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# College Sexual Assault: Student Risk of Victimization Off-Campus

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College Sexual Assault: Student Risk of Victimization Off-Campus

A Thesis Presented

By

DANIELLE CHRISTENSON

Submitted to the College of Graduate Studies

Bridgewater State University

Bridgewater, Massachusetts

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Master of Science

In Criminal Justice

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College Sexual Assault: Student Risk of Victimization Off-Campus

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DANIELLE CHRISTENSON

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Approved as to style and content by:

Signature: \_\_\_\_\_  
Name, Chair (please print) Date

Signature: \_\_\_\_\_  
Name, Member (please print) Date

Signature: \_\_\_\_\_  
Name, Member (please print) Date

### Abstract

Although there is a plethora of research focusing on college sexual assault victimization and risk factors respectively, few studies have specifically examined the location of these incidents as a risk factor. Among the few studies examining sexual assault location, the researchers determined college students are more likely to be victimized off-campus<sup>1</sup>. Fisher, Cullen and Turner (2000) found that 66.3% of sexual assaults of college-aged females took place off-campus compared to 33.7% that occurred on-campus (Fisher et al., 2000). In a similar study, Nobles, Fox, Khey and Lizotte (2012) examined the role of location in college crime (including sexual assault). The researchers discovered very few crimes occurred on campus but many of these crimes were located very close to campus (Nobles et al., 2012) Based on these studies, the location of college sexual assault deserves attention. The purpose of this research is to examine whether the location of college sexual assault (on or off-campus) increases the risk for sexual assault victimization among college students. Specifically, using Lifestyle-Routine Activities Theory as a framework (Cohen, Kluegel, & Land, 1981), this research will analyze secondary data to determine whether female college students are more likely to be victimized off-campus.

Keywords: College Sexual Assault, Sexual Assault Risk Factors, Off-Campus Activities, College Sexual Assault Location, Lifestyle-Routine Activities Theory, Campus Sexual Assault

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<sup>1</sup> For the purposes of this research, off-campus will refer to property that is located close to campus but is not owned by a college or university. This property is frequented or inhabited by college students (Nobles, 2013).

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## **Chapter 1**

### **Introduction**

In April 2015, a Duke University student was raped at an off-campus fraternity recruitment party. The victim was allegedly drugged by a male student and taken to a house next door where she was sexually assaulted. The victim awoke the next day in a bed she did not recognize and in a shirt that was not hers. She had bruises and scrapes on her body (Chason, 2015).

Unfortunately, this scenario of sexual assault is far more common than the more high-profile incidents of sexual assault, which occur on a college campus (i.e. University of Connecticut hockey player's sexual assault and Columbia University student Emma Sulkowicz sexual assault) (Chason, 2015). The media's depiction of college sexual assault as a purely campus problem, off-campus sexual assault is often overlooked. It is the goal of this current study to shed light on this issue.

### **Prevalence and Context**

Sexual assault is a serious issue faced by college campuses nationwide. The prevalence of sexual victimization in college has been well documented for over 30 years. According to several recent studies, one in five college women will become victims of sexual assault while in college. (Fisher et al., 2000; Krebs et al., 2009; Krebs et al., 2011; Fisher et al., 2010; White House Task Force, 2014).

Sexual assault is not unique to college campuses, and this fact is not the contention of this study. In fact, a study published by the Bureau of Justice statistics in 2014, found that non-students were more likely to be sexually assaulted than students (Sinzoich, 2014). However, college sexual assault is unique because of the opportunities created by the college environment.



This collegiate environment, which will be explained further in chapter two, provides many opportunities for students to socialize through various campus programs, clubs, classes, sports teams, and living spaces (dorm rooms). These opportunities can also place students in situations that put them at risk for crime victimization.

In addition to the college environment, it is the age of victims that makes college sexual assault unique (Fisher, Daigle, & Cullen, 2010). In the United States, women aged eighteen- to twenty-three are at the highest risk of sexual assault victimization of any other age group. This age group directly coincides with the current college population (Sinzoich, 2014). What this means is there is an abundance of potential victims of sexual assault on college campuses (Fisher, Daigle, & Cullen, 2010).

The college environment also brings together potential offenders and victims (Hindelang, Gottfredson, & Garofalo, 1978). According to the Bureau of Justice Statistics, 10.1 percent of sex offenders are between the ages of 18-20 and 31.2% are between the ages of 21-29 (Greenfield, 1997). The high percentage of sex offenders within the traditional college age group presents a significant risk to college campuses. Colleges create an illusion of safety, in creating this false feeling of security, students may become more trusting of strangers and acquaintances whom they may not trust outside of the college setting. Ultimately, this means there are many potential victims and offenders occupying the same space at the same time (Hindelang, Gottfredson, & Garofalo, 1978).

When discussing the college environment, it is also important to note the victim-offender relationship, which is especially important in college sexual assault cases. When looking at both college sexual assault and sexual victimization in general, a majority of the time the victim and

offender are not strangers, they know each other. The offender can be a friend, colleague, significant other, family member, or just an acquaintance. In college, especially since the development of social media sites, there is a lot more opportunity to meet people and become acquainted with them. As will be explained further in the risk factors section of the literature review, this victim-offender relationship in the college setting can create opportunity for sexual victimization (Belknap & Erez, 2007).

### **Definition of Sexual Assault**

In order to understand college sexual assault, it is important to understand how the definition of sexual assault has evolved. The definition of sexual assault has changed significantly over time. Sexual assault encompasses more than just rape but this was not always the case. The U.S. Department of Justice updated their definition of sexual assault to include “any type of sexual contact or behavior that occurs without the explicit consent of the recipient. Falling under the definition of sexual assault are sexual activities as forced sexual intercourse, forcible sodomy, child molestation, incest, and fondling (U.S. Department of Justice, 2015).

The definition of sexual assault used in research, has also evolved since the 1980’s, one frequently cited definition of sexual assault comes from Koss (1988) “sexual contact due to a man’s verbal pressure or positions of authority” (cited in: Fisher & Cullen, 2000, pg.332). Researchers today tend to use gender neutral language when defining sexual assault and also tend to include two separate categories of sexual victimization: incapacitated sexual assault and physically forced sexual assault. The gender-neutral language and inclusion of different categories in sexual assault will be used in this current study.

## College Sexual Assault Policy

College sexual assault has been a popular topic of research. However, it only recently garnered media attention and the attention of the White House due to several high profile cases, as well as an investigation of Title IX<sup>2</sup> complaints by the Department of Education. In 2014, the White House released a report on college sexual assault. The report stated that while attending a university, one in five women become victims of sexual assault (White House Task Force to Protect Students from Sexual Assault, 2014). These findings come 25 years after the first high profile college sexual assault case, that of Jeanne Clery (Nobles, Fox, Khey, & Lizotte, 2012).

Jeanne Clery's rape and murder gained national attention. Clery's case started the conversation about crime (specifically sexual assault) on college campuses. Not only did the crime itself shed light on this unknown issue, but it also sparked new policy. The Clery Act was passed in honor of Jeanne Clery in 1990 through the advocacy of her parents. The goal of the Clery Act was to make college crime more transparent by forcing universities to report and make public their crime statistics. Despite the case and legislation dating back 25 years, colleges are still not accurately reporting their crime statistics (Nobles, Fox, Khey, & Lizotte, 2012).

In addition to the Clery Act, universities draft their own policies to address sexual assault. Although policies do exist which are meant to prevent and respond to sexual assault, many are regarded as inadequate (Fisher, Daigle, & Cullen, 2010). One reason provided for the inadequacy in these policies is that they only pertain to sexual assaults that happen on a college campus.

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<sup>2</sup> Title IX was a part of the Education Amendment passed in 1972 (20 U.S.C. § 1681, *et seq.*) by the President of the United States. The law primarily prohibits sex discrimination at colleges and universities. Title IX also addresses sexual harassment, sexual assault and gender discrimination (Department of Justice, 2001).

When discussing a “college campus” this research is referring to university owned property (Fisher, Daigle, Cullen 2010).

The places that students frequent are not always considered a part of campus property. Sometimes college students choose to live in an area very close to campus. They may also choose to frequent bars, clubs, or parties. This non-campus owned property that is geographically located close to a college campus is considered off-campus. The university does not own these off-campus places, and therefore, the university is not held responsible for incidents that happen there, even if it involves their students. Because the universities are not liable for these incidents, they are not addressing a majority of sexual assaults that happen to their students. This is because a majority of victims who are sexually assaulted in college are sexually assaulted off-campus (Krebs, Lindquist, Warner, Fisher, Martin 2007). Why are students more likely to be sexually assaulted off-campus? To date this question has remained unanswered. It is the contention of this research that it may be because of the risky lifestyles and opportunities that occur off-campus.

When researching college sexual assault, risk factors are often examined. These risk factors include access or the consumption of alcohol, partying, prior victimization, year in school, and greek membership. Risk factors aim to determine what would increase a person’s risk of victimization (Krebs et al. 2007). When attempting to examine off-campus sexual assault, this study will look into the risky behaviors that are associated with sexual assault victimization. It may be that college sexual risk factors are more heavily concentrated in specific locations off-campus. This understudied problem is in need of attention. The following section will provide information on college sexual assault risk factors and how they explain the sexual victimization of college students it will then go on to describe the issue of college sexual assault off-campus and any opposing positions.

## Chapter 2

### Literature Review

This current study focuses on location of sexual assault in college (on or off-campus). Historically, college sexual assault research has been confined to campus owned property (living on-campus). However, it is important to examine off-campus activity. This study will use the general term “college sexual assault” rather than “campus sexual assault” to refer to all sexual assaults victimization experienced by college students during their time of enrollment. In order to discuss off-campus sexual assault, first, the general risk factors of college sexual assault must be examined. The following will provide information on sexual assault risk factors.

### College Sexual Assault Risk Factors

#### Previous sexual assault

It is important to understand that because of the age of college students, many students arrive at a university with prior experiences, behaviors, and routines that may put them at risk of sexual assault victimization. One of these experiences is sexual assault victimization prior to entering college. This risk of repeated victimization is not exclusive to the college population, but has been examined in the general population as well. Despite not exclusively being a college problem, research has found that many college students experienced a sexual assault before entering college (Fisher, Daigle, & Cullen, 2001).

