The impact of sexual self-esteem on sexual risk detection in college women

Lauren Lucente
The Impact of Sexual Self-Esteem on Sexual Risk Detection in College Women

by

Lauren V. Lucente

A Thesis

Submitted to the Department of Psychology
College of Liberal Arts and Sciences
In partial fulfillment of the requirement
For the degree
Master of Arts in Clinical Mental Health Counseling
At
Rowan University
July 5, 2012

Thesis Chair: D.J. Angelone, PhD
Abstract

Lauren Lucente
THE IMPACT OF SEXUAL SELF ESTEEM ON SEXUAL RISK DETECTION IN COLLEGE WOMEN
2011/2012
D.J. Angelone, PhD.
Masters of Arts in Clinical Mental Health Counseling

Sexual assault victimization has been associated with poor risk recognition and low sexual self-esteem (Gidycz, McNamara, & Edwards, 2006; Schwartz & Shipiro, 1997). Evidence suggests that sexual self-esteem may precede risk recognition subsequently impacting victimization (Mayers, Heller, & Heller, 2003; Zeanah & Schwartz, 1996). The purpose of this study was to investigate the direct predictive impact of global and specific components of sexual self-esteem on risk recognition. Participants engaged a laboratory analog to measure risk detection and completed a series of questionnaires to measure sexual self-esteem. Results indicated that global sexual self-esteem is not predictive of risk recognition. In regard to individual components, attractiveness was found to be uniquely predictive of risk recognition. Specifically, women who believed they were physically attractive had better risk detection than women who did not view themselves as attractive. These findings are discussed in relationship to expanding the literature on sexual self-esteem and risk recognition.
# Table of Contents

Abstract  
List of Figures  
List of Tables  
Chapter 1: Introduction  
Chapter 2: Method  
2.1 Participants  
2.2 Measures  
2.3 Procedure  
Chapter 3: Results  
Chapter 4: Discussion  
List of References

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abstract</td>
<td>i</td>
</tr>
<tr>
<td>List of Figures</td>
<td>iii</td>
</tr>
<tr>
<td>List of Tables</td>
<td>iii</td>
</tr>
<tr>
<td>Chapter 1: Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Chapter 2: Method</td>
<td>11</td>
</tr>
<tr>
<td>2.1 Participants</td>
<td>11</td>
</tr>
<tr>
<td>2.2 Measures</td>
<td>11</td>
</tr>
<tr>
<td>2.3 Procedure</td>
<td>13</td>
</tr>
<tr>
<td>Chapter 3: Results</td>
<td>13</td>
</tr>
<tr>
<td>Chapter 4: Discussion</td>
<td>18</td>
</tr>
<tr>
<td>List of References</td>
<td>26</td>
</tr>
</tbody>
</table>
## List of Figures

<table>
<thead>
<tr>
<th>Figure</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 1: Number of sexually inappropriate responses participant tolerated</td>
<td>15</td>
</tr>
</tbody>
</table>
List of Tables

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 1 Intercorrelations among components of sexual self-esteem, tolerated responses, and condition</td>
<td>16</td>
</tr>
</tbody>
</table>
Chapter 1

Introduction

Sexual aggression, broadly defined as unwanted sexual experience ranging from verbal harassment to completed rape, is a common threat that women face throughout their lifespan (Jewkes, Sen, & Garcia-Moreno, 2002). Approximately, 35% of women report a history of childhood sexual assault, and 32% of women report a history of adult sexual assault (Lemieux & Byers, 2008). During college, 31.5% of women report an incident of sexual assault by the conclusion of freshman year, and by senior year, 71.9% report being victimized (Muehlenhard & Linton, 1987; Turchik, Probst, Irvin, Chau, & Gidycz, 2009). Although women are at risk for sexually aggressive behavior across all ages, college women seem to be at greatest risk.

Along with the identification of prevalence rates for sexual aggression in college women, researchers have also examined negative consequences associated with sexual victimization. The effects, regardless of the severity of the sexually impositional behavior, can adversely impact a victim’s psychological health (Fitzgerald, Drasgow, Hulin, Gelfand, & Magley, 1997; Kilpatrick, Acierno, Resnick, Saunders, & Best, 1997; Koss, Gidycz, & Wisniewski, 1987; Sorenson & Golding, 1990). Victims who experience less severe forms of sexual aggression (e.g., sexual harassment) report symptoms of anxiety, depression, and hopelessness (Fitzgerald et al. 1997; Kilpatrick et al. 1997; Koss et al. 1987). Of the women who experience the most severe form of victimization, completed rape, 32% report being diagnosed with a mental health disorder (e.g., depression and posttraumatic stress disorder), and 19% report attempting suicide (Kilpatrick et al. 1997; Koss et al. 1987; Sorenson & Golding, 1990). Clearly, negative
consequences associated with sexually aggressive behavior can result in undesired changes in the mental health of victims.

