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ABSTRACT

SADIE J. MUMMERT
The Relationship Between Risky Behaviors, Individual Characteristics, and Sexual Revictimization Among College Women
(Under the direction of DR. LEAH DAIGLE)

Sexual revictimization of college women is a relatively new area of study within the field of victimology. Although the link between childhood sexual assault (CSA) and adult revictimization has been examined, many aspects of why college-aged females are revictimized have gained little attention. This Master's thesis will explore the current literature as well as analyze the possible link between risky behaviors, individual characteristics, and sexual revictimization. Using Jacquelyn W. White and Paige Hall Smith's (2004) data, *A Longitudinal Perspective on Physical and Sexual Intimate Partner Violence Against Women*, bivariate analyses were conducted regarding the revictimization of college women. The findings suggest a few differences between single victims and revictims. The findings also suggested that nonvictims and revictims were found to have multiple differences across variables. Suggestions for future research will be discussed.

INDEX WORDS: risky behaviors, individual characteristics, sexual revictimization

THE RELATIONSHIP BETWEEN RISKY BEHAVIORS, INDIVIDUAL CHARACTERISTICS, AND SEXUAL REVICTIMIZATION AMONG COLLEGE WOMEN

by

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B.A., WITTENBERG UNIVERISTY

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of the

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DEDICATION

I would like to dedicate this Master's thesis to my Mom and Dad for their continuous love and support. If it were not for their encouragement, I would not be where I am today. Thank you for all that you both have done for me, I love you.

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I would like to thank Georgia State University, the College of Health and Human Sciences, and the Department of Criminal Justice for the opportunity to study in the Criminal Justice Master's Program and their encouragement to write this Master's Thesis. I would like to extend a special thank you to my thesis committee for their continuous support throughout this process. Thank you to Dr. Brian Payne and Dr. Mark Reed for serving on my committee and volunteering your time during this thesis project. An extra special thank you goes to Dr. Leah Daigle, my thesis chair. Your time and dedication to this thesis and the process are very much appreciated. I could not have accomplished this without your ongoing support.

AUTHOR'S STATEMENT

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CHAPTER I
Introduction

The victimization of females by varying forms of sexual assault has become increasingly apparent over the past two decades particularly on among college women. Research shows that college women are at risk of being sexually victimized and revictimized. For example, data from the National College Women Sexual Victimization (NCWSV) study show that 2.8 percent of college women experience an attempted or completed rape in an academic year. For every 1,000 females students on a college campus, about thirty-five rapes take place each year (Fisher, Cullen, & Turner., 2000). College women are also likely to experience other types of sexual victimization such as coercion, unwanted sexual contact, and stalking. In fact, about one third of college women in the NCWSV study experienced unwanted or uninvited sexual incidents of some kind (Fisher et al., 2000).

Revictimization is also an important problem impacting college women. Research shows that about one-fourth of college women of those who had been sexually victimized experienced more than one sexual victimization incident (Fisher et al., 2000). It has been found that those who become the victim of an unwanted sexual experience are at a greater risk of being sexually revictimized in the future (Classen, Palesh, & Aggarwal, 2005; Norris, Nurius, & Dimeff, 1996). Classen and colleagues (2005) found that sexual revictimization was reported by two out of every three women who reported an initial sexual victimized.

Because this area of research is relatively new, it is limited (Classen et al., 2005). In particular, little is known about the causes of female sexual victimization and sexual revictimization. Most research has focused on the link between childhood sexual assault (CSA) and revictimization (Arata, 2000; Desai, Arias, Thompson, & Basile, 2002; Filipas & Ullman, 2006; Messman & Long, 1996; Messman-Moore, Long, & Siegfried, 2000). The revictimization of college women has also been explored and shows an abundance of revictimizations occurring among college women (Daigle, Fisher, & Cullen, 2008; Fisher, Daigle, & Cullen, 2008; Fisher, Daigle, & Cullen, 2010; Fisher & Wilkes, 2003). Due to the limited research examining lifestyles and individual characteristics, a study to examine if some of these traits seem to predispose women to becoming a revictim is an important step to be taken. It is possible that risk seeking and low self-control are two characteristics that may place college women at risk of being sexually revictimized. Revictimizations may also occur if these risky behaviors and individual personality characteristics continue on unchanged after an initial sexual victimization.

The lifestyle-routine activities theory (L/RAT) is one perspective used to examine risky behaviors. The basic premise of this perspective is that risky behaviors and lifestyles make particular persons more vulnerable, in this case to sexual victimization and revictimization. According to this perspective, if there is a suitable or vulnerable victim, then the chances of the crime taking place increase. Other elements of the theory are also important such as the presence of and proximity to motivated offenders and lack of capable guardianship. In regards to proximity to motivated offenders, studies have found that females who socialize in contexts where they are frequently around unfamiliar

men are likely to be sexually revictimized (Fisher, Daigle, & Cullen, 2010). Target suitability and exposure to crime are similar; potential victims may place themselves and participate in situations where alcohol consumption is prevalent, which can increase their risk of being revictimized (Fisher et al., 2010).

Another relevant theoretical perspective is risk heterogeneity. Based on the concept of risk heterogeneity, some people are more likely to be sexually revictimized based on personal characteristics such as personality and risk taking. These traits could include things such as low self-control and impulsivity (Schreck, 1999). Although not yet applied to sexual victimization or sexual revictimization, Schreck (1999) found that low self-control increases the likelihood of victimization for individuals. Accordingly, it is possible that college women with low self-control are more likely to be sexually revictimized than those with higher levels. This thesis will add to the current literature on self-control in hopes to further explain its connection to sexual revictimization.

CHAPTER II
Literature Review

Sexual Victimization

Rape

With high profile rape trials in the media and Congress being involved in taking action against sexual victimization (Kilpatrick, 1993), it is evident that it is a serious problem in the United States. Kilpatrick, Edmunds, and Seymour (1992) reported that over twelve million women in the United States will be raped at some point during their adult lives. When that number is broken down, women are raped at an alarming rate of almost seven hundred thousand per year. The National Crime Victimization Survey reported that a total of 248,280 rape/sexual assault incidents took place in 2007 (BJS, 2007). Additionally, the Uniform Crime Reports (UCR) indicate that in 2008 .5 rapes occurred for every one thousand people in the United States population (BJS, 2008).

Other Sexual Victimization

Rape is not the only type of sexual victimization that women experience. Other forms of sexual victimization include but are not limited to: sexual coercion, sexual contact with force or the threat of force, sexual contact without force, and threats (Fisher, Daigle, Cullen, & Turner, 2003). Approximately seventeen percent of women in one study were sexually assaulted at some point in their lifetime (Sorenson, Stein, Siegal, Golding, & Burnam, 1987). Sexual victimization is so commonplace that Carmen, Rieker, and Mills (1984) conclude that a sexual victimization at some point in a person's life is almost unavoidable.

Sexual Victimization of College Women

College females are part of the population that experiences rape. Using the National College Women Sexual Victimization Study, Fisher, Cullen, and Turner (2000), investigated the extent to which college women are sexually victimized. They focused not only on rape, but a total of 12 different forms of sexual victimization (completed rape, attempted rape, completed sexual coercion, attempted sexual coercion, completed sexual contact with force of the threat of force, completed sexual contact without force, attempted sexual contact with force or the threat of force, attempted sexual contact without force, threat of rape, threat of contact with force or the threat of force, threat of penetration without force, and threat of contact without force). After looking at incidents from a total of 691 college female participants and over thirteen hundred separate incidents, they found that 157 incidents of completed and attempted rape were experienced, resulting in 2.8 percent of college women in the sample having experienced a rape incident (Fisher et al., 2003). More recently, Kilpatrick et al. (2007) conducted a study of two thousand female college students taken from the American Student List. They found that 11.5% of the college women in their sample reported being raped (Kilpatrick et al., 2007).

College-aged females are at particular risk of being sexually victimized (Himelein, 1995) because they fall into the age range (18 to 24) that has the highest sexual victimization rates; although college students are at a lesser risk than their counterparts who are not in college (Hart, 2003). Approximately a little over half of college women have had some kind of experience with sexual victimization of some type,

which includes rape and other types of sexual victimization such as sexual coercion and unwanted sexual contact (Koss & Dinero, 1989). Gross, Winslett, Roberts, and Gohn (2006) reported that thirty seven percent of college women surveyed had experienced more than one sexual victimization incident since they entered college. A little over half of the women surveyed by Koss and her associates reported having some type of unwanted sexual contact (Koss et al., 1987; Koss, Woodruff, & Koss, 1990).

Consequences

It is important to investigate the sexual victimization of college women because of the consequences that go along with it. Sexual victimization is oftentimes accompanied by multiple negative consequences. Substance abuse, posttraumatic stress disorder (PTSD), and depression are some of the consequences of rape that victims experience (Kilpatrick et al., 2007). In a study on the effects of rape, Resick (1993) found that women who had been the victims of rape suffered from issues with self-esteem, fear, and anxiety. Depression, PTSD, and problems adjusting to social and sexual situations were also common (Resick, 1993). Importantly, more than a quarter of the women who reported suffering from PTSD as a rape-induced symptom reported still had PTSD a year later (Kilpatrick et al., 1992).

Sexual Revictimization

Revictimization, specifically sexual revictimization, is a growing concern for college women. Sexual revictimization occurs when an individual experiences a sexual victimization following an initial sexual victimization. For example, if a woman is raped

and then raped again after the initial incident, it constitutes sexual revictimization. Classen, Palesh, and Aggarwal (2005) shed light on the occurrence of sexual victimization and its connection to sexual revictimization. They discovered that those who experienced sexual abuse or assault had an increased risk of being sexually revictimized. In addition, they found that two out of every three women who had experienced sexual victimization of some kind also reported multiple sexual victimizations or sexual revictimization (Classen et al., 2005). Norris, Nurius, and Dimeff (1996) also found that women who were previously sexually victimized are at greater risk of being sexually victimized again in the future.

Sexual revictimization can occur across developmental time periods. For example, an abundance of research indicates that there is a positive relationship between childhood sexual abuse (CSA) and sexual revictimization as an adult (Arata, 2000; Desai, Arias, Thompson, & Basile, 2002; Filipas & Ullman, 2006; Messman & Long, 1996; Messman-Moore, Long, & Siegfried, 2000). In fact, “estimates based on community samples are that child sexual abuse (CSA) doubles or even triples the risk of sexual revictimization for adult women” (Classen, Palesh, & Aggarwal, 2005, p. 103). Walsh, Blaustein, Knight, Spinazzola, and Van der Kolk (2007) examined college-aged female students through self-report surveys. They concluded that childhood sexual abuse was correlated with future sexual assault as an adult (Walsh et al., 2007). Other studies have reported similar findings. Women are more at risk of being sexually revictimized if they were sexually victimized in the past (Fite, 2006). In fact, “those abused as children were two times more likely to experience sexual victimization during adolescence, and those

reporting adolescent victimization were four times more likely to be assaulted" (Fite, 2006).

Some research has considered revictimization within a relatively short time period. Tjaden and Thoennes (2006) assessed sexual revictimization within a time period of a year in the National Violence Against Women Study. They found that women who reported being raped were raped 2.9 times a year on average (Tjaden & Thoennes, 2006). Tjaden and Thoennes (2006) also reported that these numbers increased when the sexual victimizations occurred between the women and an intimate partner.