One of largest studies involving the risk factors leading to the sexual victimization of college students was the *College Sexual Assault Study* (2007). The *College Sexual Assault Study* was a web-based survey involving undergraduate students from two large public universities (Krebs, Lindquist, Warner, Fisher and Martin, 2007). This study is important because it provides

extensive information on both the context of, and the risk factors associated with, college sexual assault. Krebs et al. (2007) identified prior sexual assault as a risk factor for a sexual victimization while in college. When evaluating previous sexual assault, Krebs et al. (2007) found that students who had previously been victims of a physically forced sexual assault were seven times more likely to experience sexual assault while in college than those who had not been previously victimized.

### **Alcohol consumption**

Alcohol consumption is arguably the most studied risk factor in college sexual assault research. This is because of the widespread use of alcohol by college students and the epidemic of binge drinking. According to the *College Alcohol Study*, 44 percent of students engage in binge drinking (two in five students) (2008). Within that sample of binge drinkers, almost half reported that they drank to get drunk (Wechesler & Nelson, 2008).

The *College Alcohol Study* also found that alcohol consumption varies by location. The three sites with the heaviest drinking were fraternity and sorority parties, off-campus bars, and off-campus parties. Older students (over the ages of 21) attended off-campus bars more frequently, while the younger students were more likely to drink at off-campus parties (Wechesler & Nelson, 2008).

The prevalence of binge drinking among college students is a cause for concern. Not only can binge drinking have negative health effects, but it can also have a negative impact when it comes to risk of sexual victimization. In a study by Wechsler et al. (2003), the researchers found that sexual assault victimization was more likely on a campus that reported higher rates of binge drinking.

Alcohol consumption was also implicated in Krebs et al.'s findings (2007). According to their research, ninety percent of victims of incapacitated sexual assault and fifty-seven percent of physically forced sexual assault victims indicated that they attended a party where alcohol was served at least once a month. There was also a positive association between frequency of getting drunk and both types of sexual assault (Krebs et al., 2007).

### **Sorority membership**

In the College Sexual Assault Study, almost a quarter of victims from both categories (incapacitated and physically force sexual assault) were members of a sorority (Krebs et al., 2007). Kalof (1993) hypothesized as to why sorority members may be more likely to be sexually assaulted than other college students. Kalof argued that sorority members may consume alcohol at a higher rate. In Kalof's study, the results indicated that sorority women were more likely to be victims of incapacitated sexual assault than non-sorority members. Kalof's second explanation was that sorority members might also come into contact more often with fraternity men, which may increase their risk of victimization. Regardless of the explanation it is clear that sorority members are at risk for sexual victimization while in college (Kalof, 1993).

### **Student status**

When asked about sexual assault victimization that occurred within the past year, Krebs et al (2007) found that respondents who were of freshman and sophomore standing were at a higher risk of becoming victims of sexual assault than juniors and seniors. Although it is not clear in previous research why this relationship exists, it may be the student's lack of awareness of risks in college. It may also be related to alcohol and where a student chooses to drink. For example, freshman and sophomore's are typically underage and unable to drink at bars and clubs

(Wechesler & Nelson, 2008). Their option is to attend a party where the alcohol and environment may be less controlled.

### **Location**

In a study by Fisher et al. (2000), the researchers discovered 60 percent of sexual assault that occurred on-campus, occurred in the student's residence. Off-campus sexual victimizations were also found to occur in residences; however, these were not necessarily victim's residences. Additionally, for incidents that were either sexual contact or threats of sexual victimization, it was more likely that they occurred in bars, dance clubs or nightclubs, or at work. In general, the researchers determined sexual assault was more likely to occur off-campus than on-campus (Fisher, Cullen, & Turner, 2000). Despite the argument that colleges are not responsible for the assaults that happen off-campus, Fisher et al. argues that because the students may be engaged in activity that relates to their life as a student (parties with other students, spring fest, tailgating for a sporting event), the college still retains responsibility (2000).

To reiterate, there are several risk factors identified in research that help to explain sexual assault victimization in college. These risk factors are previous dating violence, victimization before college, alcohol and drug use, college class year, and sorority membership (Krebs, Warner, Fisher, & Martin, 2009).

Researchers have examined where college sexual assaults take place (Fisher et al., 2000, Krebs et al., 2007, Nobles et al., 2012, Cass, 2007, Fisher et al., 2010). However, the connection between risk and place has never been fully explored. There is a need for this analysis based on several findings that off-campus sexual assault is more prevalent than on-campus sexual assault. Despite these findings, the majority of research focuses on on-campus sexual assault.



There are several risk factors and lifestyle characteristics that can contribute to sexual assault victimization (Hindelang, Gottfredson, & Garofalo, 1978). It is the goal of this research to apply those characteristics and concepts in order to explain why students are more likely to be victimized off-campus compared to on-campus. Although risk factors have never been explicitly applied to a specific location, the following explanation will attempt to connect the two concepts.

As mentioned in Chapter 1, what makes college sexual assault different from the victimizations that don't involve college students, is the college environment itself. Risk factors are one component that contributes to that college environment; the other component is the lifestyle that college students lead. It is that lifestyle that creates the risk factors that were previously described. In order to explain why college sexual assault is unique to sexual assault outside of college, lifestyle routine activities theory will be used.

### **Theoretical Framework**

#### **Lifestyle-routine activities theory**

Cohen, Kluegal and Land (1979) developed lifestyle-routine activities theory by combining lifestyle exposure theory (Hindelang, Gottfredson, & Garofolo, 1978) and routine activities theory (Cohen & Felson, 1979). The fusing of these theories was important for Cohen et al. because they were able to use their newly formulated theory (lifestyle-routine activities theory) to explain individual victimization.

Lifestyle-routine activities theory provides an explanation of crime that involves a person's daily routine and how these particular events can influence crime opportunity (McNeeley, 2014). The underlying assumption of lifestyle-routine activities theory is that offenders act rationally, thus when choosing their victim, offenders carefully calculate the risks and benefits (Hindelang, Gottfredson, & Garofalo, 1978).

This theory is crucial in understanding the current research study because it takes into account the context of a situation (i.e. location, awareness, desirability, etc.). Despite general support for the theory in its application to victimization, according to Polacastro (2013), only two of the five components find consistent significance in research studies.. Proximity and Exposure have consistent findings when they are applied to victimization and offending whereas target suitability and guardianship have inconsistent findings (Polacastro, 2013). Despite mixed findings, lifestyle-routine activities theory has been used in college sexual assault studies (Fisher et al., 2010; Bondurant, 2001; Cass, 2007).

Lifestyle routine activities theory is made up of five components; exposure, proximity, target attractiveness, guardianship, and type of crime (Hindelang, Gottfredson, & Garofalo, 1978). The following provides detailed information for each component of lifestyle-routine activities theory.

### **Proximity**

Proximity refers to the location of the potential victim in relation to the location to the motivated offender. According to this theory, being in a close proximity to potential offenders will increase a person's likelihood of victimization. A potential victims proximity (closeness in distance) to potential offenders largely depends on the victim's lifestyle. For example, a female who spends a majority of her time around males may place herself at a higher risk of victimization according to research (Hindelang, Gottfredson, & Garofalo, 1978).

Proximity has implications in research on college sexual assault because there is a large number of students (most between the ages of 18-23) both male and female in close proximity of each other constantly (Krebs C. , Lindquist, Warner, Fisher, & Martin, 2007). Potential victims and potential offenders can interact in class, in social groups on campus, at off-campus parties,

and at bars. In sum, there are countless opportunities for students to come into contact with other students. According to Siegel and Raymond (1992), eighty percent of crimes committed against students are perpetrated by other students. Thus, the proximity of a victim to potential offenders in college is high (Fisher, Sloan, Cullen, & Lu, 1998).

In one study Cass (2007) examine proximity and sexual assault victimization. Specifically, the researcher argued that proximity could explain why a student who is more active in campus life, and students who often party in the evenings are more likely to be victims of sexual assault in college. This is because proximity refers to the location of the victim to the offender and by participating in campus life and partying, college students are likely to be around potential offenders. Furthermore, Cass attempts to explain the relationship between the amount of full time students at a university and sexual assault victimization using proximity (Cass, 2007).

In a similar study by Fisher, Cullen, Sloan and Lu (1998), the researchers examined lifestyle-routine activities theory and the explanation of theft victimization. Although this particular study did not focus on sexual assault it does have several implication for the current study. Particularly the finding that the amount of time a student spends on campus (average number of days/ whether the student is full-time) increases their risk of theft victimization. The researchers concluded that students who spend more time on campus are more likely to come into contact with potential motivated offenders and therefore, are at an increased likelihood of victimization due to their proximity (Fisher, Sloan, Cullen, & Lu, 1998).

### **Exposure**

Exposure refers to those who are more “visible or accessible to an offender” (McNeeley, 2015, pg. 33). In research, this concept is often operationalized as “public activities”. Public

activities are activities that occur outside the home that place potential targets close to potential offenders. According to Fisher, Sloan, Cullen and Lu (1998), a person is at risk for victimization when lifestyle and context (place, relationships between victim and offender, time) converge. In other words, potential victims may place themselves in a particular situation that may expose them to victimization (Fisher, Sloan, Cullen, & Lu, 1998).

College life is often associated with partying, drinking, the recreational use of drugs and much more socializing due to independence. Research has shown that alcohol plays a major role in the victimization of college students. Significant factors in predicting victimization include the number of nights spent out drinking (more nights out equals more risk), and the amount of alcohol consumed. This is especially true for sexual assault victimization (Fisher, Daigle, & Cullen, 2010).

### **Target attractiveness**

Target attractiveness refers to the “desirability of the victim”. In other words, some victims may be at a higher risk due to their lifestyle choices (McNeeley, 2015, pg.34). There are three factors that influence target attractiveness, these three factors are; “financial or symbolic gain, the ease with which a potential target can be offended against, and the ability of the victim to resist the attack” (McNeeley, 2015, pg.34).

