Koss & Dinero, 1989; Marx et al., 1996; Norris, Nurius, & Dimeff, 1996; Siegel & Williams, 2003).

Coercion tactics used by perpetrators have also been identified as situational variables related to sexual victimization. Examples include threats or use of physical force, alcohol and other drugs, misuse of authority, verbal pressure (e.g., continual arguments and promises of positive consequences), sexual arousal techniques (e.g., persistent kissing or fondling), and emotional manipulation (e.g., threats to end the
Risk Perception

Risk perception refers to one’s ability to recognize behavioral and situational variables that increase the probability of experiencing victimization. The proposed study is concerned with women’s ability to perceive risk factors for unwanted sexual experiences within the context of heterosexual acquaintance or dating relationships. Researchers have begun to investigate the behavioral factors associated with risk for sexual victimization and have hypothesized that women with a victimization history may have deficient risk perception skills (Naugle & Follette, 1994; Norris, Nurius, & Graham, 1999; Wilson, Calhoun, & Bernat, 1999). Variables that discriminate between the presence and absence of risk must be present in order for an individual to perceive risk; however, many situational risk factors associated with sexual victimization are also present in situations of normal socializing, which decreases the likelihood that women detect risk (Nurius, 2000). Breitenbecher (2001) reviewed investigations that explored several theories of sexual revictimization and found risk perception to be the only theory with clear empirical support. Although few investigations have been conducted to date, preliminary findings support a relationship between risk perception and sexual victimization.

In general, women perceive themselves as being at less personal risk for experiencing sexual assault than other women (Norris et al., 1999). However, women who have experienced sexual assault do not share this optimistic bias. Rather, they
believe that they are at increased risk for experiencing sexual assault again in the future (Norris et al.). Brown, Messman-Moore, Miller, and Stasser (2005) also found that women with more severe victimization experiences viewed themselves as more likely to experience a future rape or sexual assault than women with less severe victimization experiences. Women who experienced sexual victimization over the course of the study displayed less comparative optimism at the beginning of the study and at follow-up. These investigators also found that the relationship between sexual victimization experience and the perception that they are more personally at risk for future sexual assault was mediated by perceived similarity to a typical sexual assault victim. Perceived control over sexual assault and psychological distress were also related to perceived risk for sexual victimization.

Norris et al. (1999) also investigated different types of situational risk factors that women may encounter while on a date. Two scales were developed to assess whether participants differentiate the types of situational risk involved in a variety of dating experiences. The first scale, labeled “clear risk factors,” included explicit variables related to sexual victimization such as sexual comments or jokes, verbal persuasion and persistence, and physical pressure while the second scale, labeled “ambiguous risk factors,” included variables considered to more vaguely indicate risk for sexual victimization such as alcohol use, man’s size, and degree of isolation. Results indicated that women require the presence of clear risk factors to report feeling on guard while they required a higher level of clear and ambiguous risk factors to report feeling uncomfortable or seriously at risk. Therefore, it may take longer for a woman to feel on guard if clear indicators of risk are not present. Because women have a learning history of
encountering ambiguous risk factors in social situations without being punished (i.e., experiencing victimization), it is likely that women will continue their interactions without engaging in risk-reducing behaviors. This study also investigated the relationship between severity of victimization and the type of risk factors required to report feeling on guard, uncomfortable, or seriously at risk. As the severity of victimization experiences increased from low to high severity, women required a higher level of ambiguous risk factors to report feeling on guard. When risk perception level increased from feeling on guard to uncomfortable and seriously at risk, women with high severity victimization again needed a higher level of ambiguous risk factors present to perceive risk while women with low severity victimization experiences needed a higher level of clear risk factors, rather than ambiguous, to perceive the same amount of risk.

Variables such as revictimization, drinking habits, and PTSD symptomatology have also been examined. Revictimized women demonstrate longer latencies on risk recognition tasks than women with single or no victimization histories and tend to wait until the situation is high risk before indicating that the interaction has gone too far (Wilson et al., 1999). Messman-Moore and Brown (2006) prospectively examined the relationship between risk perception and revictimization and found that women who were revictimized throughout the course of the study indicated at the beginning of the study that they would leave a hypothetical acquaintance rape situation significantly later than women who were previously victimized but not revictimized during the course of the study. Norris et al. (1999) identified that women who report consuming alcohol in dating situations require more depictions of female drinking to recognize risk in a written dating scenario compared to women who report that they do not consume alcohol. Women who
drink also view themselves as being at higher risk for experiencing sexual assault than nondrinkers. While drinkers may be more cognizant of their risk for unwanted sexual experiences, whether women detect this risk and engage in self-protective behaviors while under the influence of alcohol remains undetermined. Women with low-level PTSD symptoms show longer latencies than women with higher-level symptoms, suggesting that low levels of PTSD symptoms are more strongly related to poorer risk recognition than are higher levels (Wilson et al., 1999). The authors explained this finding as being consistent with PTSD information processing models, which indicate that individuals with higher levels of PTSD symptoms appear “hyperprepared” to recognize risk in ambiguous situations.

Physiological changes might indicate the presence of risk. However, chronic arousal or emotional numbing, as experienced by victims of prior sexual assaults, may reduce the ability to detect physiological changes under threatening situations (Naugle, 1999). Recently, Soler-Baillo, Marx, and Sloan (2005) investigated whether physiological reactivity differs for victims and non-victims of sexual assault in response to a date rape auditory stimulus (Marx & Gross, 1995). They found that victims did display a different pattern of physiological response to the scenario such that non-victims experienced greater heart rate reactivity during earlier segments when risk is more ambiguous rather than clear. The difference in heart rate reactivity was not statistically significant in later segments when the couple’s interaction intensified. This finding suggests that victims of sexual assault do not experience physiological cues of risk early on in interpersonal situations when risk is likely lower and more ambiguous, which might account for findings that women with sexual victimizations histories report that they
would leave a situation significantly later than non-victims, when the risk for experiencing sexual assault is greater (Messman-Moore & Brown, 2006; Soler-Baillo et al., 2005; Wilson et al., 1999). The authors suggest the need for future research to investigate the relationship between PTSD and physiological reactivity since prior research has found that individuals with higher levels of PTSD report leaving the situation earlier, as discussed above.

VanZile-Tamsen, Testa, and Livingston (2005) conducted an experiment to examine prior sexual victimization and the ability to recognize and respond to risk. In this study, the authors examined the relationships between perpetrator intimacy, risk appraisal, and response intention (i.e., direct resistance, indirect resistance, consent, or passivity). Results support previous research findings that women are less likely to perceive a situation as risky the more intimately they know the perpetrator. Risk appraisal, which they conceptualized as 1) severity ratings of the man's use of verbal pressure and physical force and 2) participants' ratings of degree of upset in the hypothetical situation, largely explained the variation in response intentions. Their findings also indicate that the effect of degree of intimacy on response intention is mediated through risk appraisal. Prior sexual victimization was not related to risk recognition (appraisal) but was related to lower refusal assertiveness. Similar to this finding, Breitenbecher (1999) did not identify a relationship between risk perception and sexual victimization.
Defining Risk Perception

Existing research on risk perception has differed in how risk perception is conceptualized and measured. The following provides a brief review. Breitenbecher (1999) conceptualized risk perception as the ability to identify threat cues. Risk perception was measured by presenting female participants with a videotaped segment of a man and a woman in a heterosexual dating situation and asking them to list anything that would make them feel uncomfortable if they were in the situation presented in the videotape. All items listed by participants were considered threat cues. Participants viewed one of two 10-minute videotaped segments, one that would eventually lead to an acquaintance rape or one that would not, and listed threat cues as they watched the segments in order to approximate real-life decision making. Based upon risk factors for sexual victimization recognized in the literature, the author identified that the “rape video” contained eight threat cues while the “neutral video” contained one. Results indicated that participants listed a greater number of threat cues for the rape video compared to the neutral video, regardless of victimization history. However, participants in the experimental group listed 17 more threat cues as being present in the video than have been empirically supported in the literature as actual risk factors for sexual assault. Furthermore, participants failed to recognize a majority of the actual risk factors (i.e., those identified in previous research). In fact, a mean of 2.1, or ~25% of actual risk factors were identified by the experimental group. Separate analyses for victims and nonvictims were not conducted on the number of actual risk factors identified. It may be that women are more likely to list several factors as making them feel uncomfortable.
when directly instructed to attend to these factors in contrast to what they may perceive as making them feel uncomfortable in an actual dating situation.

Norris et al. (1999) conceptualized risk perception as involving two types of cognitive assessments: 1) the ability to make judgments regarding how they would feel (i.e., on guard, really uncomfortable, or seriously at risk) in response to threatening situations; and 2) the ability to perceive global risk pertaining to whole groups rather than to individuals. Situational risk perception was measured using a risk-rating task that included nine risk factors for sexual aggression that had been selected from the literature. Participants read a scenario describing a heterosexual dating experience and were asked to imagine how they would respond if each of the nine situational risks occurred. The risk factors were presented on a continuum from low to high risk and participants rated the points on the continuum in which they would feel on guard, really uncomfortable, and seriously at risk. Global risk perception was measured by having participants rate their perceptions of the likelihood of experiencing six types of unwanted sexual activity for themselves and for other women. Brown et al. (2005) examined personal and comparative risk perception by asking women to rate the likelihood of experiencing rape and sexual assault in the next 5 years for themselves and for other college women. VanZile-Tamen et al. (2005) also explored the role of cognitive assessments by examining risk appraisals related to the man’s coercive behavior and participants level of upset in response to the man’s behavior. In addition to risk appraisal, these authors examined how participants would respond to the situation.

Wilson et al. (1999) conceptualized risk perception as the length of time it would take participants to make a decision that the man in an audiotaped date rape analogue had
“gone too far.” The instrument used to measure risk recognition was developed by Marx and Gross (1995) and consisted of an audiotaped vignette of a man and a woman engaging in sexual contact that becomes coercive and eventually leads to threats of force. The audiotape runs for a total of 390 seconds, and decision latency is recorded in seconds by a reaction time program. Soler-Baillo et al. (2005) also conceptualized risk perception in this way and used the same decision latency measure. Additionally, these authors conceptualized risk perception as objective physiological response (i.e., heart rate) to an auditory analog date rape situation. Messman-Moore and Brown (2006) also conceptualized risk perception as involving response to risk not just threat recognition.

The studies conducted to date have used a variety of conceptualizations and instruments to investigate the risk perception hypothesis, leaving the role of risk perception unclear. There is need for the development and validation of an assessment tool in order to better study this hypothesis. Given a validated tool, research can analyze risk perception as a mechanism of sexual victimization/revictimization and then develop, implement, and evaluate prevention programs based on empirical findings.

Behavioral Resistance Strategies

Once the risk for sexual victimization has been recognized, individuals must engage in self-protective behaviors in order to increase the probability of avoiding sexual victimization. Little is known about the relationship between risk perception and response to perceived risk as most studies have focused solely on risk perception (Messman-Moore & Long, 2003). Studies examining protective behaviors have found that physical resistance and fleeing are associated with avoiding rape (Bart & O’Brien, 1985; Clay-
Warner, 2002; Ullman & Knight, 1991; Zoucha-Jensen & Coyne, 1993) while evidence for the effectiveness of verbal resistance strategies has been mixed. Forceful verbal resistance (e.g., screaming, yelling, threatening the perpetrator) has received empirical support as an effective strategy (Bart & O’Brien, 1985; Ullman & Knight, 1992; Zoucha-Jensen & Coyne, 1993) while nonforceful verbal resistance (e.g., pleading, talking, reasoning, crying) is frequently associated with rape completion (Bart & O’Brien, 1985; Clay-Warner, 2002; Ullman & Knight, 1991; Zoucha-Jensen & Coyne, 1993). Although acquaintance rape is more prevalent than stranger rape and women are more likely to avoid stranger rape than acquaintance rape (Bart, 1981), most studies have examined behavioral resistance strategies used by women who were raped by a stranger.

Hickman and Muehlenhard (1997) investigated the relationship between women’s fears of rape and precautionary behaviors. Of the women who engaged in precautionary behaviors for acquaintance rape, fear was the only significant predictor of precautionary behaviors. This finding is unsettling because more women report fearing stranger rape than acquaintance rape, which indicates that few women are engaging in behaviors that might protect them from acquaintance rape. In addition, protective behaviors examined in this study primarily consisted of avoiding risky situations rather than using specific behavioral strategies to avoid rape after the situation has become high risk, which tells us little about what a woman might do if she does not perceive a situation with an acquaintance as risky until the situation has become high risk.

Levine-MacCombie and Koss (1986) examined protective behaviors used by women who experienced attempted or completed acquaintance rape and found that physical resistance was ineffective while fleeing and screaming for help were effective.
Nonforceful verbal resistance strategies were also somewhat effective for acquaintances, which is ineffective for avoiding rape committed by a stranger. Greene and Navarro (1998) found assertiveness with the opposite gender, a nonforceful resistance strategy, to be a protective factor for sexual victimization. While these behaviors have been related to situations in which women avoided acquaintance rape, women are less likely to engage in protective behaviors with acquaintances than with strangers (Hickman & Muehlenhard, 1997). One explanation for this might be that women have other consequences to consider when resisting pressure by an acquaintance such as the potential to lose the friendship of or dating relationship with the acquaintance or to be judged negatively by others (Nurius, 2000).

Although the above studies have provided information about techniques that may be useful in avoiding acquaintance rape, most studies retrospectively examined these strategies. Research to date has not investigated the effectiveness of rape avoidance strategies implemented at different points throughout the interaction. For example, do women begin to verbally resist pressure for sexual activity when the situation is low risk, or do women use these strategies once the situation has become high risk? These questions relate to the relationship between perceiving and responding to risk. Meadows, Jaycox, Orsillo, and Foa's study (as cited in Messman-Moore & Long, 2003) differentiated between risk perception and response and found that women with victimization histories reported that they would leave a hypothetical dating scenario later than individuals without victimization histories. What if a woman cannot leave the situation because her attempts are blocked by the perpetrator? Assaults that take place at the victims’ homes are more likely to be completed than assaults that take place outdoors.
(Bart & O'Brien, 1981), which might be particularly relevant for victims of acquaintance rape. If women perceive threat before the situation has become high risk, might their resistance strategies be more effective? Research indicates that previously victimized women are less assertive than women without a victimization history (Greene & Navarro, 1998). Do highly assertive women tend to engage in protective behaviors earlier than less assertive women do, and is this related to revictimization? To date, no investigations have examined the relationship among CSA, risk recognition, behavioral responses, and revictimization (Messman-Moore & Long, 2003). Behavioral analog measures can be useful in examining these questions. Furthermore, analog measures can incorporate aspects of the social contexts involved in acquaintance rapes in order to examine the use of protective behaviors under conditions that more closely approximate real-life decision-making.

Program of Research

This study belongs to a program of research initiated by Naugle and colleagues that focuses on the development, validation, and use of an innovative videotaped methodology for the assessment of potential behavioral risk factors of sexual revictimization in heterosexual relationships. This programmatic research is based upon a behavior analytic perspective that considers a history of sexual victimization important in explaining the development and maintenance of current problems (Naugle & Follette, 1994). For example, a history of CSA may result in a decreased ability to discriminate environmental threat cues and/or to effectively respond to these variables.
Naugle and Follette (1994) developed videotaped vignettes to test the hypothesis that women with and without prior victimization histories differ in their ability to discriminate risk in social situations. The videotaped vignettes depicted a variety of social situations ranging from obvious risks with strangers to subtle risks with acquaintances. Two vignettes successfully differentiated between the two groups of women. These vignettes portrayed situations involving subtle risk factors between acquaintances with more interpersonal familiarity. In these analog situations, women were more likely to report a likelihood of engaging in risky behavior. In addition, women with a victimization history were more likely to indicate acquiescence to engaging in unprotected sex and to increasingly coercive advances by a man in a position of authority. Limitations of this study included a lack of clear psychometric data for the vignette methodology and the inability of several of the vignettes to reveal significant differences between previously victimized and nonvictimized women.

Naugle (1999) improved upon the methodological strategy by developing three additional videotaped vignettes directly related to risk factors for sexual assault. Two of the three vignettes included two decision points where women were asked to respond to the question, “What would you say or do now?” This allowed participants to verbally respond during the analog situations and across increasingly risky conditions in order to obtain responses that more closely approximate real life decision-making. These responses were audiotaped and later coded using the investigator-developed Behavioral Assessment of Risk Recognition (BARR) coding system. In this study, the BARR was found to have inter-rater reliability of 0.816. Expert raters and participants rated the dimensions of risk and social pressure portrayed in the vignettes using the investigator-
developed Vignette Rating Questionnaire (VRQ). The VRQ developed for this study was a Likert-type measure of a variety of dimensions of the scenarios, including level of risk, likelihood of acquiescence, realism, and characteristics of the characters depicted in the scenarios. Another strength of this study is the use of expert raters in rating these dimensions and in elaborating the vignettes to strengthen content validity. Results indicated that while women with a prior victimization history rated scenarios as including more risk, they were also more likely to acquiesce or provide ambiguous responses to the males’ advances.

Naugle and Maher (Maher, 2003) developed another vignette to assess the role of sexual communication skills as a risk factor for sexual victimization. Procedures similar to those used by Naugle (1999) were employed to enhance the content validity of the vignette. Participants with varying victimization experiences were asked to view, rate, and behaviorally respond to the scenario. In this study, participant responses were videotaped and later coded using a modified version of the BARR. This modified version included both content codes as well as codes to capture aspects of participants’ nonverbal behavior. In addition, a subset of female responses gathered from this study were presented to different samples of male participants, including undergraduate men and an incarcerated sex offender sample. Data gathered from these studies indicated that men are more likely to perceive the responses of women with prior victimization histories as either acquiescent or ambiguous compared to responses of women without prior victimization histories (Dietzel & Naugle, 2004). Women’s responses were perceived as acquiescent or ambiguous even though the intention of the women was to decline a sexual overture. Furthermore, men were more likely to endorse hypothetically coercive
behaviors after viewing the responses of previously victimized women than those of nonvictimized women.

These initial studies provided support for the use of the videotaped vignette methodology as a behavioral analog measure of risk perception and effective behavioral responding and the validation process began by examining content validity of these vignettes. After receiving feedback from peer reviewers regarding use of the methodology, it was apparent that the next direction for this program of research needed to be further development and validation of the analog measure. A multi-phase study was initiated to accomplish this goal.

Carter-Visscher and Naugle completed the first two phases of this project which focused on development of new vignettes and content validation of the written vignettes. Phase one of this study was conducted to identify specific situational risk factors, including coercion tactics, and resistive strategies associated with unwanted sexual contact experienced by individuals in heterosexual relationships. The information collected was based upon real world experiences, in order to develop realistic vignettes that depict specific situations that require risk perception and effective responding skills to prevent unwanted sexual experiences. A focus group methodology was employed in order to develop vignettes that are meaningful and relevant to the target population. The decision to use focus groups to gather these data was supported by literature that suggests focus groups are a useful qualitative technique for developing and validating assessment instruments (Litt, 2003; O’Brien, 1993; Willgerodt, 2003). Advantages of focus groups over conventional methods of instrument development include the fact that 1) focus groups are useful for gaining insight into the perceptions of individuals who have
experiences related to the research topic; 2) focus groups provide information regarding the language and terminology used by the people in the groups of interest; 3) focus groups often stimulate insights that might otherwise be missed; and 4) focus groups are more time efficient and practical than conducting individual interviews (O'Brien, 1993; Willgerodt, 2003). Several studies report that victims of unwanted sexual experiences and acquaintance rape are less likely to consider the assault a rape than victims of stranger rape (Koss, Gidycz, & Wisniewski, 1987; Koss et al., 1988; Schwartz & Leggett, 1999). Asking specific questions using a focus group format assisted in obtaining information that some individuals might not otherwise endorse on questionnaires because they may not consider themselves victims of sexual assault.

Information obtained during the focus groups and from the existing literature was used to develop ten written vignettes illustrating a variety of heterosexual interactions and portraying varying levels of risk for unwanted sexual experiences. The primary goal of phase two was to establish initial psychometric data for the written vignettes by gathering data to demonstrate the content of the vignettes is appropriate for assessment of risk perception and response with heterosexual college student populations. Gaining support for the content validity of the vignettes was the first step in examining construct validity. The vignettes were presented to professionals specializing in the content domain of sexual victimization and to college students with and without sexual victimization histories during phase two in order to examine content validity. These participants rated the vignettes on dimensions of realism, relevance, and risk. One question also asked participants to rate whether or not they would stop the interaction at a given point. The central research question addressed by phase two was: Can agreement regarding what is
realistic, relevant, and risky for sexual assault in heterosexual college student populations be reached by expert and student raters to provide support for content validity of written vignettes designed to assess risk perception and behavioral responding? Overall, content and student expert raters were able to reach agreement indicating the content of the vignettes is valid, with the exception of two vignettes, which have been excluded from further development and validation phases of this project. Following phase two, we decided to standardize the number of vignette segments so each vignette would have an equal number of segments in order to make comparisons of results across vignettes easier to interpret. Further information regarding how these decisions were made and the segments that resulted is discussed in the Methods section that follows.

Reexamining the Literature

Upon revisiting the risk perception literature, including additional studies that had been published since phases one and two of this project began, one factor that continuously seemed to cloud risk perception research is that many studies have been subsumed under the umbrella of “risk recognition” or “risk perception” although conceptualizations and methodologies have varied from one study to the next. When examining this literature, three conceptual themes emerge: 1) whether participants perceive risk and how risky the perceive the situation to be, 2) how participants appraise risk associated with responding in an assertive manner, and 3) how participants respond to risk. The themes of risk perception and appraisals are quite similar as they both relate to evaluations individuals make about risks, and one can argue that they could be both conceptualized as risk perception. However, because there are different types of perceptions and appraisals of risk, including them both under the umbrella of “risk
perception” or “risk appraisal” can become confusing. For example, how risky participants believe a situation is and thoughts about what consequences might occur if they respond in a certain way could both be considered perceptions or appraisals, but these two issues are distinct and have been studied separately. Therefore, from this point forward, “risk perception” will refer to whether or not individuals identify the presence/absence of risk and the level or degree of risk involved in the situation (e.g., how risky the situation is, how much coercion the perpetrator used, whether women believe they are at risk), “response appraisal” will refer to thoughts and evaluations about the potential consequences of responding in a certain way, and “response” will refer to how participants respond to risk including overt behaviors and physiological responses. All of these factors need to be considered together in order to more fully understand how women, both with and without sexual victimization histories, think about and respond to risk for sexual assault. When the literature is reexamined with this conceptualization in mind, findings become easier to understand and interpret.

Brietenbecher (1999) examined risk perception by investigating whether participants could identify threat cues in a heterosexual dating scenario that may or may not lead up to acquaintance rape and found no difference in participants’ ability to perceive the presence of risk regardless of sexual victimization history. Other studies have further examined risk perception and appraisals. For example, both Norris et al. (1999) and Brown et al. (2005) investigated women’s perceptions of personal and global risk for sexual victimization and found that women who have been sexually victimized tend to perceive greater personal risk for subsequent sexual assault while women, in general, tend to report an optimistic bias such that other women are perceived to be at
greater risk for sexual victimization than they are. During phase two of this project, we also found women reported optimistic bias such that they believed the vignettes portraying unwanted sexual experiences were more relevant to others than to themselves, but the low-risk vignettes were judged as equally relevant for other college women and for themselves.