In addition to identifying the negative consequences of sexual aggression, researchers have attempted to classify the characteristics that are predictive of victimization. Distal factors are characteristics, related to both the victim and the perpetrator, that are temporarily distant from the current situation and comprised of personality characteristics, attitudes, and general life experiences (Abbey, Zawacki, Buck, Clinton, & McAuslan, 2001). In regard to personality factors and attitudes, men’s endorsement of adversarial beliefs towards women, traditional gender roles, hostility towards women, and rape myth acceptance have been associated with perpetrator assault (Seto & Barbaree, 1997). For example, men with high levels of adversarial beliefs are 11.2 times more likely to engage in sexually aggressive behavior than men with low levels of adversarial beliefs (Yeater, Lenberg, Avina, Rinehart, & O'Donohue, 2008). Similarly, personality factors and attitudes have also been associated with sexual victimization (Abbey et al. 2001). For example, women’s endorsement of low levels of self-esteem has been associated with sexual coercion victimization (Testa & Dermen, 1999; Turner, Finkelhor, & Ormrod, 2010). Also, women who support sexist attitudes are more likely to be victimized than women with egalitarian attitudes (Sochting, Fairbrother, & Koch, 2004; Yeater et al. 2008). Women who felt uncomfortable asserting themselves and who relinquished all control, in comparison to women who reported no difficulty, were respectively 19.6 times and 4.6 times more likely to experience sexual aggression (Yeater et al. 2008). Life experiences of both the victim and the perpetrator have been associated with sexual aggression such that, victims and perpetrators of sexual assault
have a history of heavy alcohol consumption (Abbey et al. 2001; Seto & Barbaree, 1997). Also, victims and perpetrators of sexual assault tend to endorse a history of prior victimization, violence, childhood abuse, frequent dating, and an early onset of sexual relationships (Abbey et al. 2001; Seto & Barbaree, 1997).

*Proximal factors* are characteristics, related to both the perpetrator and the victim, that are temporarily close to the current situation and comprised of situational factors, interpretations and behaviors within certain environments (Abbey et al. 2001). In regard to situational elements, 80% of sexual assaults occur in social situations or on dates where consensual sex, between the victim and perpetrator, is a plausible outcome (Abbey, Ross, McDuffie, & Mcsuslan, 1996a; Abbey et al. 2001). Immediate interpretations of the current dating situation influences sexual assault such that, society supports men using subtle cues to initiate sexual interactions, which often leads to confusion and misinterpretations about sex. Environmentally, locations where alcohol is being consumed (e.g., bars and parties) by both the victim and the perpetrator have increased likelihood of sexual assault occurring (Abbey, Mcauslan, & Ross, 1998; Abbey, Ross, McDuffie, & Mcsuslan, 1996b; Yeater et al. 2008). In fact, 87.9% of victims and 77.5% of perpetrators indicated that they had been under the influence of alcohol during the occurrence of the sexual assault (Yeater et al. 2008). Logistics of the date have also been identified as an associated factor. In fact, on dates initiated by the perpetrator and when no expenses were incurred, women were respectively 22.1 and 44.7 times more likely to be victimized (Yeater et al. 2008).

Risk recognition, a proximal factor involving the cognitive mediation of cues that indicate sexual risk, logically precedes victimization. That is, in order to decide how to
act in a potentially risky situation, a woman must first appraise the situation and identify it as being dangerous (Gidycz et al. 2006; Yeater, Treat, Viken, & McFall, 2010). Thus, a woman’s ability to detect such risk may be directly related to sexual victimization.

Women with poor risk recognition have response latency, the act of taking longer to or being unable to ascertain cues communicating possible sexual risk, consequently leading to an increased risk of victimization (Gidycz et al. 2006; Soler-Baillo, Marx, & Sloan, 2005; Wilson, Calhoun, & Bernat, 1999; Yeater et al. 2010). Considering that response latency is related to an increased vulnerability to sexual assault, specific populations with a decreased ability to identify risk have been distinguished.

Women who endorse a history of sexual assault have a decreased ability to ascertain cues indicating sexual risk. In fact, women with the most severe victimization histories have the longest response latency, when compared to women with less severe histories (Soler-Baillo et al. 2005; Wilson et al. 1999; Yeater et al. 2010). Response latency can be physiologically demonstrated by differences in biological responses to risk cues in women with and without victimization histories. Victims of sexual assault display significant delays in expected increases in heart rate when presented with risk cues, when compared to women without victimization histories (Soler-Baillo et al. 2005; Wilson et al. 1999). Therefore, previous life experiences, (i.e., victimization history) may increase vulnerability to sexual assault by impacting women’s ability to detect sexual risk cues.

Along with victimization history, other distal factors can impede a women’s ability to detect sexual risk. These distal factors can inhibit risk recognition when women focus attention on cues that are not salient in the immediate environmental context. For example, women who value having an attractive partner, and who find the man with
whom they are interacting attractive, tend to ignore cues related to sexual risk and focus on cues related to the man’s attractiveness (Angelone et al. 2009). A similar pattern has been found with women who endorse rape myth acceptance and women who are concerned with their popularity. Specifically, women who accept rape myths tend to ignore cues related to risk and focus on cues that are related to their beliefs (Yeater et al. 2010). Also, women who are concerned with or value popularity may ignore risk cues and attend to cues associated with popularity (Yeater et al. 2010). Given the complicated process involved in risk detection it is logical that some distal factors may influence this process. Perhaps, one distal factor that may play a role in risk detection is sexual self-esteem.