Although alcohol consumption and drug use can expose a person to potential victimization it can also increase target vulnerability. Alcohol can increase a person’s vulnerability to sexual assault by decreasing their awareness and motor skills. Excessive drinking can cause “blackouts” that leave a victim unconscious and even more vulnerable. Drugs can have a similar effect as alcohol. Due to college being a place where drug and alcohol experimentation

often occurs, target attractiveness may be of particular interest to college sexual assault research (Fisher, Cullen, & Turner, 2000).

### **Capable guardianship**

Capable guardians can take on many forms in research. Capable guardianship can be either social or physical (Cohen et al., 1981). Physical guardianship refers to tools used to increase security. Physical guardianship can include locking doors, security systems, police presence, or self-defense classes. Social guardianship refers to the presence of a person, meaning that the physical presence of that person (friend, roommate, acquaintance) will deter an offender from attacking a potential victim (Fisher, Cullen, & Turner, 2000).

According to Fisher et al. (1998), college students are poor guardians of themselves and their property. It is common in dorms to find doors cracked open, doors unlocked, and property left unattended. Although there is threat to student victimization on campus, it is the presence of capable guardians that may deter crime. For example, on-campus dorms are often equipped with some type of security (Fisher, Sloan, Cullen, & Lu, 1998). This varies from college to college. But, in general, college dorms are often equipped with one or more of the following; a student key card for accessing the front door to the dorm and specific dorm room, security attendant at the door (student or professional worker), resident assistant and or resident director, and security cameras (Reyns, 2010).

In addition to security specifically in a student's dorm, colleges also have either campus security or a campus specific police department. Also, student's roommates can function as capable guardians. Despite the capable guardians that exist on-campus, these same securities are not provided to students living off-campus (Fisher, Cullen, & Turner, 2000). In cases of sexual

assault, this could explain why students are more likely to be victimized off-campus compared to on-campus.

### **Type of crime**

Lifestyle- Routine Activities theory acknowledges that the previous four components (proximity, exposure, target attractiveness and capable guardianship) effect on victimization will vary by crime type. McNeeley states that the four components “are more likely to be associated with crimes prompted by instrumental motivations (e.g. theft and burglary) rather than expressive ones (e.g. assault)” (McNeeley, 2015, pg 17). Although the components of lifestyle-routine activities theory are not always strongly associated with crimes that have expressive motivations, researchers have previously used the theory to explain college sexual assault.

The components of Lifestyle-Routine Activities Theory are still relevant in today’s research, however, Lifestyle-Routine Activities does not account for the technological advances of the past 20 years. The way in which people meet and interact has evolved from in-person meetings to online interaction. Although this research does not include the social media component, when evaluating college sexual assault in the 21<sup>st</sup> century, this technology needs to be included in the discussion.

### **Lifestyle-Routine Activities Theory: Effects of Social Media and Technology**

Technological advances over the past 20 years have significantly changed the way we live, communicate, socialize, study, and work. Lifestyle- routine activities theory, as previously mentioned, looks at how person’s daily activities can increase their risk of victimization (Fisher, Sloan, Cullen, & Lu, 1998). Our daily activities today, however, have drastically evolved due to technology. Therefore, when examining the routines of college students we must also look at their use of technology and social media.

Although there are no studies that examine the role technology plays in college sexual assault cases there are studies that use lifestyle-routine activities theory to explain cybercrime. Although college sexual assault and cyber crimes may seem like two very different crimes, there are some cyber crimes that are committed against college victims (i.e. revenge porn). The way researchers examine lifestyle routine activities in cyber stalking cases can provide insight to the current study (Reyns, 2010).

In a study by Reyns on cyber stalking, the researcher operationalized each component of lifestyle-routine activities theory to adapt it to an online environment<sup>3</sup> (2010). The components of lifestyle-routine activities in an online environment are, online exposure<sup>4</sup>, online proximity<sup>5</sup>, online target attractiveness<sup>6</sup> and online guardianship<sup>7</sup>. For the interest of this study online exposure, online proximity and target attractiveness will be described (Reyns, 2010).

College students spend a lot of time on their electronic devices. In fact, colleges often require students to have a laptop. On top of these devices, most students have smart phones and tablets that enables them to access the schools free wireless Internet connection. It is online that students are able to socialize and communicate with classmates, family, strangers, and friends of friends. Such social media sites as Instagram, Twitter, Facebook, etc. allows students to share photographs, make comments, talk to friends, and share their locations. Although traditionally “exposure” in L-RAT referred to physically being close to someone, (e.g. going to parties, or hanging out with groups) the Internet can have the same effect. Students are able to create groups that other students can join. Students can send out invitations to different parties on and off

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<sup>3</sup> Interactions and activities that occur online

<sup>4</sup> Time a potential victim spent online and the activities that they participated in

<sup>5</sup> Whether the potential victim has ever added a stranger as a friend on a social network

<sup>6</sup> Any information that would allow a potential offender to pursue a victim/any information that provides details about the potential victim

<sup>7</sup> Whether the user of a social media website had their account set to private or whether they used a profile tracker which allowed them to see who viewed their account (Reyns, 2010)

campus. As evidenced, exposure online can function in a similar way to physical exposure but the internet creates a larger social circle for students (Reyns, 2010).

The Internet, smart phones and social media can put a person in close proximity to billions of people all around the world. What it can also do is place a person in proximity to the people around them. This increases the number of acquaintances a person has and in turn can create an increase in potential victims or offenders. For example, the smart phone application tinder uses your location to locate people around you. The application is meant for dating but allows users who both “like” pictures of each other to exchange messages (United Educators, 2015). In this instance, the application allows those who do not necessarily know each other, but are in close proximity to each other, meet in a virtual space. Social media is another way to connect with people. For example, Facebook allows users to search for people within their own hometown and universities. Facebook users that are “friends” with each other can see pictures and post and message each other. Often times Facebook users tag themselves and others at locations, which allows their followers to know where they are (Reyns, 2010).

Reynes developed three measures of online proximity, “Whether the respondent has ever added a friend on their online social network that the respondent did not know, how many “friends” in total the respondent has across all of their social networks and whether the respondent has ever joined an online services that assisted them in acquiring new “friends” for their online social network” (Reynes, 2010, pg.81). Although Reynes work was relating lifestyle routine activities theory to cyber stalking (an online crime) there are some parallels that can be drawn from online proximity and college sexual assault. For example, a potential offender and potential can meet online in a virtual space and then meet in a physical space (Reyns, 2010).



Online target attractiveness differs greatly from physical target attractiveness. Online target attractiveness refers to any information that allows the potential offender to track the victim. This is often information that a potential victim posts on a social media profile. Reynolds used nine indicators of online target attractiveness. These nine indicators were students posting their, “full name, relationship status, sexual orientation, instant messenger ID, email address, links to other blogs and social network sites, interests and/or activities, photos, and videos” (Reynolds, 2010, pg. 84).

As evidenced, online lifestyle-routine activities theory can explain crime risk in the virtual world. Because of the increasing use and development of technology it is important that these risks be evaluated. Although online lifestyle-routine activities theory is used to explain cyber-crime, this study will use it to explain how online activities can increase the chance of being victimized in the physical world. The following section will connect lifestyle-routine activities theory and online lifestyle-routine activities theory to off-campus college sexual assault risk.

### **Applying Lifestyle-Routine Activities Theory to Off-Campus Risk of College Sexual Assault**

As previously mentioned, researchers have examined where college sexual assaults take place. However, the connection between risk and place has never been fully explored. There is a need for this analysis based on several findings that off-campus sexual assault is more prevalent than on-campus sexual assault. Despite these findings, the majority of research focuses on on-campus sexual assault.

There are several risk factors and lifestyle characteristics that can contribute to sexual assault victimization. It is the goal of this research to apply those characteristics and concepts in

order to explain why students are more likely to be victimized off-campus compared to on-campus. Although risk factors have never been explicitly applied to a specific location, the following explanation will attempt to connect the two concepts.

Alcohol consumption is one of the most studied risk factors of college sexual assault. It is the contention of this study that alcohol consumption is a strong risk factor of off-campus sexual assault. In a study by Wechsler, Lee, Nelson and Kuo (2002), the researchers used data from the CAS (College Alcohol Survey) of 120 colleges in the United States. The survey asked students about their alcohol use and associated problems, lifestyles, demographics, and background. According to the study, Two in five college students engage in binge drinking<sup>8</sup> (Wechsler, Lee, Elson, & Kuo, 2003). Binge drinking is detrimental due to its consequences. Students who attend colleges that report a high level of binge drinking also, as a consequence, have a high rate of verbal and physical assaults, as well as sexual assaults compared to colleges that report a low-level of binge drinking (Wechsler, Lee, Elson, & Kuo, 2003).

Although binge drinking is common among college students, there is a specific age group that is more likely to engage in this behavior. This age group is students under the age of 21. Underage students did not drink more than of-age students (21-23) but they were more likely to drink enough to get drunk or drink at binge-levels (4-5 drinks in a row). Underage students are also more likely to experience specific problems associated with alcohol use (Wechsler, Lee, Elson, & Kuo, 2003). Underage students were “more likely to do something they regretted, forget where they were or what they did, cause property damage and underage students were more likely to get hurt or injured as a result of alcohol use” (Wechsler et al., 2003, pg.26).

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<sup>8</sup> Wechsler et al. defined binge drinking as the consumption of at least 5 drinks in a row by men and at least 4 drinks in a row for women.

Wechsler et al. determined that location was significant when examining drinking behavior (2003). For example off-campus parties and off-campus bars were determined to be the locations that involved the highest amount of drinking. The researchers noted a significant increase in the attendance of off-campus parties as well as the amount of drinking and heavy drinking at this particular location (Wechsler, Lee, Elson, & Kuo, 2003).

Wechsler et al. not only determined that drinking was more likely to occur off-campus but also that underage students were more likely to drink at off-campus parties (2003). This is likely due to their inability to access bars or nightclubs. At bars and nightclubs, bartenders are not allowed to serve an intoxicated person. There are also security measures in place in order to keep people safe (bouncers, police, security cameras). At off-campus parties there is access to alcohol to those who are underage without a limit to how much they are served. Without safety precautions in place, underage students often engage in binge drinking. This can lead to potential unintended consequences, specifically, sexual assault (Wechsler, Lee, Elson, & Kuo, 2003).