VanZile-Tamsen et al. (2005) reported examining risk appraisal and defined it as including two types of perceptions including type and severity of coercive behavior used by the man and degree of upset women report in response to the man’s behavior. With the current conceptualization of risk perception and response, one can argue that assessment of the man’s behavior would be a perception of risk while the degree of upset reported by women would be an example of a covert response. One can argue this because upset is an emotional reaction, which is more closely related to physiological response than to evaluations of an event. If future studies examining perceptions, appraisals and/or covert responses find discrepancies between their findings and this finding, this discrepancy could be related to how the studies define and examine these factors. For that reason, it is important to keep in mind that VanZile-Tamsen et al.’s conceptualization of appraisal might be better understood as consisting of both an appraisal and a covert response. These authors also examined risk response by asking women how they would overtly respond in that situation and found that women with sexual victimization histories were less likely to assertively refuse the man’s coercive attempts at sexual activity than women without this history. They also found that prior sexual victimization did not influence risk appraisal, suggesting that revictimization may be more closely related to overt behavioral responding rather than to risk perception.
Studies measuring risk response have consistently found significant differences in responding behavior for women with and without sexual victimization histories (Messman-Moore & Brown, 2006; Naugle, 1999; Norris et al., 1999; Soler-Baillo et al., 2005; VanZile-Tamsen et al., 2005; Wilson et al., 1999) whereas studies examining risk perception and appraisals have not consistently found a difference between the groups (Brietenbecher, 1999; Naugle, 1999; VanZile-Tamsen et al., 2005), providing more evidence that revictimization might be related to overt responding behavior rather than to risk perception. Taken together, this conceptualization of risk perception, appraisal, and response assists in interpreting findings from phase two of our study suggesting women with and without sexual victimization histories do not differ in the degree of risk they perceive the vignettes to portray.

This reexamination of the literature and reconceptualization of risk perception indicates the need for a consistent, clear conceptualization of risk perception and response in order to better understand the relationship between revictimization and risk perception and effective responding. Differentiating between risk perception, response appraisal, and response also assists in interpreting existing research in this area. Because there is need for a validated assessment tool that measures risk perception, response appraisal, and response, the behavioral analog measure currently being developed and validated includes items intended to measure these theoretical constructs.
Current Study

Phase Three

The purpose of phase three of this project was to modify the written vignettes and vignette rating questionnaire (VRQ) based upon data obtained during phase two of this project and to provide additional support for construct validity and reliability of the analog measure.

Construct validity refers to demonstrating the sample of items in an assessment actually measure the theoretical construct they are purported to measure (Anastasi & Urbina, 1997; Kline, 1986). One type of construct validity data includes data that demonstrate the content of a measure is appropriate. In phase two of this project, which preceded the current study, we obtained support for the content validity of eight out of ten written vignettes. Another way to examine construct validity is to study indices of convergent and discriminant validity (DeVellis, 2003; Kline, 1986). Convergent validity refers to comparing a new measure of a construct (e.g., risk perception) to existing measures of that construct and detecting a relationship between the measures. Discriminant validity can be examined by comparing a new measure of a given construct to existing measures of constructs that differ from what the new measure purports to assess and finding non-significant relationships between measures of different constructs. Because the new measure should differ from existing measures in some unique way so the new measure is not merely a replication of another measure, small to moderate correlations are expected (Anastasi & Urbina, 1997; Kline, 1986). The following hypotheses were set forth to investigate convergent validity in the current study:
1) Risk perception will be related to endorsement of expected risk as it relates to general risky sexual activities.

2) Appraisals that negative consequences would likely occur if the woman responded assertively will converge with psychological barriers to resistance of sexual aggression.

3) Assertive responding in reaction to the vignettes will be associated with sexual assertiveness.

4) Assertive responding will be related to socially desirable responding.

For each of the convergent validity hypotheses, we expected small to moderate positive correlations between the VRQ subscales rated at vignette segment four for the high risk vignettes as this is the highest risk point for all of these vignettes. We expected this high level of risk to positively relate to the constructs portrayed in the measures they were being compared to. For each of the low risk vignettes, we expected small to moderate negative correlations between the VRQ subscales rated at segment four and the other measures.

To explore discriminant validity, the following hypotheses were examined:

1) Risk perception, appraisals, and responses will not be related to perceived risk of intimate relationships in general.

2) Risk perception, appraisals, and response will discriminate from relationship satisfaction.

3) Risk perception of unwanted sexual experiences will not correlate with expected risk of general aggressive and illegal behaviors.
4) Risk perception and appraisals will not be associated with socially desirable responding.

The expectation that assertive responding would be related to social desirability while risk perception and appraisals would not was based upon Morokoff et al.'s (1997) finding that social desirability was related to refusing sexual advances (i.e., sexually assertive behavior) but not to initiating sexual activity. Morokoff et al. state this finding is likely related to the fact that in our society, it is traditionally more acceptable for women to refuse sex than to initiate it. For each of the discriminant validity hypotheses, we expected to find non-significant correlations between each of the VRQ subscales measured at segment four and the other measures for both the high and low risk vignettes.

The process of demonstrating construct validity is an iterative process that involves finding repeated support for the same hypotheses using multiple tests of construct validity and different criteria assessed in different ways (Smith, 2005). In addition to examining how measures of similar and dissimilar constructs converge and discriminate from a new measure of a given construct, we also explored whether how one responds to the written vignettes (i.e., Response subscale of the VRQ) discriminates between sexual victimization history group beyond that of general assertiveness, sexual assertiveness, and psychological barriers to responding.

While we previously examined each vignette independently and accumulated evidence to include content that is appropriate for studying risk for unwanted sexual experiences in a heterosexual college student population, we had yet to examine how these vignettes relate to each other. This is an important step as we intend to use a group of vignettes as part of a behavioral analog measure as a whole, rather than using
individual vignettes. Therefore, it was necessary to examine another form of data that provide support for construct validity, which include data that demonstrate the internal structure of a measure is appropriate. We used a multidimensional scaling (MDS) procedure, which identifies the configuration (i.e., spatial representation) of the group of vignettes, to identify how similar the group of vignettes are perceived to be and on what dimensions they differ. The configuration provides a visual picture of the perceived relationship between vignettes and allows us to look at all of the vignettes simultaneously (Stalans, 1994). Information about how similar the vignettes are perceived to be was obtained by examining the distance between vignettes in the configuration. This information will be used, along with other validity and reliability data, to guide decisions about which vignettes, if any, should be excluded and which should be retained for further development and validation. For example, if vignettes cluster together along a particular dimension, it may be redundant to include all of those vignettes in the final analog measure. This decision depends upon how similar they are perceived to be, the number of vignettes within the cluster, and other validity and reliability data we have obtained about the vignettes within the cluster. On the other hand, it may be useful to retain at least two vignettes within a cluster as this would allow us to have alternate forms of that type of vignette to examine reliability. Likewise, alternate forms of a vignette could be used in the future when teaching women effective risk perception and responding skills as part of prevention programs to assist with generalization of skills across situations.

Reliability of the instrument was evaluated by examining internal consistency and temporal stability of the measure. Internal consistency was examined by considering
Cronbach's coefficient alpha and mean inter-item correlations of items on the VRQ; temporal stability of the written vignettes was obtained through test-retest procedures. At the outset of this phase of the project, we recognized there may be some difficulty in demonstrating test-retest reliability of the vignettes because participants will have learned how the vignettes end, which has the potential to change participant ratings should they decide (based upon the knowledge that the vignette does or does not end in an unwanted sexual advance) that they should have responded differently to earlier vignette segments knowing what they now know about the vignette outcome. These constructs may be particularly difficult to assess in a laboratory setting due to contextual complexities associated with real-world interpersonal interactions. For example, it may be likely that a woman consistently responds to the sexual advances of different men in an acquiescent manner yet would not do so if confronted with the exact situation (i.e., same man, same context) again in the future because the woman has learned how the encounter with that individual ends, as is the case with assessing risk perception, response appraisals, and responses using the same vignettes at two points in time. Therefore, questions about the appropriateness of using test-retest procedures to support temporal stability of this analog measure remain.

Based upon the expectation that test-retest reliability may be an inappropriate method for examining reliability of this measure, we decided to examine the MDS configuration to identify whether vignettes cluster in pairs and if so, how similar the pairs appear. We planned to use the pairs of vignettes to examine alternate forms reliability should we find that vignettes are perceived similar enough to be considered alternate forms of the other. Comparing whether participant ratings correlate across similar
vignettes, rather than for the same vignette over time, more closely approximates the situations individuals encounter in the real-world.
METHODS

Participants

Validity and Reliability Group

One hundred ninety-three female college students over the age of 18 (M: 20, SD: 2.8) were recruited from Western Michigan University’s campus to rate written vignettes for construct validity. Eight participants withdrew from the study, leaving a total of 185 participants who completed validity ratings. None of the participants that withdrew from the study indicated why they did so and at least three of the participants initially stated that they had not allowed enough time to complete the session and would return to complete the study at a later time. When contacted, three participants made arrangements to complete participation and all three did not show for their appointments. None of the participants that withdrew from the study indicated distress nor was overt distress observed by the student investigator or research assistants for any participants in this study. Most participants completing the ratings received extra credit for participating while others chose to participate without compensation.

We used a conservative definition of sexual victimization by defining it as attempted and completed sexual assault. Fifty-two participants (28%) reported a childhood sexual abuse history, and 82 participants (45%) reported an adult sexual victimization history. Seventy-nine participants (44%) reported no sexual victimization history, 20 (10%) reported childhood sexual abuse only, and 50 (28%) reported adult
sexual victimization only. Thirty-two participants (18%) reported a revictimization history defined as including at least one childhood sexual abuse experience and at least one sexual abuse experience after the age of 14. Ninety-four percent of the women in this sample reported a heterosexual orientation, 69% identified themselves as currently in a dating or committed relationship and 31% single and not in a dating relationship. Most participants (92%) were full-time students with class standing as follows: 36% freshman, 21% sophomores, 23% juniors, and 20% seniors. Eighty percent of the participants described their ethnicity as Caucasian, 12% African American, 3% Asian/Pacific Islander, 1% Hispanic/Latino, and 4% as having other ethnicities.

A subset of participants who participated in the first construct validity rating session were invited to return and rate half of the vignettes for a second time in order to provide test-retest reliability ratings. Initially, participants were randomly selected to return for the second session. However, as only 25% of the 100 participants who had been randomly selected to participate had agreed to return after 11 months of data collection, we discontinued random selection and invited all participants to return with the goal of inviting as many participants as possible to return for the retest session. Similar to the difficulty of getting participants to return for the retest session, it was also difficult to get participants to return at the one month time period proposed. Rather, the mean test-retest time period was 7 weeks (SD=5.2). Participants only rated half of the vignettes (see procedures) during the retest session. Group 1, which consisted of twenty-one participants, rated vignettes 1, 2, 6, and 10 (i.e., three high risk vignettes and one low risk), and group 2, which consisted of 20 participants, rated vignettes 4, 7, 8, and 9 (i.e., three high risk vignettes and one low risk). The mean age of participants in group 1 was
20 ($SD: 2.0$), and the mean age of participants in group 2 was 21 ($SD: 4.3$). In group 1, eleven participants (53%) reported no sexual victimization history, three (14%) reported childhood sexual abuse only, four (19%) reported adult sexual victimization only, and three participants (14%) reported a revictimization history. In group 2, eleven participants (55%) reported no sexual victimization history, no participants reported childhood sexual abuse only, six (30%) reported adult sexual victimization only, and three participants (15%) reported a revictimization history. Ninety-five percent of the women in both groups reported a heterosexual orientation. Like the overall sample, the two groups consisted of primarily Caucasian, full-time students (95% for both groups) with over half (62% and 75% for groups 1 and 2, respectively) of the participants currently in a committed relationship. Ethnicity was broken down for groups 1 and 2 as follows: Caucasian (80% and 75%, respectively), African American (10% and 20%, respectively), Hispanic/Latino (5% for both groups), and Asian/Pacific Islander (5% for group 1 and none for group 2). There were no statistically significant demographic differences for the two groups including sexual victimization history.

**Multidimensional Scaling (MDS) Group**

Ten female college students over the age of 18 ($M: 20, SD: 3.33$) and one content expert were recruited to rate the similarity of the group of eight vignettes in order to obtain data about the internal structure of the analog measure. Student participants were recruited from Western Michigan University's campus and earned extra credit for participating in these sessions. Nine of the ten student participants were Caucasian and one was African American. Fifty percent of the sample did not have a sexual
victimization history, no participants had a childhood sexual victimization history only, 20% had an adult sexual victimization history only, and 30% had a revictimization history. All of the student participants were attending school full time. The expert rater was a licensed clinical psychologist with research and practice experience with victims of sexual assault.

Measures

All measures are presented in Appendix B, with the exception of the written vignettes, which are presented in Appendix C.

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

The PDS was administered to participants in order to obtain basic demographic information and information regarding current relationship status, dating and sexual practices, and sexual experiences prior to and after the age of 14. This information is summarized and used to describe the sample of college women who provided MDS, convergent and discriminant validity, and reliability data for the analog measure. The PDS is a self-report inventory designed to gather standard demographic information such as age, ethnicity, relationship status, and current dating and sexual practices (Naugle, 1999). In addition to the standard demographic questions, the PDS also includes questions from *Wyatt Sexual History Questionnaire* (Wyatt, 1985; Wyatt & Newcomb, 1990), the *Sexual Experiences Survey* (Koss & Oros, 1982) and *National Women's Study Victimization Screening* (Resnick, Kilpatrick, Dansky, Saunders, & Best, 1993) regarding the participants’ sexual experiences prior to and after the age of 14.
1. *Wyatt Sexual History Questionnaire* (WSHQ). Items from the WSHQ are designed to retrospectively measure characteristics of childhood sexual abuse such as age of onset, duration, frequency, relationship to the perpetrator, use of force by the perpetrator, and presence of alcohol during the abusive event (Wyatt, 1985; Wyatt & Newcomb, 1990). Because we used a conservative definition of childhood sexual abuse, affirmative responses to items 22, 23, and 24 on the PDS were not included in our analyses as attempted or completed childhood sexual abuse experiences as these items did not include physical sexual contact between the child and the perpetrator. One or more affirmative responses to items 25 – 33 on the PDS were included in our definition of childhood sexual abuse experiences.

2. *Sexual Experiences Survey* (SES). The SES is a 10-item survey used to assess participants’ unwanted sexual experiences, whether or not the individual acknowledges these experiences as sexual assault (Koss & Oros, 1982). The measure proceeds from questions regarding lower severity situations to those meeting the legal definition of rape. The measure has a 1-week test-retest reliability of .93 and internal consistency reliability of .74 for female students (Koss & Gidycz, 1985). The last item of the SES was modified for the PDS by expanding it into three separate items. These items assess whether the participant experienced forced oral sex, anal sex, or penetration by fingers or objects. For our purposes, affirmative responses to items 45, 46, and 47 on the PDS were not
included in our conservative definition of attempted or completed adult sexual assault experiences as these items reflect giving in to sexual play (fondling, kissing, or petting) but not intercourse. An affirmative response to one or more of items 48 – 56 on the PDS were used to reflect an adult sexual victimization experience.

3. National Women’s Study Victimization Screening (NWSVS). Items from the NWSVS use behaviorally specific definitions to assess risk factors for rape, physical assault, and events potentially related to the development of PTSD symptoms as well as additional questions regarding the participant’s age at the time of the event, how long it has been since the event occurred, and threat and injury that may have occurred during the event (Resnick et al., 1993). We did not analyze results from this section of the PDS for the purposes of this study. These data will be used for future investigations.

Written Vignettes

The eight written vignettes we gathered content validity support for in phase two of this project were further validated during phase three. The vignettes were originally developed based upon data reflecting real-world heterosexual interpersonal experiences gathered through focus groups conducted with heterosexual college women with and without sexual victimization histories and based upon situational risk factors for sexual victimization as identified in the literature. Vignettes were intended to vary on the following dimensions: 1) relationship factors (e.g., type of relationship, length of
relationship), 2) situational risk factors (e.g., degree of isolation, alcohol involvement, verbal persuasion, emotional manipulation, physical force), and 3) degree of risk portrayed. Vignettes were broken into segments at points in which our research team believed the type of risk factor changed and/or at a point when obvious increases in risk were portrayed. For the final version of the behavioral analog measure, the question, “What would you say or do now?” will be presented at these points. This question will allow future participants completing the assessment to verbally respond during the analog situations to provide a description of the behaviors they would engage in if they were the individual in the vignette. This item will be used to assess the individual’s ability to effectively respond in the analog situation. Information regarding the point at which participants would discontinue their interaction with the potential perpetrator, if at all, will also be obtained from the responses provided.

Originally, vignettes were broken into 4 – 9 segments. Before beginning the current study, vignette segments were modified for further validation such that each vignette currently has four segments. Decisions about how to collapse the segments were made based upon empirical and conceptual criteria. Empirical criteria included examining multiple comparison data indicating which segments were rated as portraying the same amount of risk and those that portrayed different degrees of risk. For each vignette, we first examined the multiple comparison data and listed how many segments there would be and at what point they would break if each segment that was rated as the same as a consecutive segment was collapsed into a single segment. Based on these data, most vignettes would consist of four or five new segments. Because we wanted each vignette to have the same number of segments, we chose the smaller of the two (i.e., four
segments). Upon examining points at which the new segment breaks would be located, we determined which of these points also made the most sense conceptually. For vignettes that had multiple segments that did not statistically differ in degree of risk portrayed, the last segment in the group was chosen as the new point to break. If there were fewer than three points that differed significantly, as for vignette 10, the first segment in the group with no differences was chosen as the first segment because there was the least opportunity for risk factors to be portrayed at this point, and the last segment in the group was chosen as the next point to break because that was the point in which the most situational risk factors had the opportunity to be presented within that group. Conceptually, these are the points in the vignette where we would like to collect data regarding how participants would respond to the open ended question.

Vignettes 1, 2, 4, 6, 7, and 8 are considered high risk vignettes such that the last segment of each vignette ends at a high risk level as determined by expert and student raters during phase two of this project. While the vignettes are considered high risk based upon the endpoint, each vignette increases from low risk at the beginning of the vignette, moderate risk in the middle of the vignette, to high risk at the end of the vignette. Therefore, each of the “high risk” vignettes actually portrays segments ranging from low to high risk. While there are no vignettes that were perceived to end with a moderate degree of risk, moderate levels of risk are portrayed within each of the high risk vignettes. Should researchers want to examine how participants respond to moderate levels of risk, perceptions of risk and responding can be examined at these points. Likewise, the videotaped vignettes will be developed to allow researchers to stop the vignettes at the moderately risky point rather than progressing to the end where the
vignette becomes high risk. Vignettes 9 and 10 are considered low risk vignettes as
determined during phase two of this project. Vignette 9 is considered low risk at each
segment except one. During one segment of vignette 9, a risk factor is embedded, which
increases the perceived risk to a moderate level at that segment as perceived by expert
and student raters. Vignette 10 is considered low risk at each of the four segments. Please
see Appendix C for the written vignettes.

**Vignette Rating Questionnaire: Risk Perception, Response Appraisal, and Response (VRQ)**

The VRQ is designed to measure participants' reactions to each vignette (Naugle,
1999) and has been revised for the current study to include 26 items thought to measure
risk perception, response appraisals, and responses to the vignettes. Three theoretical
subscales (i.e., Risk Perception, Response Appraisal, and Response) were developed
based upon the conceptualization of these three constructs as discussed above. Factor
analyses have not yet been conducted to verify the subscales. Therefore, for purposes of
this study, the subscales are theoretical in nature.

Risk perception and response items are rated on a 6-point Likert scale ranging
from 1 = “strongly disagree” to 6 = “strongly agree”. Response appraisal items are rated
on a 6-point scale (1 = “extremely unlikely,” 6 = “extremely likely”). For each of the
theoretical subscales, higher scores indicate greater perception of risk, stronger appraisals
that negative consequences would occur for responding in an assertive manner indicating
barriers to resisting, and greater assertive responding. The Risk Perception subscale
consists of item numbers 1, 3, 9, 11, and 14 on the revised VRQ. Item 1 is reverse scored.
Ten items assessing response appraisal (i.e., items 17 – 26 on the revised VRQ) were
added to this version of the VRQ based upon past research on psychological barriers to resisting sexual aggression (Norris et al., 1996; Nurius et al., 2000). Two items were included to assess each of the following concerns: 1) negative social consequences, 2) negative impact on the relationship with the male, 3) embarrassment, and 4) uncertainty about the interaction. One question was also included to assess skill deficit and another to assess concern for physical safety. Nine questions were originally included to assess response. However, upon further review and prior to conducting analyses, it was evident that two items on the Response subscale (i.e., items 7 and 13) differed from other items such that even a high score would not indicate assertive responding. Therefore, these two items were not included in the subscale for the following data analyses, leaving a Response subscale of 7 items, which include item numbers 2, 4, 5, 6, 8, 10, and 12 on the revised VRQ. Item 2 is reverse scored. Some of these items were developed based upon past research while other items were modified versions of items used in previous research (Norris et al., 1996; Nurius et al., 2000). Statistical analyses were conducted during phase three to examine the internal consistency of the Risk Perception, Response Appraisal, and Response subscales.

**Level of Risk in Dating Situations (LRDS)**

This measure was developed for the purposes of phase two of this project to assess the degree of risk for unwanted sexual contact undergraduate women believe to be involved in a variety of dating situations. It was designed by selecting a variety of known situational risk factors and sexual coercion tactics reported in the literature (Cleveland et al., 1999; Corbin et al., 2001; Koss & Dinero, 1989; Koss & Dinero, 1987; Marx et al.,
1996; Muehlenhard & Linton, 1987; Norris et al., 1996; Siegel & Williams, 2003; Struckman-Johnson et al., 2003) and developing items that reflect those situational risk factors. Situational risk factors portrayed in the LRDS include threats and physical coercion, alcohol involvement, dating activity/location, revealing female attire, the presence of a power differential favoring the male or female, prior consensual sexual activity between the couple, verbal pressure, emotional manipulation, and sexual arousal techniques. Theoretical LRDS subscales have been developed based upon these situational risk factor categories. Participants rate each item on a 4-point scale ranging from "no risk" to "high risk," and each subscale is scored by averaging items within each category, making score comparisons across subscales more accessible. The theoretical subscales have not yet been submitted to a factor analysis. Three questions illustrating female assertiveness are also included as a theoretical subscale to obtain information about females’ perceptions of the risk involved in a situation when a woman asserts herself. Rather than illustrating a risk factor for sexual assault as the other questions do, these questions portray a protective factor for acquaintance rape as identified in the literature. Responses to these questions can provide information about women’s perceptions of asserting themselves in dating and sexual contexts and the level of risk involved in situations when women engage in assertive behaviors. The assertiveness questions involved the following: 1) the woman states that she cannot stay at man’s apartment long before going there; 2) the woman refuses to engage in further sexual activity after kissing and petting; and 3) the woman states her sexual limitations before they begin kissing.
These theoretically identified subscales were examined during phase two of this project to find out whether college women perceive these situational risk factors to vary in degree of risk portrayed. Based upon analyses conducted during phase two, threats and physical coercion were the only risk factors considered high risk and were rated as riskier than all other situational risk factors. Verbal pressure, sexual arousal techniques, emotional manipulation, and alcohol involvement were all considered moderately risky. Verbal pressure, sexual arousal techniques, and emotional manipulation ratings did not differ significantly from each other, but they differed from all other ratings. Female assertiveness, female attire, prior consensual sexual activity, dating activity/location and the presence of a power differential were considered low risk. As this measure is currently under development, there are no reliability and validity data available for the measure. Convergent validity between the moderately risky and highly risky LRDS subscales and the VRQ Risk Perception subscale was examined in the current study.