Sexual self-esteem indicates how one feels about oneself as a sexual being, how one identifies one’s sexual identity and one’s ability to evaluate sexual cognitions, behaviors and affect (Horne & Zimmer-Gembeck, 2006; Mayers, Heller, & Heller, 2003; Zeanah & Schwartz, 1996). Sexual self-esteem is a broad construct that can be divided into ten distinct areas: Sexual Body-Esteem, Sense of Entitlement to Sexual Pleasure from Self, Sense of Entitlement to Sexual Pleasure from Partner, Self-efficacy in Achieving Sexual Pleasure, Sexual Self-reflection, Skills/Experience, Attractiveness, Control, Moral Judgment, and Adaptiveness (Horne & Zimmer-Gembeck, 2006; Zeanah & Schartz, 1996). Sexual Body-Esteem is one’s belief that her body appears to be sexually attractive and desirable to others. Self-efficacy in Achieving Sexual Pleasure, Sense of Entitlement to Sexual Pleasure from Self, and Sense of Entitlement to Sexual Pleasure from Partner involves being able to ask for what one wants as well as feeling entitled to obtain sexual pleasure from oneself and one’s partner. Sexual Self-Reflection is one’s willingness to
reflect on and evaluate one’s sexual behaviors, emotions, and cognitions (Horne & Zimmer-Gembeck, 2006). Skills/Experience concern a person’s ability to be pleased either by oneself or another person and the availability of occasions for engagement in sexual activity. Control is one’s ability to manage sexual thoughts, exchanges, and feelings. Attractiveness is one’s ability to feel sexually attractive regardless of how others feel. Moral Judgment is the congruence between a person’s behaviors, cognitions and feelings with one’s morals. Adaptiveness is coordination of one’s sexual actions and experience with one’s goals in other aspects of life (Zeanah & Schwartz, 1996).

Sexual self-esteem is not static, but rather can change over time. In fact, it has the ability to be impacted negatively by the self and others. A woman can damage her own sexual self-esteem by acting in a way that is contrary to how she would normally behave (Mayers et al. 2003). In addition to acting out of character, there may be an unwanted consequence that can further decrease her sexual self-esteem (Mayers et al. 2003). For example, a woman could develop a sexually transmitted infection which may trigger feelings of disgust and shame, leading to deterioration of her sexual self-esteem. Reduction in sexual self-esteem elicited by others can occur through a range of behaviors spanning from less severe incidents, such as name calling, to more severe incidents, such as rape (Mayers et al. 2003).

Low sexual self-esteem is associated with a range of psychological and behavioral consequences, as well as a potential restructuring of one’s self concept. Psychological consequences include: depression, anxiety, shame, suicidal ideation, isolation, decreased interested in sex, difficulties with sexual function, and fear of males (Mayers et al. 2003). For some women, behavioral consequences include, not engaging in sex, avoiding
materials that mention sex, avoiding seeing their own body naked, and discontinuing all elements of their lives that pertain to their sexuality (Mayers et al. 2003). For other women, behavioral consequences can include: increased desire for sex, excessive interest in sex, being overly sexual, and engaging in poorly accepted sexual behaviors that are distasteful to the individual (Mayers et al. 2003). Potentially, some women, with damaged sexual self-esteem, may experience a restructuring of their self-concept such that one is completely defined by who she is as a sexual being (Mayers et al. 2003; Resick & Schnicke, 1993; Sochting et al. 2004). In essence, one’s sole value is determined by her sexuality, sexual attractiveness, and sexual skill and experience. Considering that low sexual self-esteem can have devastating after-effects on women, the specific relationship between sexual self-esteem and victimization needs to be examined.

As stated, one’s sexual self-esteem can be damaged by many factors including: name calling, being raised in an environment that does not allow the discussion of sex, being dissatisfied with one’s personal appearance, gossip/rumors, demeaning letters or notes, harassing comments, and sexual assault (Heinrichs, Macknee, Auton-Cuff, & Domene, 2009; Mayers et al. 2003). Considering the broad range of events that can have a damaging effect, it seems probable that a woman could experience a decrease in her sexual self-esteem prior to being victimized. Considering many different events can damage sexual self-esteem, perhaps women with low sexual self-esteem are at an increased risk of being victimized.

The change in self-concept as a result of damaged sexual self-esteem is associated with one’s sole value being comprised of her sexual attractiveness, sexual prowess, and sexuality (Mayers et al. 2003). Perhaps placing a high value on these aspects may distract
a woman from the current situation, causing her to misjudge sexual risk cues. As presented, when a woman places an emphasis on something other than risk cues, her ability to recognize risk decreases (Angelone et al. 2009; Yeater et al. 2010). For example, women who placed an emphasis on popularity relied less on victimization risk information than women who were not concerned with popularity impact (Yeater et al. 2010). Similarly, women who endorsed rape supportive attitudes, when compared to women who did not, had increased difficulty ascertaining cues that indicated sexual risk (Yeater et al. 2010). Regarding sexual self-esteem, it seems as if women might be attending to information that pertains to their sexual self-esteem, due to a preoccupation with cues related to their self-concept. This preoccupation might result in women not attending to victimization risk cues, decreasing their ability to recognize risk, which would directly increase vulnerability to sexual assault. As demonstrated, a probable relationship exists such that sexual self-esteem directly impacts risk recognition which then effects vulnerability to sexual assault.