Like women in general, sexual revictimization is also a problem for college females. Daigle, Fisher, and Cullen (2008) conducted a study that highlighted the problem of sexual revictimization. Using data from two national-level studies of college women with samples that totaled over eight thousand college women, they explored the different type of sexual revictimizations that occurred, the time course of the incidents, and the characteristics of the incidents. Using data derived from the National College Women Violent Victimization (NCWVV) study and the National College Women Sexual Victimization (NCWSV) study, they examined each incident of sexual victimization that the women reported experiencing in a single academic year (Daigle et al., 2008). Daigle and colleagues (2008) looked at five types of sexual victimization (rape, sexual coercion, unwanted sexual contact with force, unwanted sexual contact without force, and threats). They found that 47.3% of the women surveyed who reported at least one sexual victimization were victims of sexual revictimization since the beginning of the academic year (Daigle et al., 2008). They also found that sexual victimization was more likely to

recur than non-sexual victimization (Daigle et al., 2008). By looking at the different types of incidents, they found that 3.3% of those who reported sexual revictimizations experienced almost fifty percent of the total number of sexual victimizations reported (Daigle et al., 2008).

Another important finding in Daigle, Fisher, and Cullen's (2008) study was that females were at greater risk of being sexually victimized in the time immediately following the initial incident. Approximately half of the rape revictimizations took place during the same month of the initial sexual victimization (Daigle et al., 2008). Additionally, about one third of repeated sexual coercions and threats were found to occur within the same month. Recurring physical assaults and unwanted sexual contacts with force were also likely to happen within the same month, 31 percent and 28 percent respectively (Daigle et al., 2008).

As with any type of victimization, there are negative outcomes that present themselves once an initial sexual victimization occurs. It is important to acknowledge that revictimizations may increase these negative outcomes. There are many consequences that arise when women are repeatedly victimized. One such consequence is the occurrence of Post Traumatic Stress Disorder (PTSD) (Filipas & Ullman, 2006; Gidycz, Coble, Latham, & Layman, 1993; Messman-Moore et al., 2000). Along with this, self-blame (Filipas & Ullman, 2006), depression, distress, and anxiety (Messman-Moore et al., 2000) have also been reported by women who reported being sexually revictimized. These symptoms were reported as being present during the latter revictimization incidents (Messman-Moore et al., 2000). Gidycz et al. (1993) also found

that women who reported sexual revictimizations were more likely to have trouble finding employment and were found in lower levels of economic status resulting in a lower quality of life. Furthermore, those who had been sexually revictimized often became more sexually active in order to cope with their sexual victimization (Filipas & Ullman, 2006).

With the seriousness of these consequences, it is surprising to find that there is little research on the causes of sexual revictimization. As mentioned before, the link between CSA and adult sexual revictimization and sexual revictimization in short time periods has begun to be examined; however, the factors that place college women at risk of being sexually revictimized are not fully understood. It is difficult to pinpoint the reasons why these repeat incidents occur (Gidycz, McNamara, Edwards, 2006); and focus should be placed on the personality, behavioral, and lifestyle characteristics of the victims. Perhaps risky behaviors and underlying personality traits are related to sexual revictimization.

Explanations for Revictimization

Although most criminological theory focuses on the reasons why people commit crimes, the lifestyle-routine activities theory (L/RAT) also provides some insight into why people become victims. According to L/RAT there are three elements that must be present for a victimization to occur. These elements are motivated offenders, suitable targets of criminal victimization, and lack of capable guardians of persons or property

(Cohen & Felson, 1979). Each of these elements can either raise or reduce the probability a crime will take place. The theory "maintains that the convergence in time and space of motivated offenders, attractive targets, and ineffective guardianship determines the risk of victimization" (Schreck & Fisher, 2004, p. 1023). A person's daily lifestyle increases his or her vulnerability to victimization (Cohen & Felson, 1979; Hindelang, Gottfredson, & Garofalo, 1978). Hindelang et al. (1978) considered the rate of victimization versus the likelihood of victimization and their impact on the "proneness" of the victim. That is, they investigated how likely a person is to become a victim based on rates. They determined that ecological variables or the victims' environments should be included in the risk factors of victimization. Many things such as socioeconomic class and demographics have an impact on a person's lifestyle. Moreover, the theory suggests that those people who have lifestyles that have them spending time away from home, at night, and with persons who are not family members are at a greater risk of becoming a victim than those who do not have such lifestyles. Taken together, lifestyles, and the choices people make that impact the coalescence of motivated offenders, suitable targets, and lack of capable guardianship increase susceptibility to becoming a victim according to the L/RAT perspective (Hindelang, Gottfredson, & Garofalo, 1978).

Proximity to Motivated Offenders

The L/RAT perspective assumes that in order for victimization to occur, motivated offenders must be present. When in close proximity to motivated offenders and deviant environments, individuals are in harm's way since they are at an increased risk of being victimized (Schwartz & Pitts, 1995). Women are at an increased risk of being

sexually victimized when they are in situations with close proximity to men with whom they are not familiar (Fisher, Daigle, & Cullen, 2010). For example, bars, fraternity houses, and college parties are all environments that may encourage sexual victimization. Fisher and Wilkes (2003) considered the theory in regards to college students. They discussed how proximity and exposure to crime are additional important elements. An environment such as student housing constitutes proximity to crime because it is likely to be a place where personal and property crimes occur. Additionally, they describe exposure to crime in terms of college women spending great amounts of their time in bars, nightclubs, and partying (Fisher & Wilkes, 2003). Fisher et al. (1997) stressed that living quarters were important due to the finding that on campus victimizations were more likely to take place in students' housing.

Exposure to Crime

Another aspect of the L/RAT, which coincides with proximity to motivated offenders, is the exposure of the potential victim to crime. Frequenting crime ridden social arenas; such as bars, strip clubs, college parties, and other places where deviant behavior is present can put potential victims at greater risk of being sexually victimized (Fisher & Wilkes, 2003; Fisher, Daigle, & Cullen, 2010). For college women, attending parties and walking alone after dark are examples of situations where crime is likely to occur.

Suitable Target

The third element germane to L/RAT is being a suitable target. A suitable target must be present for a potential offender to feel like he is able to commit the crime. A

suitable target is someone who opens himself or herself up to possible victimization by exposure to deviant environments and/or behaviors. For example, by attending parties, victimization risk factors are increased. This creates increased vulnerability of the targets by providing an increased opportunity for a crime to take place. This applies to the lifestyle choices and routines that the potential victims and do every day (Fisher, Daigle, & Cullen, 2010). College females can easily become suitable targets when they frequent college parties, college bars, or belong to sororities due to the increased deviant behaviors (i.e. alcohol consumption, drug use, sexual promiscuity) present in these environments. These deviant behaviors may lower women's inhibitions and expose them as vulnerable targets.

Capable Guardianship

Finally, if there is a guardian present who is protecting or looking after others or property, then victimization risk declines (Cohen & Felson, 1979; Miethe & Meier, 1994). There are two types of guardianship, social and physical. Devices such as pepper spray, security alarms, and rape whistles can serve as physical guardians. Roommates, friends, neighbors, and the police are forms of social guardians. Guardians may not be present in situations where victims live alone, walk across college campuses alone, or frequent high crime areas alone. Unfortunately, those people who students may consider to be social guardians could also become potential offenders (i.e. roommates). Important to college females, Fisher and Wilkes (2003) found that most student victimizations are committed by fellow students.

Research on L/RAT & Sexual Victimization

Overall, the findings are mixed for lifestyle-routine activities theory in regards to its application to sexual victimization. However, for the most part, the findings seem to moderately support the theory. Fisher and Wilkes (2003) completed a study that analyzed L/RAT in regards to college students in the United States and England. Focusing on L/RAT in general, their findings showed that the daily lifestyles and activities of college students help to determine the relationship between risk and victimization (Fisher & Wilkes, 2003). They found that those who had partying and drug use lifestyles, displayed target suitability, and lacked guardianship were found to be at a higher vulnerability and risk of victimization generally (Fisher & Wilkes, 2003).

In the realm of motivated offenders, Schwartz & Pitts (1995) found that frequent physical proximity to males increases the risk that women will be sexually victimized. Other research shows that an increased risk for sexual victimization happens oftentimes in unhealthy romantic relationships (Farrell, Phillips, & Pease, 1995). By being in such relationships, a person is also placing themselves in close physical proximity to a potential offender. Physical proximity to potential offenders is found to increase a female's risk of being sexually victimized.

Research on sexual victimization and L/RAT has found that target suitability is an important construct. Much of this research has focused on alcohol use as a measure of target suitability. Using alcohol is linked to an increased risk of sexual victimization for college females. This is because potential offenders are commonly found in places where alcohol consumption is prevalent (Abbey et al., 2001). Consumption by the potential victim can increase the likelihood of victimization occurring. Alcohol may lower the

victim's inhibitions making her easily persuaded into a compromising situation. If drinking heavily, victims are "less able to defend themselves" (Schreck, 1999, p. 635).

Many studies have found a relationship between alcohol abuse and increased sexual victimization (Koss & Dinero, 1989; Testa, Livingston, & Collins, 2000; Abbey et al., 2001). Testa et al. (2000) found that woman who consumed alcohol or a placebo they believed to be alcohol were more accepting of men who appeared at their door intoxicated. These females were also more willing and open to allowing the men to gain access into their residence and participating in activities, which would most likely increase their risk of being sexually victimized (Testa et al., 2000).

Capable guardians have also been considered in studies pertaining to L/RAT. Households that have a greater number of adults present, such as two parent families, are less likely to be victimized than those who have a fewer number of adults (Mukherjee & Carcach, 1998). While capable guardians are studied as an aspect of the theory, this element is frequently devalued as a meaningful concept. In many cases, social guardianship is related to sexual victimization in the opposite direction of what the theory suggests. This may be because the potential victim's peers, who might oftentimes serve as social guardians, are also the potential offenders.

L/RAT and Revictimization

The L/RAT does provide some key insights as to why women are sexually victimized more than once. In regards to proximity to motivated offenders, studies have found that females who socialize in realms where they are frequently around unfamiliar men are likely to be sexually revictimized (Fisher, Daigle, & Cullen, 2010). Like initial

victimizations, these social arenas that increase risk are places such as bars, clubs, and college parties.

Victimization incidents are oftentimes accompanied by alcohol consumption. Women are found to be suitable targets, another element of the R/LAT, when alcohol consumption is involved in their lifestyles. Many studies have supported this argument; alcohol use promotes revictimization (Ellis, Atkeson, & Calhoun, 1982; Gidyz et al., 1995). There is also a possible unexplored link between revictimization and drug use (Fisher, Daigle, & Cullen, 2010).

The L/RAT can help to explain sexual revictimization through the aspect of exposure to crime. Similar to the element of target suitability, potential victims may place themselves and participate in situations where alcohol consumption is prevalent, which can increase their risk of being revictimized. Being a member of organizations on campus such as sororities is also suggested to increase sexual revictimization but has not been supported empirically (Fisher, Daigle, & Cullen, 2010).