**Cognitive Appraisal of Risky Events (CARE; Fromme, Katz, & Rivet, 1997)**

This is a 30-item measure designed to assess outcome expectancies of engaging in a variety of risky activities including the following six factors: illegal drug use, aggressive and illegal behaviors, risky sexual activities, heavy drinking, high risk sports, and academic/work behaviors. Participants can independently provide ratings for outcome expectancies including: expected risk, expected benefit, and/or expected personal involvement in these activities by rating each of the expectancies on a 7-point Likert scale (1 = “not at all likely,” 7 = “extremely likely”). Therefore, a total of 90 ratings (expected risk, expected benefit, expected involvement) can be made. Each factor
is scored by averaging items within each factor, and higher scores indicate outcome expectancies of greater expected risk, benefit, and personal involvement. This measure demonstrated adequate internal reliability ranging from 0.64 to 0.90 for the six factors as rated by 224 undergraduate students. Ninety-eight undergraduate students provided ten day test-retest ratings, which ranged from 0.51 to 0.65 for expected risk and from 0.58 to 0.79 for expected benefit. Outcome expectancies of drug and alcohol use, risky sexual behavior, and aggression were positively correlated with impulsive sensation seeking and negatively correlated with social conformity. Expected risk of the risky sexual activities subscale was used to investigate convergent validity with risk perception and the aggressive and illegal behaviors subscale was used to investigate discriminant validity with risk perception measured by the written vignettes and VRQ.

**Barriers to Responding to Sexual Aggression (BRSA; Nurius et al., 2000)**

This 21-item measure assesses psychological barriers to resisting unwanted sexual advances. Twenty-one reasons that would make it difficult for individuals to leave a situation where they were being pressured to engage in unwanted sexual activities are included. It consists of three mean-based subscales examining concern about embarrassment, fear of rejection by the man, and disabling effects of alcohol consumption. Participants rated the degree to which the concerns made it difficult for the woman to protect herself or control the situation. Ratings were made on a 5-point scale (0 = “not at all significant” to 4 = “extremely significant”) and higher ratings indicate greater psychological barriers to resisting unwanted sexual activities. Internal reliability was rated by 66 primarily Caucasian undergraduate women from 10 sorority chapters at a
large West coast university. Internal reliability of the subscales was adequate with coefficient alpha values of 0.82 for concern about embarrassment, 0.77 for fear of rejection by the man, and 0.81 for disabling effects of alcohol consumption. Validity and test-retest reliability data for this measure are not provided. Rather than examining the individual subscales of this measure, we were interested in examining how all 21 of the psychological barriers related to response appraisals represented in the VRQ. Therefore, we used the total scale score in conducting our analyses rather than individually examining the three subscales. This measure was used in phase three to obtain convergent validity data between psychological barriers and response appraisals on the VRQ.

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

The SAS includes 18 items that assess sexual assertiveness in women. Ratings are made on a 5-point scale ranging from “never” to “always.” Higher scores on the refusal subscale, the subscale of interest for the current study, indicate greater assertive refusal. Items 7, 8, and 10 on this subscale are reverse scored. The measure consists of three factors that measure initiation, refusal, and pregnancy-sexually transmitted disease prevention assertiveness. The measure has good internal consistency for Initiation, Refusal, Pregnancy-STD prevention, and total score with standardized coefficient alphas of 0.77, 0.71, 0.83, and 0.75, respectively. The SAS subscales demonstrated moderately stable test-retest scores on the three subscales over 6-month and 1-year time periods with correlations ranging from 0.59 to 0.77. Construct validity was demonstrated through significant relationships between SAS subscales and predicted constructs such as condom self-efficacy and Pregnancy-STD Prevention assertiveness; social desirability and

47
Refusal and Pregnancy-STD Prevention; previous sexual experience and Initiation; and anticipation of negative partner reaction and less assertive refusal of unwanted sex. The relationship between the Refusal subscale and assertive responding indicated on the VRQ was examined for convergent validity.

General Assertiveness (Morokoff et al., 1997)

The single item, “In general, I believe that I am an assertive person” was presented to participants on a 5-point scale from “strongly disagree” to “strongly agree.” Morokoff et al. used this item to assess preliminary construct validity of the SAS. This item was used in the current study to assess whether responses on the VRQ discriminate sexual victimization status beyond that of general assertiveness.

Marlowe-Crowne Social Desirability Scale (M-C SDS; Crowne & Marlowe, 1964)

The M-C SDS consists of 33 true or false self-report items designed to measure a response bias reflecting the tendency to endorse uncommon positive characteristics that appear socially desirable (e.g., I’m always willing to admit when I make a mistake) and to reject common negative characteristics that appear socially undesirable (e.g., I like to gossip at times). Eighteen items are keyed true and 15 false. Crowne and Marlowe (1960) examined the validity and reliability of the M-C SDS and found the measure to demonstrate high internal consistency (Cronbach’s alpha = 0.88) as rated by 39 undergraduate students and a one-month test-retest reliability of 0.89 as rated by 31 of the students that completed the internal consistency ratings. One hundred twenty undergraduate students provided ratings for the M-C SDS and the Edwards Social
Desirability Scale (Edwards, 1957). Results provided support for convergent validity between the two scales. To further examine validity, the authors administered the M-C SDS, Edwards' SDS, and the MMPI to the same 39 participants who completed the internal consistency ratings and compared the magnitude of correlations between the MMPI subscales and the M-C SDS and the correlations between the MMPI subscales and the Edwards Social Desirability Scale and found Edwards' scale to correlate more strongly with the MMPI subscales, which they used as evidence to support the discriminant validity of the M-C SDS scores (Leite & Beretvas, 2005). The M-C SDS was used to examine convergent validity with assertive responding and discriminant validity with risk perception and appraisals.

Risk in Intimacy Inventory (RII; Pilkington & Richardson, 1988)

This 10-item measure is designed to assess perceptions of risk in close relationships on a six point Likert-scale. High scores on this measure indicate the belief that intimate relationships, in general, are risky. High levels of risk in intimacy were related to less trust of others, less assertive behavior in a dating context, susceptibility to boredom, and dislike of physical risk taking. Three hundred ninety-one undergraduate students completed ratings that were used to assess reliability and validity of the RII. The measure has demonstrated good internal consistency with a Cronbach’s alpha of 0.80. Validity of the measure was supported by a negative relationship between perceiving risk in intimacy and being trusting of and assertive with others and no significant relationship between RII scores and social desirability. We used this measure to assess discriminant
validity with Risk Perception, Response Appraisals, and Response subscales measured by the VRQ.

Relationship Assessment Scale (RAS; Hendrick, 1988)

The RAS includes seven items on a 5-point Likert-scale designed to measure global relationship satisfaction. Higher scores on this measure indicate greater relationship satisfaction. Fifty-seven dating couples were recruited to complete reliability and validity ratings. This measure demonstrated acceptable reliability for a brief scale as indicated by the internal consistency (alpha = 0.86) value and a mean inter-item correlation of 0.49. The RAS is highly correlated with the Dyadic Adjustment Scale (DAS; Spanier, 1976) and moderately correlated with marriage adjustment (Hendrick, 1981). In addition, Hendrick also found the RAS to be an effective discriminator of couples who stay together and those who break up. High correlations between DAS Satisfaction subscale score and RAS total score support the validity of the RAS as a measure of relationship satisfaction (Vaughn & Matyastik Baier, 1999). This measure was used to assess discriminant validity between relationship satisfaction and the three VRQ subscales.

Procedures

Procedures were conducted in accordance with approved HSIRB guidelines (see Appendix A). Participants were recruited from the Western Michigan University campus. Students interested in learning more about participating in the study were encouraged to
contact the student investigator or research assistants via telephone or e-mail at their convenience.

Validity and Reliability Raters

Participants in this group were invited to participate in the initial testing session and were later randomly selected or invited to participate in the retest session. Participants completed measures used to assess construct validity and reliability. Several individual and group testing sessions were conducted on different dates and times, which allowed participants to choose a session that was most convenient for them. All participant information was kept confidential. Each participant was asked to complete a packet of materials including the VRQ template, VRQ answer sheet, PDS, CARE, BRSA, SAS, M-C SDS, RII, RAS, and general assertiveness question. The written vignettes were presented on a computer monitor in PowerPoint presentation format. Upon receiving the testing materials, the student investigator or RA briefly explained the packet contents and session procedures. Participants completed the packet materials during the testing session. Participants were then randomly selected or invited to participate without random selection (see Participants section) in the retest session. During this session, participants were asked to rate half of the written vignettes again using the VRQ. Participants were asked to only rate half of the vignettes again, rather than all 8, in order to decrease the length of time participation in the second session would require, with the hope that this factor would increase the likelihood that participants would be willing to return for the retest session. After participants completed and returned the rating materials, they received an Extra Credit Participation Form they could return to their
course instructors if extra credit was offered for participation, depending upon the individual course instructor’s policy.

**MDS Group**

Participants in the MDS group were invited to participate in one session to complete the vignette similarity ratings. Participants rated the eight vignettes for similarity using a paired-comparison approach in which the eight vignettes were combined in all possible pairs (e.g., vignette 1 compared to vignette 2, vignette 1 compared to vignette 3 etc.), randomly ordered and counterbalanced. Participants were asked to rate their degree of similarity using an 8-point scale ranging from “very similar” to “very different” as suggested by Sireci (1998) (see Appendix B). The MDS group also completed the PDS to gather demographic information. After participants completed and returned the rating materials, they received an Extra Credit Participation Form they could return to their course instructors in case extra credit was offered for participation in research, depending upon the individual course instructor’s policy.

**Data Analytic Procedures**

Descriptive statistics were conducted on the PDS to describe characteristics of the student samples that completed MDS, convergent and discriminant validity, and test-retest reliability ratings. Pearson product-moment correlations were conducted to analyze convergent validity and discriminant validity. To examine the hypothesis that risk perception will converge with endorsement of expected risk related to general risky sexual activities, a correlational analysis between responses to the Risky Sexual
Activities subscale of the *Cognitive Appraisal of Risky Events* measure and responses to the risk perception questions on the VRQ was conducted. The hypothesis that women who expect negative consequences to occur if they respond assertively to the man's advances will also endorse psychological barriers to resistance of sexual aggression was examined by inspecting the strength of the correlation between women's responses to appraisal questions on the VRQ and responses on the *Barriers to Responding to Sexual Aggression* measure. The hypotheses that assertive responding in reaction to the written vignettes will be related to sexual assertiveness and socially desirable responding were explored by correlating responses on the VRQ with responses on the Refusal subscale of the *Sexual Assertiveness Scale* and *Marlowe-Crowne Social Desirability Scale*.

The discriminant validity hypothesis that risk perception, response appraisals, and responses on the VRQ measure will not be related to perceived risk of intimate relationships in general was examined by looking at the relationship between responses on the VRQ and *Risk in Intimacy Inventory*. We also examined whether risk perception, response appraisals, and responses discriminated from relationship satisfaction by conducting correlational analyses between responses on the VRQ and on the *Relationship Assessment Scale*. The hypothesis that risk perception of unwanted sexual experiences will discriminate from expected risk of general aggressive and illegal behaviors was explored by examining whether endorsement of risk perception on the VRQ and expected risk responses on the Aggressive and Illegal Behaviors subscale of the CARE are uncorrelated. Finally, we examined whether risk perception and response appraisals discriminate from socially desirable responding by exploring the relationship between risk perception and response appraisal scales on the VRQ and endorsement of socially
desirable responses on the Marlowe-Crowne Social Desirability Scale. To identify whether responses to the vignette segments discriminate between sexual victimization history groups while controlling for general assertiveness, sexual assertiveness, and psychological barriers to responding, sequential multiple regression analyses were performed.

A three-way multidimensional scaling (MDS) analysis was conducted to examine the structure of the group of vignettes. The three-way MDS procedure provided both group and individual level information based upon vignette similarity ratings and included item-stem coordinates on the particular dimensions for the group model and salience weights indicating how each individual uses the group dimensions (Darcy, Lee, & Tracey, 2004).

Pearson product-moment correlations were also conducted to examine test-retest and reliability between responses on the VRQ at the initial testing session and responses on that measure at the retest session. Finally, mean inter-item correlations and Cronbach’s coefficient alpha were conducted to examine the internal reliability of the VRQ subscales.
RESULTS

For all of the following results, vignettes 3 and 5 have been omitted from analyses as they were excluded from further study based upon findings from phase two of this project.

Convergent and Discriminant Validity

The main objective of phase three of this project was to examine convergent and discriminant validity of the VRQ scales and vignettes to demonstrate construct validity. Table 1 includes means and standard deviations for all of the measures used to assess convergent and discriminant validity, with the exception of the VRQ subscales, which are presented in Table 9.

Table 2 reports the correlations between the VRQ Risk Perception subscale and the Risky Sexual Activities subscale of the CARE (CARE: RSA), the VRQ Response Appraisal subscale and the BRSA, and the VRQ Response subscale and the Refusal subscale of the SAS.

For each of these analyses, we examined the relationship between the VRQ subscales administered during segment 4 for each vignette as we were comparing ratings of high risk situations. It was hypothesized that the VRQ subscales would demonstrate small to moderate correlations with the measures listed above. Consistent with our hypothesis, response appraisals converged with psychological barriers to responding in an assertive manner, as measured by the BRSA, for each of the high risk vignettes.
Table 1
Means and Standard Deviations for Measures Used to Assess Convergent and Discriminant Validity

<table>
<thead>
<tr>
<th>Measure</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barriers to Responding to Sexual Aggression</td>
<td>35.65</td>
<td>18.13</td>
</tr>
<tr>
<td>Cognitive Appraisal of Risky Events: Aggressive and Illegal Behavior subscale</td>
<td>47.17</td>
<td>11.45</td>
</tr>
<tr>
<td>Cognitive Appraisal of Risky Events: Risky Sexual Activities subscale</td>
<td>16.58</td>
<td>4.44</td>
</tr>
<tr>
<td>Level of Risk in Dating Situations: Emotional Manipulation subscale</td>
<td>3.40</td>
<td>0.46</td>
</tr>
<tr>
<td>Level of Risk in Dating Situations: Sexual Arousal Subscale</td>
<td>3.47</td>
<td>0.36</td>
</tr>
<tr>
<td>Level of Risk in Dating Situations: Threats and Physical Coercion subscale</td>
<td>3.93</td>
<td>0.18</td>
</tr>
<tr>
<td>Level of Risk in Dating Situations: Verbal Pressure Subscale</td>
<td>3.45</td>
<td>0.37</td>
</tr>
<tr>
<td>Marlowe – Crowne Social Desirability Scale</td>
<td>49.09</td>
<td>5.01</td>
</tr>
<tr>
<td>Relationship Assessment Scale</td>
<td>28.86</td>
<td>4.93</td>
</tr>
<tr>
<td>Risk in Intimacy Inventory</td>
<td>25.94</td>
<td>10.26</td>
</tr>
<tr>
<td>Sexual Assertiveness Scale for Women: Risky Sexual Activities Subscale</td>
<td>22.18</td>
<td>5.17</td>
</tr>
</tbody>
</table>

Table 2
Intercorrelations Among the Risk Perception, Response Appraisal, and Response Subscales of the VRQ and the CARE: Risky Sexual Activities Scale, BRSA, and SAS: Refusal Scale

<table>
<thead>
<tr>
<th>VRQ: RP</th>
<th>CARE: RSA (r)</th>
<th>VRQ: RA</th>
<th>BRSA (r)</th>
<th>VRQ: R</th>
<th>SAS: Refusal (r)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vignette 1</td>
<td>0.118</td>
<td>Vignette 1</td>
<td>0.352**</td>
<td>Vignette 1</td>
<td>–0.079</td>
</tr>
<tr>
<td>Vignette 2</td>
<td>0.035</td>
<td>Vignette 2</td>
<td>0.285**</td>
<td>Vignette 2</td>
<td>0.090</td>
</tr>
<tr>
<td>Vignette 4</td>
<td>0.032</td>
<td>Vignette 4</td>
<td>0.343**</td>
<td>Vignette 4</td>
<td>0.171*</td>
</tr>
<tr>
<td>Vignette 6</td>
<td>0.132</td>
<td>Vignette 6</td>
<td>0.274**</td>
<td>Vignette 6</td>
<td>0.017</td>
</tr>
<tr>
<td>Vignette 7</td>
<td>0.039</td>
<td>Vignette 7</td>
<td>0.342**</td>
<td>Vignette 7</td>
<td>–0.015</td>
</tr>
<tr>
<td>Vignette 8</td>
<td>0.079</td>
<td>Vignette 8</td>
<td>0.327**</td>
<td>Vignette 8</td>
<td>0.114</td>
</tr>
<tr>
<td>Vignette 9</td>
<td>–0.149*</td>
<td>Vignette 9</td>
<td>0.147</td>
<td>Vignette 9</td>
<td>–0.161*</td>
</tr>
<tr>
<td>Vignette 10</td>
<td>–0.004</td>
<td>Vignette 10</td>
<td>0.070</td>
<td>Vignette 10</td>
<td>–0.025</td>
</tr>
</tbody>
</table>

*NOTE: CARE: RSA = Cognitive Appraisals of Risky Events, Risky Sexual Activities Scale; BRSA = Barriers to Responding to Sexual Aggression; SAS = Sexual Assertiveness Scale for Women; VRQ: RP = Vignette Rating Questionnaire, Risk Perception subscale; VRQ: RA = Vignette Rating Questionnaire, Response Appraisal subscale; VRQ: R = Vignette Rating Questionnaire, Response subscale. *p < 0.05, **p < 0.01.
Contrary to our hypotheses, the Risk Perception and Response scales did not converge with the Risky Sexual Activities subscale of the CARE and Refusal subscale of the SAS, respectively. The only exceptions to these findings were that vignette 9, a low risk vignette, demonstrated a small negative relationship with both measures; and vignette 4, a high risk vignette, demonstrated a small positive relationship with the Refusal subscale of the SAS.

Although not one of the original hypotheses, after finding that risk perception did not converge with the CARE: RSA subscale, we decided to investigate whether risk perception associated with the vignettes would relate to risk perceptions of dating situations established as risk factors for sexual assault in the literature as measured by the LRDS. We expected dating situations included on the LRDS that are perceived as moderately to highly risky (i.e., verbal pressure, and emotional manipulation) to correlate with segment 3 of the high risk vignettes, a moderately risky point in the vignette. Likewise, we expected LRDS items that are perceived as highly risky (i.e., threats and physical coercion) to correlate positively with segment 4 of the high risk vignettes, the highest risk point of each vignette. Consistent with our expectations, segment 3 of all but one of the high risk vignettes (i.e., vignette 8) had small significant correlations with the moderately risky LRDS scales. Similarly, segment 4 of all of the vignettes except vignettes 2, 7, and 10 had small significant correlations with the threats and physical coercion LRDS subscale (Table 3).

We hypothesized that perceived risk of general aggressive and illegal behaviors, as measured by the CARE, would differentiate from risk perception associated with the
Table 3

Intercorrelations Among the Risk Perception Subscale of the VRQ and LRDS Subscales

<table>
<thead>
<tr>
<th>VRQ: RP Segment 3</th>
<th>LRDS Sexual Arousal</th>
<th>LRDS Verbal Pressure</th>
<th>LRDS Emotional Manipulation</th>
<th>VRQ: RP Segment 4</th>
<th>LRDS Threats &amp; Physical Coercion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vignette 1</td>
<td>0.222**</td>
<td>0.204**</td>
<td>0.188*</td>
<td>Vignette 1</td>
<td>0.165*</td>
</tr>
<tr>
<td>Vignette 2</td>
<td>0.180*</td>
<td>0.146*</td>
<td>0.155*</td>
<td>Vignette 2</td>
<td>0.097</td>
</tr>
<tr>
<td>Vignette 4</td>
<td>0.250**</td>
<td>0.239**</td>
<td>0.149*</td>
<td>Vignette 4</td>
<td>0.247**</td>
</tr>
<tr>
<td>Vignette 6</td>
<td>0.205**</td>
<td>0.166*</td>
<td>0.178*</td>
<td>Vignette 6</td>
<td>0.184*</td>
</tr>
<tr>
<td>Vignette 7</td>
<td>0.276**</td>
<td>0.226**</td>
<td>0.194**</td>
<td>Vignette 7</td>
<td>0.066</td>
</tr>
<tr>
<td>Vignette 8</td>
<td>0.241**</td>
<td>0.256**</td>
<td>0.135</td>
<td>Vignette 8</td>
<td>0.244**</td>
</tr>
<tr>
<td>Vignette 9</td>
<td>-0.007</td>
<td>0.050</td>
<td>-0.027</td>
<td>Vignette 9</td>
<td>-0.246**</td>
</tr>
<tr>
<td>Vignette 10</td>
<td>0.087</td>
<td>0.081</td>
<td>0.035</td>
<td>Vignette 10</td>
<td>-0.109</td>
</tr>
</tbody>
</table>

*NOTE:* VRQ: RP = Vignette Rating Questionnaire, Risk Perception subscale; LRDS = Level of Risk in Dating Situations measure. *p < 0.05, **p < 0.01.

high risk points in our vignettes that specifically portray sexual assault and found our results to support this hypothesis as presented in Table 4.

Table 4

Intercorrelations of Risk Perception Subscale of VRQ and Aggressive and Illegal Behaviors Subscale of the CARE

<table>
<thead>
<tr>
<th>VRQ: RP</th>
<th>CARE: Aggressive &amp; Illegal Behaviors (r)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vignette 1</td>
<td>0.121</td>
</tr>
<tr>
<td>Vignette 2</td>
<td>0.010</td>
</tr>
<tr>
<td>Vignette 4</td>
<td>0.048</td>
</tr>
<tr>
<td>Vignette 6</td>
<td>0.115</td>
</tr>
<tr>
<td>Vignette 7</td>
<td>0.083</td>
</tr>
<tr>
<td>Vignette 8</td>
<td>0.133</td>
</tr>
<tr>
<td>Vignette 9</td>
<td>-0.205**</td>
</tr>
<tr>
<td>Vignette 10</td>
<td>-0.058</td>
</tr>
</tbody>
</table>

*NOTE:* CARE = Cognitive Appraisals of Risky Events; VRQ: RP = Vignette Rating Questionnaire, Risk Perception subscale. **p < 0.01.
We also hypothesized that risk perception, response appraisals, and responses associated with segment 4 of our vignettes would not relate to relationship satisfaction as measured by the RAS (Table 5) and the belief that having relationships, in general, is risky as measured by the RII (Table 6).