Given the importance of risk recognition on sexual assault, a variety of methods have been developed to measure this factor. Early research relied on vignettes in order to measure participant’s ability to detect sexual risk cues. This methodology requires participants to read a brief story where a victim is sexually assaulted and certain variables are manipulated, such as the amount of alcohol consumed (Testa, VanZile-Tamsen, Livingston, & Buddie, 2006). However, since participants are reading a story, they may not be responding as they would in a real world situation. To overcome this problem, researchers have developed laboratory analogs. A benefit to using an analog, as opposed to vignettes, is that it allows a real world study of behaviors while maintaining strong
internal validity (Mitchell, Hirschman, Angelone, & Lilly, 2004). In one specific paradigm, participants view a video portrayal of a dating situation where risk factors for sexual assault are highlighted. Then, participants write down events that would make them feel uncomfortable if they were in that situation (Breitenbecher, 1999; Marx, Calhoun, Wilson, & Meyerson, 2001). Another analog requires participants to listen to an audio portrayal of a man assaulting a woman; participants press a button indicating when they believed the man has “gone too far” (Marx & Gross, 1995; Marx et al. 2001; Wilson et al. 1999). More recently, researchers developed a computerized paradigm where participants believe they are interacting with a potential speed dating candidate. The candidate’s responses systematically increase in sexually inappropriate and suggestive language, and a participant’s decision to engage in conversation serves as a measure of risk recognition (Angelone et al. 2009). By measuring risk recognition through a computerized interaction, rather than requiring participants to distinguish risk cues in situations in which they are not actively engaging, this analog can capture how women might respond in similar real world interactions with men (Angelone et al. 2009).

Currently, sexual self-esteem is associated with victimization, and risk recognition is correlated with sexual assault (Heinrichs et al. 2009; Mayers et al. 2003; Van Bruggen, Runtz, & Kadlec, 2006). Thus, it is possible that sexual self-esteem may precede risk recognition which directly affects victimization. Specifically, women with low sexual self-esteem are likely to have poor risk recognition, increasing their risk of sexual assault. Given the lack of research in this area, the current study is attempting to examine the relationship between sexual self-esteem and risk recognition. Therefore, one goal of this study is to examine the impact sexual self-esteem has on one’s ability to
distinguish risk cues. It is hypothesized that 1) lower levels of global sexual self-esteem will be predictive of poor risk recognition in women. An exploratory goal of this study is to examine if the different components of sexual self-esteem (i.e., skills and experience/attractiveness) influence risk recognition uniquely. Since women who have low sexual self-esteem tend to attend to their attractiveness, skills, and experience it is hypothesized that 2) women may pay more attention to cues related to these aspects and less attention to other facets of their sexual self-esteem (Mayers et al. 2003).
Chapter 2

Method

Participants

A total of 61 female participants from a public university in the northeastern United States were recruited through a psychology department participant pool. The final sample had an average age of 20.5 (SD = 5.3), with 66.9% identifying their relationships status as single. With respect to ethnic background, 42.9% of participants self-identified as European American, 14.8% as African/African American, 9.8% as Hispanic/Hispanic American, 4.9% as Asian/Asian American, and 21.3% chose not to respond or indicated they were of some other ethnic background.

Measures

*Demographic Questionnaire.* A questionnaire assessed various demographic information about the participants. Among other variables, this questionnaire inquired about the participant’s age and relationship status.

*Female Sexual Subjectivity Inventory (FSSI; Horne & Zimmer-Gembeck, 2006).* The FSSI measured participants’ sexual body esteem, sexual desire and pleasure, and sexual reflection for women who are entering adulthood. These areas are assessed by five subscales: *Sexual Body-Esteem, Sense of Entitlement to Sexual Pleasure from Self, Sense of Entitlement to Sexual Pleasure from Partner, Self-efficacy in Achieving Sexual Pleasure, and Sexual Self-reflection* (Horne & Zimmer-Gembeck, 2006). This scale consists of 20 items (e.g., “I am confident that others will find me sexually desirable”) measured on a Likert-type scale with responses ranging from 1 (strongly disagree) to 5 (strongly agree). The mean of each subscale of this inventory was calculated separately.
with higher means indicating higher sexual subjectivity. This measure has high internal consistency with Cronbach’s alpha of .82 (Horne & Zimmer-Gembeck, 2006). Similarly, in the current study the measure has high internal consistency with a Cronbach’s alpha ranging from .76-.86 across all five subscales.