Specific class year was not mentioned in Wechsler et al.'s study, although as previously mentioned, this was a risk factor for college sexual assault. A study produced by the higher education research company, United Educators, did include class year in their analysis. The study used data from sexual assault claims that involved university students. There were a total of 304 claims analyzed from 104 colleges in the United States. In 41% of claims, the victim and offender met at an off-campus party. When analyzing victimization and party attendance by class year, Freshman (50%) and Sophomores (26%) were more likely to attend an off-campus party (United Educators, 2015).

Both the United Educators and the Wechsler et al. study can provide an explanation for the finding from Krebs et al. that freshman and sophomore students are more likely to be victims

of sexual assault. While the Wechesler et al. study did not identify whether the students were freshman or sophomores, typically underage students would fall into these two class standings (traditionally). The findings from these three studies (Wechesler et al. (2003), Krebs et al. (2007) and United Educators (2015) combined, provides evidence that freshman and sophomore's are more likely to become victims of sexual assault because they are more likely to binge drink and party off-campus.

The college lifestyle and environment also influences the risk of sexual assault off-campus. For example, being involved in sororities, fraternities, and athletic teams may expose students to victimization due to their involvement in student activities. For example, sororities and fraternities host frequent events and parties at their houses (most fraternity and sorority houses are not owned or controlled by universities) (Fisher, Cullen, & Turner, 2000).

One in eight students at four-year universities live in a Greek (sorority or fraternity) house (Peter, 2014) Events and parties place strangers in a close proximity to each other at specific times (often at night). As the previously mentioned research explains, potential victims may "expose" themselves to victimization due to their activities such as partying and binge drinking. During these events and parties there are opportunities for potential offenders to meet and identify suitable targets. Events and parties that involve alcohol place victims at a higher risk because when a student becomes intoxicated, lifestyle routine activities would argue, that their target suitability increases.

Students at colleges with a strong athletic following (Division I athletic teams) often have increased social activities (e.g. tailgating, homecoming, pep rally). Tailgating is often associated with alcohol consumption. Tailgating can occur off-campus at student's residences, in stadium parking lots, and in various parking lots and locations close to the stadium. Although students do

attend these games or tailgates, there are many others (alumni and fans from around the country) who come to these games as well. In essence, these sporting events increase the amount of motivated offenders and potential victims by placing them in a relatively close proximity to each other. Although students may not be victimized at a tailgate location, they may meet their potential offender at these events (Krebs C. , Lindquist, Warner, Fisher, & Martin, 2007).

In addition to these elements of lifestyle routine activities theory (e.g. exposure and proximity) the lack of capable guardian element is evident on college campuses. Those who are in college are often experiencing independence for the first time (without their parents or legal guardians). Although students on campus are still independent, colleges offer safe guards to students to prevent crime. These same safe guards are not available off-campus and can contribute to the high rate of victimization in this location (Fisher, Daigle, & Cullen, 2010).

As previously described, there are certain lifestyles and contexts that can increase a students risk of victimization off-campus. Although lifestyle-routine activities theory and risk factor based research on college sexual assault can provide information on preventing victimization, these two areas of research need to be updated to include social media elements.

The previous sections have demonstrated the risk factors associated with college sexual assault. These risk factors were then put into context using lifestyle-routine activities theory and online lifestyle-routine activities theory. These concepts were then connected to sexual assault risk among college students in an off-campus location.

The purpose of this study is to add to research examining college sexual assault risk factors. Based on research mentioned previously, students are at risk for sexual assault victimization both on and off-campus therefore; college sexual assault will be used rather than campus sexual assault. This particular study will focus on sexual assault location (off-campus v

on-campus) as a risk factor for sexual assault victimization of college students. The goal of this study is to inform university policies and laws (e.g. The Federal Campus Sexual Assault Victims' Bill of Rights) about off-campus sexual assault as well as on-campus sexual assault locations. In doing so, better sexual assault prevention initiatives can be developed.

Despite the abundance of research in the area of college sexual assault, researchers have rarely turned the attention of their research to location. This thesis will contribute to the literature by determining which risk factors are more prevalent off-campus compared to on-campus. Specifically, this research will answer the question: Is there an increased risk of sexual assault off-campus? This study expects to find that college students are more at risk of sexual assault off-campus compared to on-campus due to a high concentration of risk factors off campus.

## Chapter 3

### Methods

#### Research Hypothesis

The goal of this research is to determine if college students have an increased risk of sexual assault off-campus. Using lifestyle-routine activities theory (Cohen, Kluegal, & Land, 1981), the researcher will examine whether student who engage in risky behaviors, linked to college sexual assault, are more likely to be sexually assaulted off-campus compared to on-campus. The null hypothesis of this study is; students who engage in risky behaviors associated with college sexual assault are just as likely to be sexually assaulted off-campus compared to on-campus.

1. Research Question---Are college students more likely to be sexually assaulted off-campus?
2. Research Hypothesis (H<sub>1</sub>)—Students who engage in risky behaviors are more likely to be sexually assaulted off-campus compared to on-campus.
3. Null Hypothesis (H<sub>0</sub>)—Students who engage in risky behaviors associated with college sexual assault are just as likely to be sexually assaulted off-campus compared to on-campus.

#### Sample

The secondary data used in this study was originally collected by Krebs, Lindquist, Warner, Fisher and Martin (2011). These data came from two large public universities in the Southern and Midwestern parts of the United States. The study was performed in the winter of the 2005/2006 academic year. Using a web-based, self report survey, the researchers collected information on student background, sexual victimization experience and context, and alcohol and

drug use. The sampling frame were restricted to students ages 18-25 to represent the traditional college student.

The original purpose of the data was to study the prevalence, nature, and reporting of drug facilitated sexual assault experienced by college students. The researchers also hoped to educate students about the types of sexual assault and increase safety and provide information about both the campus and community resources available to students. Although the data set is focused on drug-facilitated sexual assault, the survey used contains questions that relate to the three dependent variables in this study, as well as the four independent variables used in the current study. The following will explain how the original researchers collected their sample.

In order to obtain a representative sample, a sampling frame of 15,661 students from University 1 and 14,875 students from University 2 was first obtained. From that sample of 30,536, the researchers split that sample by randomly assigning cases into four groups (University 1 Men, University 1 Women, University 2 Men, University 2 Women). Next, using probability sampling, equal freshman, sophomore, juniors and seniors were chosen. Probability sampling “ensures that a sample mirrors the population from which it was drawn (for example, a sample of people should contain a breakdown of race, gender, and age similar to that found in the population)” (Gau, 2013, Pg. 9).

Next, samples were taken from each of the four groups. The final sample used in the survey included 5,446 undergraduate women and 1,375 undergraduate men, for a total sample of 6,821 students. The response rate for University 1 was 42.2% for women and 32.7% for men. For University 2 the response rate was 42.8% for women and 35.5% for men (Krebs C. , Lindquist, Warner, Fisher, & Martin, 2011). The final sample of student demographic



information is listed in Table 3.1. For the current thesis, this total sample (n= 6,821) is the sample that will be analyzed.

As Table 3.1 illustrates, the sample for this study was majority female (79.80%), white (82.2%) with an average age of 20. The sample was evenly distributed between freshman (23.80%), sophomore (24.50%), junior (25.20%) and seniors (24.90%) (Krebs C. , Lindquist, Warner, Fisher, & Martin, 2011).

**Table 3.1. Sample Demographic Frequencies (N=6,821)**

<i>Variable</i>	<i>Number</i>	<i>%</i>
Gender		
Male	1375	20.2
Female	5446	79.8
Race		
White	5610	78.81
Black/ African American	615	8.6
Hispanic/ Latino	189	2.7
Asian	417	5.86
Native American/ Pacific Islander	25	0.04
American Indian/ Alaska Native	100	1.4
Other	162	2.3
Age		
18	1066	15.6
19	1604	23.5
20	1475	21.6
21	1451	21.3
22-24	1122	16.4
25-29	94	1.4
30-39	2	0
40 or older	7	0.1
College Classification		
Freshman	1622	23.8
Sophomore	1671	24.5
Junior	1719	25.2
Senior	1699	24.9
Other	106	1.6
Refused	4	0.1

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## Measures

Measures for this study are based on lifestyle-routine activities theory (Cohen et al., 1979) and college sexual assault risk factors. The variables described below will be used to identify which lifestyle-risk factors<sup>9</sup> increase the chance of sexual victimization on- or -off campus. This particular data set from Krebs et al. (2011) is appropriate for the current study because of its large sample, randomly selected data, as well as the content of the questions. This data set specifically asks several questions about the location of sexual victimization, this is vital to measuring the dependent variables. The unit of analysis for this study is undergraduate college students (ages 18-25).

### Dependent variables

***College sexual assault.*** College sexual assault is defined as sexual victimization (sexual assault by force, sexual assault while incapacitated, forced touching and attempted sexual assault) that occurred on campus owned property or somewhere close to campus (Nobles, Fox, Khey, & Lizotte, 2012). College sexual assault was operationalized in this study using three questions. (1) Since college, have you been a victim of a completed sexual assault by force/threats of force (yes or no)? (2) Since college, have you been a victim of a completed sexual assault while incapacitated (yes or no)? And (3) Since college, have you been a victim of sexual assault by threats or lies (yes or no)? As evidenced in Table 3.2, over 16% of the total sample was victims of sexual assault while in college (Krebs C. , Lindquist, Warner, Fisher, & Martin, 2011).

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<sup>9</sup> Lifestyle-risk factors, for the purposes of this study, refer to the college sexual assault risk factors that are grouped into lifestyle-routine activities theory components (proximity, exposure, capable guardian, suitable target) Cohen, Kluegal and Land, 1981).

***Off-campus sexual assault.*** Off-campus sexual assault is defined as a sexual victimization that occurs close to campus but is not considered to be a part of campus or owned by the campus (Fisher, Daigle, & Cullen, 2001). In this study off-campus, sexual assault is operationalized using the following five questions. (1) Happened off-campus (2) Happened in a building off-campus (3) Happened in a vehicle off-campus (4) Happened away from campus (yes or no) (5) Specify other off-campus location (open-ended). As evidenced in Table 3.2, 128 respondents were sexually victimized off-campus.