Table 5

Inter correlations Among the Risk Perception, Response Appraisal, and Response Subscales of the Vignette Rating Questionnaire and the RAS

<table>
<thead>
<tr>
<th>Vignette 1</th>
<th>Vignette 2</th>
<th>Vignette 4</th>
<th>Vignette 6</th>
<th>Vignette 7</th>
<th>Vignette 8</th>
<th>Vignette 9</th>
<th>Vignette 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>VRQ: RP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RAS</td>
<td>0.017</td>
<td>-0.009</td>
<td>-0.034</td>
<td>0.021</td>
<td>0.024</td>
<td>0.018</td>
<td>-0.024</td>
</tr>
<tr>
<td>VRQ: RA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RAS</td>
<td></td>
<td>-0.210*</td>
<td>-0.152</td>
<td>0.016</td>
<td>-0.102</td>
<td>-0.087</td>
<td>-0.047</td>
</tr>
<tr>
<td>VRQ: R</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RAS</td>
<td></td>
<td></td>
<td>-0.102</td>
<td>-0.084</td>
<td>-0.018</td>
<td>-0.093</td>
<td>0.019</td>
</tr>
</tbody>
</table>

NOTE: RAS = Relationship Assessment subscale; VRQ: RP = Vignette Rating Questionnaire, Risk Perception subscale; VRQ: RA = Vignette Rating Questionnaire, Response Appraisal subscale; VRQ: R = Vignette Rating Questionnaire, Response subscale. *p < 0.05.

Overall, these hypotheses were also supported, providing further support for discriminant validity. The exception to this finding was small significant positive correlations between response appraisals related to segment 4 of vignettes 1 and 2 and the RII. Finally, based upon previous research that found assertive responding related to socially desirable responding, we hypothesized responses to our vignettes would have a small correlation with socially desirable responding, as measured by the M-C SDS and risk perception and response appraisals would discriminate from this measure. Contrary
Table 6

Intercorrelations Among the Risk Perception, Response Appraisal, and Response Subscales of the Vignette Rating Questionnaire and the RII

<table>
<thead>
<tr>
<th>VRQ: RP</th>
<th>RII</th>
<th>VRQ:RA</th>
<th>RII</th>
<th>VRQ: R</th>
<th>RII</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vignette 1</td>
<td>0.080</td>
<td>Vignette 1</td>
<td>0.208**</td>
<td>Vignette 1</td>
<td>0.129</td>
</tr>
<tr>
<td>Vignette 2</td>
<td>0.023</td>
<td>Vignette 2</td>
<td>0.165*</td>
<td>Vignette 2</td>
<td>−0.004</td>
</tr>
<tr>
<td>Vignette 4</td>
<td>−0.086</td>
<td>Vignette 4</td>
<td>0.095</td>
<td>Vignette 4</td>
<td>−0.084</td>
</tr>
<tr>
<td>Vignette 6</td>
<td>0.053</td>
<td>Vignette 6</td>
<td>0.080</td>
<td>Vignette 6</td>
<td>0.039</td>
</tr>
<tr>
<td>Vignette 7</td>
<td>−0.055</td>
<td>Vignette 7</td>
<td>0.083</td>
<td>Vignette 7</td>
<td>−0.060</td>
</tr>
<tr>
<td>Vignette 8</td>
<td>−0.052</td>
<td>Vignette 8</td>
<td>0.059</td>
<td>Vignette 8</td>
<td>−0.010</td>
</tr>
<tr>
<td>Vignette 9</td>
<td>0.027</td>
<td>Vignette 9</td>
<td>−0.009</td>
<td>Vignette 9</td>
<td>0.112</td>
</tr>
<tr>
<td>Vignette 10</td>
<td>0.112</td>
<td>Vignette 10</td>
<td>−0.018</td>
<td>Vignette 10</td>
<td>0.107</td>
</tr>
</tbody>
</table>

Note. RII = Risk in Intimacy Inventory; VRQ: RP = Vignette Rating Questionnaire, Risk Perception subscale; VRQ: RA = Vignette Rating Questionnaire, Response Appraisal subscale; VRQ: R = Vignette Rating Questionnaire, Response subscale. *p < 0.05, **p < 0.01.

to this, we found Risk Perception, Response Appraisal, and Response subscales of the VRQ to all discriminate from socially desirable responding (Table 7).

Table 7

Intercorrelations Among the Risk Perception, Response Appraisal, and Response Subscales of the Vignette Rating Questionnaire and the M-C SDS

<table>
<thead>
<tr>
<th>VRQ: RP</th>
<th>M-C SDS</th>
<th>VRQ:RA</th>
<th>M-C SDS</th>
<th>VRQ: R</th>
<th>M-C SDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vignette 1</td>
<td>0.047</td>
<td>Vignette 1</td>
<td>−0.077</td>
<td>Vignette 1</td>
<td>−0.070</td>
</tr>
<tr>
<td>Vignette 2</td>
<td>0.097</td>
<td>Vignette 2</td>
<td>−0.143</td>
<td>Vignette 2</td>
<td>0.098</td>
</tr>
<tr>
<td>Vignette 4</td>
<td>0.037</td>
<td>Vignette 5</td>
<td>−0.074</td>
<td>Vignette 5</td>
<td>0.050</td>
</tr>
<tr>
<td>Vignette 6</td>
<td>0.027</td>
<td>Vignette 6</td>
<td>−0.021</td>
<td>Vignette 6</td>
<td>−0.011</td>
</tr>
<tr>
<td>Vignette 7</td>
<td>−0.028</td>
<td>Vignette 7</td>
<td>−0.078</td>
<td>Vignette 7</td>
<td>−0.045</td>
</tr>
<tr>
<td>Vignette 8</td>
<td>0.046</td>
<td>Vignette 8</td>
<td>−0.036</td>
<td>Vignette 8</td>
<td>−0.008</td>
</tr>
<tr>
<td>Vignette 9</td>
<td>−0.049</td>
<td>Vignette 9</td>
<td>0.041</td>
<td>Vignette 9</td>
<td>−0.113</td>
</tr>
<tr>
<td>Vignette 10</td>
<td>−0.016</td>
<td>Vignette 10</td>
<td>0.012</td>
<td>Vignette 10</td>
<td>0.011</td>
</tr>
</tbody>
</table>

Note: M-C SDS = Marlowe – Crowne Social Desirability Scale; VRQ: RP = Vignette Rating Questionnaire, Risk Perception subscale; VRQ: RA = Vignette Rating Questionnaire, Response Appraisal subscale; VRQ: R = Vignette Rating Questionnaire, Response subscale.
To further assess construct validity, we examined whether responses to the vignettes, at each segment, would discriminate between sexual victimization group status beyond that of general assertiveness, sexual assertiveness as measured by refusal on the SAS, and psychological barriers to responding assertively as measured by the BRSA. For each vignette, only refusal as measured by the SAS made a statistically significant contribution to the model. Responses to the vignettes, as measured by the VRQ, did not make a unique contribution.

Internal Structure

We submitted the eight vignettes to a three-way (i.e., weighted) MDS procedure using the INDSCAL model (Carroll & Chang, 1970) to examine both group and individual level information about the group of vignettes that make up the internal structure of the analog measure. The analysis yielded a two-dimensional solution with a good fit for the entire sample indicated by Young’s formula 1 S-stress value of 0.14 and an $R^2$ (RSQ), proportion of variance accounted for, of 0.94. Some caution should be taken in interpreting this two-dimensional solution, however, as stress values somewhat depend upon the number of objects, $I$, and dimensionality, $R$, such that as long as $I$ is large compared to $R$, the exact values do not have much influence (Kruskal & Wish, 1978). The rule of thumb is if $I > 4R$, the interpretation of stress is not sensitive to $I$ and $R$. With our data, $I = 4R$, indicating a good fit will occur 25% of the time for countless random data.

The interpretation of the configuration is based upon the subjective method for interpreting MDS configurations. The configuration is examined in all directions to
discover the underlying patterns based upon what one knows about the items. As depicted in Figure 1, Dimension 1 appeared to represent degree of risk such that low scores indicated high risk vignettes and high scores indicated low risk vignettes. Dimension 2 appeared to represent relationship duration such that high scores indicated acquaintances who just met and low scores indicated the individuals were in a dating relationship of varying lengths of time. Results also indicate that vignettes 2, 6, and 8, 1 and 4, and 9 and 10 are the most similar pairs of vignettes, suggesting it would be acceptable to use pairs of vignettes to examine alternate forms reliability.

Figure 1. Two-Dimensional Configuration of Written Vignettes.
Salience weights and the weirdness index for each individual are listed in Table 8. The mean salience weight of Dimension 1 was 0.86 and Dimension 2 was 0.08. These values indicate individuals tended to place most importance on Dimension 1 (degree of risk) and little importance on Dimension 2 (relationship duration) in rating the similarity of the vignettes.

Table 8
Weirdness Index and Individual Salience Weights

<table>
<thead>
<tr>
<th>Participant</th>
<th>Weirdness Index</th>
<th>Salience Weights</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Dimension 1</td>
</tr>
<tr>
<td>1</td>
<td>0.8195</td>
<td>0.9972</td>
</tr>
<tr>
<td>2</td>
<td>0.3667</td>
<td>0.9131</td>
</tr>
<tr>
<td>3</td>
<td>0.2244</td>
<td>0.9098</td>
</tr>
<tr>
<td>4 – SA</td>
<td>0.4004</td>
<td>0.9836</td>
</tr>
<tr>
<td>5</td>
<td>0.5679</td>
<td>0.8270</td>
</tr>
<tr>
<td>6 – SA</td>
<td>0.5239</td>
<td>0.8514</td>
</tr>
<tr>
<td>7 – SA</td>
<td>0.9443</td>
<td>0.9984</td>
</tr>
<tr>
<td>8 – SA</td>
<td>0.7402</td>
<td>0.9933</td>
</tr>
<tr>
<td>9</td>
<td>0.3023</td>
<td>0.9125</td>
</tr>
<tr>
<td>10 – SA</td>
<td>0.9809</td>
<td>0.9996</td>
</tr>
<tr>
<td>11 - expert</td>
<td>0.5459</td>
<td>0.7982</td>
</tr>
</tbody>
</table>

Note: SA = sexual abuse history.

Examination of the weirdness index, where values of 0 indicate the individual weights each dimension the same as the average weight and values of 1 indicate the individual weights a single dimension as all important, along with Figure 2, which plots the individual salience weights, points to a pattern in which individuals with an abuse history (participants 4, 6, 7, 8, and 10) tend to place greater importance on Dimension 1 compared to Dimension 2. Participants 1 and 6 were the exceptions to this pattern such
that participant 1, who did not have an abuse history, tended to place a similar degree of importance on Dimension 1 as those with an abuse history and vice versa for participant 6 who had an abuse history. It is also interesting to note that the expert rater (participant 11) placed less importance on a single dimension (e.g., Dimension 1) compared to the other raters.

Figure 2. Individual Salience Weights Plot.
Reliability

Test-retest reliability values are presented in Table 9 along with means and standard deviations for each of the vignette segments and each subscale. Note no data are reported for segments 1 and 2 of vignette 2 and segment 1 of vignette 10 for Response Appraisal and Response subscales as the subscales were not applicable for those segments.

Table 9
Vignette Segment Means and Standard Deviations, Test-Retest Reliability, Internal Consistency, and Mean Inter-Item Correlations

<table>
<thead>
<tr>
<th>Subscale &amp; Vignette</th>
<th>$M$</th>
<th>$SD$</th>
<th>No. of Items</th>
<th>Test-Retest</th>
<th>$\alpha$</th>
<th>$r$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Risk Perception:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>vignette 1, segment 1</td>
<td>10.86</td>
<td>5.22</td>
<td>5</td>
<td>0.610**</td>
<td>0.790</td>
<td>0.435</td>
</tr>
<tr>
<td>vignette 1, segment 2</td>
<td>14.81</td>
<td>5.63</td>
<td>5</td>
<td>0.454*</td>
<td>0.742</td>
<td>0.366</td>
</tr>
<tr>
<td>vignette 1, segment 3</td>
<td>21.69</td>
<td>5.24</td>
<td>5</td>
<td>0.559**</td>
<td>0.745</td>
<td>0.369</td>
</tr>
<tr>
<td>vignette 1, segment 4</td>
<td>25.91</td>
<td>4.89</td>
<td>5</td>
<td>0.496*</td>
<td>0.796</td>
<td>0.448</td>
</tr>
<tr>
<td>vignette 2, segment 1</td>
<td>7.84</td>
<td>3.93</td>
<td>5</td>
<td>0.250</td>
<td>0.708</td>
<td>0.316</td>
</tr>
<tr>
<td>vignette 2, segment 2</td>
<td>15.81</td>
<td>5.68</td>
<td>5</td>
<td>0.312</td>
<td>0.717</td>
<td>0.321</td>
</tr>
<tr>
<td>vignette 2, segment 3</td>
<td>21.43</td>
<td>5.75</td>
<td>5</td>
<td>0.751**</td>
<td>0.764</td>
<td>0.409</td>
</tr>
<tr>
<td>vignette 2, segment 4</td>
<td>28.43</td>
<td>4.08</td>
<td>5</td>
<td>0.386</td>
<td>0.794</td>
<td>0.448</td>
</tr>
<tr>
<td>vignette 4, segment 1</td>
<td>10.70</td>
<td>5.01</td>
<td>5</td>
<td>0.411</td>
<td>0.736</td>
<td>0.373</td>
</tr>
<tr>
<td>vignette 4, segment 2</td>
<td>23.06</td>
<td>5.38</td>
<td>5</td>
<td>0.379</td>
<td>0.740</td>
<td>0.370</td>
</tr>
<tr>
<td>vignette 4, segment 3</td>
<td>23.46</td>
<td>5.38</td>
<td>5</td>
<td>0.509*</td>
<td>0.754</td>
<td>0.377</td>
</tr>
<tr>
<td>vignette 4, segment 4</td>
<td>26.79</td>
<td>4.58</td>
<td>5</td>
<td>0.570**</td>
<td>0.714</td>
<td>0.373</td>
</tr>
<tr>
<td>vignette 6, segment 1</td>
<td>10.24</td>
<td>4.43</td>
<td>5</td>
<td>0.604**</td>
<td>0.722</td>
<td>0.334</td>
</tr>
<tr>
<td>vignette 6, segment 2</td>
<td>16.87</td>
<td>5.76</td>
<td>5</td>
<td>0.660**</td>
<td>0.757</td>
<td>0.388</td>
</tr>
<tr>
<td>vignette 6, segment 3</td>
<td>21.22</td>
<td>6.08</td>
<td>5</td>
<td>0.708**</td>
<td>0.797</td>
<td>0.442</td>
</tr>
<tr>
<td>vignette 6, segment 4</td>
<td>27.86</td>
<td>4.18</td>
<td>5</td>
<td>0.136</td>
<td>0.765</td>
<td>0.424</td>
</tr>
<tr>
<td>vignette 7, segment 1</td>
<td>12.55</td>
<td>5.39</td>
<td>5</td>
<td>0.326</td>
<td>0.787</td>
<td>0.418</td>
</tr>
<tr>
<td>vignette 7, segment 2</td>
<td>20.30</td>
<td>6.33</td>
<td>5</td>
<td>0.335</td>
<td>0.816</td>
<td>0.477</td>
</tr>
<tr>
<td>vignette 7, segment 3</td>
<td>21.90</td>
<td>6.18</td>
<td>5</td>
<td>0.186</td>
<td>0.840</td>
<td>0.517</td>
</tr>
<tr>
<td>vignette 7, segment 4</td>
<td>26.35</td>
<td>5.62</td>
<td>5</td>
<td>-0.117</td>
<td>0.840</td>
<td>0.547</td>
</tr>
<tr>
<td>Time</td>
<td>Value</td>
<td>Standard Deviation</td>
<td>Confidence Interval</td>
<td>p-Value</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>-------</td>
<td>--------------------</td>
<td>---------------------</td>
<td>---------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0:20</td>
<td>0.70</td>
<td>0.19</td>
<td>0.54 - 0.86</td>
<td>0.60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1:20</td>
<td>0.70</td>
<td>0.19</td>
<td>0.54 - 0.86</td>
<td>0.60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2:20</td>
<td>0.70</td>
<td>0.19</td>
<td>0.54 - 0.86</td>
<td>0.60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3:20</td>
<td>0.70</td>
<td>0.19</td>
<td>0.54 - 0.86</td>
<td>0.60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4:20</td>
<td>0.70</td>
<td>0.19</td>
<td>0.54 - 0.86</td>
<td>0.60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5:20</td>
<td>0.70</td>
<td>0.19</td>
<td>0.54 - 0.86</td>
<td>0.60</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 9—Continued
<table>
<thead>
<tr>
<th>Item</th>
<th>SD</th>
<th>M</th>
<th>No. of Velence &amp; 1st-Kessel</th>
<th>T</th>
<th>No. of Velence &amp; 2nd-Kessel</th>
<th>T</th>
</tr>
</thead>
<tbody>
<tr>
<td>101.0</td>
<td>869.0</td>
<td><strong>619.0</strong></td>
<td>10</td>
<td>744</td>
<td>10</td>
<td>748</td>
</tr>
<tr>
<td>88.0</td>
<td>879.0</td>
<td><strong>515.0</strong></td>
<td>10</td>
<td>628</td>
<td>22.0</td>
<td>74.0</td>
</tr>
<tr>
<td>69.0</td>
<td><strong>87.0</strong></td>
<td><strong>87.0</strong></td>
<td>10</td>
<td>744</td>
<td>27.0</td>
<td>79.0</td>
</tr>
<tr>
<td>69.0</td>
<td><strong>87.0</strong></td>
<td><strong>87.0</strong></td>
<td>10</td>
<td>744</td>
<td>27.0</td>
<td>79.0</td>
</tr>
<tr>
<td>69.0</td>
<td><strong>87.0</strong></td>
<td><strong>87.0</strong></td>
<td>10</td>
<td>744</td>
<td>27.0</td>
<td>79.0</td>
</tr>
<tr>
<td>69.0</td>
<td><strong>87.0</strong></td>
<td><strong>87.0</strong></td>
<td>10</td>
<td>744</td>
<td>27.0</td>
<td>79.0</td>
</tr>
</tbody>
</table>

Table continued...
Overall, the Response Appraisal subscale was the most reliable, the Risk Perception subscale was moderately reliable, and the Response subscale was the least reliable across vignettes. For the Response Appraisal subscale, vignette 2 had the lowest test-retest reliability values with neither segment reaching statistical significance. For the Risk Perception subscale, vignettes 2, 7, and 10 were the least reliable across segments. Finally, for the Response subscale, vignettes 6, 7, 8, 9, and 10 demonstrated little reliability across segments.

Based upon the MDS configuration, which indicated the vignettes clustered into three distinct groups, with the exception of vignette 7, we chose to analyze both immediate and delayed alternate forms reliability with our existing data set as we had planned should the MDS configuration identify such clusters. Vignettes 2 and 7 were excluded from further evaluation based upon both the MDS configuration (i.e., identifying that vignette 7 did not cluster with other vignettes) and other results, which provided least support for the validity and reliability of these two vignettes. Pearson product-moment correlations were calculated for both immediate and delayed responses. Immediate alternate forms reliability was examined by comparing ratings from the first administration of the vignettes during which participants provided ratings for each vignette. Therefore, correlations were conducted for the pairs of vignettes that clustered together (i.e., vignettes 1 and 4; vignettes 6 and 8; vignettes 9 and 10) as rated during session 1. Participants were the same 185 that completed the validity ratings and time one test-retest ratings. Delayed alternate forms reliability was examined by comparing ratings from the first and second administrations of the vignettes, during which two groups of participants returned at time two and provided ratings for half of the vignettes.
Participants were the same 21 from group one and 20 from group two that completed test-retest reliability ratings. Because participants completed ratings for only half of the vignettes, the order in which participants provided ratings differed by group. That is, group 1 already knew the outcome of vignettes 1, 6, and 10 when providing ratings for the second time during session 2 while group 2 knew the outcome of vignettes 4, 8, and 9. Results are presented in Table 10.

Overall, moderate to large significant correlations were found for most of the vignette segments for all six vignettes when vignettes were administered concurrently. Correlations conducted for delayed alternate forms reliability mostly ranged from small to large correlations but fewer reached statistical significance, which is likely related to the small sample sizes of groups 1 and 2. Similar to test-retest reliability results, response appraisal ratings resulted in larger correlations and more often met significance as compared to risk perception and response. The inconsistency in correlation coefficients from group 1 to group 2 as observed for the same vignette segments likely occurred because the groups differed in which vignette in the pair they already knew the outcome to when providing ratings for the second time.

