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Certainty Versus Suspicion: Incapacitated Sexual Assault on Campus

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Abstract

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Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Abstract

One in four women experience sexual assault during college. With rates of sexual assault on college campuses continuing to increase, the need for advanced analysis utilizing contemporary variables is justified. The purpose of this quantitative study was to compare two groups of female college-attending students. One group was certain and the other suspected that they were sexually assaulted while incapacitated (independent variables). Dependent variables compared between groups were offender type (interest on offenders with fraternal affiliations), law enforcement reporting decisions, and barriers to reporting sexual assault. Four research questions measured whether there was a statistically significant difference amongst the dependent variables when compared to the independent variables. The theoretical foundation for this study was empowerment theory. A comparative research design was used to examine archival data from the Inter-University Consortium for Political and Social Research. Logistic regression and chi-square analysis showed mostly significant results: fraternal membership, reporting to law enforcement, and barriers to reporting to law enforcement were statistically significant. In addition, ad hoc tests were significant, indicating that being on a date with the offender, university disciplinary action taken, and whether the offender was arrested were all statistically significant variables. Social change is achievable at two levels, organizational and societal. Universities, advocacy groups, and governmental agencies may all benefit from contemporary findings. Furthermore, improved societal understanding of campus sexual assault culture and victimology can create a safe space for victims to report sexual assault on a college campus when it involves incapacitation.

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Dedication

I dedicate this research to all the brave survivors of sexual assault.

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To my dissertation committee, my village, without your guidance, support, and encouragement I wouldn't be writing this.

To my husband, my rock, you have been cheering me on for 12 years, pursuing degree after degree.

To my daughter Mira, my sweet baby. You can do anything you want to do with dedication and tenacity.

To my parents, in-laws, extended families, friends, and cohorts, I did it! Thank you for being on my team.

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Chapter 1: Introduction to the Study

Introduction

Sexual assault remains a pervasive public health crisis, and college campuses are high risk environments for victimization. The U.S. Department of Justice Office on Violence Against Women (2017) defines sexual assault as "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 such as forced sexual intercourse, forcible sodomy, child molestation, incest, fondling, and attempted rape. In 2015, a general population study revealed 431,840 reported sexual assaults, and of those sexual assaults, 47% of victims were aged 12 or older (U.S. Department of Justice, Office of Justice Programs, 2016). The Department of Justice (DOJ, 2016) cited a significant 66% increase in rates of reported sexual assault between 2014 and 2015.

Krebs, Lindquist, Berzofsky, Shook-Sa, and Peterson (2016) reported 25.1% of students (all sexes) from nine different universities experienced incapacitated sexual assault. With incapacitated sexual assault (ISA) so common among the college-attending population, it is pertinent to understand whether there are differences between female college students who are certain they were sexually assaulted while incapacitated and those female students who suspected they were sexually assaulted yet are not certain. This research is timely, as rates of sexual assault increase—particularly those involving incapacitation—but rates of reporting such experiences continue to decrease. Comparing differences in victims' decisions and behaviors depending on their experience may influence prevention and intervention.

In this study, I addressed four research questions focused on victims of sexual assault who knew they were sexually assaulted while incapacitated and those who suspected they experienced sexual assaulted while incapacitated, as well as offender type, reporting, and barriers to reporting the sexual assault to law enforcement. Exploratory analysis was limited to measuring the differences between being certain of, and being suspicious of, sexual assault. A small study out of Norway showed a 7% increase in suspicion of sexual assault during incapacitation since the early 1990s (Hagemann et al., 2013). Another study showed a 17% increase since the 1980s (as cited in Hagemann et al., 2013).

A significant gap exists in historical and contemporary literature regarding whether there are statistically significant differences between the two study populations. Findings from this study may be used to better understand victims, aid in building comprehensive prevention programs, inform sensitivity training for university and law enforcement agents, and tailor intervention programs for victims who have experienced and report sexual assault during their college experience. Chapter 1 provides background for the study. I highlight pertinent historical literature, state why the study needed to be done and what I intended to accomplish, offer a list of research questions and their hypotheses, and outline the theoretical foundation of the study. Finally, I discuss the nature of the study, define keywords are defined, and identify assumptions, delimitations, limitations, and the significance of the study.

Background

The DOJ Office of Justice Programs (2013) gathered data on sexual violence against women in the general population from 1994-2010. Findings suggest victims of sexual assault are most likely to fit the following demographics: between the ages of 12-17, either Caucasian or African American, have never been married, have a household income of less than $25,000, and live in an urban area (DOJ, 2013).

The social and sexual culture of the college campus continues to evolve. Krebs et al. (2016) found college students across all genders have a one in four chance of being sexually assaulted on their college campus during their pilot study. Female students alone had a 21% chance of experiencing sexual assault since entering college (Krebs et al., 2016). Hooking-up, or casual sex with no long-term emotional commitment, has become a popular phenomenon across college campuses and correlates to sexual assault (Sutton& Simons, 2014). Hook-ups typically take place during a party where alcohol and other recreational drugs are available (Flack et al., 2015).

Two types of offender tactics are discussed in this analysis: forcible sexual assault (FSA) and ISA. FSA is characterized by a perpetrator using (or threatening to use) physical force or a weapon to gain control over their victim (Carey, Durney, Shepardson, & Carey, 2015). Krebs, Lindquist, Warner, Fisher, and Martin (2007) differentiate between sexual assault by force and sexual assault which takes place when a victim is unable to provide consent or stop what was happening because of being passed out, drugged, drunk, incapacitated, or asleep. Therefore, ISA will herein be defined as such. Flack et al. (2015) used a similar definition of a victim being too intoxicated by alcohol

or other drugs to consent to sexual activity. Physical injury is more likely to occur and is associated with FSA (Cohn, Zinzow, Resnick, & Kilpatrick, 2013). Peter-Hagene and Ullman (2014) found that post-traumatic stress disorder (PTSD) is significantly more likely following a sexual assault by force. Strang, Peterson, Hill, and Heiman (2013) reported FSA to be extremely low amongst the college-attending population.