***On-Campus sexual assault.*** On-campus sexual assault is defined as a sexual victimization that occurred on campus owned property (Nobles, Fox, Khey, & Lizotte, 2012). On-campus sexual assault was operationalized using the following ten questions. (1) Were you on your college campus when it happened? According to Table 3.2, 216 respondents indicated that they were sexually assaulted on-campus.

**Table 3.2 Frequency Tables: Dependent Variables (N=6,821)**

<i>Variable</i>	<i>Number</i>	<i>%</i>
College Sexual Assault	1126	16.51%
On-Campus Sexual Assault	216	3.20%
Off-Campus Sexual Assault	128	1.90%

### **Independent variables**

The independent variable for this study are theoretically organized based on Lifestyle Routine Activities Theory. The four independent variables are proximity, exposure, target suitability, and capable guardianship. The following sections describe how the independent

variables were operationalized (Hindelang, Gottfredson, & Garofolo, 1978, Cohen & Felson, 1979).

**Proximity.** The proximity variable in lifestyle-routine activities theory references the physical vicinity of a potential victim to a motivated offender. Prior researcher has indicated that college sexual assault victims are typically female, and offenders are typically male. Men and women are in close proximity to each other throughout the duration of their college career. According to lifestyle-routine activities theory, this proximity creates an increased risk of sexual victimization (Reyns, 2010).

This study measures proximity as (1) since college, do you frequently attend fraternity parties? This variable was recoded from the original data set's question "Since college, how many times have you attended a fraternity party?" "Frequently" was coded as "once or twice a week" and "daily" (2) Do you live with significant other (Fisher et al, 1998; Krebs et al., 2007; Nobles, 2012; Fisher et al. 2010). This variable was recoded from the two variables "Do you live with a boyfriend or girlfriend?" and "Do you live with a spouse or partner?" According to the sample, just over seven percent of respondents indicated that they frequently attended fraternity parties. This means that seven percent of the sample is in close proximity of males at least once per week. According to research this indicates risk for sexual victimization.

**Exposure.** Exposure is a concept that refers to risk activities or lifestyle's that place an individual at risk for victimization. Research typically operationalizes exposure as public activities that occur outside the home (See Fisher et al., 2010). For example, involvement in Greek life, specifically sororities, can expose students to sexual victimization (Krebs, Warner, Fisher, & Martin, 2009).

In order to measure exposure in this study, both sorority membership and social alcohol use variables were examined. Sorority membership was operationalized using (1) since college have you pledged or joined a Greek organization (yes or no)? The social alcohol use variable is (1) since college; do you frequently attend parties where alcohol is served (yes or no)? As shown in table 3.3, 16 percent of students indicated that they were involved in Greek life. This could indicate a high level of exposure within the sample.

**Target suitability.** The target suitability component of lifestyle-routine activities theory asserts that certain behaviors or characteristics can increase a person's vulnerability to victimization. Previous studies have looked at economic variables in order to measure target suitability (Fisher et al., 2008), the current study uses substance use variables to measure target suitability. By consuming alcohol, especially to the point of inebriation, potential victims may increase their susceptibility to sexual assault victimization by reducing their awareness and decision-making abilities.

To measure target suitability, this study used (1) since college, have you been frequently drunk? As evidence in table 3.3, college students consume alcohol to the point of intoxication at a high rate. This high rate of alcohol consumption has been indicated in previous research as a risk factor to sexual victimization (specifically incapacitated sexual assault).

**Guardianship variables.** Prior studies measuring guardianship categorize guardianship into two categories, physical and social guardianship (Reyns, 2010). Physical guardianship includes locking doors, security systems, police presence, and self-defense classes. Social guardianship refers to the presence of a person, meaning that the physical presence of that person

(friend, roommate, acquaintance) will deter an offender from attacking a potential victim (Fisher, Cullen, & Turner, 2000). The current study focuses on social guardianship variables

For the purposes of this study the following guardianship measures were used. These variables are separated into two separate categories, guardianship and absence of guardianship. The guardianship variables are (1) Do you live with one or more student(s) (yes or no) and (2) Do you live with your parents (yes or no)? The absence of guardianship measure is (1) live alone. According to table 3.3, most students live with a fellow student (70%). Living with another student is a form of social guardianship that should prevent sexual assault.

### **Other risky behaviors**

**Prior sexual assault before college.** As mentioned in the literature review (see page 5), several college sexual assault and general sexual assault research has determined prior sexual assault is a risk factor of a subsequent sexual assault. Prior sexual assault before college is operationalized in the current study using the variable, (1) Before college, have you been sexually assaulted? This variable was recoded from the original data set's three variables (1) before starting college, were you a victim of a completed sexual assault by lies, threats, etc.? (2) Before college, were you a victim of a completed sexual assault by force or threat of force? And (3) before college, were you a victim of sexual assault while incapacitated (yes or no)?

**Student status.** Prior college sexual assault studies have indicated that victimization risk varies depending on a student's college classification (i.e. whether they are a freshman, sophomore, junior, senior, etc.) (Fisher, Daigle, & Cullen, 2001). The student status variable is operationalized in this current study using one measures (1) what is your college classification (i.e. Freshman, Sophomore, Junior, Senior).



**Table 3.3 Frequency Tables: Independent Variables (N=6,821)**

<i>Variable</i>	<i>Number</i>		<i>%</i>	
	Yes	No	Yes	No
Proximity				
Frequently Attend Fraternity Party	502	6315	7.40%	92.60%
Live with Significant Other	475	6346	7.00%	93.00%
Exposure				
Since College Pledged/ Joined a Greek Organization	1106	5693	16.20%	83.50%
Since College, Do you frequently attend parties where alcohol is served?	2411	4402	35.30%	64.50%
Target Attractiveness				
Since college, Do you frequently get drunk?	1616	4313	23.70%	6320.00%
Capable Guardian				
Presence				
Live with one or more than one student?	4838	1983	70.00%	29.10%
Live with Parents?	846	5975	12.40%	87.60%
Absence				
Live alone	565	6256	8.30%	91.70%
Other Risky Behaviors				
Victim of Sexual Assault Before College	1095	5723	16.10%	83.90%
College Classification				
Freshman	1622	5199	23.80%	76.22%
Sophomore	1671	5150	24.50%	75.50%
Junior	1719	5102	25.20%	74.80%
Senior	1699	5122	24.91%	75.09%
Other	106	6715	1.50%	98.45%
Refused	4	6817	0.05%	99.95%

### Statistical Analysis

This study will employ the Chi-Square test of independence in order to analyze the relationship between the independent and dependent variables previously mentioned. Chi-Square



was chosen for this study because it is the most appropriate method when both independent and dependent variables are nominal. In order to ensure the validity and reliability of this study, the researcher ensured each assumption of Chi Square was met before running the analysis. There are a few assumptions of Chi Square. The first is that all observations are independent and all categories of variables were mutually exclusive. These observations in each cell must be a frequency or count, not a percentage. In addition, in order to run a Chi square, the sampling distribution of deviations must be normal. In order to ensure a normal distribution, the sample size of a study must be large. This ensures that each cell in the frequency table has a cell count that is more than 5 (Gau, 2013)

Chi-Square analyzes the actual values in the data set and compares them to the expected values (values that would occur if there was no association between the independent and dependent variables). Chi-square uses contingency tables in its calculation. Each cell of the contingency table is analyzed using the chi-square formula. The chi-square formula is  $\chi^2 = \sum [(O - E)^2 / E]$  where O is observed value and E is the expected value. The final value obtained is the chi-square value that is used to obtain the p-value (Babbie, Wagner, & Zaino, 2015).

This study will use a .05 alpha level to denote strength. The p-value produced by chi-square explains the percent likelihood that the association between the independent and dependent variable occurred by chance. If the p-value is less than .05 the relationship is considered significant.

The test of strength for this study is the Phi Coefficient. Phi is used to denote the strength of the association between two variables in chi-square. The coefficient is specifically used with 2x2 tables. A Phi Coefficient of .1 indicates weak strength, .3 indicates medium strength, and .5

indicates a high strength. The following section will explain the results of the data analysis (Babbie, Wagner, & Zaino, 2015).

## **Chapter 4**

### **Results**

The purpose of this study was to determine if college students are at an increased risk of sexual assault off-campus. This study used lifestyle-routine activities theory in order to determine whether students who engage in risky behaviors, linked to college sexual assault, are more likely to be sexually assaulted off-campus compared to on-campus. To reiterate, the research question of this study is, are college students more likely to be sexually assaulted off-campus? The null hypothesis contends that students, who engage in risky behaviors (framed by L-RAT) that are associated with college sexual assault, will be less likely to be sexually assaulted off-campus compared to on-campus.

Three dependent variables and five independent variables were analyzed in this study. The dependent variables are college sexual assault, on-campus sexual assault and off-campus sexual assault. The independent variables are proximity, exposure, target attractiveness, capable guardian and other risky behaviors (student status and prior sexual assault). The data used in this study was obtained from the Interuniversity Consortium for Political and Social Research (ICPSR).

The following section will provide the results of the analysis between the independent and dependent variables. For the purpose of organization, this section will be organized by dependent variable. A discussion of these results will be provided in chapter five.

### **College Sexual Assault Results**

Table 4.1 is a summary of the results between the dependent variable, college sexual assault and the independent variables (Proximity, Exposure, Capable Guardian, Target

Attractiveness and Other Risky Behaviors). Almost all of the independent variables were statistically significant at the .05 alpha level, when compared to college sexual assault.

### **Proximity**

The two proximity variables were both significant to college sexual assault. Frequently attend a fraternity party  $\chi^2$  (1, N=6810) 20.145,  $p < .05$  and live with a significant other  $\chi^2$  (1, N=6810) 6.865,  $P < .05$  significantly predicted the likelihood of college sexual assault victimization. What this means, according to lifestyle-routine activities theory, is because of the closeness in geographic location of a potential victim (a student) to a potential offender (in this case a significant other that the student lives with or being around male fraternity members), the student is at an increased risk of sexual victimization.