Finally, capable guardianship is a factor in determining whether sexual revictimization takes place according to L/RAT. The theory predicts “that sexual victimization is highest among students who engage in routines that expose them more often to motivated offenders in the absence of capable guardianship (e.g., going to parties, going along in an intoxicated condition to men’s rooms, frequently dating)” (Fisher, Daigle, & Cullen, 2010, pg. 123-124). Research suggests that revictimization and social guardianship are correlated. Tseloni (2000) reported that those households with fewer numbers of adults were also at risk of being revictimized. Physical guardians have

not been found to be linked to revictimization (Rodgers & Roberts, 1995; Tseloni, 2000), although there may be evidence that it may help to prevent additional victimizations.

One study to date has attempted to distinguish the factors that place college women at risk of being sexually revictimized. Fisher et al. (2010) found that the L/RAT does contribute to the understanding of sexual revictimization (Fisher, Daigle, & Cullen, 2010). If motivated offenders, suitable target, and capable guardianship coalesce, then victimization is likely to occur. Furthermore, if no change is brought upon these elements and they continue to coalesce, then another victimization is likely, thus revictimization. Basically, the factors that led to the first victimization will lead to another if those factors are not changed (Fisher et al., 2010). Fisher and colleagues (2010) found that there was no difference between the lifestyles and routine activities of victims and those of revictims of sexual victimization. Their daily routines were similar, thus the L/RAT can also provide support and reasoning for not just victimization, but also revictimization. The same factors predicted sexual victimization and sexual revictimization (Fisher et al., 2010). These factors included propensity to be in places exclusively male, being in a committed relationship, propensity to be in places with alcohol, propensity for substance use, carrying self-protection, and living alone (Fisher et al., 2010). Lifestyles place a woman at risk and keep her at risk. Therefore, everyday routines and activities of college females should be considered when explaining their sexual revictimization. Other individual-level characteristics, however, such as low self-control and assertiveness have not been studied.

Individual Factors and Sexual Revictimization

Beyond the L/RAT perspective, there are other alternative possibilities that may explain victimization. One set of factors that may be related to victimization deal with individual-level characteristics. Such an approach has been used to explain risk of victimization. For example, low self-control has been identified as a risk factor for victimization. Gottfredson and Hirschi (1990) introduced the general theory of crime in which they identified the key element of crime to be self-control. They believed that self-control must be present in order for a person to refrain from committing crimes. People with low self-control are attracted to behaviors and acts that require little time commitment, provide instant gratification, and are enacted with relatively little effort or tediousness (Gottfredson & Hirschi, 1990). There are six traits that define self-control. They are future orientation, empathy, tolerance for frustration, diligence, preference for mental rather than physical activity, and risk avoidance (Gottfredson & Hirschi, 1990). If a person has low self-control, he or she will most likely participate in acts that have an immediate gratification (Gottfredson & Hirschi. 1990). Hence, crime is a desirable outlet for them. Furthermore, Gottfredson and Hirschi (1990) argue that low self-control is also a cause of behaviors analogous to crime. Behaviors such as drug use, alcohol consumption, and gambling are argued to be related to self-control (Gottfredson & Hirschi, 1990; Schreck, Stewart, & Fisher, 2006). Unemployment and sexual promiscuity are also cited as being caused by low self-control. It is suggested that self-control is learned through the way a person is raised as a child via parental socialization

(Gottfredson & Hirschi, 1990). If this is the case, then self-control is a learned trait. It is not something innate.

While Gottfredson and Hirschi (1990) associate low self-control with why people commit crimes, low self-control may also be related to crime victimization. Many of these same characteristics of criminals may be similar to those characteristics of victims (Lauritsen, Sampson, & Laub, 1991; Fisher & Wilkes, 2003), which make them more susceptible to becoming victims. Schreck (1999) used the theory of low self-control to explain why persons are victimized by utilizing the six traits of self-control defined by Gottfredson & Hirschi (1990). The first trait is future orientation. The lower the degree of future orientation a person has, the less he or she tends to value the future consequences of their actions, oftentimes resulting in behavior choices that compromise the safety of those with low self-control (Schreck, 1999). Empathy is another element of self-control. Due to insensitivity, those with low self-control often lack close friendships and relationships. Without these important social ties, guardianship is less likely to be present, thus creating more of an opportunity for victimization to occur (Schreck, 1999). The next characteristic of self-control is tolerance for frustration. In regards to the trait of tolerance for frustration, two people fighting will both display aggression. If there is a low tolerance for frustration present in one of the people, then her aggression will be apparent much more quickly and easily. The victim is determined simply by who loses the dispute (Schreck, 1999). A fourth component of self-control according to Schreck (1999) is diligence. With low self-control, persistence is lacking and therefore those suffering from low self-control are unlikely to protect themselves by taking precautions

(Schreck, 1999). Preference for mental rather than physical activity is another factor of self-control. A person with low self-control becomes defensive and belligerent during an altercation. By doing so, he or she makes himself or herself prone to victimization (Schreck, 1999). The sixth and final dimension of self-control is risk avoidance. Thrill-seeking behaviors such as gambling and hitchhiking are sought out by those with low self-control. These activities can put them at greater vulnerability of becoming a victim (Schreck, 1999).

There has been an ample amount of support for Gottfredson and Hirshi's general theory of crime. A study by Arneklev, Grasmick, Tittle, and Bursik (1993) found that there was a negative correlation between self-control and drinking as well as between self-control and gambling. Keane, Maxim, and Teevan (1993) examined self-control and its effect on whether people drink and drive. They found that there was a significant relationship between the two. After conducting a meta-analysis of findings of the link between self-control and crime and other deviant behaviors, Pratt and Cullen (2000) demonstrated that low self-control is a consistent and robust predictor of such activities.

Research also supports the link between low self-control and victimization. Schreck (1999) reported that victimization and low-self control are significantly related. Low self-control amplifies the risk of victimization. He also considered the effect of self-control on different types of victimization. He found that low self-control was most strongly connected to personal victimization (Schreck, 1999). Schreck, Stewart, and Fisher (2006), using the Gang Resistance Education and Training (GREAT) data, also examined low self-control as a risk factor for revictimization. In support of Schreck's

(1999) hypothesis, they found that there was a significant correlation between victimization and low self-control. They also considered whether those people with low self-control who became victims were likely to change their behaviors and lifestyles that increased their risk of being victimized. Their results showed that people with lower levels of self-control who had been victimized were less likely to change their deviant lifestyles over time (Schreck, Stewart, & Fisher, 2006).

The relationship between low self-control and victimization had been further defined. Stewart, Elifson, and Sterk (2004) explain the tie between low self-control and L/RAT and how they intertwine. Self-control and other personality traits seemingly lead to prevalent participation in risky behaviors and lifestyle choices (Stewart, Elifson, & Sterk, 2004). Schreck and Fisher (2004) suggest that the explanation of victimization expands beyond just L/RAT. They found that peer groups as well as family are important variables in the context of becoming a victim. Teenagers who associate themselves with deviant peers are more likely to take part in deviant behaviors, which puts them at greater risk of being victimized (Schreck & Fisher, 2004).

The six elements of self-control brought forth by Gottfredson and Hirschi (1990) have been found to be related to victimization (Schreck, 1999). Low-self control may also be linked to sexual revictimization. Lack of future orientation can be expressed as when a woman makes choices without the consideration of the future consequences those choices have (Schreck, 1999). For example, a woman who repeatedly abuses alcohol may make herself more vulnerable by lowering her inhibitions (Schreck, 1999). If she continues to drink heavily, she will be increasing her risk of becoming a sexual revictim.

Lack of empathy causes a person to be insensitive to others, which causes a lowered amount of close friendships and relationships thus guardianship is decreased (Schreck, 1999). If guardianship is decreased, college women who live alone and walk alone, especially at night, will be increasing their chances of sexual revictimization to occur. Lack of tolerance for frustration can be expressed by easily showing aggression (Schreck, 1999). Women who easily show aggression and become easily overwhelmed display signs of this trait. If a woman continues to seem vulnerable by showing this weakness of not being able to handle pressure, sexual revictimization may occur. For example, if a woman is easily frustrated and in turn lets her frustration get the best of her, then her better judgment my lapse making her vulnerable. Lack of diligence can be explained as a lack of persistence (Schreck, 1999). If an offender sees that a woman continually gives up easily and does not put effort into something she believes in, the chance of sexual revictimization is increased. This is because the offender may see her as being weak and less resistant. Preference for physical rather than mental activity is expressed by becoming defensive or belligerent during an altercation (Schreck, 1999). When a woman consistently engages in altercations she put herself at an increased risk of being revictimized. For example, a woman may continually fight with her boyfriend or intimate partner. This fighter and aggression could continue over into intimate situations. Finally, lack of risk avoidance is expressed by being a thrill-seeking individual (Schreck, 1999). With thrill-seeking behaviors, such as drinking alcohol or doing drugs, comes risk. Rozee and Koss (2001) found that women who are victimized are less likely to recognize risk. In order to avoid risk, a woman must be able to assess, acknowledge, and act (Rozee &

Koss, 2001). Those women who have low self-control may recognize risk, but enjoy taking risk through lack of risk avoidance.

It is possible that personality traits similar to low self-control would be related to sexual revictimization for three reasons. First, research shows that individual traits predict victimization; hence it is possible that the factors that predict an initial sexual victimization also predict subsequent sexual victimizations. Second, it is consistent with one of the explanations of revictimization that centers on the fact that individual factors may distinguish those who are victimized a single time from those who are victimized more than once. This explanation is known as risk heterogeneity. If these factors continue without modification, then the person will remain at risk. For example, if those with low self-control who have been victimized do not change their risky lifestyle behaviors or their level of self-control that may have facilitated their initial victimization (Schreck, Stewart, & Fisher, 2006), they may be at risk of sexual revictimization. Additionally, a study that did not include individual-level factors found that L/RAT factors did not distinguish single sexual victimizations from sexual revictimizations, which suggests that perhaps individual-level factors are what drive sexual revictimization risk. Therefore, further investigations into such factors should be done.

Thus, the purpose of this thesis is to investigate individual characteristics, such as self-control, as well as risky lifestyles and their impact on the sexual revictimization of college females. By doing so, this thesis will contribute to the research already done on sexual revictimization. It will explore a possible new link between the individual characteristic of self-control and sexual revictimization as well as expand on the

knowledge of the relationship between risky behavior use and sexual revictimization. The specific research questions designed for this exploration are detailed below.

Research Questions

Research Question One: **Do low self-control measures and risky behavior measures differ across nonvictims, single victims, and revictims in regards to any sexual revictimization?**

Classen et al. (2005) and Norris et al. (1996) found that those who experienced an initial sexual victimization had an increased risk of being revictimized. Increased risky behavior may increase the chance of any sexual revictimization to occur. Additionally, low levels of self-control may also increase this risk. Low self-control is thought to increase the risk of any sexual revictimization. Similarly, those who participate in risky behavior may have an increased chance of being the victim of any sexual revictimization.

Research Question Two: **Are there differences between nonvictims, single victims, and revictims and low levels of self-control along with risky behaviors in regards to sexual revictimization from Waves I to II?**

Research has shown that 47.3 percent of women who reported at least one sexual victimization were found to be the victim of sexual revictimizations during the course of the academic school year (Daigle et al., 2008). Low levels of self-control and increases risky behaviors may account for the sexual revictimization across Waves I and II, which constitutes an academic school year. It is hypothesized that respondents who have low self-control will have a increased likelihood of being sexually revictimized during an

academic school year. Increased participation in risky behaviors may also increase the risk of sexual revictimization during the course of a year.