Reliability was also assessed by examining internal consistency of the subscales. These results are also presented in Table 9. Cronbach’s coefficient alpha statistic is widely used for assessing internal consistency. However, for scales with fewer than 10 items, Cronbach alpha values are often quite small. Instead, mean inter-item correlation values can be used for scales with fewer than 10 items (Pallant, 2005). Nunnally (1978) recommends a minimum Cronbach alpha value of 0.7, and Briggs and Cheek (1986) recommend inter-item correlation values range from 0.2 to 0.4 to demonstrate acceptable
Table 10
Immediate and Delayed Alternate Forms Reliability Correlations

<table>
<thead>
<tr>
<th>Vignette Pairs</th>
<th>Immediate $(n = 185)$</th>
<th>Delayed $(n = 21)$</th>
<th>Delayed $(n = 20)$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Risk Perception:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>v1 and v4, segment 1</td>
<td>0.186*</td>
<td>-0.240</td>
<td>0.403</td>
</tr>
<tr>
<td>v1 and v4, segment 2</td>
<td>0.395**</td>
<td>0.516*</td>
<td>0.342</td>
</tr>
<tr>
<td>v1 and v4, segment 3</td>
<td>0.507**</td>
<td>0.549**</td>
<td>0.651**</td>
</tr>
<tr>
<td>v1 and v4, segment 4</td>
<td>0.314**</td>
<td>0.380</td>
<td>0.345</td>
</tr>
<tr>
<td>v6 and v8, segment 1</td>
<td>0.440**</td>
<td>0.412</td>
<td>0.248</td>
</tr>
<tr>
<td>v6 and v8, segment 2</td>
<td>0.494**</td>
<td>0.593**</td>
<td>0.474*</td>
</tr>
<tr>
<td>v6 and v8, segment 3</td>
<td>0.535**</td>
<td>0.627**</td>
<td>0.118</td>
</tr>
<tr>
<td>v6 and v8, segment 4</td>
<td>0.505**</td>
<td>-0.059</td>
<td>-0.051</td>
</tr>
<tr>
<td>v9 and v10, segment 1</td>
<td>0.384**</td>
<td>-0.299</td>
<td>0.230</td>
</tr>
<tr>
<td>v9 and v10, segment 2</td>
<td>0.005</td>
<td>0.107</td>
<td>0.212</td>
</tr>
<tr>
<td>v9 and v10, segment 3</td>
<td>0.309**</td>
<td>-0.073</td>
<td>-0.237</td>
</tr>
<tr>
<td>v9 and v10, segment 4</td>
<td>0.283**</td>
<td>0.126</td>
<td>-0.126</td>
</tr>
<tr>
<td><strong>Response Appraisal:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>v1 and v4, segment 1</td>
<td>0.360**</td>
<td>0.266</td>
<td>0.388</td>
</tr>
<tr>
<td>v1 and v4, segment 2</td>
<td>0.524**</td>
<td>0.536*</td>
<td>0.262</td>
</tr>
<tr>
<td>v1 and v4, segment 3</td>
<td>0.671**</td>
<td>0.370</td>
<td>0.590**</td>
</tr>
<tr>
<td>v1 and v4, segment 4</td>
<td>0.641**</td>
<td>0.604**</td>
<td>0.561*</td>
</tr>
<tr>
<td>v6 and v8, segment 1</td>
<td>0.610**</td>
<td>0.535*</td>
<td>0.409</td>
</tr>
<tr>
<td>v6 and v8, segment 2</td>
<td>0.647**</td>
<td>0.592**</td>
<td>0.361</td>
</tr>
<tr>
<td>v6 and v8, segment 3</td>
<td>0.698**</td>
<td>0.558**</td>
<td>0.439</td>
</tr>
<tr>
<td>v6 and v8, segment 4</td>
<td>0.780**</td>
<td>0.488*</td>
<td>0.303</td>
</tr>
<tr>
<td>v9 and v10, segment 2</td>
<td>0.496**</td>
<td>0.673**</td>
<td>0.445*</td>
</tr>
<tr>
<td>v9 and v10, segment 3</td>
<td>0.573**</td>
<td>0.625**</td>
<td>0.667**</td>
</tr>
<tr>
<td>v9 and v10, segment 4</td>
<td>0.644**</td>
<td>0.620**</td>
<td>0.695**</td>
</tr>
<tr>
<td><strong>Response:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>v1 and v4, segment 1</td>
<td>0.095</td>
<td>-0.069</td>
<td>0.564**</td>
</tr>
<tr>
<td>v1 and v4, segment 2</td>
<td>0.426**</td>
<td>0.269</td>
<td>0.351</td>
</tr>
<tr>
<td>v1 and v4, segment 3</td>
<td>0.443**</td>
<td>0.155</td>
<td>0.600**</td>
</tr>
<tr>
<td>v1 and v4, segment 4</td>
<td>0.310**</td>
<td>-0.175</td>
<td>0.284</td>
</tr>
<tr>
<td>v6 and v8, segment 1</td>
<td>0.484**</td>
<td>0.098</td>
<td>0.246</td>
</tr>
<tr>
<td>v6 and v8, segment 2</td>
<td>0.445**</td>
<td>0.327</td>
<td>0.348</td>
</tr>
<tr>
<td>v6 and v8, segment 3</td>
<td>0.418**</td>
<td>0.358</td>
<td>0.296</td>
</tr>
<tr>
<td>v6 and v8, segment 4</td>
<td>0.511**</td>
<td>0.136</td>
<td>0.112</td>
</tr>
<tr>
<td>v9 and v10, segment 2</td>
<td>0.055</td>
<td>0.260</td>
<td>-0.089</td>
</tr>
<tr>
<td>v9 and v10, segment 3</td>
<td>0.219**</td>
<td>0.010</td>
<td>-0.224</td>
</tr>
<tr>
<td>v9 and v10, segment 4</td>
<td>0.292**</td>
<td>0.230</td>
<td>-0.075</td>
</tr>
</tbody>
</table>

*Note: v = vignette. *p < 0.05, **p < 0.01.*
internal consistency. Table 8 lists Cronbach’s alpha and inter-item correlation values for each subscale with the suggested statistic for each subscale (i.e., Cronbach’s alpha or inter-item correlation) in boldface. Overall, the three scales demonstrate good internal consistency across vignettes and segments. Within the Response Appraisal subscale, Cronbach’s alpha value is slightly below 0.7 for all segments of vignette 10, segments 2 and 3 of vignette 9, segment 1 of vignettes 4, 6, and 8, and segment 4 of vignette 2. For most of these segments, Cronbach’s alpha would increase to 0.7 if item 17, “I’m not sure where this is going to lead. I’ll wait and see what happens,” was omitted from the scale.
DISCUSSION

The purpose of this multi-phase project is to develop and validate a behavioral analog measure of risk perception and effective behavioral responding for a female college student population. During the first and second phases of this project, we developed ten written vignettes illustrating a variety of heterosexual interactions varying in level of risk for unwanted sexual experiences and found support for content validity of eight vignettes. The third phase of this project, the current study, focused on obtaining additional construct validity and reliability data. We conducted tests of convergent and discriminant validity, examined the internal structure of the measure by considering the similarity between and dimensions underlying the group of vignettes, and evaluated reliability of the written vignettes and VRQ.

Convergent and Discriminant Validity

The main objective of phase three of this project was to examine convergent and discriminant validity of the theoretical VRQ subscales and written vignettes to provide support for construct validity. Convergent and discriminant validity hypotheses were put forth to guide the process. We identified one measure per VRQ subscale (i.e., Risk Perception, Response Appraisal, and Response) that was expected to converge with the subscale at a small to moderate level and at least one measure to discriminate from each of the three VRQ subscales. Our hypothesis that response appraisals indicating negative consequences would likely occur if the woman responds assertively to the man’s coercive
and/or threatening advances portrayed in the written vignettes would converge with psychological barriers to resistance of sexual aggression was supported for each of the high risk vignettes as demonstrated by moderate correlations between the measures. The hypotheses that risk perception would relate to endorsement of expected risk of general risky sexual activities and responses to the vignettes would relate to sexual assertiveness were not supported. Rather, our constructs of risk perception and responding differ from the constructs assessed by existing measures. That is, our construct of the ability to perceive risk for unwanted sexual experiences in heterosexual interpersonal situations is not the same as perceiving general risky sexual activities (e.g., leaving a social event with someone the person has just met, involvement in sexual activities without consent, having sex with someone the person just met or does not know well, sex with multiple partners, unprotected sex) as risky. This finding may relate to the fact that the general risky sexual activities listed above may not be perceived as involving as much risk for sexual assault as the situations portrayed in the written vignettes. In fact, the general risky sexual activity items do not imply coercion or use of force as do the written vignettes. Likewise, our construct of assertive responding to the written vignettes differs from the construct of assertively refusing sex or other sexual activities with a steady sexual partner, which makes sense conceptually given our assessment measures assertive responding to coercive and sexually aggressive situations with acquaintances and steady dating partners.

Both conceptually and statistically speaking, it appears as though our constructs of risk perception and assertive responding to sexually aggressive interpersonal situations differ from the constructs assessed by the existing measures we used for comparison,
which points to the difficulty of establishing convergent validity between newer constructs that have no existing validated measures (e.g., risk perception and effective responding to sexually aggressive situations) and those constructs that do have existing validated measures, such as the constructs measured by CARE and SAS. Although we believed the LRDS measures a construct more closely related to risk perception as assessed by the VRQ and written vignettes than did the CARE measure, we chose to compare the VRQ to the CARE because this measure had some validity data to support its use whereas the LRDS currently does not because it is also a new measure under development. However, given we have reason to believe the LRDS measures a construct similar to that of risk perception as measured by the VRQ based upon the existing literature, we chose to conduct additional analyses examining the convergence between the LRDS and the VRQ although this was not one of our original hypotheses. It was expected that these constructs would be more closely related as both involve perceiving degree of risk involved in heterosexual dating situations that involve coercion and physical force or threat of force. As expected, the vignette segments that portray a moderate degree of risk for sexual assault had small correlations with the LRDS scales college women perceive as moderately risky (i.e., use of sexual arousal techniques, verbal pressure, emotional manipulation). The only exception to this was emotional manipulation which had a small but non-significant correlation with segment 3 of vignette 8. However, sexual arousal techniques and verbal pressure did have a small significant relationship with this vignette segment, indicating the construct of risk perception as measured by these two assessments do converge for all of the moderately risky segments of the vignettes. Similarly, the vignette segments that portray a high
degree of risk for sexual assault had small significant correlations with the LRDS theoretical subscale female university students perceive as highly risky (i.e., use of physical force and threats of physical force). Only segment 4 of vignettes 2, 7, and 10 did not converge with this LRDS subscale.

Overall, the discriminant validity hypotheses that risk perception, response appraisals, and responses to the written vignettes would differentiate from relationship satisfaction and the perception that intimate relationships in general are risky were supported. The only exceptions to this were small significant, positive correlations between response appraisals and risk of intimate relationships in general for vignettes 1 and 2. Also consistent with our hypothesis, risk perception associated with the high risk vignettes was not related to the perception that aggressive and illegal behaviors in general are risky. Rather, our construct of risk perception is measuring the perception that use of coercion and threats of force related specifically to sexual aggression is highly risky. Finally, although we had hypothesized that assertive responding to high risk situations portrayed in the written vignettes would relate to socially desirable responding, based upon the findings of previous research (Morokoff et al., 1997), none of the VRQ scales were related to socially desirable responding, indicating we are measuring something different.

Demonstrating convergent and discriminant validity is a frequently used method of establishing construct validity. In addition to examining how measures of similar and dissimilar constructs converge and discriminate from a new measure, we also investigated whether how women respond to the vignette segments would discriminate between sexual abuse group status as an additional way to examine construct validity. We
expected response style (i.e., assertive vs. unassertive responding) to discriminate between individuals with differing sexual abuse histories based upon Naugle’s (1999) finding that women with a sexual abuse history provided more acquiescent responses to unwanted sexual advances portrayed in videotaped vignettes compared to women without this history. However, our findings did not support this expectation. A hypothesis for this finding is that responding to specific items on the VRQ is qualitatively different than women responding in an open-ended fashion to the question, “What would you do or say now?” as Naugle required in her earlier study. This task requires women to generate their own responses, which requires a specific skill set compared to prompting women how to reply as is the case with the VRQ. This finding points to the importance of using open-ended questions as part of the behavioral analog measure, which is planned for our future research using this measure.

Internal Structure

During phase two of this project, we examined the structure of the group of vignettes that make up the analog measure and identified six of the vignettes are considered high risk vignettes and two vignettes are considered low risk, as intended. Further, the high risk vignettes were perceived to increase in level of risk as the vignettes progress. However, we had not examined the structure of the group of vignettes as a whole measure. It is important to examine this factor as we plan to use a group of vignettes to make up the behavioral analog measure rather than independent use of individual vignettes. This makes it important to understand how the vignettes relate to each other. Do the vignettes differ from one another or are they all perceived as similar?
If it appears as though multiple vignettes are perceived as the same on multiple dimensions, it would be redundant to include all of the vignettes in the final analog measure. Therefore, a MDS procedure was implemented to examine the structure of the group of vignettes.

The two-dimensional configuration illustrated in Figure 1 appears to identify an acquaintance-dating relationship dimension and a high risk-low risk dimension. The vignettes appear to form three distinct clusters with vignette 7 separate from the other clusters. Vignettes 6, 2, and 8 appear as high risk vignettes involving individuals in an acquaintance relationship, vignettes 4 and 1 appear as high risk vignettes involving individuals in a dating relationship, and vignettes 9 and 10 appear as low risk vignettes involving individuals in an acquaintance/newly dating relationship. Vignette 7 stands alone as a high risk vignette involving individuals in a newly dating situation. While clusters can be identified, none of the vignettes directly overlap, suggesting that even vignettes within the same cluster somewhat differ on one or both dimensions. The results obtained from examining the MDS configuration correspond with findings from phase two of this project such that content and student expert raters from phase two identified the same six vignettes that are considered high risk in the MDS configuration as ending with high risk segments and the same two vignettes that are considered low risk in the MDS configuration as portraying low risk across vignette segments. The ability to demonstrate that six of the vignettes are perceived as high risk and two are perceived as low risk across two different studies utilizing different tests provides strong evidence for the high – low risk dimension of the group of vignettes.
Examining individual level MDS information in addition to the group level information discussed above provided information about how different individuals with varying histories (i.e., sexual abuse history and expert rater status) view the similarity of the vignettes. This information indicated that overall, most individuals tend to view the degree of risk involved in the vignette as most important in rating the similarity of the vignettes compared to the relationship duration dimension. However, both dimensions appeared to be considered when making judgments about similarity. Interestingly, there also appeared to be a tendency for individuals with a sexual abuse history to place nearly all importance of the vignette on level of risk involved compared to individuals without a sexual abuse history and the expert rater. While these differences were small, overall, this gives us some information to consider when using the behavioral analog measure in future research and in developing prevention and intervention programs.

Reliability

Current findings suggest response appraisal demonstrated the highest degree of temporal stability across vignettes and vignette segments, as assessed by test-retest procedures, compared to risk perception, which had a moderate degree of temporal stability, and response, which demonstrated the least degree of temporal stability. At this point, these findings are difficult to interpret based upon the lack of current knowledge about the constructs of risk perception, response appraisal, and effective responding as this is a relatively new area of research with little consistency in the definition of risk perception used across studies. Our findings may indicate that response appraisal and risk perception can more readily be assessed using the same vignettes across time as
compared to responding. Overall, however, these findings appear to support our initial assumption that test-retest procedures are inappropriate for examining reliability of our analog measure given the assessment of risk perception and response would be expected to change once the outcome of a vignette is known. Given operant learning theory suggests individuals change their future behavior based upon past reinforcement and punishment, it seems reasonable to conclude that test-retest procedures are not appropriate for this measure, particularly because real-world situations in which individuals may respond in a consistent fashion do not include identical scenarios. Even if some contextual factors remain the same across situations, (e.g., the perpetrator is the same individual) there are a number of other contextual factors that differ across events and other situational variables that influence behavioral responding. It is important to keep in mind that while test-retest is frequently used as the method to demonstrate reliability of a measure, it is not the only measure of reliability nor is it appropriate for all measures.

Given individuals learn the outcome of the vignettes after the first presentation, it is important to examine the reliability of these constructs using similar vignettes rather than the same vignettes. For this reason, we decided to examine immediate and delayed alternate forms reliability using our existing data sets once clusters of similar vignettes were identified through MDS procedures. Correlations resulting from comparing responses to the pairs of vignettes administered at the same time (i.e., immediate alternate forms reliability) produced moderate to large significant correlations for most vignette segments across vignettes. These findings provide support for the reliability of the vignettes. Even after participants learned the outcome of one vignette, they tended to
respond to similar vignettes in a consistent fashion. It was not until participants learned
the outcome of all the vignettes that responses appeared to change. This is observed in the
delayed alternate forms reliability correlation coefficients, which tended to be smaller
than those found for immediate alternate forms reliability.

It is important to note that the delayed alternate forms procedure used for our
current analyses is not the traditional procedure used in examining delayed alternate
forms reliability. Traditionally, the two measures (e.g., vignettes) would be presented at
two different points in time without the participant having rated one of the measures at
two different times. Because we used the same data set to compare delayed alternate
forms reliability as was used to compare test-retest reliability, the participants had already
read all of the vignettes and knew the outcome when rating one of the vignettes in the
pair for the second time weeks later. Therefore, our current delayed alternate forms
reliability procedure has the same limitation as the test-retest reliability procedure.
Considering this, it is interesting to compare our test-retest and delayed alternate forms
results, which exhibit a similar pattern. Response appraisal and risk perception items
demonstrated small to moderate relationships while response items produced the smallest
and least frequently significant correlations. This pattern, which is distinctly different
than the pattern observed for immediate alternate forms reliability, provides additional
support that participants respond differently to the vignettes after having learned the
outcome of at least one of the vignettes, rendering test-retest procedure inappropriate for
examining the reliability of our analog measure.

Another limitation to consider is how responding is currently measured. As
previously discussed, we included specific responses on the VRQ and asked participants
to indicate how likely it is they would respond in that manner, which is quite different from a real-world situation in which individuals must make quick choices about how to respond in a given moment without prompts presented. Therefore, it is likely that asking women how they might respond to a given situation in an open-ended fashion rather than under a forced choice condition would more closely approximate a real-world decision making process in which individuals choose how to respond based upon their available repertoire. It is also likely that this type of condition would better lend itself to highlighting differences in responding between women with and without sexual abuse histories, similar to Naugle’s (1999) findings. Further, this would allow us to better assess for skills deficits and to teach more effective ways of responding.

Finally, results indicate we were able to establish an acceptable level of internal consistency for the Risk Perception, Response Appraisal, and Response subscales of the VRQ.

Conclusions and Future Directions

Examination of the construct validity and reliability results indicates vignettes 2 and 7 as producing the most inconsistent findings compared to the other vignettes, which suggest these two vignettes may be the least valid and reliable and should, therefore, be eliminated from further development and validation. Taken together, the findings from phase three of this project suggest we were able to provide support for the construct validity of the written vignettes and Risk Perception and Response Appraisal theoretical subscales of the VRQ for the remaining vignettes. Only the Response subscale did not converge with the measure we examined it against and responses to the vignettes did not
discriminate between groups based upon sexual victimization history. For this reason, along with the reliability issues regarding the Response subscale, it is suggested that an immediate follow-up step to this project should include further examination of the Response subscale using the written vignettes. For example, convergent validity could be examined using the existing Response subscale compared to another measure that may more closely approximate our construct of effective responding, such as Marx and Gross' (1995) audiotaped analog measure. However, given current findings suggest the existing forced-choice Response subscale on the VRQ may be too limiting such that it does not require participants to use their existing repertoire to effectively respond to the scenario, it is suggested that the next study also use open-ended questions to assess responding skills. Convergent validity could be examined in the next study using responses to open-ended questions only, after responses are coded, or in conjunction with the existing forced-choice Response subscale.

Another immediate step in this line of research should be to further examine delayed alternate forms reliability using the traditional procedure of administering one of the vignettes in the pair to a group of participants and then administering the second vignette in the pair at another point in time. In this case, participants would not know the outcome of either vignette at the time they are rating it, which would give us a better understanding of how participants perceive and respond to risk under similar, rather than identical, situations at two points in time. Another limitation of the current study in examining reliability was the difficulty of getting participants to return for the retest session and to get them to return in a timely fashion. It may be necessary to include a stronger incentive than extra credit per hour of participation for returning to complete the
study when assessing reliability in the future. Also, when examining delayed alternate forms reliability, the two administrations could occur in closer proximity (e.g., one or two weeks later) because researchers would not be concerned about the effects of remembering the outcomes of the vignettes from time one to time two using this procedure.

Given the limitation of this study’s use of theoretical VRQ subscales in assessing validity and reliability, an additional immediate next step needs to include the use of factor analysis to examine whether or not the VRQ succeeds in measuring three distinct constructs. Once the theoretical subscales are further examined using factor analysis and the Response subscale more adequately demonstrates construct validity and reliability, the next step in this multi-phase project would be to produce the videotaped vignettes and examine validity and reliability of this form of the behavioral analog measure, which can be accomplished using the procedures above as well as procedures such as examining responses using an open-ended format. Following this phase, the videotaped vignettes can be used to explore predictive validity. Specifically, if we are able to demonstrate a difference in the responding behavior of individuals with and without sexual victimization and revictimization histories based upon their open-ended responses, the next step would be to follow participants longitudinally to examine whether responses at time one predicts those who are either later sexually assaulted for the first time or those who are revictimized following participation in the study at time one.

This study belongs to an ongoing program of research focused on developing and validating a behavioral analog measure for risk perception and effective behavioral responding that can be used in another line of research to learn more about how women
respond under risky interpersonal situations and how their behaviors may be modified to increase the likelihood that they can engage in protective behaviors early during an interpersonal interaction to decrease the likelihood of encountering unwanted sexual experiences. Once the behavioral analog measure using videotaped vignettes adequately demonstrates construct validity and reliability, this line of research can begin with a college student population. Results of this line of research can be used to inform the development of future sexual assault prevention programs on college campuses. Further, results obtained from this multiphase project indicating the most effective methods of establishing construct validity and reliability for this type of behavioral analog measure can inform another multiphase project in which a behavioral analog measure is developed and validated for use with a community sample. It is expected that these vignettes would differ contextually from those used with the college student population, but methods informed by this phase of the project can inform future development of similar behavioral analog measures for use in a community setting.
Appendix A

Human Subjects Institutional Review Board (HSIRB) Approval
Date: February 1, 2007

To: Amy Naugle, Principal Investigator
   Robin Carter-Visscher, Student Investigator for dissertation

From: Chris Cheatham, Ph.D., Vice Chair

Re: HSIRB Project Number: 07-01-10

This letter will serve as confirmation that your research project entitled “Study one: Unwanted Sexual Experiences and Risk Perception: Validation of Written Vignettes; Study two: Unwanted Sexual Experiences and Risk Perception: Content and Structural Validity of Written Vignettes” has been approved under the expedited category of review by the Human Subjects Institutional Review Board. The conditions and duration of this approval are specified in the Policies of Western Michigan University. You may now begin to implement the research as described in the application.

Please note that you may only conduct this research exactly in the form it was approved. You must seek specific board approval for any changes in this project. You must also seek reapproval if the project extends beyond the termination date noted below. In addition, if there are any unanticipated adverse reactions or unanticipated events associated with the conduct of this research, you should immediately suspend the project and contact the Chair of the HSIRB for consultation.

The Board wishes you success in the pursuit of your research goals.

Approval Termination: February 1, 2008
APPLICATION FOR CONTINUING REVIEW OR FINAL REPORT FORM

In compliance with Western Michigan University's policy that "the HSIRB's review of research will be conducted at appropriate intervals but not less than once per year," the HSIRB requests the following information:

I. PROJECT INFORMATION

PROJECT TITLE: Study one: Unwanted Sexual Experiences and Risk Perception: Validation of Written Vignettes; Study two: Unwanted Sexual Experiences and Risk Perception: Content and Structural Validity of Written Vignettes

HSIRB Project Number: 07-01-10

Previous level of review: □ Full Board Review □ Expedited Review □ Administrative (Exempt) Review

Date of Review Request: 02/04/07 Date of Last Approval: 02/01/06

II. INVESTIGATOR INFORMATION

Have all investigators completed human subjects protections training at www.cmprg.org?

☐ Yes ☐ No (Training must be completed before protocol can be renewed)

PRINCIPAL INVESTIGATOR OR ADVISOR

Name: Amy Naugle, Ph.D.
Department: PSYCH Mail Stop: 5439 Electronic Mail Address: amy.naugle@wmich.edu

(1) CO-PRINCIPAL OR STUDENT INVESTIGATOR

Name: Robin Carter-Visscher, M.A.
Department: PSYCH Mail Stop: 5439 Electronic Mail Address: robin.carter-visscher@wmich.edu

(2) CO-PRINCIPAL OR STUDENT INVESTIGATOR

Name: 
Department: 
Mail Stop: 
Electronic Mail Address:

III. CURRENT STATUS OF RESEARCH PROJECT

Please answer questions 1-4 to determine if this project requires continuing review by the HSIRB.

1. The project is closed to recruitment of new subjects.
   ☐ Yes (Date of last enrollment: ) ☐ No (Project must be reviewed for renewal.)

2. All subjects have completed research related interventions.
   ☐ Yes ☐ Not Applicable ☐ No (Project must be reviewed for renewal.)

3. Long-term follow-up of subjects has been completed.
   ☐ Yes ☐ Not Applicable ☐ No (Project must be reviewed for renewal.)

4. Analysis of data is complete.
   ☐ Yes ☐ No (Project must be reviewed for renewal.)

* If you have answered "No" to ANY of the questions above, you must apply for Continuing Review. Please complete numbers 5-12 on page 2. If you need to make changes in your protocol, please submit a separate memo detailing the changes that you are requesting.