### **Exposure**

As previously mentioned when students engage in risky activities that increase their likelihood of victimization, this is known as exposure. The two exposure variables, since college pledged or joined a Greek organization  $\chi^2$  (1, N=6810) 29.371,  $p < .05$  and since college do you frequently attend parties where alcohol is served  $\chi^2$  (1, N=6810) 69.903,  $p < .05$  significantly increased the likelihood of experiencing college sexual assault according to Table 4.1. According to these findings, if a student is a part of a Greek organization and frequently attends parties where alcohol is served, they increase their likelihood of becoming a victim of sexual assault in college. In turn, this confirms lifestyle-routine activities theory assumptions about exposure and victimization.

### **Capable guardian**

The absence of capable guardian variable, live alone  $\chi^2$  (1, N=6810) 3.844,  $p < .05$ , and the presence of a capable guardian measure live with parents were significantly related to college sexual assault. As predicted, living with one or more students did not increase the likelihood of college sexual assault victimization  $\chi^2$  (1, N= 6810) .696,  $p = .404$ . The findings show that students who live alone and students who live with their parents are at an increased risk of sexual assault in college. These results show mixed support for the capable guardian component of lifestyle- routine activities theory. While living alone did increase a victim's risk (absence of capable guardian), living with parents did as well (presence of capable guardian).

### **Target attractiveness and other risky behaviors**

The target attractiveness variable in this study significantly predicted college sexual assault victimization  $\chi^2$  (1, N= 6810) 50.531,  $p < .05$ . Under the other risky behaviors, being a victim of previous sexual assault significantly predicted college sexual assault victimization. This finding is consistent with previous research on college sexual assault and risk factors.

The college sexual assault variable was also significant. Being a freshman, junior and senior significantly increased the likelihood of college sexual assault victimization, however, being a sophomore did not. According to previous research, freshman and sophomore students are more likely to be victimized than juniors and seniors. Although the findings were mixed when it comes to this relationship, the question asked about all sexual assaults in college and did not ask the participant to specify whether their answers were based on a sexual assault they had experience years before. For example a senior student could have answered the questions based on an assault that happened when they were a freshman.

**Strength measures**

When evaluating the measures based on the Phi Coefficient (test of strength), none of the independent variables have a particularly strong effect on the dependent variable. Each independent variable had a phi of less than .1 with the exception of the exposure variable, since college; do you frequently attend fraternity parties? Which had a phi of .107. The following section will provide results for the on-campus sexual assault dependent variable.

**Table 4.1 Results College Sexual Assault**

<i>Variable</i>	<i>%</i>	<i>χ<sup>2</sup></i>	<i>df</i>	<i>p</i>	<i>Φ</i>	
	<b>Yes</b>	<b>No</b>				
<b>Proximity</b>						
Frequently Attend Fraternity party	502 (7.4)	6305(92.6)	20.145	1	.000*	0.054
Live with Significant Other	475 (7)	6335 (93)	6.865	1	.009*	0.032
<b>Exposure</b>						
Since College Pledged/ Joined a Greek Organization	1105(16.3)	5685(83.7)	29.371	1	.000*	0.066
Since college, do you frequently attend parties where alcohol is served?	2407(35.4)	4395(64.6)	69.903	1	.000*	0.107
<b>Target Attractiveness</b>						
Since college, do you frequently get drunk?	1615(27.3)	4305(72.7)	50.531	1	.000*	0.092
<b>Capable Guardian</b>						
<b>Presence</b>						
Live with one or more students?	4830 (70.9)	1980(29.1)	0.696	1	0.404	0.01
Live with Parents?	844 (12.4)	5966(87.6)	11.699	1	.001*	0.041
<b>Absence</b>						
Live alone	565 (8.3)	6245(91.7)	3.844	1	0.05*	0.024
<b>Other Risky Behaviors</b>						
Victim of Sexual Assault Before College	1092 (16)	5717 (84)	472.068	1	.000*	0.263

College Classification						
Freshman	1618 (23.8)	5188(76.2)	88.389	1	.000*	0.114
Sophomore	1669 (24.5)	5137(75.5)	0.479	1	0.489	0.008
Junior	1715 (25.2)	5091(74.8)	7.841	1	.005*	0.034
Senior	1698 (24.9)	5109(75.1)	45.097	1	.000*	0.081

\*Row percentage in  
parenthesis

P<.05\*



## **On-Campus Sexual Assault Results**

Table 4.2 (page 49) summarizes the results of the relationship between the dependent variable, on-campus sexual assault and the independent variables. According to the analysis, four independent variables were statistically significant at the .05 alpha level

### **Proximity**

One proximity variable, frequently attending a fraternity party, was significant in increasing the likelihood of on-campus sexual assault victimization  $\chi^2$  (1, N=502) 8.072,  $p < .05$ . What this relationship indicates is students who frequently attend fraternity parties are more likely to experience sexual assault on-campus than those who do not frequently attend fraternity parties. The other proximity variable, living with a significant other did not increase the likelihood of sexual assault victimization on-campus. These results show mixed findings for the proximity variable.

### **Capable guardianship**

According to Table 4.2, living with one or more students  $\chi^2$  (1, N=502) 7.338,  $p < .05$  and living with parents places a person at risk of sexual victimization on-campus  $\chi^2$  (1, N=502) 8.729,  $p < .05$ . The only absence of capable guardian measure, living alone, did not increase the likelihood of sexual assault victimization on-campus  $\chi^2$  (1, N=502) .123,  $p = .726$ . These findings are in direct contrast to lifestyle-routine activities theory that argues that the presence of a capable guardian should deter crime. This finding will be further evaluated in the discussion section.

### **Target attractiveness**

The target attractiveness variable was not significantly associated with on-campus sexual assault  $\chi^2$  (1, N=502) .041,  $p = .841$ . What this indicates is students who frequently get drunk in

college are not more likely to be sexually victimized. Target suitability is a concept that refers to a victim's vulnerability to attack. Despite alcohol reducing decision-making abilities, this measure was not significant with on-campus sexual assault. Some prior literature on this topic as well as the limitations can help to explain this finding.

In general, college sexual assault reporting is extremely low. In addition, victims of sexual assault in college are not always aware that what happened to them is sexual assault. It may also be that the victim was unconscious at the time of his or her victimization and was not aware that the assault took place. In terms of the finding and the actual location on-campus, as mentioned in the literature review, there may be added protections on-campus such as security or campus police or an increased amount of bystanders due to housing arrangements in dorm rooms.

### **Other risky behaviors**

Despite literature indicating that a victim of a previous sexual assault is at a higher risk of experiencing a subsequent sexual victimization, the current study did not find this relationship to be significant when looking at victimizations on-campus  $\chi^2 (1, N=502) .061, p=.805$ . In addition, the college classification variable was significant with freshman, sophomores and seniors but not with juniors.

### **Tests of strength**

When evaluating the measures based on the Phi Coefficient (test of strength), none of the independent variables have a particularly strong effect on the dependent variable. Both of the significant variables (frequently attend a fraternity party and live with one or more students) had a phi of .1 indicating a low strength. The following section will provide results from the off-campus sexual assault variable.

**Table 4.2 Results On-Campus**

<i>Variable</i>	<i>%</i>		<i>χ<sup>2</sup></i>	<i>df</i>	<i>p</i>	<i>Φ</i>
	<b>Yes</b>	<b>No</b>				
<b>Proximity</b>						
Frequently Attend Fraternity Party	54 (10.8)	448 (89.2)	8.072	1	.004*	0.127
Live with Significant Other	46 (9.2)	456 (90.8)	2.243	1	0.134	0.067
<b>Exposure</b>						
Since College Pledged/ Joined a Greek organization	106 (21.1)	396 (78.9)	3.434	1	0.064	0.083
Since College, Do you frequently attend parties where alcohol is served?	215 (42.8)	287 (57.2)	3.652	1	0.056	0.085
<b>Target Attractiveness</b>						
Since college, Do you frequently get drunk?	161 (33.8)	315 (66.2)	0.041	1	0.841	0.012
<b>Capable Guardian</b>						
<b>Presence</b>						
Live with one or more students?	349 (69.5)	153 (30.5)	7.338	1	0.007*	0.121
Live with Parents?	45 (9)	457 (91)	8.729	1	0.003*	0.132
<b>Absence</b>						
Live alone	53 (10.6)	449 (89.4)	0.123	1	0.726	0.016
<b>Other Risky Behaviors</b>						
Victim of Sexual Assault Before College	196 (39)	306 (61)	0.061	1	0.805	0.011
<b>College Classification</b>						
Freshman	73 (14.6)	428 (85.4)	13.797	1	.000*	0.166
Sophomore	111 (22.2)	390 (77.8)	8.152	1	.004*	0.128

Junior	133 (26.5)	368 (73.5)	2.904	1	0.088	0.076
Senior	177 (35.3)	324 (64.7)	14.695	1	.000*	0.171

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\*Row Percentages in Parenthesis P<.05\*

## **Off-Campus Sexual Assault Results**

Table 4.3 summarizes the results of the chi-square analysis between the dependent variable, Off-campus sexual assault and all of the independent variables (Proximity, Exposure, Target Attractiveness, Capable Guardianship and Other Risky Behaviors).

### **Proximity**

As shown in Table 4.3 (page 53), the proximity measure: frequently attend fraternity parties was significant at the .05 alpha level  $\chi^2$  (1, N= 551) 4.401,  $p < .05$ . The chi-square analysis compared the amount of participants who indicated they were sexually assaulted off-campus and frequently attended a fraternity party (7.3%) to the amount who indicated they were sexually assaulted on-campus and did not frequently attend a fraternity party (92.7%).

### **Capable guardianship**

The presence of capable guardian measure, live with one or more students was significant  $\chi^2$  (1, N= 286) 4.165,  $p < .05$  while living with parents, was not statistically significant  $\chi^2$  (1, N= 286) .365  $p = .546$ . The only absence of capable guardian measure, living alone did not significantly predict sexual victimization off-campus. These findings yield mixed results for capable guardianship. The presence of a capable guardian should have no significance when compared to off-campus sexual assault because according to lifestyle-routine activities theory, a capable guardian is supposed to deter crime. Although the findings for living with a parent were consistent with the theory, the result for living with one or more students was not. The theory also argues that in the absence of a capable guardian, crime can occur. The lack of significance between our absence of capable guardian measure and off-campus sexual assault does not show support for this theory.