Of interest is the Greek system, more specifically, fraternity membership and how the fraternity party/hook-up culture perpetuates ISA. Boswell and Spade (1996) studied high-risk fraternity parties, which were characterized by disproportionate male to female ratios, gender segregation, and less respectful treatment of women. The use of alcohol and other drugs at parties thrown by fraternities has been found to be a mechanism to control female college students and can lead to sexual assault (Harris & Schmalz, 2016). Corprew and Mitchell (2014) contrasted fraternity members to nonfraternity members, and identified statistically significant differences in sexually aggressive attitudes, hypermasculine attitudes, and disinhibition**.** The DOJ (2014) gathered data from 1995-2013, finding that 31,302 sexual assaults were reported by 18-24-year-old college-attending female students. College-attending females reported 20% of sexual assaults, compared to nonstudents who reported 32% (DOJ, 2014). Low rates of sexual assault reporting equate to low rates of offender apprehension (Cohn et al., 2013). Measuring sexual assault can be difficult because of low reporting rates, particularly among college students. Low reporting rates amongst this population can be based on perceived barriers a victim experiences following a sexual assault, such as fear of offender reprisal. Walsh and Bruce (2014) found that only 14% of both male and female victims in the general

population reported sexual assault to law enforcement. In a national study of college-attending female students, only 13% of the 203 female students reporting sexual assault to researchers had reported their assault to law enforcement (Wolitzky-Taylor et al., 2011).

To date, there is little evidence indicating that the general female population and college-attending victims experience unique barriers to reporting sexual assault to law enforcement. Zinzow and Thompson (2011) published a list of barriers specific to both male and female college-attending victims. Similarly, Cohn et al. (2013) conducted a random, national study of barriers to reporting sexual assault amongst women and found similar results. In this research, I sought to understand whether reporting barriers differ amongst college-attending victims who are certain of ISA versus those who suspect they experienced ISA. If findings can generalize barriers experienced by each victim group, intervention programs and advocacy groups may tailor their approach to assistance based on victimology. University intervention programs, advocacy groups, and law enforcement all hope victims will report sexual assaults, so the offender may be held accountable. If assault tactics influence initial disclosure decisions by victims, these agencies can tailor not only intervention, but prevention programs as well.

Problem Statement

There is no research comparing college-attending women who suspect they experienced sexual assault while incapacitated to those college-attending women who know they were sexually assaulted while incapacitated. In addition, there is no research measuring whether statistically significant differences exist between these victim groups

and whether the offender is affiliated with a fraternity, if the assault takes place during a party or social function, reporting sexual assault to law enforcement, and barriers to reporting assaults to law enforcement. Therefore, a significant gap in the literature exists on this topic.

While rates of sexual assault on college campuses continue to rise, the need for advanced analysis using contemporary variables is justified. I will expound on Cranney's (2015) discussion of the college campus party culture, specifically to include fraternity sponsored parties. Kuperberg and Padgett (2016) suggested a deeper examination of hooking-up and how it influences sexual violence on college campuses.

James and Lee (2015) suggest future research focus on why college-attending victims of sexual assault do not report their assault experiences. Few studies explore specific perceived barriers victims experience that deter them from reporting their experience to law enforcement. Wolitzky-Taylor et al. (2011) and Cohn et al. (2013) both attempted to identify different barriers between the general population and the college population of sexual assault victims. In this research, I focused on differences in experienced barriers between victims certain of ISA and victims suspicious of ISA.

If differences exist between victim groups across variables such as location of offense, offender type, reporting behaviors, and barriers to reporting to law enforcement, those findings will contribute to positive social change. Prevention and intervention programs can be designed and enhanced to educate victims on sexual assault, the benefits of reporting regardless of whether the victim is certain or only suspects they were assaulted, and barriers (including the stigma) after experiencing a sexual assault.

Dissemination of findings will benefit not only law enforcement, but also universities and sexual assault advocacy services in college towns. Findings will assist university campus prevention and intervention training, law enforcement sensitivity training, and they may be used to educate sexual assault response teams on how to provide the best service for victims.

Purpose of the Study

This quantitative study contributes to the literature on sexual assault by answering questions about specific variables related to sexual assault incidents on college campuses. These questions measured if there is a statistically significant difference between women who suspect, and women who know, they have been sexually assaulted while incapacitated. Furthermore, this study identified whether there is a statistically significant difference between victim populations (independent) and the following variables (dependent): location of sexual assault incident, whether the offender was a member of a Greek fraternal organization, reporting decisions, and experienced barriers leading the victim to not report the assault.

Research Questions and Hypotheses

This study was guided by four research questions:

RQ1: Are college-attending women who suspect they have been sexually assaulted while incapacitated significantly more likely than college-attending women who know they were assaulted while incapacitated to have been at a party or social gathering when the assault occurred?

$H_0$1: There is no difference between college-attending women who suspect, and college-attending women who know, they have been sexually assaulted while incapacitated and whether the incident took place at a social gathering or party.

H_a1: There is a difference between college-attending women who suspect, and college-attending women who know, they have been sexually assaulted while incapacitated and whether the incident took place at a social gathering or party.

RQ2: Are college-attending women who suspect they have been sexually assaulted while incapacitated significantly more likely than college-attending women who know they were sexually assaulted while incapacitated to be sexually assaulted by a fraternity member?

$H_0$2: There is no difference between college-attending women who suspect, and college-attending women who know, they have been sexually assaulted while incapacitated and whether the perpetrator was a fraternity member.

H_a2: There is a difference between college-attending women who suspect, and college-attending women who know, they have been sexually assaulted while incapacitated and whether the perpetrator was a fraternity member.

RQ3: Are rates of reporting to campus police or law enforcement significantly higher among college-attending women who know they have been sexually assaulted while incapacitated than college-attending women who suspect they were sexually assaulted while incapacitated?

$H_0$3: There is no difference in rates of reporting to campus police or law enforcement between college-attending women who know, and college-attending women who suspect they have been sexually assaulted while incapacitated.

H_a3: There is a difference in rates of reporting to campus police or law enforcement between college-attending women who know, and college-attending women who suspect they have been sexually assaulted while incapacitated.