*Sexual Self Esteem Inventory for Women (SSEI-W; Zeanah & Schwarz, 1996).*

The SSEI-W was administered to assess both participant’s global sexual self-esteem and endorsement of specific components of sexual self-esteem across five distinct domains. The 81 item inventory (e.g., I am pleased with the way my body has developed) measures sexual self-esteem on a Likert-type scale ranging from 1 (strongly disagree) to 6 (strongly agree) across 5 subscales: *Skill/Experience, Attractiveness, Control, Moral Judgment, and Adaptiveness* (Zeanah & Schwartz, 1996). Each subscale of this inventory was summed and scored separately with higher scores indicating higher sexual self-esteem endorsement. An overall score for global sexual self-esteem was calculated by adding the sum of each individual subscale. This scale has high internal consistency (Chronbach’s alphas ranging from .85-.94 across all five subscales) and high discriminant validity with low inter-correlations between subscales. High construct validity is evident as indicated by subscales being moderately correlated ($r = .44 - r = .57$) with the Rosenberg self-esteem scale, indicating sexual self-esteem is a separate construct from global self-esteem (Zeanah & Schwarz, 1996). For the current study, this measure has high internal consistency with a Chronbach’s alpha ranging from .78-.90 across subscales.

*Edudate Analog (Angelone et al. 2009).* This analog was used to measure a women’s ability to recognize sexual risk. This computerized paradigm determines risk recognition by the length of communication between the participant and the bogus speed
dating candidate during an interactive online speed date. This paradigm measures women’s sexual risk detection across multiple conditions. For the current study, risk detection was measured across two conditions: high attractiveness/high status (e.g., physically attractive male with a stable, well-paying occupation) and low attractiveness/low status (e.g., physically unattractive male with an unstable, low-paying occupation). While engaging the speed date, participants have the opportunity to receive up to eleven predetermined responses from the bogus speed dating candidate. The bogus candidate’s first two responses are neutral (e.g., “Anything that can make me laugh”) and the subsequent nine responses systematically increase in sexually inappropriate content (e.g., “Goin to college. I m the first in my fam to do so. I am also very “accomplished” in the bedroom…I’ll save those stories for when me and u meet”). Risk recognition is determined by the number of sexually inappropriate responses a participant tolerates. More responses tolerated indicate poorer risk recognition, whereas fewer responses tolerated indicate better risk recognition. The Edudate paradigm has been correlated with the Sexual Harassment Attitude Scale (SHAS; Mazer & Percival, 1988), a known measure of tolerance of sexual coercion, \((r = .32)\) demonstrating construct validity (Angelone et al. 2009).

**Procedure**

Participants were recruited through a computerized participant pool. They arrived at a specified computer lab where they were assigned a computer, equipped with privacy dividers, and were given instructions specifying how to engage the laboratory analog. They were told that they were “beta testing new online speed dating software;” the true purpose of the study was withheld in order to prevent participant bias. Participants were
randomly assigned to receive either a high attractiveness/high status bogus candidate or a low attractiveness/low status bogus candidate. All participants completed a demographic questionnaire before being presented with a predetermined and condition specific profile containing a picture of a bogus dating candidate and a short profile detailing a description of his occupation, educational background, and interests. Participants then engaged the Edudate analog where they actively participated in an online speed date with the bogus candidate (Angelone et al. 2009). After engaging the speed date, participants completed the FSSI and SSEI-W as measures of sexual self-esteem. After completion of all measures, participants were verbally debriefed with a full explanation of the study and reasons why deception was necessary.
Chapter 3

Results

Prior to conducting the primary analyses, we examined the number of tolerated responses, differences between conditions (high attractiveness /high status and low attractiveness /low status), and overall endorsement of sexual self-esteem. Overall, 22.4% of the sample ended the speed date after the first sexually inappropriate response from the bogus speed dating candidate. The remaining 77.6% of the sample tolerated two or more responses, and only 10.3% of the sample tolerated all eleven predetermined responses. A majority of participants disengaged the speed date prior to reaching the total number of predetermined responses resulting in a positively skewed distribution (Figure 1). The data were then transformed using inverse scores criterion. The transformed data were used for all subsequent statistical analyses. Next, an independent samples t-test was conducted to identify differences between condition (high attractiveness/high status and low attractiveness/low status) on number of tolerated responses. There were no significant differences between the high attractiveness/high status ($M = 5.54$, $SD = 2.31$) and the low attractiveness/low status ($M = 4.62$, $SD = 2.38$) conditions, $t (59) = -2.5$, $p > .05$; thus, all subsequent analyses represent collapsed data across these conditions.
Table 1 presents means, standard deviations, global and subscale specific endorsement of sexual self-esteem, and intercorrelations among the ten sexual self-esteem subscales and responses tolerated. Self-reported sexual self-esteem was relatively high with participant’s mean scores on all measures of sexual self-esteem falling above the midpoints of the subscales (Table 1). In regard to correlations, the Attractiveness subscale was significantly correlated with the number of responses tolerated, $r (52) = - .31, p = .02$. There were no significant relationships between all other subscales and responses tolerated.
Table 1.