Research Question Three: **Are there differences among nonvictims, single rape victims, and rape revictims and low self-control as well as risky behaviors?**

One study found that half of the women who reported experiencing a completed or attempted raped had experienced sexual victimization in the past (Russell, 1984). This evidence of rape revictimization raises the question of why it occurs. Perhaps there is a difference among nonvictims, single victims, and revictims in regards to individual measures such as self-control. Risky behaviors may also play a role in why women are revicitms of rape. Those who have low self-control may have an increased risk of being revictims of rape. Additionally, those who participate in risky behaviors are also at an increased risk of being revictimized.

Research Question Four: **Do nonvictims, single victims, and revictims of rape revictimization from Wave I to Wave II differ in low levels of self-control and risky behaviors?**

Women reported being raped 2.9 times a year on average according to the National Violence Against Women Study (Tjaden & Thoennes, 2006). With this evidence, it seems necessary to measure rape revictimization over the course of one year. Research has not indicated if individual characteristics and/or risky behaviors are a factor in why rape revictimization happens. It is hypothesized that low levels of self-control and/or multiple types of risky behavior increase the risk of rape revictimization across waves (equivalent to one year).

Research Question Five: **Are people who experience childhood sexual assault and adult sexual revictimization different in levels of low self-control and risky behavior?**

Multiple studies indicate that there is a positive relationship between CSA and sexual revictimization as an adult (Arata, 2000; Desai et al., 2002; Filipas & Ullman, 2006; Messman & Long, 1996; Messman-Moore et al., 2000). Could there be more to this relationship? Individual characteristics, such as low self-control, and increased risky behaviors may play a role in why CSA victims become adult revictims, in that childhood sexual assault revictimization is increased when low levels of self-control are present and/or the engagement in risky behavior occurs.

CHAPTER III
Methods

The purpose of this thesis is to examine the relationship between risky behaviors, individual characteristics, and sexual revictimization of female college students. Both the lifestyles-routine activities theory and individual characteristics that measure factors indicative of low self-control will be used as the theoretical guidance for the analysis.

Data

The data to be used for this research was originally obtained for a study funded by the National Institute of Mental Health and was collected by Jacquelyn W. White and Paige Hall Smith (2004) in their study entitled *A Longitudinal Perspective on Physical and Sexual Intimate Partner Violence Against Women*. The purpose of White and Hall's (2004) study was to look at the extent of and the factors involved in the physical and sexual victimization of college students. White and Hall's (2004) sample consisted of two cohorts, both male and female, from a southeastern state university in the United States. Two separate incoming undergraduate classes (new students in 1990 and 1991) determined the cohorts. A convenience sample of both male and female college students, from the medium sized state university, were surveyed during their new student orientation or by phone calls placed to those students who did not attend. A follow-up survey was administered in the spring of the same school year given to the same class from the new student orientation. A total of 1,580 females and 851 males were included in the study (White & Smith, 2004).

A five year study, the data were collected at five separate waves (Fall 1990/1991, Spring 1991/1992, Spring 1992/1993, Spring 1993/1994, Spring 1994/1995). The first cohort was initially surveyed in the Fall of 1990 then again in the Springs of 1991, 1992, 1993, and 1994, while the second cohort was first administered the survey in the Fall of 1991 and then re-administered the survey in the Springs of 1992, 1993, 1994, and 1995. The students were repeatedly surveyed at the ages of 18 (initial administration), 19, 20, 21, and 22 respectively (White & Smith, 2004). At Wave I, a total of 1,572 female and 514 male college students were surveyed. Seven hundred and twenty five female and 489 male college students were assessed at Wave II. Wave III participants included 1,180 female and 278 male college students. In Wave IV, 953 college females and 301 college males completed the survey. Finally, 746 college females and 142 college males were assessed in Wave V. Longitudinal studies include data from multiple time periods rather than just one single collection of data. This type of study is more effective in establishing causality (Lieberson, 1985). Since the data being used in the current study is longitudinal, time order is easier to establish. It also allows for victimizations across waves to be examined, thus exposing incidents of revictimization.

The students were asked questions regarding social experiences, physical and sexual dating violence, and multiple types of physical or sexual victimization. Individual characteristics were also assessed along with lifestyle choices and routines (White & Smith, 2004).In particular, key variables collected in this data set were personality characteristics pertaining to depression, self-worth and self-image, and anxiety. Drug and alcohol use were also reported. Intimate partner relationships, types of sexual

victimization, the conditions and environment where the victimization occurred, childhood sexual victimization, and perspectives of the same and opposite sex were also measured. Different risky lifestyle behaviors were assessed at each wave.

Sample

For the purposes of this thesis, only the female data are assessed. A total of 1,569 incoming state university college women were included in this sample. The sample for the current study consisted of two cohorts of women; one from 1990 (825 college women) and one from 1991 (744 college women) (White & Hall, 2004). Only wave I and II will be used for this study. This is done in order to provide the largest sample size as well as to avoid problems with sample attrition. Wave I, administered in the Fall of 1990 and Fall of 1991, of the analysis consists of 1,569 female participants, and wave II, administered in Spring 1991 and Spring 1992, is made up of 1,398 female participants all of whom completed the survey at Wave I. This sample consisted of incoming new students in 1990 and 1991. The college women were mostly White (74.3%, n= 1,142).

Plan of Analysis

A secondary data analysis is the foundation of the thesis. In regards to this study, risky behaviors, individual characteristics, and initial sexual victimizations will be measured at Wave I. Sexual revictimization is measured in several ways, which are detailed below. In short, any sexual revictimization experienced at Waves I and II is used, sexual revictimization from Wave I to Wave II is included, and a measure of sexual revictimization that examines childhood sexual assault and any sexual revictimization during Waves I and II is included. As such, the relationship between risk factors,

individual characteristics, and recurring sexual victimization can be examined. Specifically, the independent variables are examined for nonvictims, those who experienced a single sexual victimization, and those who experienced sexual revictimization to see if differences exist. Therefore, bivariate analyses were conducted. Since this is the first step towards identifying individual-level risk factors that may distinguish nonvictims, single sexual victims, and recurring sexual victims, this type of analysis is appropriate.

An analysis of variance (ANOVA) will be used as one of the statistical tests for this analysis. An ANOVA is used to compare the means of three or more groups. It determines whether the means are equal (Weinberg & Abramowitz, 2008). If the means are not equal, a Post Hoc test is run to show where there are differences in the means. In this analysis, the Tukey HSD served as the Post Hoc test. For the purposes of this analysis, the ANOVA was used to analyze the means of the self-control independent variables and the revictimization dependent variables. In this way, differences across nonvictims, single sexual victims, and sexual revictims in the independent variables can be examined.

A second statistical test was used in this analysis as well. Pearson's chi-square will be used to determine the probability of an independent measure and a dependent measure both occurring and if that occurrence is significant. Chi-square is used for nominal level variables (Weinberg & Abramowitz, 2008). For the purposes of this analysis, the chi-square test was conducted to analyze the percentages of the risky behavior (nominal level) independent measures across the revictimization dependent

measures. The demographic control variable of race and revictimization measures was also tested using the chi-square statistical test.

Measures

Independent Variables

In order to assess the independent variables pertaining to the individual characteristics, measures were created to reflect elements relevant to self-control as set forth by Gottfredson and Hirschi (1990). Each of the independent variables are measured at Wave I of the data.

Low Self-Control

Lack of future orientation. Lack of future orientation was measured by using three statements: “daily life interesting”, “future hopeful, promising”, and “I feel sure I can do most of the things I try”. In regard to the first two statements, participants were asked how they have been during the past month. Respondents were asked how much the third statement reflected what kind of person they thought they were. Items were measured on a scale of zero to five (0= no response, 1= not at all like me, 2= a little like me, 3= somewhat like me, 4= mostly like me, 5= very much like me). All three of these statements were recoded so that higher scores reflect more lack of future orientation. Responses to the statements were then added together to create the lack of future orientation scale. Cronbach’s alpha is .649 for this scale. The mean for lack of future orientation is 7.03 and can be found in Table 1.

Lack of empathy. To measure lack of empathy, one item was used. Respondents were asked how much they felt the following statement represented the person they think

they are: “I try to understand how other people are feeling”. A response set was provided (0= no response, 1= not at all like me, 2= a little like me, 3= somewhat like me, 4= mostly like me, 5= very much like me). Responses were recoded so that higher values reflect lack of understanding of others’ feelings. The mean for this variable is 1.66 and can be found in Table 1.

Self-centeredness. A self-centeredness variable was also included. “I am a self-centered person. I want things to go my way” was used to measure self-centeredness by participants. A response set was provided from which individuals were asked to indicate how much they considered this item to be the person they thought themselves to be in the past month (0= no response, 1= not at all like me, 2= a little like me, 3= somewhat like me, 4= mostly like me, 5= very much like me). The mean for self-centeredness is 2.05 and can be found in Table 1.

Lack of tolerance for frustration. The third element of self-control according to Gottfredson and Hirschi (1990) is tolerance for frustration. To measure lack of tolerance for frustration, one item is used. Respondents were asked to report how much the following statement represents them as a person in the past month: “I am a fussy person who is easily annoyed and irritated.” Participants were provided with a response set (0= no response, 1= not at all like me, 2= a little like me, 3= somewhat like me, 4= mostly like me, 5= not at all like me). Responses were recoded so that a greater lack of tolerance for frustration is reflected by higher scores. The mean for lack of tolerance for frustration is 2.14 and can be found in Table 1.

Lack of diligence. Lack of diligence is also indicative of low self-control. Study participants were asked how much the following statement applied to their thoughts of themselves in the past month: “I am able to do tough things by myself if I have to and I don’t need other people to help me or tell me what to do.” A response set was provided for the participants (0= no response, 1= not at all like me, 2= a little like me, 3= somewhat like me, 4= mostly like me, 5= very much like me). Item responses were recoded so that higher values reflect lack of diligence. The mean for this variable is 2.70 and can be found in Table 1.

Preference for physical rather than mental activity. To measure the fifth characteristic of self-control, a measure of preference for mental rather than physical activity was included. The statement from the data “I am a very forceful, ‘take charge’ kind of person” was used to measure preference for physical activity. Respondents were asked how much this statement described them as a person in the past month (0= no response, 1= not at all like me, 2= a little like me, 3= somewhat like me, 4= mostly like me, 5= very much like me). Higher scores reflect preference for physical activity rather than mental activity. The mean for this variable is 2.80 and can be found in Table 1.

Lack of risk avoidance. Lack of risk avoidance was also measured. Respondents were asked how the much the statement “I like to play things safe and not take chances” showed what kind of person they think they were in the past month (0= no response, 1= not at all like me, 2= a little like me, 3= somewhat like me, 4= mostly like me, 5= very much like me). It was recoded to display the lack of risk avoidance. Higher scores

showed a greater lack of risk avoidance by the respondent. The mean for lack of risk avoidance is 2.74 and can be found in Table 1.

Risky Behaviors

Measures were also created to analyze the risky behaviors respondents participated in during Wave I. Because alcohol and drug use is common among college students and has been shown to be related to sexual victimization, items used to measure alcohol and drug use are included (Koss & Dinero, 1989; Testa et al., 2000; Abbey et al., 2001).