RQ4: Is there a significant difference in barriers to reporting to campus security or law enforcement between college-attending women who suspect they were sexually assaulted while incapacitated and college-attending women who knew they were sexually assaulted while incapacitated?

$H_0$4: There is no difference in barriers to reporting to campus security or law enforcement amongst college-attending women who suspect they were sexually assaulted and college-attending women who knew they were sexually assaulted, while incapacitated.

H_a4: There is a difference in barriers to reporting to campus security or law enforcement amongst college-attending women who suspect they were sexually assaulted and college-attending women who knew they were sexually assaulted, while incapacitated.

Theoretical Foundation for the Study

This study was guided by empowerment theory, as described by Lord and Hutchison (1993). Empowerment is a two-step mental process: first, a person gains a psychological sense of control over their own lives, and second, a person gains concern

for social influence and justice (Rappaport, 1987). One premise of empowerment theory is that justice stems from empowerment (Rappaport, 1987).

Lord and Hutchison's (1993) study on power versus powerlessness included groups of individuals who became disabled later in their lives and abuse survivors. Many female participants reported experiencing sexual abuse (Lord & Hutchison, 1993). Kieffer (1984) concluded that powerlessness results from a perceived inability to make decisions. For instance, perpetrator reprisal, being blamed for the assault, or not being sure what happened was a crime are all reasons a victim may feel insecure about reporting a sexual assault to law enforcement. Experiencing barriers and feeling as if reporting will be fruitless, victims begin to feel powerless (Kieffer, 1984).

Victims may feel powerless before being faced with the decision of whether to report their experience. Individuals who experienced ISA may be more likely to experience powerlessness as many victims are incapable of resisting their attacker (Padmanabhanunni & Edwards, 2012). Powerlessness can become, or accompany, helplessness as discussed by Frazier et al. (2009). Zimmerman (1990) described the antithesis of helplessness, known as hopefulness, which can be acquired by skill building and achieving control over one's life. Just as victims can learn to be helpless and powerless, they can learn to be hopeful and powerful (Zimmerman, 1990). When individuals take an active role in decisions and behaviors of their lives, they feel empowered (Rapport, 1987).

Using the theory of empowerment and power versus powerlessness, I compared whether victims perceived they had the power to report sexual assault to law

enforcement. Of interest is whether the victim was certain or only suspicious of a sexual assault. I interpret reporting sexual assault as an empowering experience, regardless of offender tactic, offender type, or barrier. Each research question was guided by the comparative nature of power versus powerlessness, and I used each question to examine how the dependent variable is affected by the independent variable. A complete discussion of the theoretical foundation is discussed in the next chapter.

Nature of the Study

This was a comparative, quantitative study using archival data. A comparative design means there is no random participant assignment (see Creswell, 2014). Comparative designs test hypotheses without manipulating any variables, while a quantitative design utilizes statistical analyses to test hypotheses (Creswell, 2014; Stangor, 2011). Frankfort-Nachmias and Nachmias (2008) noted that the benefits of conducting archival analysis include increased sample size, ability to expand the scope of variables used, and cost effectiveness. Because of the sensitive nature of this topic and my desire to identify differences among two groups, utilizing data already gathered mitigated ethical risk.

I used archival data from the Inter-University Consortium for Political and Social Research (ICPSR, 2016). The dataset was comprised of quantitative responses to an assessment created by Krebs et al. (2007). College-attending women from two universities in the United States ($N = 5,446$) were asked specific questions relating to sexual assault experiences before entering, and since entering college. This dataset was only available to my dissertation chair and me following Institutional Review Board

(IRB) approval and ICPSR approval. I had access to the ICPSR website because I am a student at Walden University. I only asked permission to access quantitative data to adequately address research questions and test hypotheses. Logistic regression was used to test each research questions to reject or accept the null hypotheses.

The National Institute of Justice, the department which performs research for the Department of Justice, funded The Research Triangle Institute (RTI) International to conduct a study of incapacitated sexual assaults at two universities. Krebs et al. (2007) created a web-based instrument administered to students from two universities, one in the Midwest and one in the South. The instrument covered a wide variety of variables related to ISA on college campuses. Some of the variables in the instrument included tactic used by offender, the relationship between the victim and offender before the assault happened, offender substance use, voluntary drug use by the victim, physical location of sexual assault, and weapon use.

In this study, I compared the independent variable, being suspicious versus being certain ISA took place, to the following dependent variables: likelihood of the offender being a member of a fraternity, reporting behaviors, and barriers to reporting. For the purposes of this study, incapacitation is the tactic used to sexually assault a victim, regardless of whether the victim voluntarily consumed alcohol and/or drugs or if they were unknowingly incapacitated by the offender. Suspicion versus knowing refers to whether the victim is sure, or believes, she was sexually assaulted. Furthermore, I sought to measure how often members of a fraternity perpetrate incapacitated sexual assault. The variable of reporting refers to quantifying whether victims reported sexual assault to law

enforcement or campus police. Lastly, this study highlighted barriers that lead to not reporting a sexual assault.

Definitions

Binge drinking: Consuming large quantities of alcohol in a short period of time.

College party: A gathering of college-attending students, typically hosted by a fraternal organization where alcohol and recreational drugs are available for use.

College social gathering: A place where college-attending students accumulate to communicate, sometimes where alcohol or other recreational drugs are consumed.

Forced sexual assault (FSA): Use, or threat of use, of physical force to obtain sexual activity without consent (Krebs et al., 2007).

Fraternity member: One individual who is part of a local organization, comprised only of males, primarily for social purposes.

Global powerlessness: The inability to see oneself as being capable of making decisions and influencing others throughout their lives (Lord & Hutchison, 1993).

Incapacitated sexual assault (ISA): Victim incapacitation (voluntarily or involuntarily) by use of alcohol and/or drugs to obtain any sexual activity without consent (which is not legally possible; Krebs et al., 2007).

Inter-University Consortium for Political and Social Research (ICPSR): Requires membership to access secondary databases, publications, and training in quantitative literacy.

Sexual assault: 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, fondling, and attempted rape (DOJ, 2017).

Situational powerlessness: The inability to see oneself as being capable of making decisions and influencing others in certain aspects of their lives (Lord & Hutchison, 1993).