Intercorrelations among components of sexual self-esteem, tolerated responses, and condition

<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>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Global Self Esteem</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Skills/Experience</td>
<td>.085*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Attractiveness</td>
<td>.5</td>
<td>.14</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Control</td>
<td>.87*</td>
<td>.76*</td>
<td>.25</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Moral Judgment</td>
<td>.6</td>
<td>.38*</td>
<td>-.02</td>
<td>.4</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Adaptiveness</td>
<td>.92*</td>
<td>.83*</td>
<td>.18</td>
<td>.84*</td>
<td>.62*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Sexual Body Esteem</td>
<td>.42*</td>
<td>.23</td>
<td>.79*</td>
<td>.29*</td>
<td>-.13</td>
<td>.24</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Sexual Self-Reflection</td>
<td>.05</td>
<td>.14</td>
<td>-.25</td>
<td>-.06</td>
<td>.24</td>
<td>.14</td>
<td>-.24</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Sense of Entitlement to Pleasure from Partner</td>
<td>.11</td>
<td>.21</td>
<td>-.25</td>
<td>.12</td>
<td>.15</td>
<td>.22</td>
<td>-.27*</td>
<td>.37*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Send of Entitlement to Pleasure from Self</td>
<td>.28*</td>
<td>.5</td>
<td>-.07</td>
<td>.13</td>
<td>.4</td>
<td>.33*</td>
<td>-.06</td>
<td>.52*</td>
<td>.4</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Self Efficacy in achieving Sexual Pleasure</td>
<td>.25</td>
<td>.42*</td>
<td>-.14*</td>
<td>.4</td>
<td>-.06</td>
<td>.27</td>
<td>-.03</td>
<td>.11</td>
<td>.49*</td>
<td>.2</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Responses Tolerated</td>
<td>-.12</td>
<td>.01</td>
<td>.31*</td>
<td>.04</td>
<td>-.12</td>
<td>-.06</td>
<td>-.19</td>
<td>-.02</td>
<td>.22</td>
<td>-.01</td>
<td>.11</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>13. Condition</td>
<td>-.14</td>
<td>-.15</td>
<td>-.08</td>
<td>-.16</td>
<td>.02</td>
<td>-.11</td>
<td>-.09</td>
<td>-.04</td>
<td>.17</td>
<td>.08</td>
<td>-.08</td>
<td>.31*</td>
<td>1</td>
</tr>
</tbody>
</table>

|                |     |     |     |     |     |     |     |     |     |     |     |     |     |
| M              | 359.75 | 80.3 | 64.1 | 75.6 | 70.3 | 69.5 | 3.4 | 3.4 | 3.4 | 3.9 | 3.4 | 3.9 | 5.1 |
| SD             | 46.3 | 15.2 | 13.9 | 11.9 | 10.5 | 11.3 | .79 | .96 | .8  | 1.2 | .96 | 2.4 | .5  |
| Alpha          | .78  | .9  | .86  | .86  | .79  | .85  | .76  | .85  | .86  | .85  | .85  |     |     |
| Midpoint of Scale | 243 | 54  | 51  | 48  | 45  | 45  | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 4.5 |

*Note* N = 61, *p<.05
To examine hypothesis one, which states that low levels of global sexual self-esteem would be predictive of poor risk recognition, a hierarchical multiple regression analysis was conducted. Perceived attractiveness and willingness to date the candidate were controlled for by entering these variables on the first step of the regression. On the second step, overall sexual self-esteem, calculated by summing all subscales of the SSEI-W, was entered into the model. A significant model emerged, $F(3, 51) = 2.9, p = .05, (\beta = .30, t = 3.80)$. The model accounted for 15% percent of the variance (Adjusted $R^2 = .15$). However, global sexual self-esteem alone was not predictive of risk recognition.

In order to examine hypothesis two, which states that different components of sexual self-esteem (i.e. attractiveness and skills/experience) would impact risk recognition uniquely, two separate hierarchical multiple regression analyses were conducted. Just as in the first regression, perceived attractiveness of the dating candidate and willingness to date the candidate were controlled for by entering these variables on the first step. The independent variables (i.e. SSEI-W and FSSI subscales) were entered on the second step in the respective analysis. In regards to the SSEI-W, a significant model emerged $F(7, 51) = 2.22, p = .05, (\beta = .35, t = 4.00)$ and Attractiveness significantly predicted risk recognition. The model accounted for 14% percent of the variance (Adjusted $R^2 = .14$). Women who self-reported feeling attractive regardless of others opinions, tolerated fewer inappropriate responses from the bogus dating candidate. With respect to the FSSI, a significant model emerged $F(7, 60) = 2.22, p < .05, (\beta = .27, t = 3.37)$. The model accounted for 12% of the variance (Adjusted $R^2 = .12$); however, none of the subscales were individually predictive of risk recognition.
Chapter 4
Discussion

The primary goal of the present study was to expand the literature and investigate the predictive utility of sexual self-esteem on risk recognition. Specifically, it was hypothesized that low global sexual self-esteem would predict poor risk recognition. It was also hypothesized that various components of sexual self-esteem (i.e. Attractiveness and Skills/Experience) would influence risk detection differently.

In the current sample, 22.4% ended the speed date after receiving the first sexually inappropriate response from the bogus dating candidate. Only 10.3% of the sample continued to engage the speed date until the predetermined number of responses was reached. Upwards of 89% of the sample choose to disengage from the speed date, suggesting that during the interaction participants may have felt uncomfortable with and wearisome of the candidate’s responses.