* If you have answered "Yes" or "Not Applicable" to ALL of the above questions, please check the Final Report box below and complete questions 5-10 on page 2.

* If your protocol has been open for three years and you still want to collect or analyze data, you must close this protocol by filing a final report using this form and apply for approval of a new protocol using an Application for Initial Review. Please make a Final Report on your project by completing numbers 5-10 on page 2.

Revised 7/03 WMU HSIRB
All other copies obsolete.
HSIRB Project Number: 07-01-10

5. Have there been changes in Principal or Co-Principal Investigators? 
   (If yes, provide details on an "Additional Investigators" form (available at the HSIRB web site, 
   http://www.wmich.edu/research/compliance/hisirb/hisirb_2.html.)
   □ Yes □ No

6. Has the approved protocol been modified or added to with respect to: 
   (If yes to any item below, provide the details on an attached sheet.)
   a. Procedures □ Yes □ No
   b. Subjects □ Yes □ No
   c. Design □ Yes □ No
   d. Data collection □ Yes □ No

7. Has any instrumentation been modified or added to the protocol? 
   (If yes, attach new instrumentation or indicate the modifications made.)
   □ Yes □ No

8. Have there been any adverse events that need to be reported to the HSIRB? 
   (If yes, provide details on an attached sheet.)
   □ Yes □ No

9. Total number of subjects approved in original protocol: 00220

10. Total number of subjects enrolled so far: 157
    If applicable: Number of subjects in experimental group: 00000      Number in control group: 00000
    • If this is a FINAL REPORT you may stop here and return the form electronically.
    • If this is an APPLICATION FOR CONTINUING REVIEW continue with numbers 11-13 below.

11. Estimated number of subjects yet to be enrolled: 000000

12. Verification of Consent Procedure: Provide copies of the consent documents signed by the last two 
    subjects enrolled in the project. Cover the signature in such a way that the name is not clear but there is 
    evidence of signature. If subjects are not required to sign the consent document, provide a copy of the most 
    current consent document being used.

13. If you are continuing to recruit subjects for this project, please remember to include a clean original 
    of the consent documents to receive a renewed approval stamp.

Principal Investigator/Faculty Advisor Signature 2/4/08

Co-Principal or Student Investigator Signature Date

Approved by the HSIRB:

HSIRB Chair Signature 02/02/2008

Western Michigan University 
Human Subject Institutional Review Board – Mail Stop 5456 
(269) 387-8293 research-compliance@wmich.edu

Revised 7/03 WMU HSIRB 
All other copies obsolete
Appendix B

Measures
Personal Data Survey for Women

Directions: For each of the questions below either circle the response that best describes you or fill in the appropriate blank.

1. What is your age?__________ years

2. What is your relationship status?
   01 Single and not involved in a dating relationship
   02 Single and currently dating/in a relationship
   03 Engaged
   04 Living with a boyfriend or romantic partner
   05 Married/Committed Partnership
   06 Separated/Divorced
   07 Widowed

3. What best describes your race/ethnicity?
   01 Asian/Pacific Islander
   02 African American
   03 Hispanic/Latino
   04 Native American
   05 White
   06 Other

4. What best describes your occupation?
   01 Professional/Technical
   02 Upper Management/Executive
   03 Middle Management
   04 Sales/Marketing
   05 Clerical/Service Worker
   06 Tradesman/Machine Operator/Laborer
   07 Military Personnel
   08 Self Employed
   09 Full-time Homemaker
   10 Retired
   11 Full-time Student
   12 Unemployed

5. If you are a student, what is your class standing upon entering this semester?
   01 Freshman
   02 Sophomore
   03 Junior
   04 Senior
   05 Graduate Student/Graduate Special
   06 Non-degree seeking student

6. What is your religion?
   01 Catholic
   02 Protestant
   03 Jewish
   04 Other:________________________
   05 None

7. What is your current yearly income?
   01 $15,000 or less
   02 $15,001 - $25,000
   03 $25,001 - $35,000
   04 $35,001 - $50,000
   05 over $50,000

8. If you are a student, what do you think your family’s income was growing up?
   01 $15,000 or less
   02 $15,001 - $25,000
   03 $25,001 - $35,000
   04 $35,001 - $50,000
   05 over $50,000

9. Where do you currently reside?
   01 House
   02 Apartment
   03 Duplex
   04 Residence Hall (dormitory)
   05 Sorority House
   06 Other:________________________
10. Which of the terms listed below would you say best describes how you think of yourself?  
01 Heterosexual, straight  
02 Homosexual, gay, lesbian  
03 Bisexual  
04 Other  

Please read: The following questions refer to your current and previous dating behavior. For each of the questions below either mark the response that best describes you and/or fill in the appropriate blank.

11. Approximately how many dates have you been on in the last 4 weeks?  
   01 With individuals of the opposite sex: ________  
   02 With individuals of the same sex: ________  
   03 I have not dated anyone in the past 4 weeks.  

12. Approximately how many dates have you been on in the past 6 months?  
   01 With individuals of the opposite sex: ________  
   02 With individuals of the same sex: ________  
   03 I have not dated anyone in the past 6 months.  

13. Approximately how many dates have you been on in the past year?  
   01 With individuals of the opposite sex: ________  
   02 With individuals of the same sex: ________  
   03 I have not dated anyone in the past year.  

14. Are you currently dating one person regularly?  
   01 No  
   02 If yes, how long have you been dating that person? ________  
   03 If there was more than one person you dated regularly, please describe:  

15. How satisfied are you with the amount of dating you currently do? (Please circle the appropriate response.)  

   1  2  3  4  5  6  7  8  
   Extremely satisfied  Moderately satisfied  Moderately dissatisfied  Extremely dissatisfied  

16. How comfortable do you feel with members of the opposite sex in social situations? (Please circle the appropriate response.)  

   1  2  3  4  5  6  7  8  
   Extremely comfortable  Moderately comfortable  Moderately uncomfortable  Extremely uncomfortable  

17. Have you had any kind of sex with another person in the last 6 months?  
   01 No  
   02 Yes  

92
For the purposes of this study, sexual intercourse with an individual is defined as follows: A man puts his penis in a woman's mouth, vagina, or rectum.

18. When was the last time you had sexual intercourse with a person of the opposite sex?
   01 Never—Please skip to number 22
   02 Within the last 6 months
   03 At least 6 months ago, but less than 2 years ago
   04 More than 2 years ago

19. How many different individuals of the opposite sex have you had sexual intercourse with during the past 30 days?
   ______________________ individuals [ ] None

20. How many different individuals of the opposite sex have you had sexual intercourse with during the last six months?
   ______________________ individuals [ ] None

21. How many different individuals of the opposite sex have you had sexual intercourse with during the last 5 years?
   ______________________ individuals [ ] None

Please read: It is now generally recognized that some women while they were children or adolescents, have had sexual experiences with an adult (or someone at least 5 years older than them). By sexual, we mean behaviors ranging from someone exposing themselves (their genitals) to you to someone having intercourse with you. These experiences may have involved a relative, a friend of the family, or a stranger. Some experiences are very upsetting and painful, while others are not, and some may have occurred without your consent.

ANSWER EACH QUESTION BELOW FOR INCIDENTS THAT OCCURRED BEFORE YOU WERE 14 YEARS OLD. Circle “Yes” if you have experienced the event before your 14th birthday. If you have not experienced the event or you experienced the event after your 14th birthday, circle “No” and go to the next item.

No Yes 22. Did anyone ever expose themselves (their sexual organs) to you?
No Yes 23. Did anyone ever masturbate in front of you?
No Yes 24. Did anyone try to seduce you with their naked body?
No Yes 25. Did a relative, family friend, or stranger ever touch or fondle your body, including your breasts or genitals, or attempt to arouse you sexually?
No Yes 26. Did anyone try to have you arouse them, or touch their body in a sexual way?
No Yes 27. Did anyone rub their genitals against your body in a sexual way?
No Yes 28. Did anyone attempt to have sexual intercourse with you (by sex we mean that a man or boy put his penis in your vagina)?
No Yes 29. Did anyone have sexual intercourse with you?
No Yes 30. Did anyone force you to have oral sex with them (by oral sex, we mean that a man or boy put his penis in your mouth or someone penetrated your vagina with their mouth or tongue)?
No Yes 31. Did anyone force you to have anal sex with them (by anal sex, we mean that a man or boy penetrated your anus with their penis)?
No Yes 32. Did anyone ever put their finger or another object in your vagina?
No  Yes

33. Did anyone put their finger or another object in your anus?

*Note:* If you answered “Yes” to any of the above items for events occurring before your 14th birthday, please complete the items on the next two pages. If you answered “No” to all of the above items, go on to #45.

**ANSWER THE FOLLOWING ITEMS TO PROVIDE INFORMATION ABOUT THE EVENTS THAT OCCURRED BEFORE YOUR 14TH BIRTHDAY.**

34. How old were you when any of these events first happened?

_______ years

35. How old were you when any of these events most recently happened?

_______ Years

36. What was the person(s) relationship to you? Check all that apply.

01 Father/step-father 02 Mother/stepmother 03 Sibling: How old was sibling at the time? Years

04 Other relative: Please specify: 05 Neighbor/Friend of the family 06 Teacher, Club Leader, Camp Counselor, etc.

07 Stranger 08 Other non-relative: Please specify:

38. Was the person(s) involved ever under the influence of drugs or alcohol at the time of the incident(s)?

01 Alcohol 02 Drugs 03 Both alcohol and drugs

04 Neither 05 Not sure

39. Did the person(s) involved ever use physical force (such as hold you down or use a weapon) to make you engage in these sexual activities?

01 No 02 Yes

40. Over how long of a period of time did these sexual experiences go on?

Number of years_________ and months_________

41. On average, how frequently did this happen?

01 Once during childhood 02 Two or three times during childhood 03 Once per year

04 Several times per year 05 Once per month 06 Daily

42. During this experience were you afraid that you might be seriously injured or killed?

01 No 02 Yes

43. Did you feel your life was threatened?

01 No 02 Yes

44. Did you suffer any injuries as a result of this experience?

01 No injuries 02 Minor injuries

94
Please read: One type of stressful event that some women experience is unwanted sexual advances. The person making the advances isn’t always a stranger, but can be a friend, boyfriend, husband or even a family member. **ANSWER EACH QUESTION BELOW FOR INCIDENTS THAToccurred after your 14th birthday.** Circle “Yes” if you have experienced the event after your 14th birthday. If you have not experienced the event or you experienced the event before your 14th birthday, circle “No” and go to the next item.

<table>
<thead>
<tr>
<th>No</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>45. Have you given in to sex play (fondling, kissing, petting, but not intercourse) when you didn’t want to because your were overwhelmed by a man’s continual arguments and pressure?</td>
<td></td>
</tr>
<tr>
<td>46. Have you had sex play (fondling, kissing, or petting, but not intercourse) when you didn’t want to because a man used his position of authority (boss, teacher, camp counselor, supervisor) to make you</td>
<td></td>
</tr>
<tr>
<td>47. 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.) to make you?</td>
<td></td>
</tr>
<tr>
<td>48. Has a man attempted sexual intercourse (get on top of you, attempt to insert his penis in your vagina) 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?</td>
<td></td>
</tr>
<tr>
<td>49. Has a man attempted sexual intercourse (get on top of you, attempt to insert his penis in your vagina) when you didn’t want to by giving you alcohol or drugs, but intercourse did not occur?</td>
<td></td>
</tr>
<tr>
<td>50. Have you given in to sexual intercourse when you didn’t want to because you were overwhelmed by a man’s continual arguments and pressure?</td>
<td></td>
</tr>
<tr>
<td>51. Have you had sexual intercourse when you didn’t want to because a man used his position of authority (boss, teacher, camp counselor, supervisor) to make you?</td>
<td></td>
</tr>
<tr>
<td>52. Had you had sexual intercourse when you didn’t want to because a man gave you alcohol or drugs?</td>
<td></td>
</tr>
<tr>
<td>53. Have you had sexual intercourse when you didn’t want to because a man threatened or used some degree of force (twisting you arm, holding you down, etc.) to make you?</td>
<td></td>
</tr>
<tr>
<td>54. Has anyone ever made you have oral sex when you didn’t want to by force or threat of harm?</td>
<td></td>
</tr>
<tr>
<td>55. Has anyone made you have anal sex when you didn’t want to by force or threat of harm?</td>
<td></td>
</tr>
<tr>
<td>56. Has anyone ever put fingers or objects in your vagina or anus against your will by using force or threat of harm?</td>
<td></td>
</tr>
</tbody>
</table>

**Note:** If you answered “Yes” to any of the above items for events occurring after your 14th birthday, please complete the items below. **If you answered “No” to all of the above items, you’re finished with this survey.**

57. How old were you when any of these events first happened?

______ years

58. How old were you when any of these events most recently happened?

______ Years
59. What was the person(s) relationship to you? Check all that apply.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Father/step-father</td>
</tr>
<tr>
<td>02</td>
<td>Brother: How old was your brother at the time?</td>
</tr>
<tr>
<td>03</td>
<td>Other relative: Please specify:</td>
</tr>
<tr>
<td>04</td>
<td>Neighbor/Friend of the family</td>
</tr>
<tr>
<td>05</td>
<td>Teacher, Club Leader, Camp Counselor, etc.</td>
</tr>
<tr>
<td>06</td>
<td>Stranger</td>
</tr>
<tr>
<td>07</td>
<td>Boyfriend/Ex-boyfriend/Date</td>
</tr>
<tr>
<td>08</td>
<td>Co-worker</td>
</tr>
<tr>
<td>09</td>
<td>Friend/Acquaintance</td>
</tr>
<tr>
<td>10</td>
<td>Other non-relative: Please specify:</td>
</tr>
</tbody>
</table>

60. Was the person(s) involved ever under the influence of drugs or alcohol at the time of the incident(s)?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Alcohol</td>
</tr>
<tr>
<td>02</td>
<td>Drugs</td>
</tr>
<tr>
<td>03</td>
<td>Both alcohol and drugs</td>
</tr>
<tr>
<td>04</td>
<td>Neither</td>
</tr>
<tr>
<td>05</td>
<td>Not sure</td>
</tr>
</tbody>
</table>

61. Were you using drugs or alcohol at the time of the incident(s)?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Alcohol</td>
</tr>
<tr>
<td>02</td>
<td>Drugs</td>
</tr>
<tr>
<td>03</td>
<td>Both alcohol and drugs</td>
</tr>
<tr>
<td>04</td>
<td>Neither</td>
</tr>
<tr>
<td>05</td>
<td>Not sure</td>
</tr>
</tbody>
</table>

62. Did the person(s) involved ever use physical force (such as hold you down or use a weapon) to make you engage in these sexual activities?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>No</td>
</tr>
<tr>
<td>02</td>
<td>Yes</td>
</tr>
</tbody>
</table>

63. Over how long of a period of time did these sexual experiences go on?

Number of years__________ and months__________

64. On average, how frequently did this happen?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Once since your 14th birthday</td>
</tr>
<tr>
<td>02</td>
<td>Two or three times since your 14th birthday</td>
</tr>
<tr>
<td>03</td>
<td>Once per year</td>
</tr>
<tr>
<td>04</td>
<td>Several times per year</td>
</tr>
<tr>
<td>05</td>
<td>Once per month</td>
</tr>
<tr>
<td>06</td>
<td>Daily</td>
</tr>
</tbody>
</table>

65. During this experience were you afraid that you might be seriously injured or killed?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>No</td>
</tr>
<tr>
<td>02</td>
<td>Yes</td>
</tr>
</tbody>
</table>

66. Did you feel your life was threatened?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>No</td>
</tr>
<tr>
<td>02</td>
<td>Yes</td>
</tr>
</tbody>
</table>

67. Did you suffer any injuries as a result of this incident?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>No injuries</td>
</tr>
<tr>
<td>02</td>
<td>Minor injuries</td>
</tr>
<tr>
<td>03</td>
<td>Serious injuries</td>
</tr>
</tbody>
</table>
68. After your 14th birthday, how many different times have you been forced to have sex, oral sex, anal sex, or been forcibly penetrated with fingers or objects?

   01 Never – Survey completed.
   02 Once
   03 Twice
   04 Three times
   05 Four times
   06 Five or more times

69. How old were you when this first happened? _________ years

70. How old were you when this most recently happened? _________ years

71. What was the person(s) relationship to you? Check all that apply.

   01 Father/step-father
   02 Brother: How old was your brother at the time? _________ years
   03 Other relative: Please specify:
   04 Neighbor/Friend of the family
   05 Teacher, Club Leader, Camp Counselor, etc.
   06 Stranger
   07 Boyfriend/Ex-boyfriend/Date
   08 Co-worker
   09 Friend/Acquaintance
   10 Other non-relative: Please specify:

72. Was the person(s) involved ever under the influence of drugs or alcohol at the time of the incident(s)?

   01 Alcohol
   02 Drugs
   03 Both alcohol and drugs
   04 Neither
   05 Not sure

73. Were you using drugs or alcohol at the time of the incident(s)?

   01 Alcohol
   02 Drugs
   03 Both alcohol and drugs
   04 Neither
   05 Not sure

74. Was this a single incident or a series of incidents where the same person made you have unwanted sex over a period of days, months, or years?

   01 Single event
   02 Series of events

75. During the most serious incident, were you afraid that you might be seriously injured or killed?

   01 No
   02 Yes
76. Did you feel your life was threatened?
   01 No
   02 Yes

77. During the most serious incident, did you suffer any injuries?
   01 No injuries
   02 Minor injuries
   03 Serious injuries

78. Did the person(s) involved ever use physical force (such as hold you down or use a weapon) to make you engage in these sexual activities?
   01 No
   02 Yes
Vignette Rating Questionnaire: Risk Perception, Response Appraisal, and Response

When answering the following questions, please picture yourself in the situation you just read and indicate whether or not you would be likely to have the following reactions or responses. Please circle the number that most appropriately corresponds to your reactions to the scenario. All of the items may not apply to every situation that you are responding to. If you feel that the item does not apply to the situation you just read, please feel free to circle NA for "not applicable." Please ask if you have any questions.

Strongly disagree 1  Mildly agree 4
Moderately disagree 2  Moderately agree 5
Mildly disagree 3  Strongly agree 6

1. I would feel comfortable in this situation.
2. I would continue the interaction with the guy in this scenario.
3. I would be concerned about my personal safety at this point.
4. I would say something about the guy's behavior now.
5. I would move a little further away from the guy.
6. I'd push, kick, or scratch the guy.
7. I'd distract the guy to a different topic/activity.
8. I would say no.
9. The man was coercive (for example, used verbal pressure and/or physical aggression) in this scenario.
10. I'd raise my voice and use stronger language (for example, "LISTEN! I really mean it!")
11. I would be concerned about experiencing an unwanted sexual advance at this point in the situation.
12. I'd scream for help.
13. I’d jokingly indicate that his behavior is unwanted.
14. There is high risk for experiencing unwanted sex at this point in this scenario.
15. This scenario appears to be relevant to experiences that occur in heterosexual dating situations.
16. The scenario I just read depicts a situation I would be likely to experience.

Questions 17-26 on back
For the next set of questions, please think about your thoughts and feelings as if you were actually in the situation. If at any point, you would have felt uncomfortable or wanted to stop the interaction with the man, what are some concerns or thoughts you might have had? Please circle the number that most appropriately corresponds to the likelihood that you would have this thought/concern. As before, all of the items may not apply to every situation that you are responding to. If you feel that the item does not apply to the situation you just read, please feel free to circle NA for “not applicable.”

<table>
<thead>
<tr>
<th></th>
<th>Extremely unlikely</th>
<th>Extremely likely</th>
</tr>
</thead>
<tbody>
<tr>
<td>17.</td>
<td>I'm not sure where this is going to lead. I'll wait and see what happens.</td>
<td>1 2 3 4 5 6 NA</td>
</tr>
<tr>
<td>18.</td>
<td>I like this guy, and I don't want to insult him.</td>
<td>1 2 3 4 5 6 NA</td>
</tr>
<tr>
<td>19.</td>
<td>If I resist and others find out, they'll think I just overreacted.</td>
<td>1 2 3 4 5 6 NA</td>
</tr>
<tr>
<td>20.</td>
<td>I might be wrong about his intentions.</td>
<td>1 2 3 4 5 6 NA</td>
</tr>
<tr>
<td>21.</td>
<td>People will think that I led him on and blame me.</td>
<td>1 2 3 4 5 6 NA</td>
</tr>
<tr>
<td>22.</td>
<td>I don't know what to say or do.</td>
<td>1 2 3 4 5 6 NA</td>
</tr>
<tr>
<td>23.</td>
<td>I'm afraid I'd get hurt if I physically resist (push, kick, scratch, etc.).</td>
<td>1 2 3 4 5 6 NA</td>
</tr>
<tr>
<td>24.</td>
<td>Saying no isn't worth ruining my future with him.</td>
<td>1 2 3 4 5 6 NA</td>
</tr>
<tr>
<td>25.</td>
<td>I'd be embarrassed if I screamed.</td>
<td>1 2 3 4 5 6 NA</td>
</tr>
<tr>
<td>26.</td>
<td>I don't want anyone to know about this.</td>
<td>1 2 3 4 5 6 NA</td>
</tr>
</tbody>
</table>
## Level of Risk in Dating Situations

We would like to ask you some questions regarding the level of risk some heterosexual dating situations might have for leading to unwanted sexual contact. For each item, assume that the woman does not want to engage in sexual intercourse. Please indicate, in your opinion, the level of risk involved in each of the following situations.

<table>
<thead>
<tr>
<th></th>
<th>Low Risk</th>
<th>Moderate Risk</th>
<th>High Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The woman agrees to go to the man’s apartment after dinner, but states that she cannot stay long.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2. The woman is dressed in a low cut shirt and jeans.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3. The woman has said “no” to all of the man’s sexual advances, but continues to go along with the advances after continual pressure.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4. The couple is alone in the woman’s apartment.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>5. The woman refuses to have sexual intercourse after willingly kissing and petting.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>6. The man offers the woman alcohol or drugs after she had stated earlier in the evening that she does not intend to engage in any other sexual activity other than kissing.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>7. The man and woman are “making out” in a car in a secluded location.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>8. Only the woman has consumed alcohol.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>9. The couple attends a religious function.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>10. The man and woman are fully clothed while kissing and petting.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>11. After the woman says, “Stop it!” the man hits her.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>12. The man and woman each had one glass of wine during dinner.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>13. Neither the woman nor the man has consumed alcohol.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>14. The man drives during the date.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>15. The woman drives during the date.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>16. The man and woman are on a date at a party.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>17. After the woman refuses sex, the man begins pouting.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>18. The man ignores the woman’s protests against sex.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>19. The man verbally threatens the woman after she refuses to have sex.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>20. The woman initiates the date.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>21. The man and woman go to a movie.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
22. The man and woman are kissing and petting while fully clothed and the man keeps asking to engage in sexual intercourse but the woman refuses.

23. After the woman says, “Stop it!” the man stops but keeps asking for sex.

24. The woman pays for all of the dating expenses.

25. The man and woman are partially clothed while kissing and petting.

26. The man gives the woman a sensual massage.

27. The woman is dressed in a low cut shirt and a short skirt.

28. Only the man has consumed alcohol.

29. The woman agrees to dance with the man.

30. After withdrawing her hand from his genitals, the man moves her hand back.

31. While kissing and petting, the man keeps trying to touch the woman’s breasts and genitals after she continually says “stop.”