Suspicion of sexual assault: A victim who is not certain they were sexually assaulted but was either told they were assaulted or have some physical sign of being sexually assaulted (Krebs et al., 2007).

Victim-offender relationship: The degree of relatedness between the victim and offender at the time of the sexual assault.

Assumptions

Original data were collected by Krebs et al. (2007). Therefore, I assumed participants consented willingly to participate in the original study, participants answered the questionnaires honestly and to the best of their ability, and all answers were coded and assessed accurately. Making these assumptions was necessary because the type of data is archival, therefore, I was not part of the initial data collection procedure.

A total of three IRB approvals were required before the original data were gathered. RTI International was funded by the National Institute of Justice to conduct research measuring incapacitated sexual assaults at two universities (Krebs et al., 2007). RTI International had to pass their IRB approval process, in addition to each participating university's individual IRB process (Krebs et al., 2007). Because each IRB approval was

granted, and the study went on to be conducted, I assumed that all possible steps were taken to safeguard participants.

Binary logistic regression was used to test the first three hypotheses and a chi-square test was used to test the fourth hypothesis. Binary logistic regression assumes the following will not be violated: the dependent variable is dichotomous, there are no outliers in the data, and no multicollinearity (Field, 2013). The chi-square test is non-parametric and assumes both variables are categorical, and each group is mutually exclusive (Field, 2013). None of these assumptions were violated. G*Power suggested a sample size of at least 190 based on power and alpha levels.

Delimitations

My study sought to determine if differences exist between two distinct female college-attending populations: victims who are certain they experienced ISA and those who suspect they experienced ISA. Four research questions tested whether there is a statistically significant difference between two victim populations and the following variables: whether the incident took place at a party, if the offender was a fraternity member, reporting behavior differences between populations, and barriers to reporting incidents to law enforcement. Certain delimitations were made due to the nature of the study.

This research was delimited to the use of archival data versus collecting primary data for analysis. Further delimitations included the participant criteria: a female only population, all participants were college-attending, enrolled in one of two 4-year universities, one in the Midwest and one in the South, and 82.2% of the total sample

population reported being White (Krebs et al., 2007). Sexual assaults reported to have taken place before entering college and since entering college are included in the original data (Krebs et al., 2007). However, this study excludes those experiences occurring before college. Because this research emphasizes the high rates of ISA amongst college-attending students, there is no statistical value in including sexual assaults that took place before the victim was attending college. Fedina, Holmes, and Backes (2018) suggested focusing on sexual assault since entering college to understand how the college environment specifically affects sexual assaults. Due to delimitations of archival data, findings are only generalizable to the specific participant criteria noted. Therefore, findings can only be generalized to the population discussed in the following chapters.

Limitations

In this study, I used archival data for analysis (Krebs et al., 2007). Original data is meant for a purpose. No assurances existed, therefore, whether this data would be appropriate for this study or if it would answer the proposed research questions and hypotheses (Frankfort-Nachmias & Nachmias, 2008). Because archival data was used, generalization is limited to only the selected sample.

To address the limitation of the original data's purpose, I only used specific data required for hypotheses testing. Only answers to those assessment questions needed to address the research questions have been analyzed. To address the limitation of generalization, I have only generalized findings to college-attending females within the sampling frame.

Significance

A college campus is a target-rich environment for sexual offenders (Ziering & Dick, 2015). Findings will benefit a variety of agencies including university campuses, sexual assault response teams, and law enforcement. Findings will assist university campus prevention and intervention training, law enforcement sensitivity training, and sexual assault response teams in how to provide the best service for victims.

A comprehensive examination of these specific variables has not been done. Outcomes from this research will begin to address this gap in the literature. In addition, it can create positive social change. As college campus sexual assault continues to make headlines, resources have been dedicated to eliminating this pervasive criminal act. Scholars, university officials, advocacy groups, and students are discussing consent, identifying what consent means, and providing education to students about it.

Legislation has been passed, beginning the conversation of consent at the congressional level. Even the White House has an initiative on ending campus sexual assault. One example enacted at California colleges is the Affirmative Consent Senate Bill 967 (2014), best known as the *yes means yes* law, which requires verbal confirmation of consent before any sexual activity begins. While this bill has been criticized, it is a first step to safeguard female college students. The founder of All Students for Consent at a university in Walla Walla, Washington advocates “ask first and ask often,” indicating consent should be a continuing discussion and agreement during sexual activity (Kitroeff, 2014).

Summary

In this study, I sought to measure differences between two distinct female college-attending sexual assault victims, those who are certain versus those who suspect they were sexually assaulted while incapacitated. To date there is no empirical data measuring how the outcome variables used here are affected by the predictor variable of certainty of ISA versus suspicion of ISA. This study has begun to address a critical gap in current literature. Knowing whether differences exist between these victim populations is important for not only providing victim services but also assisting law enforcement in being sensitive to why some victims act a certain way versus others.

Chapter 2 is a comprehensive literature review of the predictor and outcome variables included in this study. I discuss the literature search strategy and the theoretical foundation guiding the study. I then examine several topics including sexual assault amongst the general and college-attending population, the hook-up culture, sexual assault tactics (both FSA and ISA) in both the general and college-attending populations, knowing versus suspicion of sexual assault, alcohol and drug use in both the general and college-attending population, the victim-offender (VOR) relationship in both the general and college-attending population, how Greek life affects sexual assault on the college campus, reporting sexual assault behaviors amongst both the general and college-attending population, and barriers victims experience when reporting sexual assault to law enforcement.

Chapter 2: Literature Review

Introduction

There is no research comparing college-attending women who suspect they experienced sexual assault while incapacitated to those college-attending women who know they were sexually assaulted while incapacitated. In addition, there is no research measuring whether statistically significant differences exist between these victim groups and whether the offender is affiliated with a fraternity, if the assault took place during a party or social function, reporting sexual assault to law enforcement, and barriers to reporting assaults to law enforcement. Therefore, a significant gap in the literature exists on this topic.