Alcohol consumption. To measure alcohol use, respondents were asked "How often do you drink alcohol?" Responses ranged from 1= I never drink or have not drunk in the past school year, 2= I drink less than once a month but at least once in the past school year, 3= I drink one to three times a month, 4= I drink one to two times a week, to 5= I drink more than twice a week. This item was recoded to reflect whether the participant had ever drank (0= no, 1= yes). The percentage for alcohol consumption is 70.9% and can be found in Table 1.

Binge drinking. A measure of binge drinking was also used to measure risky behavior. Respondents were asked "In an average month, how many times do you have 5 or more drinks in a row?" Responses included 1= never, 2= one time, 3= two to five times, 4= six to nine times, to 5= ten or more times. Responses were recoded to reflect whether or not a respondent binge drank in an average month (0= no, 1= yes). The percentage of binge drinking is 36.1% and can be found in Table 1.

Marijuana use. The use of marijuana is also a risky behavior. Respondents were asked, “How often do you use marijuana?” in the past year. Individuals who had not used marijuana were originally coded as 1, individuals who had used marijuana less than once a month but at least once in the past year were coded as 2, those who had used marijuana one to three times a month were coded as 3, individuals who had used marijuana one to three times a week were coded as 4, and respondents who had used marijuana more than twice a week were coded as 5. Responses were then recoded to indicate whether respondents ever used marijuana (0=no, 1=yes). The percentage of marijuana use is 19.1% and can be found in Table 1.

Other drug use. Drug usage other than marijuana was also used to measure risky behavior. Respondents were asked “How often do you use drugs other than alcohol or marijuana (for example: cocaine, speed, etc.)?” Responses could range from 1 (never use other drugs in the past year) to 5 (use other drugs more than twice a week). Participant responses were recoded to reflect a yes (coded as 1) or no (coded as 0) answer to the item. The percentage of other drug use is 7.5% and can be found in Table 1.

Ever used drugs. The responses from both marijuana use and other drug use were combined to create one drug use variable. This variable reflects a yes (coded as 1) or no (coded as 0) response to drug use of any kind of drug. The percentage of ever used drugs is 19.9% and can be found in Table 1.

Relationship status. Current relationship status was used to measure the exposure to motivated offenders. In order to assess the current relationship status of the respondents, they were asked to respond to the statement: “Indicate your current

relationship status". Responses included single (1), engaged (2), married (3), and divorced/separated (4). Responses were then recoded to single (coded as 1) that includes single and divorced/separated and not single that includes engaged and married (coded as 0). The percentage of relationship status is 25.1% and can be found in Table 1.

Dependent Variables

Types of Revictimization

Sexual revictimization Across Waves I and II. Sexual revictimization from Wave I or Wave 2 was also used as a dependent variable. All of the reported revictims from the victim type variable were included in this variable. This means those respondents who reported at least one sexual victimization incident at Wave I were then combined with those who reported at least one sexual victimization incident at Wave II. At least one sexual victimization incident at both Waves I and II constituted revictimization across waves. Sexual victimization at both waves was coded as 2, while sexual victimization at only one wave was coded as 1, and no sexual victimization at all was coded as 0. The sample consisted of nonvictims (42.7%, n=592), single victims (14.9%, n= 207), and revictims (42.4%, n= 588) for this variable found in Table 2.

Sexual revictimization. Because college women are at risk of experiencing other forms of sexual victimization, a broad measure of sexual victimization was also included. Ten items pertaining to sexual victimization were used to measure revictimization across Waves I and II. Respondents were asked to answer how often each of the following have occurred from age fourteen to present: "Have you given in to sex play (fondling, kissing or petting but not intercourse) when you didn't want to because you were overwhelmed

by a male's continual arguments or pressure?", "Have you engaged in sex play (fondling, kissing or petting but not intercourse) when you didn't want to because a male used his position of authority (boss, teacher, camp counselor, supervisor) to make you?", "Have you engaged in sex play (fondling, kissing or petting but not intercourse) when you didn't want to because a male threatened to use some degree of physical force (twisting your arm, holding you down, etc.) to make you?", "Have you had a male attempt sexual intercourse (get on top of you, attempt to insert his penis) when you didn't want to by threatening or using some degree of force (twisting your arm, holding you down, etc.) but intercourse did not occur?", "Has a male ever deliberately given you alcohol or drugs and attempted to engage in sexual intercourse (get on top of you, attempt to insert his penis) when you didn't want to but intercourse did not occur?", "Have you given in to sexual intercourse when you didn't want to because you were overwhelmed by a male's continual arguments and pressure?", "Have you engaged in sexual intercourse when you didn't want to because a male used his position of authority (boss, teacher, camp counselor, supervisor) to make you?", "Has a male ever deliberately given you alcohol or drugs and engaged in sexual intercourse when you didn't want to?", "Have you engaged in sexual intercourse when you didn't want to because a male threatened or used some degree of physical force (twisting your arm, holding you down, etc.) to make you?", and "Have you ever been in a situation where you had sexual acts with a male such as anal or oral intercourse when you didn't want to because he used threats or physical force (twisting your arm, holding you down, etc.) to make you?" Responses to each item could be: 1= never, 2= one time, 3= two times, 4= three to five times, or 5= more than five

times. The items were recoded to reflect the type of victim as a nonvictim (never experienced a sexual victimization incident), single victim (experienced one sexual victimization incident), or revictim (experienced more than one sexual victimization incident). Victimizations reported in both Wave I and Wave II were combined to create this variable. The sample consisted of nonvictims (42.7%, n= 592), single victims (34.5%, n= 478), and revictims (22.8%, n=317) for this variable found in Table 3.

Rape revictimization across Waves I and II. Another variable was included to measure rape revictimization from Waves I or II. Instead of measuring any experience of rape revictimization in both Waves I and II, this measure only labels victims as recurring rape victims if they experienced rape in Wave I and rape in Wave II. Women could be categorized as nonvictims, never experienced a rape incident; single victims, experienced only one rape incident; or rape revictims, experienced more than one rape incident. The sample consisted of nonvictims (71.2%, n= 988), single victims (11.4%, n=158), and revictims (16.7%, n=232) for this variable found in Table 4.

Rape revictimization. Participants were asked to respond to five items involving multiple types of rape that they have experienced since the age of fourteen. Respondents were asked during Waves I and II “Have you given in to sexual intercourse when you didn’t want to because you were overwhelmed by a male’s continual arguments and pressure?”, “Have you engaged in sexual intercourse when you didn’t want to because a male used his position of authority (boss, teacher, camp counselor, supervisor) to make you?”, “Has a male ever deliberately given you alcohol or drugs and engaged in sexual intercourse when you didn’t want to?”, “Have you engaged in sexual intercourse when

you didn't want to because a male threatened or used some degree of physical force (twisting your arm, holding you down, etc.) to make you?", and "Have you ever been in a situation where you had sexual acts with a male such as anal or oral intercourse when you didn't want to because he used threats or physical force (twisting your arm, holding you down, etc.) to make you?" Possible responses included 1 (never), 2 (one time), 3 (two times), 4 (three to five times), and 5 (more than five times). Responses for each item were recoded to reflect whether or not a woman had experienced that particular experience. Those results were then combined in order to create the recurring rape variable. Individuals' rape experiences from Waves I and II were used to do so. Those individuals who had not experienced any rape incident were considered to be nonvictims. Those who had experienced only one rape across Waves I and II were considered to be single victims. Those respondents who had experienced more than one rape incident in Waves I and II were considered rape revictims. This measure then indicates rape victim status for respondents in Waves I and II. The sample consisted of nonvictims (71.2%, n=988), single victims (19.8%, n= 275), and revictims (8.3%, n= 115) for this variable found in Table 5.

Childhood sexual assault revictimization. Because research indicates that those sexually victimized in childhood are at risk of being sexually victimized as adults (Classen et al., 2005), a measure of sexual revictimization from childhood to early adulthood was included. Childhood sexual assault is defined as being sexually assaulted before the age of fourteen. Respondents were asked if "Another person showed his/her sex organs to you or asked you to show yours.", "A person fondled you in a sexual way

or touched your sex organs or asked you to touch their sex organs.", "A male attempted intercourse with you (but penetration did not occur).", and "A male had intercourse with you (penetration occurred; ejaculation not necessary)." Participants were asked how often the experiences happened to them before the age fourteen. If persons never had these experiences they were coded 1, those who had experienced this one time were coded 2, those who had experienced this more than once were coded 3, those who had experienced three to five were coded 4, and those who indicated they had experienced any of these acts more than five times were coded 5. The responses were recoded to indicate whether or not a person had experienced any childhood sexual victimization (0= no, 1= yes). It is important to note that this variable includes behaviors as a child, which could be classified as experimental behaviors rather than victimization. For example, touching between children, which is not considered a sexual victimization, could possibly be included in this variable in participants responses. The childhood sexual assault revictimizaiton variable represents childhood sexual victimization (a yes response) and any type of adult revictimization occurring in Waves I and/or II. Reported childhood sexual victimization was then combined with sexual victimizations that took place at Wave I. Responses for a childhood victimization and an adult victimization at Wave I were combined to create the childhood sexual assault revictimization variable. The responses were recoded so that nonvictim was coded as 0, single victim was coded as 1, and revictim was coded as 2. The sample consisted of nonvictims (30.6%, n= 411), single victims (40.6%, n=544), and revictims (28.8%, 386) for this variable found in Table 6.

Race. Race was used as a control variable. Respondents were asked "What is your race or ethnic background?" Responses included 1= White, Non-hispanic, 2= Black, Non-hispanic, 3= Hispanic, 4= Asian, or Pacific Islander, or 5= American Indian or Alaskan Native. This variable was then recoded to reflect nonwhite (coded as 0) and white (coded as 1).

Table 1. Characteristics of total sample in analysis

Sample Characteristic	**Mean (s.d.)**
Self-Control	
Lack of Future Orientation	7.03 (2.60)
Lack of Empathy	1.66 (.86)
Self-Centeredness	2.05 (1.05)
Lack of Tolerance for Frustration	2.14 (1.11)
Lack of Diligence	2.70 (1.19)
Preference for Mental Rather than Physical Activity	2.80 (1.08)
Lack of Risk Avoidance	2.74 (1.16)

Sample Characteristic	**%**
Risky Behavior	
Alcohol Consumption	70.9
Binge Drinking	36.1
Marijuana Use	19.1
Other Drug Use	7.5
Ever Used Drugs	19.9
Relationship Status	25.1
Race (white=1)	72.3

CHAPTER IV
Results

In the first step of the analyses, a bivariate analysis of the independent measures and the dependent measure of any sexual revictimization in Waves I or II was conducted. This dependent measure reflected those who reported any sexual victimization incident at either Wave I or Wave II. The results are shown in Table 2. First, ANOVA was run to test for differences in means for the three victim groups across the independent variables, and when the value of F was significant at .05, Tukey's HSD test was run to determine where the differences lie between groups. There were five self-control variables that showed significant differences between the victim groups. For nonvictims, the mean for lack of future orientation is 6.82 and for revictims it is 7.27. Self-centeredness was also found to be significantly different between nonvictims and revictims. For nonvictims, the mean of self-centeredness is 1.93 while the mean is 2.15 for revictims. The self-control variable of lack of tolerance for frustration was similarly found to be significant. Nonvictims have a mean of 1.99 for lack of tolerance for frustration and revictims have a mean of 2.25. A fourth self-control variable showed a significant difference between nonvictims and revictims. Nonvictims had a mean of 2.71 on the variable lack of preference for mental rather than physical activity and an average of 2.89 for revictims. Finally, lack of risk avoidance also showed a significant difference between nonvictims and revictims. For nonvictims, the mean is 2.85 and for revictims the mean is 2.63. Revictims, then, reported greater lack of future orientation, were more self-centered, had greater lack of tolerance for frustration, greater preference for physical

rather than mental activity, nonvictims. Lack of risk avoidance was found to be higher among nonvictims than revictims.