**Exposure**

The one variable significant at the .05 level was, since college pledged/ joined a Greek organization  $\chi^2$  (1, N= 286) 8.995,  $p < .05$ . This finding indicates that students who pledge a Greek organization are more likely to be sexually assaulted off-campus than those who are not a part of Greek life. The other exposure variable in this study, frequently attending parties where alcohol is served, was not significant when looking at specifically off-campus sexual assault.

**Target attractiveness and other risky behavior**

None of the Target attractiveness (Since college, frequently drunk  $\chi^2$  (1, N= 286) .041,  $p = .841$ ) or Other Risky Behavior variables (college classification, previous sexual assault and other risky behaviors) was statistically significant at the .05 levels.

**Tests of strength**

When evaluating the statistically significant measures based on the Phi Coefficient (test of strength), none of the independent variables have a particularly strong effect on the dependent variable. All three of the significant variables (frequently attend a fraternity party, pledged or joined a Greek organization, and live with one or more students) had a phi of .1 indicating a low strength. The following chapter will discuss the results of the data analysis more in depth. 1

**Table 4.3 Results Off-Campus**

<i>Variable</i>	<i># (%)</i>		<i>χ<sup>2</sup></i>	<i>df</i>	<i>p</i>	<i>Φ</i>
	<b>Yes</b>	<b>No</b>				
<b>Proximity</b>						
Frequently Attend Fraternity Party	21 (7.3)	265 (92.7)	4.401	1	.036*	0.124
Live with Significant Other	31 (10.8)	255 (89.2)	1.209	1	0.272	0.065
<b>Exposure</b>						
Since College Pledged/ Joined a Greek Organization	52 (18.2)	234 (81.8)	8.995	1	0.003*	0.177
Since College, Do you frequently attend parties where alcohol is served?	112 (39.2)	174 (60.8)	2.805	1	0.094	0.099
<b>Target Attractiveness</b>						
Since college, Do you frequently get drunk?	89 (33)	181 (67)	0.041	1	0.84	0.012
<b>Capable Guardian</b>						
<b>Presence</b>						
Live with one or more students?	185 (64.7)	101 (35.3)	4.165	1	0.041*	0.121
Live with Parents?	35 (12.2)	251 (87.8)	0.365	1	0.546	0.036
<b>Absence</b>						
Live alone	29 (10.1)	257 (89.9)	2.457	1	0.117	0.093
<b>Other Risky Behaviors</b>						
Victim of Sexual Assault Before College	113 (39.5)	173 (60.5)	1.238	1	0.266	0.066
<b>College Classification</b>						
Freshman	27 (9.5)	258 (90.5)	0.642	1	0.423	0.047
Sophomore	50 (17.5)	235 (82.5)	0.29	1	0.59	0.032

Junior	84 (29.5)	201 (70.5)	0.14	1	0.708	0.022
Senior	121 (42.5)	164 (57.5)	0.495	1	0.482	0.042

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\*Row percentages in parenthesis

P<.05\*



## **Chapter 5**

### **Discussion and Conclusion**

It was the purpose of this study to examine sexual assault risk off-campus using lifestyle-routine activities theory. To reiterate, the null hypothesis of this study is, students who engage in risky behaviors associated with college sexual assault are just as likely to be sexually assaulted off-campus compared to on-campus. As evidenced by the mixed results, this research fails to reject the null hypothesis. In other words, the null hypothesis, students who engage in risky behaviors associated with college sexual assault are just as likely to be sexually assaulted off-campus compared to on-campus, is accepted. Although there were some significant risk factors for off-campus sexual assault there was no evidence that there was a higher risk off-campus than on-campus. Only one variable (pledging or joining a Greek organization) was significant for off-campus sexual assault and not on-campus sexual assault. The following will provide an overview of key findings, provide the limitations, future research suggestions and conclusion.

### **Key Findings**

#### **College sexual assault**

A majority of the variables were significant to college sexual assault. This finding provides support for three of the four components of lifestyle-routine activities theory. Proximity, exposure, and target attractiveness were all significant. Meaning that proximity, exposure and target attractiveness will increase the likelihood of college sexual assault victimization.

Capable guardianship yielded mixed results. This was because the presence of a capable guardian was found to increase the likelihood of sexual assault victimization, however, capable

guardianship is supposed to deter crime. The absence of a capable guardian variable was significant when compared to college sexual assault, this is a finding that is expected according to lifestyle routine activities theory. This result is interesting, however, it is not unfounded. A large percentage of college students are victims of college sexual assault prior to college. Also, a student who lives with the parents is not always going to be home therefore, living with parents does not always ensure proper guardianship. Overall, the findings from the college sexual assault variable are consistent with prior research. As mentioned in the Chapter 2, studies typically find proximity and exposure measures to be significant while often find mixed findings for target attractiveness and capable guardianship.

In terms of the risk factors associated with college sexual assault, the findings indicate that alcohol, sorority membership (pledging or joining a Greek organization), partying, prior sexual assault, and being a freshman, junior or senior are all significant. The college classification or year in school variable was, however, flawed as the study asked about sexual assaults that occurred in general not just in the person's freshman, sophomore, junior or senior year. Although this study found significance at the college sexual assault level when breaking down into the two locations, on-campus and off-campus, the results were very different.

### **On-campus sexual assault**

The proximity variable, frequently attending fraternity parties, and capable guardianship variables, live with parents and live with one or more students, significantly predicted on-campus sexual assault victimization. While the proximity variables significance was consistent with previous studies, the capable guardian measure was not. Both of the variables that denoted the

presence of a capable guardian were significant. Lifestyle-routine activities theory argues that it is the presence of a capable guardian that deters crime.

What this finding indicates is, this may not always be the case and the presence of a capable guardian might increase the likelihood of victimization. If a student lives with one or more roommates, this may indicate some type of protection (their presence=protection) however, it may be that a roommate could expose their other roommates to crime by engaging in risky behaviors. For example, Jeanne Clery's roommate left the door ajar of their dorm room in order to allow a guest that was staying with her to move about as they pleased. Unfortunately, Clery's attacker was able to access the dorm because of the open door. Although Clery didn't engage in the risky behavior, she fell victim due to her roommate's actions (Nobles, Fox, Khey, & Lizotte, 2012).

If a student lives with their parents it may seem like they would be better protected from sexual assault victimization. This studies finding indicates that this is not the case. Although the finding is not consistent with lifestyle-routine activities theory, it is not inexplicable. As mentioned in Chapter 2, many college students arrive at college having been previous victims of sexual assault. Some of these students, arguably, lived with their parents prior to college. Despite living with their parents, students may still spend a majority of time outside the home. Students who live with their parents can still participate in social events on campus that might lead to their victimization (Fisher, Daigle, & Cullen, 2010).

### **Off-campus sexual assault**

Only three of the independent variables were significant at predicting the likelihood of off-campus sexual assault. This finding fails to reject the null hypothesis. There is not a higher risk of sexual victimization off-campus compared to on-campus. The one variable, which was significant off-campus and not significant on-campus, was Greek life membership. This finding may indicate that college students who pledge or join a fraternity or sorority are more at risk of sexual assault victimization off-campus than they are on-campus.

Alcohol, partying, college classification, and previous sexual assault were not significant in predicting the likelihood of off-campus sexual assault. Although this may indicate a lack of risk to sexual assault victimization off-campus, there were several limitations in the study that affected this finding. The limitations of this study are discussed in the following section.

### **Limitations**

Although this study contributes to the literature by examining the location of college sexual assault and the risks associated with that location, this study had several limitations associated with the use of secondary data that impaired the researchers' ability to truly examine this risk. The data set itself was large and included variables that coincided with the dependent variables for this study; however, the data was flawed in one major way.

The original data set contained a question asking generally, "did the sexual assault occur on your college campus?" (Krebs C. , Lindquist, Warner, Fisher, & Martin, 2011) The researchers never asked this general question when asking respondents about off-campus sexual assault. This study had to operationalize off-campus sexual assault by combining various off-campus location variables (e.g. did the assault happen in a building off-campus, did the assault happen in a car off-campus, etc.). Unfortunately, the researchers did not cover every location off-

campus and allowed students to specify another location. This “specify another location off-campus” variable yielded 131 responses. These responses could not be used in the current study. If the respondents were provided with a more general off-campus question (i.e. did your sexual victimization occur off-campus), the results of the current study may have been different.

A related limitation to this study was the time constraint and IRB restrictions. Due to these two limitations it wasn't feasible to create an original survey that specifically targeted off-campus sexual assault. Therefore key questions that could have aided in exploring off-campus sexual assault were omitted. In the following section on future research, the creation of a specific study on off-campus sexual assault will be explained.

Another limitation facing this research is its generalizability. This particular study, and the original data set, is specifically focused on a college population. Therefore, these results could not be generalized to the entire population of people between the ages of 18-25. The only generalizations that could be made would be to the college population although; this would be limited as well.

The data set took its sample from one large university in the South and one in the Midwest. College life can differ depending on the size and location of a university. For example, not every university is going to have a strong Greek presence. Moreover, partying and alcohol use is not as prominent on some campuses when compared to others. In a study by Krebs, Lindquist and Barrick (2010), the results indicated that students who attended a Historically Black College University (HBCU) had a lower rate of alcohol use than non-HBCU.

Despite several limitations of this study, the findings still indicate a presence of risk that is worth examining. There were also findings, unrelated to the study that may warrant further insight. The following section will make recommendations for future research.

## **Future Research**

### **Lifestyle routine activities theory and social media**

The current study utilized lifestyle-routine activities theory as a framework; however, due a lack of questions regarding the use of social media sites by college students, this study was unable to use online lifestyle routine activities theory. The internet is used for socialization by nearly every college student in the United States (Nobles, Fox, Khey, & Lizotte, 2012). Social media is where many college students meet, interact and share information. It is important that future studies that look at the components of lifestyle-routine activities theory include the online variables as well. This will provide a more accurate picture of victimization.