The purpose of this quantitative study was to compare two groups of female college-attending students, one group certain, the other suspicious, they were sexually assaulted while incapacitated. Variables I compared between groups were: whether the assault took place at a party or social gathering, offender type (specifically Greek fraternity members), law enforcement reporting decisions, and barriers to reporting sexual assault experienced by victims. Researchers have explored the rates, cost (mental, physical, and financial), circumstances (alcohol and drug use, location of assault, and offender type), and behaviors following a sexual assault. No literature, seminal or current, compares sexual assault victims, who are certain versus suspicious they were sexually assaulted.

In this chapter, I discuss the nuances of sexual assault, hook-up culture, offenders, reporting, and barriers. The study was guided by the principals of empowerment theory

and the concept of power versus powerlessness. The literature search and strategy, along with each variable, is discussed in terms of the general population versus the college-attending population to identify a gap in literature and justify my use of these variables.

Literature Search & Strategy

I used the following databases to search the literature: Inter-University Consortium for Political and Social Research Datasets (ICPSR), Academic Search Complete, Criminal Justice Database, ERIC, Google Scholar, PsychiatryOnline, ProQuest Central, PsycARTICLES, PsycEXTRA, PsycINFO, SAGE Journals, ScienceDirect, SocINDEX with Full Text, and Thoreau. The following keywords were used to search the literature: *sexual assault, rape, college, campus, fraternity, frat, incapacitated, alcohol, reporting, law enforcement, barriers, suspicion versus knowing, suspicion of sexual assault, empowerment, rape myth,* and *sexual script.*

Initial search parameters were peer-reviewed and full-text availability only. I eliminated full-text availability after a solid foundation of articles was obtained. This gave me access to non-full-text article abstracts. Full text articles unavailable via Walden University's library were requested using the document delivery service. In the searches, I focused on literature published between the years 2013 and 2018. I used reference lists of current articles to identify additional articles, in addition to searching for specific authors who were commonly cited in current works.

Theoretical Foundation

This study was guided by empowerment theory, which juxtaposes power and powerlessness (Lord & Hutchison, 1993). Rappaport (1987) theorized empowerment as a

two-step mental process: first, a person gains a psychological sense of control over their own lives; second, a person gains concern for social influence and justice. Rappaport (1987) explained that the construct of justice stems from empowerment (e.g., if a sexual assault victim reports to law enforcement and the perpetrator is charged, the perception is that justice has been served). Therefore, victims who choose to report to law enforcement are empowered by the result in justice.

Lord and Hutchison's (1993) study on power versus powerlessness included participants who become disabled later in life and abuse survivors. Many of the female participants reported experiencing sexual assault (Lord & Hutchison, 1993). Participants were interviewed about whether they experienced powerlessness in different aspects of their lives. Some participants reported experiencing powerlessness in only some aspects of their lives, which Lord and Hutchison described as *situational powerlessness*. Some individuals only experienced powerlessness when attempting to access resources or when they were engaged in a social situation. When an individual feels powerless about each fact of their lives, Lord and Hutchison describe this as *global powerlessness*.

Kieffer (1984) contended that powerlessness results from a perceived inability to freely make decisions, or when an individual perceives their decision making will be futile. Perpetrator reprisal, being blamed for the assault, or not being sure what happened was a crime, are all reasons a victim may not report sexual assault to law enforcement. These barriers can make a victim feel powerless (Kieffer, 1984). Individuals who experienced ISA may be more likely to experience powerlessness as some victims are incapable of resisting their attacker (Padmanabhanunni & Edwards, 2012). Powerlessness

can become, or accompany, helplessness (Frazier et al., 2009). Zimmerman (1990) described hopefulness, in contrast to the concept of helplessness, as attained by skill building and achieving control over one's life. Just as victims can become helpless and powerless, they can become hopeful and powerful (Zimmerman, 1990).

McDermott and Garofalo (2004) established that when individuals mastered the ability and confidence to make choices and participate in decisions affecting their lives, they became empowered. Gupta and Kurian (2006) described empowered individuals as those who perceive they possess power over their lives. When victims of domestic or sexual violence chose to report experiences to law enforcement, they report feeling empowered by actively participating in the reporting process (McDermott & Garofalo, 2004).

Russell and Light (2006) interviewed victims of sexual assault who shared whether any part of the reporting was empowering. Victims reported feeling positive about their reporting experience when law enforcement officers referred victims for victim services (Russell & Light, 2006). When victims do not receive referral to services such as medical care and counseling, they are less likely to feel empowered. Kasturirangan (2008) illustrated the importance of access to services for victims of sexual assault and the process of empowerment. Zimmerman (1995) explains empowerment as the action of the individual making decisions about their lives.

Empowerment theory is often applied to victims of intimate partner violence or domestic violence (Cattaneo & Goodman, 2015; Morgan, 2013;). When victims lose power to their abusers, a significant aspect of empowerment is restoring the power that

was lost (Cattaneo & Goodman, 2015). In an abusive situation, a victim's personal safety is in total control of the offender (Cattaneo & Goodman, 2015). The concept of not having control over one's personal safety, power, and decision making resounds amongst sexual assault victims (Goldberg, 2015).

The theory of empowerment continues to evolve with contemporary research. For instance, Morgan (2013) argued that empowerment theory is too vague. Empowerment can be both a process and an outcome, which can make applicability difficult (Morgan, 2013). While some scholars focus on the outcome application of empowerment, Christens (2012) described empowerment as a transformative process. This transformative process can be applied at both the individual level and the community level (Christens, 2012).

Scholars are beginning to address the ambiguity of empowerment theory. Cattaneo and Goodman (2015) suggested an updated model of empowerment that addresses both the process and outcome of empowerment. Cattaneo and Goodman stressed the importance of having the ability to apply empowerment theory against a wide range of abuse types.

Empowerment theory and the concept of power versus powerlessness guided this research in my assumption that victims who report their sexual assault to law enforcement experienced fewer perceived barriers. Additional outcome variables such as assault location and offender type all affect the reporting decisions, therefore affecting whether victims experience empowerment. Experiencing several barriers to reporting may result in victims feeling powerless.