Using the chi-square test of correlations at .05 level of significance, five independent variables for risky behavior showed significant relationships across victim types. Alcohol consumption was found to have a significant relationship with victim type. Fifteen percent of persons who consumed alcohol were single victims, while 48.1 percent of persons who consumed alcohol were revictims. The results for binge drinking showed similar findings. Although only 13.0 percent of binge drinkers in an average month were single victims, 57.3 percent of binge drinkers were revictims. Another variable, marijuana use, was found to have a significant relationship with victim type. Of those respondents who reported using marijuana, 12.8 percent were single victims, while 65.1 percent were revictims. A fourth risky behavior, other drug use, was found to be significantly related to victim type. Only fourteen percent of persons who had used other drugs were nonvictims, but 74.0 percent of people who reported using other drugs were revictims. The fifth and final risky behavior variable that was found to have a significant relationship with victim type was ever used drugs. Although 12.6 percent of those who ever used drugs were single victims, 65.1 percent of those who reported ever using drugs were revictims. Overall, the following risky behavior variables are related to victim type: alcohol consumption, binge drinking, marijuana use, other drug use, and ever used drugs.

Table 2. Bivariate analyses of Any Sexual Revictimization at Wave I or Wave II

	Nonvictim (n=592)	**Single Victim (n=207)**	**Revictim (n=588)**	**F**
Sample Characteristic	Mean (s.d.)	Mean (s.d.)	Mean (s.d.)	
Self-Control				
Lack of Future Orientation* [a]	6.82 (2.50)	6.87 (2.71)	7.27 (2.62)	4.88
Lack of Empathy	1.63 (.85)	1.66 (.84)	1.67 (.86)	.31
Self-Centeredness*[a]	1.93 (.93)	2.03 (1.05)	2.15 (1.11)	6.48
Lack of Tolerance for Frustration* [a]	1.99 (.99)	2.07 (1.09)	2.25 (1.15)	8.19
Lack of Diligence	2.76 (1.19)	2.68 (1.16)	2.69 (1.21)	.71
Preference for Physical Rather than Mental Activity* [a]	2.71 (1.06)	2.74 (1.02)	2.89 (1.09)	4.52
Lack of Risk Avoidance* [a]	2.85 (1.17)	2.77 (1.12)	2.63 (1.13)	5.16
	Nonvictim	**Single Victim**	**Revictim**	χ^2
Sample Characteristic	%	%	%	
Risky Behavior				
Alcohol Consumption*	36.9	15.0	48.1	56.08
Binge Drinking*	29.8	13.0	57.3	73.55
Marijuana Use*	22.1	12.8	65.1	72.27
Other Drug Use*	14.0	12.0	74.0	47.30
Ever Used Drugs*	22.3	12.6	65.1	75.37
Relationship Status	40.4	14.0	45.5	1.87
Race (white=1)	42.1	15.4	42.4	1.11

*p<.05

[a] Nonvictims significantly differ from revictims.

[b] Nonvictims significantly differ from single victims.

Another bivariate analysis of the independent measures and the dependent measure of sexual revictimization was run. This dependent variable reflects sexual revictimization reported from Wave I to Wave II. The results are shown in Table 3. An ANOVA was run and when the value of F was significant at .05, Tukey's HSD test was run to determine where the differences lie. There were five self-control variables that showed significant differences across victim groups. For nonvictims, the mean for lack of future orientation is 6.82 and for revictims it is 7.27. Self-centeredness was also found to be significantly different for nonvictims and revictims. For nonvictims, the mean for self-centeredness is 1.93 while the mean is 2.21 for revictims. The self-control variable of lack of tolerance for frustration was similarly found to be significant. Nonvictims have a mean of 1.99 for lack of tolerance for frustration and revictims have a mean of 2.33 for lack of tolerance for frustration. Nonvictims and victims are also different in terms of lack of preference for mental rather than physical activity. The mean for nonvictims is 2.71 compared to 2.86 for single victims. Finally, lack of risk avoidance also showed a significant difference between nonvictims and revictims. For nonvictims, the mean for lack of risk avoidance is 2.85 and for revictims the mean is 2.58. The results above indicate that revictims have greater levels of lack of future orientation, self-centeredness, and lack of tolerance for frustration than nonvictims. Meanwhile, single victims showed a greater lack of preference for mental rather than physical activity compared to nonvictims. Additionally, nonvictims had a greater lack of risk avoidance than revictims.

Using chi-square test at a .05 level of significance, five independent variables for risky behavior showed significant correlations among the victim types. Alcohol

consumption was found to have a significant relationship with victim type. Of those who reported drinking, 37.2 percent were single victims, while 25.9 percent were revictims. Binge drinking had a significant relationship with victim types. Nonvictims made up 29.8 percent of those who reported binge drinking and single victims made up 39.1 percent of binge drinkers. Another variable, marijuana use, was found to have a significant relationship with victim types. Approximately, 22 percent of marijuana users were nonvictims, while 44.6 percent were single victims. A fourth risky behavior, other drug use, was found to have significant relationship with victim type. Fourteen percent of persons who reported using other drugs were nonvictims, while forty-five percent were single victims. The fifth and final risky behavior variable that was found to have a significant relationship with victim type was ever used drugs. Of those who ever used drugs, 37.2 percent were single victims and 25.9 percent were revictims. Overall, revictims generally expressed higher percentages of risky behaviors then nonvictims in this model. The following risky behavior variables are related to victim type alcohol consumption, binge drinking, marijuana use, other drug use, and ever used drugs.

Table 3. Bivariate analyses of Sexual Revictimization from Wave I to Wave II

Sample Characteristic	**Nonvictim (n=592)** Mean (s.d.)	**Single Victim (n=478)** Mean (s.d.)	**Revictim (n=317)** Mean (s.d.)	**F**
Self-Control				
Lack of Future Orientation* [a]	6.82 (2.50)	7.10 (2.67)	7.27 (2.61)	3.44
Lack of Empathy	1.63 (.85)	1.66 (.85)	1.69 (.88)	.40
Self-Centeredness*[a]	1.93 (.93)	2.06 (1.06)	2.21 (1.15)	7.31
Lack of Tolerance for Frustration* [a]	1.99 (.99)	2.12 (1.11)	2.33 (1.17)	10.05
Lack of Diligence	2.76 (1.19)	2.68 (1.18)	2.69 (1.22)	.72
Preference for Physical Rather than Mental Activity* [b]	2.71 (1.06)	2.86 (1.04)	2.84 (1.12)	3.06
Lack of Risk Avoidance* [a]	2.85 (1.17)	2.73 (1.12)	2.58 (1.13)	5.87

Sample Characteristic	**Nonvictim** %	**Single Victim** %	**Revictim** %	χ^2
Risky Behavior				
Alcohol Consumption*	36.9	37.2	25.9	50.12
Binge Drinking*	29.8	39.1	31.2	58.72
Marijuana Use*	22.1	44.6	33.3	56.45
Other Drug Use*	14.0	45.0	41.0	39.95
Ever Used Drugs*	36.9	37.2	25.9	50.12
Relationship Status	40.4	36.5	23.0	1.12
Race (white=1)	42.1	34.9	22.9	.48

*p<.05
[a] Nonvictims significantly differ from revictims.
[b] Nonvictims significantly differ from single victims.

Next, a bivariate analysis was run on the independent measures and the dependent measure that captures any rape revictimization at Wave I or Wave II. Participants who reported experiencing rape in Wave I or Wave II are revictims in this measure. The results are shown in Table 4. First, ANOVA was run and when the value of F was significant at .05, Tukey's HSD test was run to determine where the differences lie. There were two self-control variables that showed significant differences between the victim groups. For nonvictims, the mean for preference for physical rather than mental activity is 2.73 and for single victims it is 2.97. Lack of risk avoidance was also found to have significant differences between nonvictims and revictims. For nonvictims, the mean for lack of risk avoidance is 2.82, while the mean is 2.51 for revictims. Nonvictims showed a greater lack of risk avoidance than revictims. Single victims had a higher level of preference for physical rather than mental activity than nonvictims.

Five independent variables for risky behavior showed a significant relationshipwith the victim types by use of the chi-square test with a significance level of .05. Alcohol consumption was found to have a significant relationship with victim type. Thirteen percent of those who consumed alcohol were single victims compared to 66.6 percent who were nonvictims. Binge drinking had similar findings. Only fifteen percent of those who reported binge drinking were single victims, while 59.3 percent of binge drinkers were nonvictims. Another variable, marijuana use, was found to have a significant relationship with victim types. Of those who reported using marijuana, 48.8 percent were nonvictims and 17.4 percent were single victims. A fourth risky behavior, other drug use, was found to have significant relationship with victim type. Forty-six

percent of other drug users were revictims, while fifteen percent were single victims. The fifth and final risky behavior variable that was found to have a significant relationship with victim types was ever used drugs. Nonvictims made up 48.7 percent of those who reported ever using drugs compared to single victims who made up 17.1 percent of those who reported ever using drugs. Generally, substance use was shown to have higher percentages among nonvictims then revictims in this model. The following risky behavior variables are related to victim type alcohol consumption, binge drinking, marijuana use, other drug use, and ever used drugs.

Table 4. Bivariate analyses of Any Rape Revitimization at Wave I or Wave II

	Nonvictim (n=988)	**Single Victim (n=158)**	**Revictim (n=232)**	**F**
Sample Characteristic	Mean (s.d.)	Mean (s.d.)	Mean (s.d.)	
Self-Control				
Lack of Future Orientation	6.97 (2.57)	6.97 (2.59)	7.28 (2.66)	1.40
Lack of Empathy	1.66 (.86)	1.61 (.76)	1.65 (.89)	.22
Self-Centeredness	2.02 (1.01)	2.11 (1.15)	2.08 (1.05)	.84
Lack of Tolerance for Frustration	2.08 (1.06)	2.15 (1.09)	2.22 (1.19)	1.60
Lack of Diligence	2.73 (1.19)	2.63 (1.18)	2.72 (1.22)	.56
Preference for Physical Rather than Mental Activity*[b]	2.73 (1.06)	2.97 (1.12)	2.90 (1.07)	4.94
Lack of Risk Avoidance*[a]	2.82 (1.15)	2.63 (1.13)	2.51 (1.12)	7.96

Sample Characteristic	**Nonvictim**	**Single Victim**	**Revictim**	χ^2
Risky Behavior	%	%	%	
Alcohol Consumption*	66.6	13.0	20.5	50.31
Binge Drinking*	59.3	15.0	25.7	62.11
Marijuana Use*	48.8	17.4	33.7	88.32
Other Drug Use*	39.0	15.0	46.0	72.71
Ever Used Drugs*	48.7	17.1	34.2	95.48
Relationship Status	69.9	12.6	17.4	1.04
Race (white=1)	71.5	11.2	17.3	.74

*p<.05
[a] Nonvictims significantly differ from revictims.
[b] Nonvictims significantly differ from single victims.