### **Off-campus sexual assault study**

As has been mentioned several times throughout this study, research has indicated that students are more likely to be sexually assaulted off-campus compared to on-campus. Despite the lack of risk off-campus found in this study, the data was not ideal for examining off-campus sexual assault specifically. Future research should develop a study that asks specific questions targeting the location of college sexual assault. By adequately identifying where the risk is, colleges can do a better job allocating their resources to these locations.

### **Study abroad students**

Although this research could not use the open-ended answers in the chi-square analysis, there were several students who indicated that they were sexually assaulted off-campus but were abroad at the time. This area is fairly new and understudied. These open-ended responses may warrant additional research in this area.

### **Conclusion**

Consistent with prior research, this study found significance between college sexual assault and the components of lifestyle-routine activities theory and risky behaviors. Despite this finding, when breaking college sexual assault into two locations, on-campus and off-campus, the results varied. As evidenced in the results section, some of the independent variables increased the likelihood of victimization and some did not. This indicates that there is missing information on the location of sexual victimization in this study. In the future, it is important that researchers exhaust all questions when conducting a study on location. Overall, the results indicated that off-campus sexual assault was not more likely than on-campus sexual assault. What this study did find is that the risks of the two locations may be different and need to be examined further in order to differentiate these risks.

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### Appendix A: Demographic Frequencies

**Table 3.1. Sample Demographic Frequencies (N=6,821)**

<i>Variable</i>	<i>Number</i>	<i>%</i>
Gender		
Male	1375	20.2
Female	5446	79.8
Race		
White	5610	78.81
Black/ African American	615	8.6
Hispanic/ Latino	189	2.7
Asian	417	5.86
Native American/ Pacific Islander	25	0.04
American Indian/ Alaska Native	100	1.4
Other	162	2.3
Age		
18	1066	15.6
19	1604	23.5
20	1475	21.6
21	1451	21.3
22-24	1122	16.4
25-29	94	1.4
30-39	2	0
40 or older	7	0.1
College Classification		
Freshman	1622	23.8
Sophomore	1671	24.5
Junior	1719	25.2
Senior	1699	24.9
Other	106	1.6
Refused	4	0.1

### Appendix B: Independent and Dependent Variable Frequencies

**Table 3.2 Frequency Tables: Dependent Variables (N=6,821)**

<i>Variable</i>	<i>Number</i>	<i>%</i>
College Sexual Assault	1126	16.51%
On-Campus Sexual Assault	216	3.20%
Off-Campus Sexual Assault	128	1.90%

**Table 3.3 Frequency Tables: Independent Variables (N=6,821)**

<i>Variable</i>	<i>Number</i>		<i>%</i>	
	Yes	No	Yes	No
<b>Proximity</b>				
Frequently Attend Fraternity Party	502	6315	7.40%	92.60%
Live with Significant Other	475	6346	7.00%	93.00%
<b>Exposure</b>				
Since College Pledged/ Joined a Greek Organization	1106	5693	16.20%	83.50%
Since College, Do you frequently attend parties where alcohol is served?	2411	4402	35.30%	64.50%
<b>Target Attractiveness</b>				
Since college, Do you frequently get drunk?	1616	4313	23.70%	6320.00%
<b>Capable Guardian</b>				
<b>Presence</b>				
Live with one or more than one student?	4838	1983	70.00%	29.10%
Live with Parents?	846	5975	12.40%	87.60%
<b>Absence</b>				
Live alone	565	6256	8.30%	91.70%
<b>Other Risky Behaviors</b>				
Victim of Sexual Assault Before College	1095	5723	16.10%	83.90%
<b>College Classification</b>				
Freshman	1622	5199	23.80%	76.22%
Sophomore	1671	5150	24.50%	75.50%
Junior	1719	5102	25.20%	74.80%
Senior	1699	5122	24.91%	75.09%
Other	106	6715	1.50%	98.45%
Refused	4	6817	0.05%	99.95%

### Appendix C: Results by Dependent Variable

**Table 4.1 Results College Sexual Assault**

<i>Variable</i>	<i>%</i>		<i>χ<sup>2</sup></i>	<i>df</i>	<i>p</i>	<i>Φ</i>
	<b>Yes</b>	<b>No</b>				
<b>Proximity</b>						
Frequently Attend Fraternity party	502 (7.4)	6305(92.6)	20.145	1	.000*	0.054
Live with Significant Other	475 (7)	6335 (93)	6.865	1	.009*	0.032
<b>Exposure</b>						
Since College Pledged/ Joined a Greek Organization	1105(16.3)	5685(83.7)	29.371	1	.000*	0.066
Since college, do you frequently attend parties where alcohol is served?	2407(35.4)	4395(64.6)	69.903	1	.000*	0.107
<b>Target Attractiveness</b>						
Since college, do you frequently get drunk?	1615(27.3)	4305(72.7)	50.531	1	.000*	0.092
<b>Capable Guardian</b>						
<b>Presence</b>						
Live with one or more students?	4830 (70.9)	1980(29.1)	0.696	1	0.404	0.01
Live with Parents?	844 (12.4)	5966(87.6)	11.699	1	.001*	0.041
<b>Absence</b>						
Live alone	565 (8.3)	6245(91.7)	3.844	1	0.05*	0.024

## Other Risky Behaviors

Victim of Sexual Assault  
Before College

1092 (16)      5717 (84)      472.068      1      .000\*      0.263

## College Classification

Freshman

1618 (23.8)      5188(76.2)      88.389      1      .000\*      0.114

Sophomore

1669 (24.5)      5137(75.5)      0.479      1      0.489      0.008

Junior

1715 (25.2)      5091(74.8)      7.841      1      .005\*      0.034

Senior

1698 (24.9)      5109(75.1)      45.097      1      .000\*      0.081

\*Row percentage in  
parenthesis

P&lt;.05\*

**Table 4.2 Results On-Campus**

<i>Variable</i>	<i>%</i>		$\chi^2$	<i>df</i>	<i>p</i>	$\Phi$
	<b>Yes</b>	<b>No</b>				
<b>Proximity</b>						
Frequently Attend Fraternity Party	54 (10.8)	448 (89.2)	8.072	1	.004***	0.127
Live with Significant Other	46 (9.2)	456 (90.8)	2.243	1	0.134	0.067
<b>Exposure</b>						
Since College Pledged/ Joined a Greek organization	106 (21.1)	396 (78.9)	3.434	1	0.064	0.083
Since College, Do you frequently attend parties where alcohol is served?	215 (42.8)	287 (57.2)	3.652	1	0.056	0.085
<b>Target Attractiveness</b>						
Since college, Do you frequently get drunk?	161 (33.8)	315 (66.2)	0.041	1	0.841	0.012
<b>Capable Guardian</b>						
<b>Presence</b>						
Live with one or more students?	349 (69.5)	153 (30.5)	7.338	1	0.007*	0.121
Live with Parents?	45 (9)	457 (91)	8.729	1	0.003*	0.132
<b>Absence</b>						
Live alone	53 (10.6)	449 (89.4)	0.123	1	0.726	0.016
<b>Other Risky Behaviors</b>						
Victim of Sexual Assault Before College	196 (39)	306 (61)	0.061	1	0.805	0.011
<b>College Classification</b>						
Freshman	73 (14.6)	428 (85.4)	13.797	1	.000*	0.166
Sophomore	111 (22.2)	390 (77.8)	8.152	1	.004*	0.128



Junior	133 (26.5)	368 (73.5)	2.904	1	0.088	0.076
Senior	177 (35.3)	324 (64.7)	14.695	1	.000*	0.171

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\*Row Percentages in Parenthesis P<.05\*

**Table 4.3 Results Off-Campus**

<i>Variable</i>	<i># (%)</i>		$\chi^2$	<i>df</i>	<i>p</i>	$\Phi$
	<b>Yes</b>	<b>No</b>				
<b>Proximity</b>						
Frequently Attend Fraternity Party	21 (7.3)	265 (92.7)	4.401	1	.036*	0.124
Live with Significant Other	31 (10.8)	255 (89.2)	1.209	1	0.272	0.065
<b>Exposure</b>						
Since College Pledged/ Joined a Greek Organization	52 (18.2)	234 (81.8)	8.995	1	0.003*	0.177
Since College, Do you frequently attend parties where alcohol is served?	112 (39.2)	174 (60.8)	2.805	1	0.094	0.099
<b>Target Attractiveness</b>						
Since college, Do you frequently get drunk?	89 (33)	181 (67)	0.041	1	0.84	0.012
<b>Capable Guardian</b>						
<b>Presence</b>						
Live with one or more students?	185 (64.7)	101 (35.3)	4.165	1	0.041*	0.121
Live with Parents?	35 (12.2)	251 (87.8)	0.365	1	0.546	0.036
<b>Absence</b>						
Live alone	29 (10.1)	257 (89.9)	2.457	1	0.117	0.093
<b>Other Risky Behaviors</b>						
Victim of Sexual Assault Before College	113 (39.5)	173 (60.5)	1.238	1	0.266	0.066

College Classification						
Freshman	27 (9.5)	258 (90.5)	0.642	1	0.423	0.047
Sophomore	50 (17.5)	235 (82.5)	0.29	1	0.59	0.032
Junior	84 (29.5)	201 (70.5)	0.14	1	0.708	0.022
Senior	121 (42.5)	164 (57.5)	0.495	1	0.482	0.042

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\*Row percentages in parenthesis

P<.05\*

## Appendix D: IRB Approval



January 14, 2016

Dr. Khadija Monk  
Criminal Justice  
311D Maxwell Library

Re: IRB Application – Case #2016086

Dear Dr. Monk:

Your proposal, *College Sexual Assault Location: Student Risk of Victimization Off-Campus*, is approved (*exempt*) by the Institutional Review Board (IRB).

Exempt protocols do not require additional review unless there are substantial changes to the project.

We wish you every success in this research.

Sincerely,



Dr. Elizabeth Spievak  
Chair, Institutional Review Board

ES/dfd

cc: Danielle Christenson