Using the theory of empowerment and power versus powerlessness, I compared whether victims perceive they have the power to report sexual assault to law enforcement. The perception of power or powerlessness relates to barriers experienced (or not) by the victim. When victims do not perceive barriers and feel powerful enough to report their experience to law enforcement, the victim experiences empowerment. Empowerment theory suggests that when victims actively engage in the process of seeking justice, they experience empowerment (Lord & Hutchison, 1993).

I built this study's research questions upon the existing theory by applying its concepts to contemporary college-attending female victims of sexual assault. In addition, I compared two distinct victim populations based on the framework of empowerment and power versus powerlessness, which has not been done. This research approached reporting sexual assault as an empowering experience, regardless of offender tactic, offender type, or barrier. Each research question was guided by the comparative nature of power versus powerlessness, with each question examining how the dependent variable is affected by the independent variable.

Literature Review: Key Variables and Concepts

Sexual Assault

Sexual assault continues to be a common violent crime, with 431,840 sexual assaults reported in 2015 (DOJ, 2016). Of those sexual assaults reported, there were 204,000 victims aged 12 or older (DOJ, 2016). Compared to 2014, the U.S. DOJ (2016) cited a significant increase in rates of sexual assault, with 284,350 sexual assaults reported, a 66% increase in 1 year. The DOJ adopted a new legal definition of rape in

2012 as “the penetration, no matter how slight, of the vagina or anus with any body part or object, or oral penetration by a sex organ of another person, without the consent of the victim” (U.S. Department of Justice Archives). This definition no longer limits sexual assault to female victims, nor does it require the use of physical force to obtain sexual activity.

African American and White women are equally as likely to experience sexual assault in their lifetime (one in five), while Hispanic women are less likely (one in seven; Black et al., 2011; DOJ, 2013). Sexual assault nurse examiners report women of color are less likely to report sexual assault to law enforcement (Maier, 2012). The DOJ (2013) gathered data on sexual violence against women between the years 1994-2010 and found that victims of sexual assault are most likely to fit within the following demographics: between the ages of 12-17, be either Caucasian or African American, to have never been married, have a household income of less than $25,000, and live in an urban area.

College-attending population.

College campuses provide a target rich environment for sexual offenders (Ziering & Dick, 2015). The DOJ (2014) reported college-attending (aged 18-24) females were more likely to experience sexual assault than females in any other age category. Enrolled, college-attending women are three times more likely to experience sexual assault than the general female population (DOJ, 2014). With rates of 6.1 in 1,000 college-attending, enrolled students being assaulted, there is an evident need to focus research on why levels of sexual assault are so high amongst this population (DOJ, 2014).

Smith and Freyd (2013) found 47% of their college-attending female participants (*N*=345) reported at least one unwanted sexual experience. Independence, availability, peer pressure, and the party culture of the contemporary college campus can lead to excessive alcohol or drug consumption by both perpetrators and victims, voluntarily and involuntarily. Seminal findings discuss a phenomenon coined the *red zone*, which typically encompasses the first year of a freshman female's college experience (Flack et al., 2008; Kimble, Neacsiu, Flack, & Horner, 2008). Recent findings suggest the "red zone" (the first year of college) remains the riskiest period for sexual assault against freshmen women (Cranney, 2015). Approximately 16,000 female students from 22 different universities in the United States were surveyed about sexual assault experiences throughout their college experience (Cranney, 2015). Findings suggest the highest chance of sexual assault exists within the red zone (Cranney, 2015). Cranney (2015) only found one instance where the red zone extended into sophomore year.

The college campus and hook-up culture.

There is a social and sexual cultural shift occurring amongst college students from dating and participating in sexual activity with one individual at a time to hooking-up. Scholars such as Claxton and van Dulmen (2013) argue the term hook-up is too ambiguous. Over the past decade, casual sexual relationships have had many different names, for instance, one-night stands, friends with benefits, the booty call, and fuck buddies (Claxton & van Dulman, 2013). Literature suggests the number of sexual encounter(s) and the relationship prior to the encounter(s) differentiates each type of casual sexual relationship (Claxton & van Dulman, 2013). For instance, when sexual

contact is reoccurring, and the individuals are strangers or acquaintances it has been defined as a booty call, while the same prior relationship and only one sexual encounter is defined as a one-night stand and reoccurring sexual contact between friends is labeled as friends with benefits (Claxton & van Dulman, 2013).

Hooking-up was defined by Sutton and Simons (2014) as casual sex with no emotional connection. Hooking-up does not involve exclusivity or long-term commitment because both parties understand the relationship is strictly sexual (Sutton & Simons, 2014). Hooking-up does not always equate to penetrative sex. It can be kissing, heavy petting, oral sex, or any combination of these sexual acts (Sutton & Simons, 2014). Sutton and Simons found half of the 337 college-attending women in their sample reported hooking-up at least once, while just over 10% reported hooking-up ten or more times.

Stinson, Levy, and Alt (2014) interviewed three male college students who were affiliated with a fraternity at a large Midwestern university. Variables discussed were: the insignificance of hooking up, the difference between relationships and hook-ups, importance of alcohol and socialization in hooking-up, and attitudes and consequence difference between males and females who hook-up (Stinson et al., 2014). Hook-ups appeared to not have any deeper meaning or significance, primarily taking place during a social gathering such as a party and were typically fueled by alcohol or drug use (Stinson et al., 2014). Distinctions were made between a relationship and a hook-up. For instance, fraternity members reported a relationship was a long-term, monogamous, ever-developing partnership while hook-ups were focused on having a good time (usually

involving sex, or some type of sexual activity), and may only last a few hours (Stinson et al., 2014). A significant double standard exists in the hook-up culture. Men who hook-up with a lot of women are praised for *scoring*, while women who hook-up are viewed as easy and less desirable (Stinson et al., 2014).

Kuperberg and Padgett (2016) analyzed 22,454 surveys taken by college students at 22 universities in the United States. The purpose was to measure hook-ups, dating, and relationships between college-attending individuals. One relevant finding was the correlation between fraternity or sorority membership and higher rates of hook-ups (Kuperberg & Padgett, 2016). Fraternity members were 2.8 times more likely to self-report hook-ups than non-fraternal students (Kuperberg & Padgett, 2016). Tomsich, Schaible, Rennison, and Gover (2013) compared residential university students to non-residential university students to find hook-ups take place far often for non-residential students (only 22% out of 926 respondents).