The current sample self-identified as having high sexual self-esteem with participants’ mean scores on the independent measures, FSSI and SSEI-W, falling above the midpoint of both scales. One explanation for high self-reported sexual self-esteem is related to participant recruitment. For the current study, all participants self-selected to take part in this study suggesting that they were comfortable with and interested in testing online dating software. Conceivably, women with low levels of sexual self-esteem avoided participating in a study that would require them to use speed dating software. Future studies ought to explore various ways to recruit participants in order to obtain a sample endorsing sexual self-esteem with a wider range.
For example, researchers could disguise the name of the study or recruit participants, rather than use self-selection, to engage in the study.

Another conceivable factor contributing to high self-reported sexual self-esteem is related to how current measures of this construct are presented to participants. The questionnaires used in the current study measure this construct in an overt manner which may lead participants to answer the questionnaires in ways they perceive as socially desirable. In order to decrease social desirability, future studies should either develop and implement more covert measures of sexual self-esteem or include a measure of social desirability.

Another probable contributor to participants’ high endorsement of sexual self-esteem, is the spike in global self-esteem that women experience as they exit adolescence and enter adulthood (Robins, Trzesniewski, Tracey, Gosling, & Potter, 2002). Perhaps, this recent spike is influencing participants’ self-reported responses such that they feel more comfortable in who they are as sexual beings. Also possible, being actively enrolled in college may somehow impact participant’s sexual self-esteem. For example, perhaps college women experience an increase in freedom, independence, and a need to explore, leading to changes in how they view and feel about themselves. Future studies ought to examine if sexual self-esteem is relatively high for everyone in this age group or just women actively enrolled in college. In order to do so, studies could include college aged women, both currently and not currently enrolled, in order to examine differences between the two groups. Studies could also develop and implement a scale to examine sexual self-esteem specifically for this age group and examine whether it is similar to or differs from other age groups.
Counter to hypothesis one, global sexual self-esteem was not predictive of risk detection in college aged women. Perhaps, examining sexual self-esteem from a global perspective is not effective in determining whether it impacts risk detection. Considering this is a relatively new and under studied construct, researchers ought to examine individual components rather than the global construct. Since the current literature on global sexual self-esteem and victimization is mixed, an in depth examination of individual components may provide more reliable and accurate information.

In line with the need to study individual facets of sexual self-esteem, hypothesis two predicted that individual components would uniquely predict risk recognition. One specific component of sexual self-esteem (i.e., attractiveness) did differ from others components in predicting risk detection. Attractiveness influences risk detection such that women with low self-perceived attractiveness disengaged the speed dating candidate more slowly than women with high self-perceived attractiveness. As presented, low sexual self-esteem can influence a woman’s self-concept, behaviors, and engagement in environments that reinforce her self-concept (Mayers et al. 2003; Resick & Schnicke, 1993; Sochting et al. 2004). With attractiveness being the only component of sexual self-esteem that is predictive of poor risk recognition, perhaps the changes in self-concept cause particular concern in the area of physical attractiveness (Mayers et al. 2003). This fixation may lead women with low self-perceived attractiveness to disregard cues related to risk and instead attend to cues related to their attractiveness. For the current study, women who believed they were less physically attractive may have continued to engage the bogus dating candidate because they disregarded or misinterpreted cues indicating sexual risk.
Perhaps, instead of attending to these cues, the women focused their attention on the elements of the responses that reinforce their self-concept.

Physical attractiveness appears to predict risk detection in women; however, it is possible is that the current relationship is mediated or moderated by personality variables and partner selection criteria. For example, attractiveness is related to assertiveness, such that women who have higher self-perceived attractiveness also have higher assertiveness (Jackson & Hutson, 1975). The ability to assert oneself is associated with victimization such that women who assert themselves, compared to women who do not, are less likely to experience sexual assault. Therefore, high assertiveness acts as a protective factor against sexual victimization (Rowe, Jouriles, McDonald, Platt, & Gomez, 2012). Perhaps, women in the current study who believed they were highly attractive may have had little difficulty disengaging from the study, when they felt as if the situation contained possible sexual risk, due to high assertiveness. Thus, assertiveness is a key factor in this relationship and may impact risk recognition.

Attractiveness and its relationship with risk detection may also be mediated or moderated by partner selection criteria. People who self-identify as being attractive are more selective in they who they choose as a dating partner and prefer their partner to also be attractive (Lee, Loewenstien, Ariley, Hong, Young, & 2008). Additionally, personality components, of a potential partner, that are not desirable can decrease perceived attractiveness of a possible dating candidate (Lewandowski, Aron, & Gee, 2007). In the current study, women who saw themselves as highly attractive may have opted out of the interaction, not only because they are more selective, but also because they viewed the candidate as less attractive. For instance, it is possible that women disengaged the speed date because they perceived the candidate to be less attractive.
and less desirable after beginning the interaction. Perhaps, this indicates that the change in partner attractiveness is due to women viewing the candidate’s responses as being reflective of negative aspects of his personality. Therefore, women who are attractive and more selective in whom they interact with may be indirectly protecting themselves from sexual victimization by disengaging with people who do not fit their specifications. Considering the relationship between sexual self-esteem and risk detection may potentially be mediated or moderated by assertiveness and partner selection, more research needs to be conducted. For example, future research could include measures of assertiveness and partner selection criteria in order to see if these variables influence risk recognition.