An additional bivariate analysis of the independent measures and the dependent measure rape revictimization from Wave I to Wave II was conducted. This dependent variable consisted of participants who reported rape revictimiziton from Wave I to Wave II. The results are shown in Table 5. An ANOVA was run and when the value of F was significant at .05, Tukey's HSD test was run to determine where the differences lie. There were two self-control variables that showed significant differences between the victim groups. For nonvictims, the mean for lack of preference for mental rather than physical activity is 2.73 and for single victims it is 2.89. Lack of risk avoidance was also found to have significant differences between both nonvictims and revictims as well as nonvictims and single victims. For nonvictims, the mean is 2.82, it is 2.63 for single victims, and is 2.39 for revictims in regards to lack of risk avoidance. These results indicate that single victims have more lack of preference for mental rather than physical activity than nonvictims. Lack of risk avoidance is found to be higher in nonvictims than in single victims and revictims.

Using chi-square test at a .05 level of significance, five independent variables for risky behavior were significantly related to victim types. Alcohol consumption was found to have a significant relationship with victim type. Almost ten percent of alcohol consumers were revictims, while 66.6 percent were nonvictims. Binge drinking had similar findings. Of those persons who binge drank, 59.3 percent were nonvictims and 12.6 percent were revictims. Another variable, marijuana use, was found to have a significant relationship with victim types. About fifty percent of marijuana users were nonvictims, while 17.4 percent of marijuana users were revictims. A fourth risky

behavior, other drug use, was found to have significant relationship with victim type. Thirty-nine percent of other drug users were nonvictims compared to twenty-six percent of other drug users who were revictims. The fifth and final risky behavior variable that was found to have a significant relationship with victim types was ever used drugs. Nonvictims made up 48.7 percent of those who ever used drugs, while 17.8 percent of those who eve used drugs were revictims. The following risky behavior variables are related to victim type: alcohol consumption, binge drinking, marijuana use, other drug use, and ever used drugs.

Table 5. Bivariate analyses of Rape Revictimization

	Nonvictim (n=998)	**Single Victim (n=275)**	**Revictim (n=115)**	**F**
Sample Characteristic	Mean (s.d.)	Mean (s.d.)	Mean (s.d.)	
Self-Control				
Lack of Future Orientation	6.97 (2.57)	7.10 (2.61)	7.29 (2.71)	.90
Lack of Empathy	1.66 (.86)	1.61 (.80)	1.69 (.93)	.43
Self-Centeredness	2.02 (1.01)	2.09 (1.13)	2.10 (.99)	.80
Lack of Tolerance for Frustration	2.08 (1.06)	2.19 (1.16)	2.19 (1.14)	1.42
Lack of Diligence	2.73 (1.19)	2.64 (1.20)	2.78 (1.21)	.91
Preference for Physical Rather than Mental Activity*[b]	2.73 (1.06)	2.95 (1.10)	2.89 (1.07)	4.87
Lack of Risk Avoidance*[a b]	2.82 (1.15)	2.63 (1.13)	2.39 (1.08)	9.18
	Nonvictim	**Single Victim**	**Revictim**	χ^2
Sample Characteristic	%	%	%	
Risky Behavior				
Alcohol Consumption*	66.6	23.7	9.7	48.33
Binge Drinking*	59.3	28.1	12.6	59.99
Marijuana Use*	48.8	33.7	17.4	86.29
Other Drug Use*	39.0	35.0	26.0	69.66
Ever Used Drugs*	48.7	33.5	17.8	93.02
Relationship Status	69.9	22.5	7.6	2.23
Race (white=1)	71.5	19.9	8.6	.37

*p<.05
[a] Nonvictims significantly differ from revictims.
[b] Nonvictims significantly differ from single victims.

Finally, a bivariate analysis of the independent measures and the dependent measure of childhood sexual assault revictimization was conducted. Participants who reported CSA and adult victimization at Wave I were considered revictims for this analysis. An ANOVA was run and when the value of F was significant at .05 level, Tukey's HSD test was run to determine where the differences lie. The results are shown in Table 6. There were three self-control variables that showed significant differences between the nonvictim and revictim groups. For nonvictims, the mean for lack of future orientation is 6.78 and for revictims it is 7.16. Self-centeredness was also found to be significantly different for nonvictims and revictims. For nonvictims, the mean of self-centeredness is 1.91, while the mean is 2.20 for revictims. The self-control variable of lack of tolerance for frustration was similarly found to be significant with revictims having, on average, a greater lack of tolerance for frustration. For lack of tolerance, nonvictims have a mean of 1.97 and revictims have a mean of 2.25. The results above indicate that revictims reported higher levels of lack of future orientation, self-centeredness, and lack of tolerance on average.

Five risky behavior variables are related to victim type when using chi-square test at a significance level of .05. Alcohol consumption was found to have a significant relationship with victim type. Although 25.2 percent of persons who reported consuming alcohol were nonvictims, 42.8 percent of those who drank alcohol were single victims. Binge drinking showed similar findings. Eighteen percent of binge drinkers were nonvictims, while 46.7 percent of persons who reported binge drinking were single victims. Another variable, marijuana use, was found to have a significant relationship

with victim type. Thirteen percent of marijuana users were nonvictims, while 43.3 percent and 43.7 percent of marijuana users were single victims and revictims respectively. A fourth risky behavior, other drug use, was found to have significant relationship with victim type. Of those persons who reported other drug use, 8.2 percent were nonvictims, 44.3 percent were single victims, and 47.4 percent were revictims. The fifth and final risky behavior variable that was found to have a significant relationship with victim type was ever used drugs. Forty-three percent of those who reported ever using drugs were revictims, while 13.2 percent of persons who ever used drugs were nonvictims, and 43.8 percent of persons who ever used drugs were single victims. Generally, substance use was found to be higher among revictims then nonvictims in this model. The following risky behavior variables are related to victim type alcohol consumption, binge drinking, marijuana use, other drug use, and ever used drugs.

Table 6. Bivariate analyses of Childhood Sexual Assault Revictimization

	Nonvictim (n=411)	**Single Victim (n=544)**	**Revictim (n=386)**	**F**
Sample Characteristic	Mean (s.d.)	Mean (s.d.)	Mean (s.d.)	
Self-Control				
Lack of Future Orientation* [a]	6.78 (2.48)	7.04 (2.61)	7.16 (2.66)	2.34
Lack of Empathy	1.65 (.85)	1.62 (.83)	1.70 (.89)	.89
Self-Centeredness* [a]	1.91 (.88)	2.05 (1.10)	2.20 (1.09)	8.08
Lack of Tolerance for Frustration* [a]	1.97 (.97)	2.13 (1.07)	2.25 (1.19)	6.57
Lack of Diligence	2.75 (1.19)	2.71 (1.19)	2.67 (1.20)	.40
Preference for Physical Rather than Mental Activity	2.71 (1.07)	2.81 (1.06)	2.87 (1.09)	2.19
Lack of Risk Avoidance	2.80 (1.15)	2.75 (1.14)	2.66 (1.14)	1.59
	Nonvictim	**Single Victim**	**Revictim**	χ^2
Sample Characteristic	%	%	%	
Risky Behavior				
Alcohol Consumption*	25.2	42.8	32.0	48.33
Binge Drinking*	18.0	46.4	35.6	58.95
Marijuana Use*	13.0	43.3	43.7	58.05
Other Drug Use*	8.2	44.3	47.4	30.64
Ever Used Drugs*	13.2	43.8	43.0	58.24
Relationship Status	30.3	41.8	28.0	.33
Race (white=1)	31.9	39.8	28.3	3.14

*p<.05
[a] Nonvictims significantly differ from revictims.
[b] Nonvictims significantly differ from single victims.

CHAPTER V
Discussion

There are three major findings that can be gleaned from this study. The first is that there is a group of college women who are sexually revictimized. Approximately 23 percent of college women reported being sexually revictimized from Wave I to Wave II, about eight percent were revictims of rape from Wave I to Wave II, and approximately 29 percent were sexually victimized as a child then revictimized as an adult. These findings suggest that sexual revictimization occurs across time from childhood to adulthood. Respondents also reported sexual revictimization while in college.

Another important outcome of this study was that there is evidence that levels of self-control differ for nonvictims, single victims, and revictims. The self-control elements that seem to matter most were lack of future orientation, self-centeredness, lack of tolerance for frustration, preference for physical rather than mental activity, and lack of risk avoidance. While four of these significant variables showed differences of self-control lie mostly between nonvictims and revictims, with a few differences between nonvictims and single victims. Lack of risk avoidance was shown to have the opposite of what was expected. This significant variable showed that lack of risk avoidance was lowered at each level of victim type from nonvictims to single victims to revictims. However, it appears that self-control matters in regards to some outcomes more than others. While all of these self-control measures were found to be significant in the sexual revictimization models, only a few of them were found to be significantly different in the rape revictimization and childhood sexual assault revictimization models. Preference for

physical rather than mental activity and lack of risk avoidance were the only self-control measures found to be significant in the rape revictimization models. This could be the result of the decline in sample size of revictims in the rape revictimization and childhood sexual assault revictimization models or because the processes that predict any sexual revictimization while in college are different. Additionally, these results could be due to the possibility that self-control factors may not reflect the same risk among rape revictims or childhood sexual assault revictims because other unique predictors of rape may be causing these specific types revictimization. It could be that self-control becomes more relevant when sexual revictimization is looked at broadly, including all types, instead of considering different types of sexual revictimization individually (Hines, 2007). When examining sexual revictimization by way of different types than perhaps other predictors are more relevant than the self-control measures. Lack of future orientation, self-centeredness, and lack of tolerance for frustration were the self-control measures found to be significant in the childhood sexual revictimization models.

A third major finding was that risky behaviors are related to sexual revictimization. Alcohol and drug use were generally found to be greater in single victims and revictims than nonvictims. This means that college women who reported consuming alcohol were sexually victimized or sexually revictimized more than those who were nonvictims. Meanwhile, those who reported substance use were more likely to be nonvictims than single victims or revictims. Additionally, of those who reported alcohol and drug use, more of them were single childhood sexual assault victims or childhood sexual assault revictims rather than nonvictims.

Other patterns were apparent throughout the findings. The majority of the self-control measures were different between nonvictims and revictims. Additionally, the self-control measures of lack of empathy and lack of diligence were not found to be significant in any model. The risky behavior measure of relationship status was also not found to be related to the dependent variables. Similarly, race was not found to be significantly related to any outcome.

Taken together, these findings suggest that self-control does matter in sexual revictimization. It only seems, however, to be relevant in regards to some of the elements of self-control and not others. One reason for this is because those elements of self-control that were found to be significant may be better measures of self-control than the others that were not significant. Lack of empathy and lack of diligence seem to be weak measures of self-control in this study.