Hook-up culture becomes a public health crisis when both voluntary and involuntary consumption of alcohol or drugs inhibit the ability to give consent to sexual activity (Garcia, Reiber, Massey, & Merriweather, 2012). A total of 373 undergraduate female students from a university in the Northeast took the Alcohol Use Disorder Identification Test, Hooking-up questions, and Revised Sexual Experiences Survey – Short Form – Victimization (Flack et al., 2015). Just under half (44%) of the sample reported having experienced sexual assault on campus, 78% of those sexual assaults took place during hookups (Flack et al., 2015). The combination of excessive drinking and

hooking-up predicted frequency of sexual assault within this population (Flack et al., 2015).

Sexual Assault Tactics

Forcible sexual assault (FSA) in general population.

FSA is characterized by a perpetrator using, or threating to use, physical force or a weapon to gain control over their victim (Carey et al., 2015). Victims who report sexual assault facilitated by physical force are more likely to be labeled as a *real rape* versus victims who report or suspect assault by incapacitation (Cohn et al., 2013; Lonsway & Archambault, 2012). Characteristics of real rape are a male offender who uses, or threatens to use force or a weapon, to assault a female victim who was previously a stranger to the offender(Lonsway & Archambault, 2012).

Victims of FSA experience PTSD at a higher rate than victims of ISA (Cohn et al., 2013; Peter-Hagene & Ullman, 2014). FSA victims are also more likely to experience physical (genital and non-genital) injury (Cohn et al., 2013). Larsen, Hilden, and Lidegaard (2014) found offenders who are strangers to the victim are more likely to use FSA. Contrary to Larsen et al. (2014), Peter-Hagene and Ullman (2014) found FSA was more likely to be perpetrated against an acquaintance. Serial rapists rarely use force as a tactic (de Heer, 2016).

A Canadian study assessed 553 incarcerated adult male sex offenders, finding 28.7% of offenders used force as a tactic during a sexual assault. In addition, 43.2% of those offenders had been using drugs or alcohol prior to the assault (Leclerc, Wortley, &

Dowling, 2016). The use of alcohol by the offender was found to increase the likelihood of using physical force during any sexual assault (Leclerc et al., 2016).

Forcible sexual assault (FSA) in college-attending population.

FSA among the college-attending populations is low (Zinzow & Thompson, 2015). Strang et al. (2013) conducted two studies, one only using a male, college-attending sample. A total of 398 college enrolled men were assessed using the modified Sexual Experience Survey and the Sexual Strategies Scales on sexual aggression and the use of physical force as a sexual strategy (Strang et al., 2013). The modified Sexual Experience Survey revealed one participant endorsed using force to obtain sexual contact, while 12 participants endorsed using drugs as a tactic (Strang et al., 2013). The Sexual Strategies Scale revealed two men endorsed using force, while 32 men revealed using drugs as a tactic (Strang et al., 2013). Zinzow and Thompson (2015) show only 5% of their 526 participant sample used force during attempted or completed sexual assault, while 16% used incapacitation as a tactic.

Incapacitated sexual assault (ISA) in general population.

ISA is defined as any sexual activity when a person is drunk, drugged, or passed out (Krebs et al., 2007). An individual is incapable of consenting to any sexual activity when they are incapacitated (Cohn et al., 2013). Regardless of whether the incapacitation was voluntary or involuntary a person cannot legally consent when incapacitated (Cohn et al., 2013).

A Canadian study analyzed urine samples of 178 cases male and female victims of suspected ISA. Just under half (49%) were judged to have been involuntarily

incapacitated, while the remaining cases were either voluntarily incapacitated or no drugs were found in their urine (Du Mont, Macdonald, & Kosa, 2016). Icelandic researchers discovered a significant increase in rates of hospital attendance by ISA victims. Between the years 1998 and 2002 36% of sexual assault victims reported experiencing ISA (Gisladottir et al., 2012). Between the years 2003 and 2007 49% of victims reported experiencing ISA (Gisladottir et al., 2012).

Richer et al. (2017) classified ISA victims as those who were involuntarily incapacitated. Instances of victims who presented at the hospital reporting involuntary ISA increased from 25% to 33% between the years 2007 and 2008 (Richer et al., 2017). Victims who were voluntarily incapacitated and then assaulted decreased by 14% within the same period (Richer et al., 2017).

Rohypnol, Xanax, and Ecstasy were the three most commonly used drugs to facilitated incapacitation in a college sample (Swan et al., 2016). A general population survey found opioids, anesthetics (Ketamine), and amphetamines have also been used to facilitate incapacitation (Dinis-Oliveira & Magalhaes, 2013). The most commonly used drugs to incapacitate a victim are metabolized by the body within 72 hours, making testing for them difficult (Dinis-Oliveira & Magalhaes, 2013).

Incapacitated sexual assault (ISA) in college-attending participants.

Carey et al., (2015) examined first year freshmen female college students using the Sexual Experiences Survey. Of the 483 participants sampled, 15.4% experienced either attempted or completed ISA within their first year of college (Carey et al., 2015). Swan et al. (2016) utilized part of a three-university longitudinal study on drugging or

spiking drinks. To understand general instances of drugging on university campuses (Swan et al., 2016). A total of 6,064 participants were asked to respond to questionnaires developed by the researchers and respond to a few open-ended questions (Swan et al. 2016). Respondents were asked questions about how many times they suspected or knew someone put something into their drink without their knowledge, if they knew someone who put a drug into someone's drink, and general questions about whether respondents have perpetrated or experienced sexual violence (Swan et al., 2016).

Just over 1% of students admitted to having drugged or witnessed someone drugging someone else's drink (Swan et al., 2016). A larger percentage of college students reported knowing or being suspicious of someone putting drugs into their drink without their consent (7.8%) (Swan et al., 2016). Female students were two times more likely to report suspicion or knowledge of being drugged than male cohorts (Swan et al., 2016). One common reason for drugging was to obtain sexual activity (Swan et al., 2016).