One strength of the current study was the use of the Edudate paradigm which measures risk recognition through an in vivo interaction between the participant and the bogus speed dating candidate (Angelone et al. 2009). With the use of the interactive paradigm, participants engaged a speed date allowing them to act in a way similar to how they might in social settings (Angelone et al. 2009). One possible limitation of the analog is that participants might not find the online dating forum to be a dangerous dating scenario. However, this seems unlikely since upwards of 89% of the sample disengaged the paradigm indicating that they evaluated the situation as uncomfortable and possibly containing risk.

One possible concern for the current study is the high Type II error rate; therefore, it is possible that relationships between global and other specific components of sexual self-esteem and risk recognition exist but were not identified. That is, it is possible that small sample size and restriction of range attributed to the Type II error rate. Future researchers ought to modify the methodology in order to address these concerns accordingly.
The one directional pathway between sexual self-esteem, risk detection, and vulnerability to victimization, presented in the current study, is simply one way to view the relationship between these variables. Given that the relationship between sexual self-esteem and risk detection is complicated, it is possible that a multi-directional pathway between sexual self-esteem, risk detection and vulnerability to victimization exist. For example, a woman may be sexually assaulted which may lead to decreases in her sexual self-esteem which may lead to a decrease in her ability to detect risk which may ultimately lead to increased vulnerability to victimization. Considering the complex interplay of these variables, future researchers ought to explore other directional relationships that may occur between sexual self-esteem, risk detection and vulnerability to victimization.

Along with the possibility of considering alternative pathways, it is also important to consider individual differences. Specifically, not all victims have low sexual self-esteem prior to being victimized; in fact, some victims may have high sexual self-esteem and still experience sexual assault. Recognizing victims are not to blame for sexual assault, the goal of identifying variables that increase vulnerability to sexual assault is a way to increase awareness and prevention efforts. By educating women about the influence of these variables as well as prevention techniques, women can further protect themselves against situations that may contain sexual risk. As with the above concerns regarding Type II error rate, future researchers need to contend with the wide variability of the factors understudy.

Another possible limitation of the current study is that there was a restriction to the range of scores. That is, the sample self-reported high sexual self-esteem and the majority of the sample disengaged the speed date prior to the end of the paradigm. Restriction of range may
have prevented the identification of relationships between both global and individual components of sexual self-esteem with risk recognition. As presented, future studies may want to expand the manner in which participants are recruited in order to assemble a sample with varying endorsement of sexual self-esteem and ability to detect sexual risk.

To date, the research examining sexual self-esteem is quite limited. Therefore, future research should continue to examine this new construct in order to provide a better understanding as to how sexual self-esteem may impact risk detection and ultimately victimization. Due to the lack of support for global sexual self-esteem predicting risk detection, future studies ought to conduct studies on the individual components rather than the construct as a whole. Examining the individual parts may allow for more specific results and understanding in regard to how the individual facets affect risk detection and victimization. After examining the relationship between individual components and risk recognition fully, perhaps this information can be used in the treatment and prevention of sexual victimization.

Current sexual assault prevention programs may need revisions in order to increase effectiveness and improve outcomes (Sochting et al. 2004). As more variables are identified and their relationship with sexual assault becomes clearer, prevention programs can make changes to the current curriculum. Programs could use research findings to identify and target explicit variables to possibly aid in further protection against sexual assault. For example, if women with low perceived attractiveness are at greater risk of sexual assault, these programs could target perceived low attractiveness and maladaptive self-concepts by dedicating this area as being a main focus in the curriculum. Specifically, curriculum would include ways women could identify and modify negative self-concepts that women have regarding their attractiveness. One area of
psychology that has been successful at modifying maladaptive self-concepts is cognitive therapy; perhaps, prevention programs could adapt and formulate their techniques from the vast literature regarding this modality.

Sexual assault treatment programs may also need revisions. Treatment programs ought to focus on decreasing the negative consequences that stem from sexual assault as well as on efforts to decrease risk of revictimization. A focus on preventing revictimization is imperative because women with victimization histories, compared to women without victimization histories, are at an increased risk of revictimization (Soler-Baillo et al. 2005; Wilson et al. 1999; Yeater et al. 2010). As demonstrated, low sexual self-esteem and maladaptive self-concepts can lead to a decreased ability to detect sexual risk cues which may ultimately increases risk for sexual assault. Given this, treatment programs ought to focus on increasing sexual self-esteem and modifying maladaptive self-concepts. This intentional focus may not only assist in decreasing negative effects of sexual self-esteem but it may also act as a prevention mechanism against revictimization. Treatment programs may focus on target areas, sexual self-esteem and maladaptive self-concepts, in both group and individual modalities; given the importance individual differences amongst victims, perhaps an individual modality is optimal. By making specific changes to prevention programs, as well as using this information to inform clinicians, it is hoped that effectiveness can be maximized ultimately decreasing the rates for which women experience victimization.