The finding that some elements of self-control are related to revictimization is in line with Schreck et al.'s (2006) findings that self-control is related to victimization. One significant low self-control element, lack of future orientation is associated with not valuing the future consequences of a person's actions. This usually results in lifestyles that compromise the person's safety. When safety is compromised, it makes the person vulnerable due to lowered inhibitions and there is an increased risk of revictimization. This element of low self-control is closely related to an increased risk of sexual revictimization because college women who do not consider the future consequences of their actions have a greater chance of being sexually revictimized. Drinking, using drugs, and partying have consequences of lowered inhibitions of judgment (Schreck, 1999) and

safety, therefore sexual revictimization may occur. Lack of tolerance for frustration is another low self-control element that was significant. This element is tied to aggression. Those who display aggression more quickly find themselves in confrontations, which oftentimes lead to endangering themselves. Sexual revictimization is related here because if a college female continually puts herself in harm's way and actively displays her aggression in these situations, she is more likely to be victimized. The more attention drawn to herself may also draw the attention of possible sexual offenders as well by highlighting her weakness of being easily frustrated. Preference for physical rather than mental activity, a low self-control element, was also found to be significant. An explanation for this is when a person becomes defensive or belligerent during an altercation. Those who act out and fight back are more prone to victimization. If this continues to happen, revictimization is likely to occur. If a female college student continually acts out in an altercation with a boyfriend, for example, then she will have a greater risk of being sexually victimized and subsequently sexually revictimized. An increase in fighting with an intimate partner may bring about aggression in intimate situations and result in sexual revictimization. Finally, lack of risk avoidance was also found to be a significant element of low self-control. This element can be expressed as thrill-seeking behaviors being sought after. This type of behavior puts a person in dangerous environments and increases their likelihood of becoming a victim. This variable was found to be the opposite in regards to the other significant low self-control elements. Those who were not victimized were found to have the highest lack of risk avoidance, with single victims following them, and finally revictims displaying the

lowest lack of risk avoidance. A lack of risk avoidance found in a college female can mean, for example, that she frequents bars, nightclubs, and parties where drug use and alcohol consumption are prevalent. Sexual revictimization is likely because alcohol and drug use increase a woman's risk of being a victim (Schreck, 1999; Abbey et al., 2001). Although the lack of risk avoidance variable is contrary to Schreck's (1999) research, it is an important finding. It could be that women who have been single sexual victims decrease their risk taking and subsequently sexual revictims decrease their risk taking even more so due to their victimizations. It could also be that the lack of risk avoidance measure is a broad measure and may not be specific to sexual victimization. This variable may apply to the respondent's life in general in regards to playing things safe.

Together, these findings, with the exception of the lack of risk avoidance findings, generally reflect those of Schreck, Stewart, and Fisher (2006); if those with low self-control who have been victimized continue to have low levels of self-control, they may be at risk of sexual revictimization. This exemplifies risk heterogeneity. This perspective suggests that some people are more likely to be sexually revictimized based on personal characteristics that if left unchanged will keep a person at risk, even after an initial victimization. Low self-control falls in line with this perspective.

Schreck, Stewart, and Fisher (2006) expressed the same concern with risky behaviors. If participation in risky behaviors that put a person at risk for victimization go unchanged, then he or she is likely to be revictimized. Alcohol and drug use were used as measures of risky behavior in this study. Overall, participants who reported drinking alcohol and using drugs were more likely to be single victims and revictims than

nonvictims. For example, in the childhood sexual assault revictimization model, 74.0 percent and 12.0 percent of other drug users were revictims and single victims respectively compared to 14.0 percent of other drug users who were nonvictims.

These findings are in line with the research that shows a relationship between alcohol abuse and increased sexual victimization (Koss & Dinero, 1989; Testa et al. (2000); Abbey et al., 2001). Women who drink lower their inhibitions and offenders find them more easily persuaded (Schreck, 1999). Substance use may be related to initial sexual victimization and subsequent sexual revictimization. If risky behaviors such as alcohol consumption and drug use are continued after the initial victimization occurs then it could be that what put the woman at risk in the first place will continue to put her at risk. Additionally, Ellis, Atkeson, and Calhoun (1982) and Gidycz et al. (1995) found that alcohol use promotes revictimization as well. In cases where substance use percentages are higher among single victims compared to revictims, it is possible that those who reported substance use of any kind had not experienced a sexual revictimization yet. Another reason why alcohol and drug use are related to sexual revictimization is that persons may use alcohol and drugs in response to an initial sexual victimization perhaps as a coping mechanism. This is in line with a state dependence explanation. College women may resort to alcohol consumption as a way to block out the consequences and memories of the initial sexual victimization.

It was expected the there would be a difference found between single victims and revictims. Instead, the self-control measures seemed to show differences primarily between nonvictims and revictims. This could be because nonvictims and revictims are

the furthest apart on the continuum of victims, and therefore they would have the most differences. However, this does not explain why there were not more differences found between single victims and revictims in the self-control measures. It could be that other individual characteristics differentiate single victims from revictims. Potential individual characteristics differences could be depression and PTSD because of their existing link with sexual victimization (Filipas & Ullman, 2006; Gidycz et al., 1993; Messman-Moore et al., 2000). Greater levels of depression and PTSD could potentially put women at a greater risk of being sexually revictimized if these characteristics are not dealt with properly through practices such as counseling or medication.

Risky behaviors were found to occur among nonvictim, single victim, and revictim. There was particularly not a lot of difference in percentages between single victims and revictims. The majority of the findings suggested nonvictims and revictims showed the most differences in substance use. It could be that the first victimization was more due to chance than brought on by a risky behavior. This study does not have the full measure of L/RAT, only the element of substance use, and therefore conclusions based on L/RAT are beyond the scope of this thesis. If measures of the full L/RAT (proximity to motivated offenders, exposure to crime, target suitability, and capable guardianship) were used rather than just substance use, more differences may be apparent between single victims and revictims.

Jointly low self-control and risky behavior may be related to sexual revictimization for additional reasons. The ability to assess risk is a key factor in explaining why sexual revictimization occurs. Rozee and Koss (2001) found that in order

to reduce risk, women need to know how to assess, acknowledge, and act in risky environments. However, women who have been sexually victimized do not easily recognize risk (Rozee & Koss, 2001). If these women also have low self-control, even if they recognize risk, they may not care to avoid it. Those with low self-control are thrill-seeking individuals and risk is increased in persons who engage in thrill-seeking behaviors. Extending this concept, women who are revictimized oftentimes stay in risky situations that put them in danger past the point of escaping from them (Messman-Moore & Brown, 2006). This means that women, who are revictims, may not recognize the risk or care about the risk quickly enough to avoid potential revictimization situations.

A few policy implications could arise from these findings. Risk-avoidance training is shown to have an impact on alleviating sexual revictimization (Fisher, Daigle, Cullen, & Santana, 2007). With this type of effectiveness, more self-protective training and risk avoidance strategies should be provided to college women. Drug and alcohol education and potentially treatment are also necessary for college females. Substance use was significantly correlated with all of the sexual revictimization dependent variables, therefore the use of alcohol and drugs appears to be related to sexual revictimization. It could be that those who use and abuse substances are more likely to be sexually revictimized or that persons who experience a sexual victimization turn to alcohol and drugs to cope. Either way, the problematic use of alcohol and drugs cannot be ignored. Finally, aggression and frustration mediation, such as learning to use debate tactics rather than physical violence, could have a positive effect on raising certain elements of self-control. If college women are instructed and educated on how to manage and express

their issues appropriately this may help not only their self-control, but to prevent their actions from escalating a situation into a sexual victimization. By learning effective resistance strategies when an incident has been initiated could further protect a woman from becoming a victim or revictim of sexual violence.

Limitations

As with all research, there were limitations to this study. First, the sample consisted only of college women. While these women were the focus of this thesis, the findings may not be able to be generalized to all women. A second limitation concerns the sample. There were additional risky behaviors measured at Waves III, IV, and V such as gambling, hitchhiking, and being alone with strangers. Unfortunately, these risky behavior measures could not be used due to the considerable decrease in sample size at these later waves from 1,572 college females in Wave I to 1,180 in Wave III to 953 in Wave IV to 746 in Wave V. In regards to the survey itself, a third limitation was the lack of consistency across waves. Questions were changed across waves, which did not allow for comparison of responses at additional waves. For example, as mentioned above, additional measures of risky behavior were found at later waves, but not in Waves I and II. Fourth, there were not measures of self-control to fully capture the complex nature of self-control. The elements used for self-control were selected to capture each element of self-control as best as possible. It is possible that the statements used did not actually measure the elements of self-control that they were supposed to measure. In addition, the individual variables used to measure the elements of self-control were not able to be scaled since reliability tests showed they were not measuring a single construct. Because

of this, a self-control scale measure as an index could not be created as it has been in previous research. This means that findings in this study could not be compared to findings in previous studies where a self-control index was used.

Two other limitations concern the bivariate analyses conducted for this study. First, bivariate analyses are not able to establish causal order. Not being able to do so makes it difficult to know for sure which variable is dependent on the value of another variable. Second, single victims and revictims may not be truly independent in that the processes that promote sexual victimization also promote sexual revictimization. An ANOVA test assumes that there is independence among groups (Weinberg & Abramowitz, 2008). If single victims and revictims are not truly independent, then these types of analyses would not be able to find differences between the two groups. If independent groups are not apparent using this statistical analysis would be problematic. The ANOVA would be the incorrect test to be used. A more sophisticated analysis that can account for that possibility should be used in the future.

Future Research

Due to the limitations of this study, there are multiple recommendations for future research in this field of study. As mentioned, the self-control measures could be improved. Better measures of self-control should be used in future research that fully captures the six elements that characterize low self-control. For example, one of the most commonly used measures uses Grasmick, Tittle, Bursik, and Arneklev's (1993) measure that includes 23 items. It would also be valuable to have measures of each element of self-control that stick together so that a self-control scale could be created. Therefore, a

self-control scale could be used rather than individual measures of the self-control elements, to examine if low self-control generally predicts sexual revictimization.

Additional risky behavior measures should be explored as well. This study focused mainly on alcohol and substance use as risky behaviors. While these are relevant to college women, other risky behavior measures should also be considered to more fully account for the propositions set forth in L/RAT. These could be behaviors such as partying and sexual promiscuity. Additionally, lack of capable guardianship and exposure to crime and motivated offenders should be examined in the analyses.

Another recommendation for future research is to examine individual characteristics other than self-control. Depression is an individual characteristic that may help to explain sexual revictimization. Depression has been linked to victimization and may be subsequently linked to revictimization (Messman-Moore et al., 2000). It seems as though individual characteristics do play a role in sexual revictimization, therefore additional characteristics should be considered, especially since factors used in this study did not distinguish single victims from revictims.

Future studies should also strive to explain how risky behavior might be related to self-control. For example, low self-control may not be directly related to sexual victimization but related through risky behavior. Those with low self-control engage in risky behavior and that is why they are revictimized. Moreover, risky behavior may encourage less self-control. In this way, risky behavior may impact self-control, which together may increase risk for sexual victimization and revictimization although this flexibility in self-control levels is contrary to the general theory of crime (Gottfredson &

Hirschi, 1990). Future research should establish causal order to examine the relationship between self-control, risky behavior, and sexual revictimization. Research has shown that those with low self-control may be less likely to change their behavior after an initial victimization causing revictimization to occur (Fisher et al., 2010; Schreck, 1999).

Finally, multivariate models should be used along with longitudinal data. As noted, bivariate analyses cannot establish causality. In future studies, multivariate models should be used in order to determine causality. Measures should also be used that examine changes in independent variables after victimization occurs to more fully understand why some college women experience one sexual victimization and others are sexually revictimized.

This is the first study linking self-control, risky behaviors, and sexual revictimization among college women. In this way, its results indicate that there is reason to believe that self-control and risky behaviors are linked to sexual revictimization. Future research should further delineate how these elements impact each other.

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