32. The man starts telling the woman how much he loves her after she has refused his sexual advances.

33. After continuous refusal, the man keeps touching and kissing the woman.

34. A man and woman go to the bar for a date.

35. The man and woman are alone in his apartment.

36. After the woman says, “Stop it!” the man pins down her arms and legs.

37. Both the man and woman have been drinking alcohol heavily.

38. The man and woman are partially clothed and the man keeps asking to engage in sexual intercourse but the woman refuses.

39. The woman initiates the date.

40. The man threatens the woman with a weapon after she refuses sex.

41. Both the woman and the man have been lightly drinking alcohol.

42. The man gets angry after the woman refuses to touch his genitals.

43. After the woman said “no” to his sexual advances, the man blocks the door so she cannot leave.

44. Before they begin kissing, the woman states directly that she doesn’t want to do anything more than kiss.

45. The man pays for all of the dating expenses.

46. A man and woman cuddle on the couch.
47. The man threatens to break up with the woman after she refuses to engage in sexual intercourse.

48. The man threatens to harm himself after the woman refuses to engage in sexual intercourse.

49. The man begins to describe how he will blackmail the woman if she does not have sex with him.

50. While kissing and petting, the woman states that she does not want to go any further. The man then removes his clothing and begins to remove hers.
Cognitive Appraisal of Risky Events

Please rate the likelihood that you might become injured, embarrassed, suffer legal consequences, or feel bad about yourself if you did the following:

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all likely</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extremely likely</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. Grabbing, pushing, or shoving someone
2. Leaving a social event with someone I have just met
3. Driving after drinking alcohol
4. Making a scene in public
5. Sex without protection against pregnancy
6. Disturbing the peace
7. Damaging/destroying public property
8. Sex without protecting against sexually transmitted diseases
9. Hitting someone with a weapon or object
10. Slapping someone
11. Sex with multiple partners
12. Getting into a fight or argument
13. Punching or hitting someone with fist
14. Sex with someone I have just met or don’t know well
15. Involvement in sexual activities without my consent

104
### Barriers to Responding to Sexual Aggression

**INSTRUCTIONS:** If you *have had* an unwanted sexual experience, please consider this incident when answering these questions. If you have had more than one unwanted sexual experience, please consider all of these incidents when answering the following questions. If you have *not* had an unwanted sexual experience, please try to imagine yourself in a situation where you are encountering an unwanted sexual experience with an acquaintance or dating partner and answer the following questions with that incident in mind. Considering this incident, **to what extent did the following factors make it difficult for you to protect yourself or control the situation?** Please circle the number that best represents your answer using the scale below. People respond in many different ways, so please try to recall and indicate all the ways you responded at the time of the incident. (If you haven’t had an unwanted sexual experience, please try to imagine the ways in which you would respond).

<table>
<thead>
<tr>
<th></th>
<th>Not At All Significant</th>
<th>Slightly Significant</th>
<th>Moderately Significant</th>
<th>Quite Significant</th>
<th>Extremely Significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>I hesitated, fearing that I wasn’t understanding his intentions.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2.</td>
<td>I didn’t want him to think I was uptight or a ‘prude.’</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3.</td>
<td>I didn’t want to overreact and make a big deal out of nothing.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4.</td>
<td>I didn’t want him to laugh at me.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>5.</td>
<td>I liked him and didn’t want to ruin things for the future.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>6.</td>
<td>I didn’t want to create a scene in front of him.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>7.</td>
<td>I didn’t want to embarrass myself by screaming out loud.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>8.</td>
<td>I didn’t want to scream because others might hear and suspect something.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>9.</td>
<td>I didn’t want to let other people know what was happening because I didn’t want to get a reputation for being “loose.”</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>10.</td>
<td>I was embarrassed to get up and run out of the room.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>11.</td>
<td>I wouldn’t want to get a reputation as a “tease.”</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>12.</td>
<td>I was afraid of being physically hurt if I didn’t go along with it.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>13.</td>
<td>I didn’t want to hurt his feelings.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>14.</td>
<td>I didn’t want him to get mad at me.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>15.</td>
<td>Because of his strength, I felt that I had no choice but to go along with him.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

Continued on Back
<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Not At All Significant</th>
<th>Slightly Significant</th>
<th>Moderately Significant</th>
<th>Quite Significant</th>
<th>Very Significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>16.</td>
<td>I was too intoxicated or too high to think through a plan to get out of the situation.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>17.</td>
<td>I was intoxicated or high, I lacked the physical strength and coordination to get away from him.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>18.</td>
<td>I felt that since I got myself into this situation, I must deal with the consequences.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>19.</td>
<td>My mind went blank making it hard to figure out what to do.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>20.</td>
<td>I didn’t expect anyone to help me even if I did scream.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>21.</td>
<td>I was too intoxicated or too high to see it coming.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
**Sexual Assertiveness Scale**

Think about a steady sexual partner you have now or your last steady partner. Answer the next 18 questions with this person in mind.

1 = never, 0% of the time  
2 = sometimes, about 25% of the time  
3 = about 50% of the time  
4 = usually, about 75% of the time  
5 = always, 100% of the time

<table>
<thead>
<tr>
<th>Question</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I begin sex with my partner if I want to.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. I let my partner know if I want my partner to touch my genitals.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. I wait for my partner to touch my genitals instead of letting my</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>partner know that’s what I want.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. I wait for my partner to touch my breasts instead of letting my</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>partner know that’s what I want.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. I let my partner know if I want to have my genitals kissed.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. Women should wait for men to start things like breast touching.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. I give in and kiss if my partner pressures me, even if I already said</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>no.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. I put my mouth on my partner’s genitals if my partner wants me to,</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>even if I don’t want to.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. I refuse to let my partner touch my breasts if I don’t want that,</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>even if my partner insists.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. I have sex if my partner wants me to, even if I don’t want to.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11. If I said no, I won’t let my partner touch my genitals even if my</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>partner pressures me.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. I refuse to have sex if I don’t want to, even if my partner insists.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13. I have sex without a condom or latex barrier if my partner doesn’t</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>like them, even if I want to use one.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. I have sex without using a condom or latex barrier if my partner</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>insists, even if I don’t want to.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. I make sure my partner and I use a condom or latex barrier when we</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>have sex.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. I have sex without using a condom or latex barrier if my partner</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>wants.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. I insist on using a condom or latex barrier if I want to, even if</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>my partner doesn’t like them.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. I refuse to have sex if my partner refuses to use a condom or latex</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>barrier.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>Disagree strongly</td>
<td>Agree strongly</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. In general, I believe that I am an assertive person.
Marlow-Crowne Social Desirability Scale

Listed below are a number of statements concerning personal attitudes and traits. Read each item and decide whether the statement is true or false as it pertains to you personally.

1. Before voting I thoroughly investigate the qualifications of all the candidates. T F
2. I never hesitate to go out of my way to help someone in trouble. T F
3. It is sometimes hard for me to go on with my work if I am not encouraged. T F
4. I have never intensely disliked anyone. T F
5. On occasion I have doubts about my ability to succeed in life. T F
6. I sometimes feel resentful when I don't get my way. T F
7. I am always careful about my manner of dress. T F
8. My table manners at home are as good as when I eat out in a restaurant. T F
9. If I could get into a movie without paying and be sure I was not seen, I would probably do it. T F
10. On a few occasions, I have given up doing something because I thought too little of my ability. T F
11. I like to gossip at times. T F
12. There have been times when I felt like rebelling against people in authority even though I knew they were right. T F
13. No matter who I'm talking to, I'm always a good listener. T F
14. I can remember "playing sick" to get out of something. T F
15. There have been occasions when I took advantage of someone. T F
16. I'm always willing to admit it when I make a mistake. T F
17. I always try to practice what I preach. T F
18. I don't find it particularly difficult to get along with loud mouthed, obnoxious people. T F
19. I sometimes try to get even, rather than forgive and forget. T F
20. When I don't know something I don't at all mind admitting it. T F
21. I am always courteous, even to people who are disagreeable. T F
22. At times I have really insisted on having things my own way. T F
23. There have been occasions when I felt like smashing things. T F
24. I would never think of letting someone else be punished for my wrongdoings. T F
25. I never resent being asked to return a favor. T F
26. I have never been irked when people expressed ideas very different from my own. T F
27. I never make a long trip without checking the safety of my car. T F
28. There have been times when I was quite jealous of the good fortune of others. T F
29. I have almost never felt the urge to tell someone off. T F
30. I am sometimes irritated by people who ask favors of me. T F
31. I have never felt that I was punished without cause. T F
32. I sometimes think when people have a misfortune they only got what they deserved. T F
33. I have never deliberately said something that hurt someone's feelings. T F
Risk in Intimacy Inventory

Please rate how much you agree or disagree with the following statements.

- Strongly disagree 1
- Moderately disagree 2
- Mildly disagree 3
- Mildly agree 4
- Moderately agree 5
- Strongly agree 6

1. It is dangerous to get really close to people.  
2. I prefer that all people keep their distance from me.  
3. I’m afraid to get really close to someone because I might really get hurt.  
4. At best, I can handle only one or two close friendships at a time.  
5. I find it difficult to trust other people.  
6. I avoid intimacy.  
7. Being close to other people makes me feel afraid.  
8. I’m hesitant to share personal information about myself.  
9. Being close to people is a risky business.  
10. The most important thing to consider in a relationship is whether I might get hurt.
Relationship Assessment Scale

The following questions ask you to provide information about your current relationship with a significant other. Please circle the number that most appropriately corresponds to your opinion about your current relationship. If you are not currently in a dating/married relationship, please indicate that in the appropriate place below and do not respond to the remaining questions.

Are you currently in a relationship with a significant other? (circle one)  YES
NO

1. How well does your partner meet your needs?
   1  2  3  4  5
   Not at all  Completely

2. In general, how satisfied are you with your relationship?
   1  2  3  4  5
   Not at all  Completely

3. How good is your relationship compared to most?
   1  2  3  4  5
   Much Worse  Much Better

4. How often do you wish you hadn’t gotten into this relationship?
   1  2  3  4  5
   Never  All the time

5. To what extent has your relationship met your original expectations?
   1  2  3  4  5
   Not at all  Completely

6. How much do you love your partner?
   1  2  3  4  5
   Not at all  Completely

7. How many problems are there in your relationship?
   1  2  3  4  5
   None  Too many to count
**Vignette Similarity Ratings**

**INSTRUCTIONS:** Listed below are all possible pairs of vignettes. Each vignette is labeled with a number (for example, “vignette 1”), which corresponds to the vignette number listed on the page with the actual text of the vignette. **Please thoroughly read both vignettes in the pair you are rating.** Then, please rate how similar you believe the pair of vignettes are in your opinion by circling the number (from 1 to 8) that best matches how similar you believe the two vignettes are. After you complete the first rating, please move to the next until you have finished all 28 ratings. **Please note that you will probably find that you have to read the vignettes carefully in the beginning in order to make these decisions.** You might find that after reading the vignettes multiple times you become familiar with the vignette you are rating and only need to skim the vignette to refresh your memory as you make the ratings. This is fine. Please make sure you refer to the vignettes as often as you need to in order to make your ratings. **If you have any questions about the similarity rating procedure, please ask for clarification.**

**IN YOUR OPINION, PLEASE RATE HOW SIMILAR EACH OF THE FOLLOWING VIGNETTE PAIRS ARE:**

<table>
<thead>
<tr>
<th></th>
<th>Very Similar</th>
<th>Very Different</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Vignette 1 and vignette 2</td>
<td>1 2 3 4 5 6 7 8</td>
<td></td>
</tr>
<tr>
<td>2. Vignette 1 and vignette 3</td>
<td>1 2 3 4 5 6 7 8</td>
<td></td>
</tr>
<tr>
<td>3. Vignette 1 and vignette 4</td>
<td>1 2 3 4 5 6 7 8</td>
<td></td>
</tr>
<tr>
<td>4. Vignette 1 and vignette 5</td>
<td>1 2 3 4 5 6 7 8</td>
<td></td>
</tr>
<tr>
<td>5. Vignette 1 and vignette 6</td>
<td>1 2 3 4 5 6 7 8</td>
<td></td>
</tr>
<tr>
<td>6. Vignette 1 and vignette 7</td>
<td>1 2 3 4 5 6 7 8</td>
<td></td>
</tr>
<tr>
<td>7. Vignette 1 and vignette 8</td>
<td>1 2 3 4 5 6 7 8</td>
<td></td>
</tr>
<tr>
<td>8. Vignette 1 and vignette 8</td>
<td>1 2 3 4 5 6 7 8</td>
<td></td>
</tr>
<tr>
<td>9. Vignette 1 and vignette 6</td>
<td>1 2 3 4 5 6 7 8</td>
<td></td>
</tr>
<tr>
<td>10. Vignette 1 and vignette 5</td>
<td>1 2 3 4 5 6 7 8</td>
<td></td>
</tr>
<tr>
<td>11. Vignette 1 and vignette 4</td>
<td>1 2 3 4 5 6 7 8</td>
<td></td>
</tr>
<tr>
<td>12. Vignette 1 and vignette 3</td>
<td>1 2 3 4 5 6 7 8</td>
<td></td>
</tr>
<tr>
<td>13. Vignette 1 and vignette 2</td>
<td>1 2 3 4 5 6 7 8</td>
<td></td>
</tr>
<tr>
<td>14. Vignette 1 and vignette 1</td>
<td>1 2 3 4 5 6 7 8</td>
<td></td>
</tr>
<tr>
<td>15. Vignette 2 and vignette 2</td>
<td>1 2 3 4 5 6 7 8</td>
<td></td>
</tr>
<tr>
<td>16. Vignette 2 and vignette 1</td>
<td>1 2 3 4 5 6 7 8</td>
<td></td>
</tr>
<tr>
<td>17. Vignette 2 and vignette 0</td>
<td>1 2 3 4 5 6 7 8</td>
<td></td>
</tr>
<tr>
<td>18. Vignette 2 and vignette 9</td>
<td>1 2 3 4 5 6 7 8</td>
<td></td>
</tr>
<tr>
<td>19. Vignette 2 and vignette 8</td>
<td>1 2 3 4 5 6 7 8</td>
<td></td>
</tr>
<tr>
<td>20. Vignette 2 and vignette 7</td>
<td>1 2 3 4 5 6 7 8</td>
<td></td>
</tr>
<tr>
<td>21. Vignette 2 and vignette 6</td>
<td>1 2 3 4 5 6 7 8</td>
<td></td>
</tr>
<tr>
<td>22. Vignette 2 and vignette 5</td>
<td>1 2 3 4 5 6 7 8</td>
<td></td>
</tr>
<tr>
<td>23. Vignette 2 and vignette 4</td>
<td>1 2 3 4 5 6 7 8</td>
<td></td>
</tr>
<tr>
<td>24. Vignette 2 and vignette 3</td>
<td>1 2 3 4 5 6 7 8</td>
<td></td>
</tr>
<tr>
<td>25. Vignette 2 and vignette 2</td>
<td>1 2 3 4 5 6 7 8</td>
<td></td>
</tr>
<tr>
<td>26. Vignette 2 and vignette 1</td>
<td>1 2 3 4 5 6 7 8</td>
<td></td>
</tr>
<tr>
<td>27. Vignette 2 and vignette 0</td>
<td>1 2 3 4 5 6 7 8</td>
<td></td>
</tr>
<tr>
<td>28. Vignette 2 and vignette 9</td>
<td>1 2 3 4 5 6 7 8</td>
<td></td>
</tr>
</tbody>
</table>
Appendix C

Written Vignettes
Vignettes

Vignette 1: Date night

This couple has been dating for a few months and has had sex one time a few weeks ago. The female in the scenario regrets having had sex the first time because she really wants to wait until she's married and the couple has talked about this one time. They've agreed to wait. The couple planned a date where they went to a Broadway play in the afternoon and then came back to her apartment for dinner that she prepared. The boyfriend paid for the play and the food. The girlfriend is dressed in a skirt and a low-cut shirt.

The scenario begins with the couple finishing up the candle-light dinner. They are talking about the play and what a nice time they've had together tonight. The boyfriend comments on the delicious dinner. The girl smiles, thanks him, says she enjoys cooking for him, and starts picking up the dishes. She puts them in the kitchen and comes out with dessert. The dessert has whipped cream on it. When she brings out the dessert, the boyfriend comments,

M: Oh, looks like somebody wants something tonight. (grinning)

F: (smiles flirtatiously & sighs) Why does everything always have to be about sex with you? Can't I just make you a nice dinner because I love you?

M: Oh come on, take a joke. I'm just kidding.

F: (flirtatiously) You better be, mister. You know what we talked about. We're going to wait.

M: Yeah, yeah, yeah.

F: What! We are. You agreed.

M: I know, I know. I'm JUST KIDDING. Man, I love it when you get all worked up! It's so sexy.

F: Shut up. (smiling, shaking head)

They continue eating dessert, and female licks some whipped cream off her spoon.

M: Man, I wish I could be that whipped cream right now. (smiling, devilishly)

F: Yeah, I bet you do. Big surprise. (sarcastically)

They finish up eating & decide to go watch a movie that they rented. They're cuddling on the couch. The boyfriend has his arm around her. He begins rubbing her neck. She smiles and is enjoying it.
F: That feels SO good!

M: You like that, huh?

F: Yes, I love massages.

M: Well, here, I'll give you a good massage. (He lays out a blanket on the floor) Come down here. (patting the floor)

*Administer VRQ here: Segment 1*

She sits down with her back to him & he starts rubbing her neck. She’s enjoying it.

M: Oh, hey, I have an idea. (He goes to her bathroom & gets some baby oil) Here, this will feel real nice. I even warmed it up for you. Ok. Lay down.

*(She does)*

M: It might get messy. You’ll have to take off your shirt, unless you don’t want to do that.

F: Yeah, I really don’t want to do that (sheepishly)

M: It’ll feel really good. Come on, it’s just a massage.

F: Oh, I’ll right.

She takes off her shirt & lays on the floor. He sits on top of her butt & unclips her bra. He pours on the baby oil & starts rubbing her back and neck. She groans and makes comments that it feels good. He then starts rubbing down her sides and up towards the sides of her breasts. He quickly moves back up to her back, then slowly works his way back towards her breasts.

*Administer VRQ here: Segment 2*

F: Ok. That’s enough now.

M: No, doesn’t it feel good?

F: Yes, but I’ve had enough.

M: Man, you really turn me on. I’d love to get down your pants right now.

F: Come on, get off me.
He leans down & puts his hands on her breasts.

F: No, we've talked about this.

M: What, it doesn't have to be sex. I just want to fool around. (frustrated)

F: I'm not stupid. I know what that leads to. Remember last time?

M: (sighs, he's getting upset) What, you really don't want to have sex with me?! Don't you love me? I love you.

F: I love you, but I want to wait. I told you that.

M: It'll make me happy though.

F: Yeah, and it'll make me happy to wait.

M: What's the problem? We've already done it before. What's the big deal?

*Administer VRQ here: Segment 3*

F: The big deal is that I didn't want to do it the last time, and I agreed to do it to make you happy. I just don't want to.

M: I love you! Please. (whiny)

F: No.

M: You're such a tease! We go out to a nice play. You make me a nice, CANDLE-LIT, dinner, and then what, NOTHING? Oh, AND you dress sexy. What am I supposed to think? I paid for this whole evening too. The play, the food, the movie. You know what women like you are called?

F: GET OFF ME!

M: You know you want this!

(fades out)

*Administer VRQ here: Segment 4*
Vignette 2: Monopoly

A group of friends are together playing Monopoly, drinking, and having a good time. One of their other friends shows up with her boyfriend and another male friend that the others don’t know.

Nicole (friend): Hey everyone! How are you doing?


John (boyfriend): Hi everyone.

Nicole: This is our friend, Dan. (pointing to him)


Nicole: Looks like you’re playing Monopoly, huh? Can we jump in?

Someone from group: Well, we’re just about done. Sam has hotels on all of his property, Kim’s about to be bankrupt, and I think I’m next. And, well, Melissa’s pretty toasted. I’m not sure she knows WHAT’S going on!

Melissa: Shut up! I’m fine. (appears drunk)

Kim: I’m going to grab a drink. Melissa, your drink looks low, do you want me to get you another one?

Administer VRQ here: Segment 1

Melissa: Sure, sounds good.

Kim goes to get drinks. Nicole and John sit down.

Dan: Can I sit here? (Pointing next to Melissa)

Melissa: Yeah, have a seat.

They continue to play & Melissa and Dan make small talk.

Dan: So, Melissa, do you go to school with Nicole and John?

Melissa: Yeah, Nicole and I are both education majors so we have a lot of classes together. What do you do?

Dan: I’m in construction.
Melissa: It must be nice to not have to worry about school. I’m so sick of school!

Dan: Yeah, but you get to have all of the fun! College is all about partying, right?

Melissa: Yeah, right. (sarcastically)

Sam: Melissa! It’s your turn. Roll the dice.

Melissa: Great, if I land on one of your properties, I’m done.

Kim: Just go. Let’s end this thing already. This game lasts forever!

Melissa takes her turn, lands on one of Sam’s properties and is out of the game b/c she doesn’t have enough money to pay and she’s mortgaged all of her properties.

Melissa: Well, at least we’re done!

Kim: It’s time for me to go. I’ve had a fun time everyone, but I’ve gotta get going. I have a lot of homework for tomorrow.

Group: Yeah, I’ve gotta go too. It’s late. Yep, me too. Let’s get together again soon. Thanks for everything Sam.

Sam: You’re welcome. Let’s do this again soon.

Dan: Hey, it’s too early to quit partying! The party’s moving to my place!” (smiling)

Group: I’ve really gotta get going. Thanks for the invite, but it’s too late for me. Yeah, me too. I’ve gotta go.

Dan: (looking at Melissa & smiling flirtatiously) Don’t be a party pooper. I want you to come.

Melissa: (looks at Nicole & John) Are you going over there?

Nicole: Sure, let’s go. Is that alright, John?

John: Sure.

Melissa rides over to Dan’s house with Nicole and John. The scene begins with Melissa getting out of the car from the back seat. She kind of stumbles & appears drunk. She goes over to Nicole’s window. Nicole and John are talking inside.

Nicole: (to John) I don’t really want to go in. I’m tired.

John: Let’s just go in for a couple drinks. We won’t stay long.
Nicole: (sighs) John, I’m tired and I have a lot of work to do tomorrow.

John: So, what? Are we just going to leave Melissa here? She wants to go in.

Nicole: I’ll give her my number and she can call when she needs a ride.

John: Alright, fine.

Melissa: (knocks on Nicole’s window & Nicole roles it down) Come on. Let’s go.

Nicole: We’re not going to go in. We’ve got other stuff we need to do.

Administer VRQ here: Segment 2

Melissa: I wish you guys would come.

Nicole: Here’s my number. (slips it in Melissa’s purse) Call me when you’re ready to go home.

Melissa: Well, thanks for the ride. (sarcastically)

The scene goes to Melissa and Dan sitting on his living room couch. Melissa’s legs are on top of Dan’s legs. She’s been there for awhile.

Dan: Can I get you another drink?

Melissa: Oh, it sounds good, but I probably should get going.

Dan: Oh, come on. One more drink. I’ll go grab you one. (he goes out of the room to get her a drink)

Melissa: (Takes out her cell phone & dials Nicole) Hey Nicole. I’m ready to go. Can you still come get me? What? You can’t!? What am I supposed to do? How am I supposed to get home? No, I don’t want to ask Dan to bring me home. I’m not his responsibility. Fine, I’ll call a cab. (hangs up the phone & is upset)

Dan: (Walks back in & hands her the drink) Who were you talking to?

Melissa: Oh, I called Nicole and asked her to come get me. She said she couldn’t.

Dan: I’ll bring you home after this drink.

Melissa: No, I don’t want to bother you with that.

Dan: (smiles & rubs her neck) You’re no bother. I’d be happy to bring you home.
Melissa: Well, thanks. I’ll probably just call a cab. Hey, where’s the bathroom?

Dan: Over here. You have to go through my bedroom to get there. Follow me.

Melissa: (follows him; comes out of bathroom & finds Dan sitting on his bed)

Dan: (pats bed next to him) Come sit down.

Melissa: I really should get going.

Dan: Oh, just sit down and relax.

Melissa: Maybe for a little while. (she sits next to him)

Dan: Why don’t you lay down?

*Administer VRQ here: Segment 3*

Melissa: (Looks around) I don’t think so.

Dan: You look tired. Lay down here.

Melissa: Yeah, I am tired, I better get going. (she gets up to leave)

Dan: You can’t leave.

*Dan forcefully pulls Melissa down*

Melissa: Stop!

Dan: (Gets on top of her and pins her arms down) You’re gonna let me do this, and then you can leave. (They struggle) You must have never had a father figure growing up or you’d let me do this.

Melissa: What! What does that have to do with anything. (pushing him away & hitting)

Dan: (While they’re struggling, he’s fondling her and trying to kiss her) He says things like, “Nothings wrong.” “Why are you shaking?” “Just let me finish & then you can leave!”

(fades out)

*Administer VRQ here: Segment 4*
Vignette 4: In the car

The first scene begins with the couple earlier in the date

Laura: I’ve had a really nice time today.

Scott: Me too. (smiles and reaches for her hand)

Laura: Can you believe we’ve been together for 4 months already?

Scott: Time flies, doesn’t it?

Laura: On the one hand, it seems like we just met, but on the other, we’ve gotten to know each other so well.

Scott: Yeah, I know what you mean. (leans in & kisses her)

Laura: You know, I’ve been thinking. I think that maybe I am getting ready to take our relationship to the next step.

Scott: Really? I know how you feel about that. You know, I understand if you don’t want to have sex now, but it better be before a year.

Administer VRQ here: Segment 1

Laura: Well, I think I might be ready. (hesitantly)

(fades out) The second scene begins with their car parked in an isolated location & the couple is making out. Laura’s shirt is off & Scott unbuckles his pants. He is on top of her.

Laura: Wait, wait. I’ve changed my mind.

Scott: What?

Laura: I’m not ready.

Scott: Oh, come on baby. (He continues touching and kissing her & she reciprocates until he pulls down her pants)

Laura: Scott, no. I don’t want to.

Scott: Why not?

Laura: I just don’t.

Scott: That’s not a good enough reason.
Laura: Scott, please.

Scott: We’ve already done everything besides have sex. Why not have sex?

Laura: I’m just not ready.

Scott: Come on. Why not move to the next step? There’s only one more step.

Laura: (stays quiet & looks away)

Scott: I love you. Don’t you love me?

Laura: Of course I love you.

Scott: You should do this for me, even if you don’t want to, because I love you.

*Administer VRQ here: Segment 2*

Laura: You should wait for me if you love me so much.

Scott: You can’t do this to me. (angrily) You know you get me all worked up, and then leave me hanging. You know I’ll be in pain if we don’t do this, baby.

Laura: I’m sorry, but no.

Scott: I’ve had it. We’re going to break up if you don’t want to do this.

*Administer VRQ here: Segment 3*

Laura: What? (hurt)

Scott: I don’t WANT to break up with you. I love you. We can stay together if you just do this for me. (He leans toward her and starts kissing her again. She doesn’t do anything. She just stares off & he begins having sex with her)

(fades out)

*Administer VRQ here: Segment 4*
Vignette 6: Lost keys

The female & male have been at a party together at the dorm and they've both been drinking. They both live in the same dorm but had not met before tonight. They've been talking for about a ½ hour. The scene begins at the party in the dorm room.

Female: (walks over to another girl) Hey Mary, I’m ready to go. Are you? I thought maybe we could walk back together since your just a couple rooms down.

Mary: I’m not quite ready to go. See that cute guy over there? We just got to talking & I want to hang out a little longer.

Female: Ok. I’ll talk to you later. Have fun.

Male: Hey, I’ll walk you back to your room.

Administer VRQ here: Segment 1

Female: Ok, I suppose. Thanks.

Male: No problem. I’m happy to do it.

They leave and start walking toward her dorm room.

Female: I had a great time tonight!

Male: Me too.

F: It was fun meeting so many people from the dorm. I didn’t think I’d get to meet so many people right away at the beginning of the semester.

M: We’re definitely going to have to throw more of these parties!

F: (stops in front of her room & grabs for her keys) Oh no! My keys.

M: What?

F: I don’t have my keys. I must have laid them down in one of the rooms we were in tonight.

M: Which room do you think you left them in?

F: I don’t know. I was in like 5 different rooms tonight! (sighs) Well, I guess I’m going to have to go look in all the rooms.
M: Here, my room is just around the corner. You can stay with me tonight and then you can go look tomorrow.

F: I don’t know. No. I really should go find them now.

M: Why don’t we go to my room & relax for a little while & then I’ll walk you back to the rooms and help you look for your keys.

F: Alright, I suppose. I’d like to sit down for awhile.

_They walk to his room & go in._

M: Have a seat. (motions toward his futon)

_They both sit down on the futon. The male sits a little close and the female casually moves over a couple inches._

M: I love college. Isn’t it great! I just love the parties. I think I’m going to join a fraternity.

F: Well, you should like that.

M: Yeah, it’ll be great. You know, you sure look good in that outfit. (he smiles & leans in to kiss her)

_Administer VRQ here: Segment 2_

F: No (backs away)

M: Come on, it’s only a kiss. I don’t bite. (smiling)

F: (laughs) Ok. (they kiss a few times and then he leans back so that she is lowered onto the futon on her back)

M: (starts putting his hand up her shirt)

_Administer VRQ here: Segment 3_

F: No, stop.

M: (sits up and stops) Sorry. It’s just been such a long time since I’ve gotten any. I guess I got a little carried away. You’re just so pretty.

F: (smiles) That’s ok. I’m just uncomfortable doing anything else but kissing. We just met, you know.
M: Yeah, you're right. (pause) You're beautiful. I bet you get that all the time.

F: (gets up to leave) Well, I better go. I need to find those keys & get to bed.

M: (He pulls her back down & pins her to the futon)

F: Get off me! (They struggle. She is screaming & fighting).

(fades out)

*Administer VRQ here: Segment 4*
Vignette 7: Playing guitar

The male and female have been dating for one week. They are at his apartment and have been playing guitar. They are sitting close to each other on the couch.

M: You have a nice voice.

F: Thanks.

M: We need to play together more often.

F: This is nice. You play really well.

M: (smiles) Thanks. (he reaches up and touches her on the back of the neck) This music is an aphrodisiac.

F: (smiles)

M: Do you want a drink?

F: No, I’m fine.

M: (He sets the guitar down) Let’s relax for a little while. (he turns on the t.v. & puts his arm around her)

F: (she moves in closer & they cuddle for a little while)

M: (He resituates & puts his hand on her thigh)

(conversation)

M: (He moves his hand to her inner thigh)

Administer VRQ here: Segment 1

F: (She doesn’t say anything but moves his hand away)

While they talk, he slowly moves his hand back to her inner thigh. She sits up & crosses her legs. He moves closer to her & kisses her. She kisses back. He pushes her down and gets on top of her.

Administer VRQ here: Segment 2

F: (She pushes him) No.

M: Come on, it’s just kissing.
Administer VRQ here: Segment 3

F: Get off. (pushing at him)

M: He pins her down & continues kissing & touching her.

(fades out)

Administer VRQ here: Segment 4
Vignette 8: Wedding/pool

(First scene) The male and female are friends but have only known each other for a couple weeks.

F: What are you doing next weekend?

M: I have a wedding to go to & I’m NOT looking forward to it.

F: Oh, why not? Weddings are so much fun.

M: A guy I work with is getting married. We’re pretty good friends at work but don’t really do anything outside of work. So, I know him, but not that well. I’d feel bad if I didn’t go.

F: Yeah, you should go. It’d probably be awkward at work if you didn’t go.

M: Yeah, it would be, but I might just make up an excuse not to go. I don’t know anyone that’ll be there.

F: Oh, just go. It’s not that big of deal. You wouldn’t have to stay at the dance all night.

M: Why don’t you come with me if it’s no big deal?

F: Maybe I will. (smiles)

M: Really? It’s out of town, though. It’s about 4 hours away so I’ll be staying the night.

F: Oh, I don’t know. I was kind of kidding.

M: Hey, you’re the one that LOVES weddings, right? Besides, at least I’d know someone that way. Seriously, will you go with me?

Administer VRQ here: Segment 1

F: Sure. Why not? I don’t have anything else going on.

(Second scene) They get to their hotel room after the wedding reception & find that there is only one bed.

F: Oh, nice! One bed, huh?

M: Yeah, it looks that way.

F: Hmm. What are we going to do?
M: What? We’ll both sleep in the bed.
F: I don’t think so.

M: Why not?
F: Um, I don’t know you THAT well. Who do you think I am, anyway?
M: All right. I’ll ask them to bring in a cot to sleep on.
F: Thanks.
M: So, do you want to go swimming?
F: Yes! I love to swim. I’ll go put on my suit.

*Goes into the bathroom to change.*

M: (hollers in to her) Hey, what color underwear do you have on?
F: What kind of a question is that!
M: Oh, you must be a virgin?
F: Excuse me! That’s none of your business.
M: (laughs) Are you ready to go swimming or what?
F: Yes, just a minute.

*(Third scene)* They are swimming in the pool & flirting. She swims to the corner and he follows her. He is facing her and she is in the corner.

M: Can I kiss you?
F: If you want to. (smiles)
M: (he kisses her)
F: I’m ok with kissing, but that’s it.
M: Yeah, that’s fine. (kisses her again) He then moves his hand up close to her breast.

_Administer VRQ here: Segment 2_
F: (she pulls away)
M: Oh, come on.
F: No, I said just kissing.

M: You’re such a tease!

F: (pulls back) What!

M: You put on that sexy swimming suit & let me kiss you, but we can’t do more?

F: No! That’s enough. I just wanted to swim & have some fun.

M: This is fun.

F: No, not really. Not anymore. I’m ready to go back up to the room. Move.

M: You can’t tell me you really didn’t want more. You came all this way to the wedding with me.

Administer VRQ here: Segment 3

F: You’ve got to be kidding.

The male moves in closer to her and kisses her again. She pulls away. He grabs her hand and forcefully puts it down his swimming trunks.

(fades out)

Administer VRQ here: Segment 4
Vignette 9: Dinner and a movie

The first scene begins with two girlfriends talking about the one friend, Kelly, going on a date with a guy that she met in one of her classes and has been talking with on the phone for about 3 weeks.

Kelly: I’m really looking forward to this date. Nick seems to be such a nice guy.

Amanda: How did you meet him again?

Kelly: We’re in a math class together and we’ve been going to study sessions together. We started talking on the phone about 3 weeks ago and we’ve gotten to know each other pretty well. Earlier this week he invited me to go out for dinner and then go over to his place for a movie.

Amanda: Sounds like fun. Does he have roommates or does he live alone?

Kelly: He rents a house with one other guy and a girl. So, you said that you’re not going to be busy tonight?

Amanda: No. Just doing some homework and then taking it easy. Why?

Kelly: Well, I’m pretty comfortable with Nick, but I don’t know him THAT well. So, I was wondering if you’d be willing to call me around 9:00 just to check in and make sure everything is going well. That way I can also make an out if I need to.


Kelly: Thanks. I appreciate it.

Amanda: So, what time is he picking you up?

Kelly: He’s not picking me up. I’m going to meet him at the restaurant at 6:30.

Amanda: Oh. That’s a good idea. Well, sounds like you’re going to have a fun time tonight. I can’t wait to hear all about it!

Kelly: (smiling) Thanks. Don’t worry. I’ll fill you in.

(Fades out & then back in at Nick’s apartment)

Kelly: Thanks again for dinner. It was really good. I love Italian food.

Nick: Yeah, you’re welcome. I had a nice time, and enjoyed the company. (smiling & rubs her arm)
Kelly: (smiles) We’ll have to do it again some time.  
Nick: I agree.

(male roommate walks through)

Nick: Hey Todd.

Todd: Hey. (walking over to them)

Nick: Todd, this is Kelly. We go to school together.

Kelly: (shaking Todd’s hand) Nice to meet you.

Todd: Yeah, nice to meet you too.

Kelly: So, what are you doing tonight?

Todd: Not too much. Just hanging out around here. Sarah, our other roommate is doing homework in our room. We might study together and then watch a movie that she picked up yesterday. You’re welcome to join us if you want.

Kelly: That’s really nice. Thanks.

Nick: Thanks for the offer. Kelly and I’ve been talking about wanting to watch this movie, though. What do you think Kelly? What would you rather do?

Kelly: Umm... I’ve really been wanting to watch this movie. (Looking at Todd) What movie are you going to watch?

Todd: Wedding Crashers. I’ve heard it’s hilarious.

Kelly: (smiling) Tempting, but I want to watch our movie. Thanks though.

Nick: Yeah, thanks again. We’ll watch the movie in my room, though, so you and Sarah can have the living room t.v.

*Administer VRQ here: Segment 1*

Todd: Alright, have a good night.

Nick: Thanks. I’m sure we will. Both Kelly and I have been wanting to see this movie.

Todd: So, what movie did you get, anyway?

Nick: Million Dollar Baby
Todd: You haven’t seen that yet?

Nick: No.

Kelly: I’ve been wanting to see it for such a long time, but I just don’t find a lot of time to watch movies between work and school. I love Morgan Freeman. He’s my favorite actor. I also love dramas. They’re my favorite.

Todd: Yeah, I’m more of a comedy guy, myself, but that movie is really good. You’ll like it.

Nick: Yeah, I don’t know a lot about the movie but I’ve heard good reviews. It won several Academy Awards anyway. Well, have a good night. Enjoy the movie. And, hey, ask Sarah if I can watch Wedding Crashers this weekend. I’ll bring it back for her.

Todd: Ok. No problem. Talk to you later. Enjoy the movie.

Kelly & Nick: Thanks.

(they walk to Nick’s room and enter; Nick leaves the door open)

Nick: Well, this is my room. It’s kind of small.

Kelly: It’s cozy though.

Nick: Oh, here are some of my pictures from Mexico that we talked about. (hands her pictures)

Kelly: Oh fun. (she starts to flip through them) It looks like you had a great time. I’d love to go to Mexico for Spring break. You’re so lucky! I never get to go anywhere fun for Spring break. I usually just work more or go home to visit.

Nick: Yeah, it was a great time. You need to take at least one Spring break for yourself. You can really go for a good price. You should save up now and go somewhere this year. If you go with a group of people it’s even cheaper.

Kelly: I really should. It looks like so much fun.

Nick: Yeah, think about it. We might be going back again this year. Well, go ahead and look at the pictures, and I’ll go get us something to drink. We have Coke, Sprite, Diet Coke, Mountain Dew, and water.

Kelly: I’ll take a Diet Coke please.

Nick: Ok. Do you want popcorn?
Kelly: Sounds good, but I’m still full from dinner.

Nick: Ok. I’ll be right back.

(comes back & hands her soda)

Kelly: (taking soda) Thanks.

Nick: You’re welcome.

(Nick sits down his drink then turns and locks the bedroom door; Kelly sees this)

Nick: Go ahead and sit down. I’ll put in the movie. Feel free to sit wherever you want. You can lay down on the bed if you like.

Kelly: Thanks. I think I’ll sit here on the couch. It looks comfortable. (The couch is placed so that it is close to the door. She sits on the end closest to the door. Nick sits on the other end of the couch).

(Phone rings & Kelly speaks with Amanda. When asked how things are going, Kelly says fine and that she’s had a nice evening. She tells Amanda that they’re going to watch a movie and that she’ll call before she leaves. Amanda asks if she wants her to call again in a couple hours. Kelly says that she does.)

Kelly: (hangs up phone) That was my roommate, Amanda. She was just checking in. She’s so sweet.

Nick: That was nice.

(movie begins; fades out and back in with movie ending; they talk about enjoying the movie)

Nick: So, do you want to do something else?

Kelly: Well...I’ve had a really good time, but I really should be going.

Nick: Are you sure?

*Administer VRQ here: Segment 2*

Kelly: (stands up and heads toward door) Yeah, it’s getting late, and I have a lot to do tomorrow. (smiles) Thanks for everything tonight. I had a really nice time.

Nick: Yeah, I did too. Thanks for joining me. We’ll have to get together again soon.

Kelly: Yeah, sounds nice.
Nick: I'll walk you out.

*Administer VRQ here: Segment 3*

Kelly: Thanks. (unlocks and opens the door; walks out first; Nick follows; he walks her out; gives her a hug and says he'll call her later) (fades out)

*Administer VRQ here: Segment 4*
Vignette 10: Blind date

Carla: So, are you going to go out with Josh or what?

Lisa: I don’t know. I’m still considering it, I guess. It just feels weird going out with someone I don’t know.

Carla: Yeah, I can understand that. You should do it, though. Brad says he’s really nice and totally your type.

Lisa: Well, I trust Brad. I’ve gotten to know him well since you’ve been dating for a couple years, but how well does he really know Josh?

Carla: They’ve worked together for about a year and they go out for drinks after work sometimes on Fridays.

Lisa: Isn’t it kind of weird that you haven’t even met him though?

Carla: Well, I haven’t really had an opportunity to meet him. When they go out after work it’s always a guy thing and we don’t really go out with people from work at other times. I don’t know. Brad wouldn’t set you up with someone shady. (smiling)

Lisa: Yeah, again, I trust him. It just seems kind of uncomfortable. I suppose I’ll probably go out with him.

Carla: Yeah, at least meet him one time. You never know, it could really work out. (smiling) Then we could go on double dates. Oh, hey. Why don’t we all go out together for your first date?

Administer VRQ here: Segment 1

Lisa: I’d feel a lot more comfortable.

Carla: Do you think Josh would mind?

Lisa: I don’t know. I don’t know him, remember. (smiles) Anyway, if he doesn’t like the idea, then I probably wouldn’t like him anyway.

Carla: Good point. We don’t have anything planned for Saturday. I’ll ask Brad and tell him to ask Josh at work.

Lisa: Thanks. I’m more excited now. (fades out)

(fades back in; it’s another day (Lisa is in different clothing); phone rings)

Lisa: (answers phone) Hello.
Josh: Hi, is Lisa there?
Lisa: This is.
Josh: Hi Lisa. This is Josh, Brad’s friend.
Lisa: Oh, hi Josh. How are you doing?
Josh: I’m good. How about you?
Lisa: I’m good too.
Josh: Great. So, I was wondering if you’re busy Saturday evening.
Lisa: Nope. I don’t have any plans for Saturday.
Josh: Well, Brad, Carla, and I are going bowling around 5:30, and I was wondering if you’d like to go with us?
Lisa: Yeah, that sounds like fun. I’d like to go bowling. Is anyone else going besides you, Carla, and Brad?
Josh: No.
Lisa: Ok. Just the four of us. Sounds like a good time. So, where are we going to bowl?
Josh: We’re going to Super Bowl. Have you been there before?
Lisa: Sure, I know right where that is.
Josh: I can pick you up. How about 5:00?
Lisa: No, no. You don’t have to pick me up. Thanks for the offer, but I’ll just drive myself.
Josh: Are you sure? It’s not out of my way, and I’d love to show you my new car.
Lisa: Yeah, I’m sure. Thanks though.
Josh: You’re welcome. So, I’ll see you there then?
Lisa: Yep. 5:30 on Saturday. See you then. Thanks.
Josh: See you Saturday.
Lisa: Bye.

Josh: Bye.

(The next scene will begin with them finishing up the bowling game.)

Carla: Hey, great game!

Lisa: Yeah, that was fun.

Josh: Yeah, it was fun, but you know, Lisa and I aren’t just going to let you and Brad off the hook like that. We’re going to have to have a rematch.

Carla: Oh, sore loser, huh? (smiling)

Josh: No. Just up for a rematch. I must not have been on my game tonight.

Brad: Well, you know, we can have a rematch but that won’t change anything. We’re the bowling champs!

Josh: We’ll see about that! Hey, do you want to do another best of 3 right now?

Carla: Uhh. I think I’ve had enough bowling for one night. Besides, I’d like to have some time to gloat about our win!

Brad: Yeah, thanks for the offer but I’ve had a long day. I worked until 3:00 and then came here. I’m ready to go home.

Josh: Alright, but we’re going to have to do this again.

Brad: Sounds good. We’ll make plans.

Carla: Well, I’ve had a great time. (hugs Lisa) We’ll have to get together again soon.

Lisa: Ok. Thanks. I’ll call you tomorrow.

Carla: Sounds good. Bye.

Lisa, Josh, and Brad: Bye. Have a good night. Yeah, you too.

Lisa and Josh stay and talk a couple minutes outside.

Lisa: Thanks for inviting me to go bowling. I had a good time. We almost had them too! Close game. (smiling)
Josh: Yeah, thanks for coming. We’re definitely going to have a rematch though. You know, this will only go to Brad’s head.

Lisa: (laughing) Yeah, he’s so competitive. Did you see him getting uptight when we almost won the third game?

Josh: (smiling) Yeah, it was great. We’ll get them next time.

Lisa: Sounds like a plan.

Josh: What are you doing now?

Lisa: I was just going to go back home.

Josh: I don’t know about you, but I’m hungry. Would you like to go get some dinner with me?

*Administer VRQ here: Segment 2*

Lisa: Sure. Sounds good. Where do you want to go?

Josh: Oh, I’m up for anything. How about you? What do you like?

Lisa: Why don’t we go somewhere that has a variety to choose from?

Josh: Ok. How about Applebees?

Lisa: Yeah, sounds good. (they start walking) So, you got a new car, huh?

Josh: Yeah, it’s right over here. (they walk to it)

Lisa: Wow, it’s so nice!

Josh: Thanks. I really like it. It’s my first new car. You should’ve seen the lemon I just got rid of.

Lisa: Oh yeah? Well, you’ll really enjoy this then. (looking at it inside and out) I really like the color. Oh, and it smells like a new car. How nice. I’d LOVE to have a new car.

Josh: Would you like to take a ride in it? How about I drive us to dinner and then I’ll bring you back here to pick up your car?

*Administer VRQ here: Segment 3*

Lisa: Thanks for the offer, but I’ll just drive my own car.
Josh: Alright.

Lisa: Ok. I’ll follow you over there.

Josh: Sounds good. I’ll see you there. (fades out)

*Administer VRQ here: Segment 4*
REFERENCES


to multicultural counseling competence. *Journal of Counseling Psychology, 51*, 139–150.