Untied, Orchowski, and Lazar (2013) administered the following measures to 127 male participants: Drinking and Drug Habits Questionnaire, Alcohol Expectancy Questionnaire, and the Sexual Experiences Survey. Of all 127 participants, four men responded they used ISA 1-10% of the time, two men 11-20%, one man 21-30%, one man 31-40%, and two men 91-100% (Untied et al., 2013). These findings justify focusing on ISA amongst college-attending individuals.

Zinzow and Thompson (2015) conducted a longitudinal study with four waves, recruiting 795 male freshmen college students, each assessed once per academic year. A

total of 183 participants reported attempting or completing sexual assault during college (Zinzow & Thompson, 2015). Of those participants, 86 used incapacitation as a tactic (Zinzow & Thompson, 2015). Sutton and Simons (2014) found similar results, 27% of 287 male college students have used incapacitation to sexually assault victims. College-attending male offenders are at the greatest risk of using incapacitation to facilitate sexual activity (Zinzow & Thompson, 2015).

Hook-ups were positively associated with sexual assault victimization ($\beta = .38$; $p = .000$) (Sutton & Simons, 2014).

Kilpatrick, Resnick, Ruggiero, Conoscenti, and McCauley (2007) conducted the most recent national study funded by the DOJ comparing rates of FSA and ISA between general and college populations. The White House Task Force to Protect Students from Sexual Assault utilized suggestions from Kilpatrick et al. (2007) in a plan to make college campuses safer for students (Krebs et al., 2016). Rates of FSA are higher in the general population than the college population (89% and 72%, respectively), while rates are high in the college population than the general population (46% and 22%, respectively) (Kilpatrick et al., 2007).

Knowing v. suspicion.

An exhaustive literature review did not produce any literature exclusively focused on college-attending victims who suspected they had been a victim of ISA. This identified a significant gap in scholarship. Limited research has been conducted on the suspicion of sexual assault while incapacitated.

Hagemann et al. (2013) measured toxicological findings of female sexual assault victims and explored the concept of ISA and suspicion of sexual assault. Patient charts from a hospital in Norway with a sexual assault clinic were analyzed (Hagemann et al., 2013). College-attending participants aged 18-24 years old accounted for 137 of the total sample population (Hagemann et al., 2013). After analyzing patient records, interviews, and test results, 55 participants were judged to have been involuntarily incapacitated (Hagemann et al., 2013).

Victims were characterized as having experienced ISA if she reported suspicion of sexual assault and at least one of the following eight symptoms of ISA: (a) vague sensation something sexual happened, (b) woke up with clothing off or in disarray, (c) unexplained bodily fluids or objects near or inside the body, (d) unexplained genital/anal bleeding, pain, or bruising, (e) unexplained non-genital injury, (f) waking up in a strange place/next to a strange person, (g) witness observation (witness observed sexual assault and told victim after the fact), or (h) knew they had been sexually assaulted (this was included only in cases when the victim knew they had been drugged) (Du Mont et al., 2009). Waking up with pelvic pain was a common reason for suspicion of sexual assault by incapacitation in a phenomenological study by Heyes (2016).

Hagemann et al. (2013) observed a steady increase in suspicion of sexual assault by incapacitation at this clinic in Norway. A 17% increase was discovered from the previous decade (Hagemann et al. 2013). Increasing rates of ISA, excessive use of alcohol and drugs, and sexual culture on college campuses justify my research.

Alcohol and Drug Use

Alcohol and drug use by the victim and offender preceding a sexual assault is associated with sexual assault. The revised definition of sexual assault states an individual is unable to provide consent under temporary physical or mental incapacity (DOJ, 2012). Richer et al. (2017) recruited 390 male and female sexual assault victims and assessed them on a variety of scales, one of which was voluntary or involuntary drug or alcohol use prior to the assault . Alcohol use was reported by 50% of participants either voluntarily or involuntarily, while marijuana use was reported by 27% of participants, and other drugs were reported by 22% of participants (Richer et al., 2017).

A Canadian study with similar methodology 86% of male and female participants reported alcohol use immediately prior to the sexual assault (Du Mont et al., 2016). A Norwegian study found 86% of 257 female participants reported alcohol use before a sexual assault while only 39% of 264 participants reported drug use (benzodiazepines, cannabinoids, opioids, central stimulants, or other medication) (Hagemann et al., 2013).

Peter-Hagene and Ullman (2014) recruited male and female sexual assault victims to assess whether participants were experiencing symptoms of PTSD. Using cluster analysis, three sexual assault tactic clusters were developed, high violence, drinking, and moderate severity (Peter-Hagene & Ullman, 2014). Findings revealed 39% of the victims in the high violence cluster reported offender alcohol use prior to the assault (no victims reported using alcohol), while 94% of victims reported offender alcohol use (and 85% reported victim use) in the alcohol related cluster, while no victims reported offender (or victim) alcohol use in the moderate severity cluster (Peter-Hagene & Ullman, 2014).

College-attending population.

Excessive alcohol and/or drug use, independence, and lack of supervision on the college campus create a target rich environment for sexual offending. Parks, Hsieh, Taggart, and Bradizza (2014) examined rates of drinking prior to, and during, each year of college. The steepest increase in female drinking rates were between high school and freshmen year (Parks et al., 2014). A 13% increase in drinking took place during the transition from high school to freshman year of college, with only a 2% increase from freshmen to sophomore year, and just over 5% from sophomore year to junior year and beyond (Parks et al., 2014). Average drinks per day and rates of weekly drinking increased throughout a participant's years of college (Parks et al., 2014).

Higher rates of sexual assault correlate with higher quantities of alcohol drinks consumed by college students (Bryan et al., 2016). Testa and Hoffman (2012) suggest women who did not consume alcohol frequently before entering college have the greatest increase in binge drinking after entering freshmen year. *Binge drinking* contributes to increased instances of sexual assault on college campuses. College students, particularly those involved in fraternal organizations, binge drink at rates higher than non-Greek students (Chauvin, 2012; Soule, Barnett, & Moorhouse, 2015). Over 60% of Greek students self-reported binge drinking, while 40% of non-Greek college students self-reported binge drinking (Chauvin, 2012).

Chauvin (2012) discusses four motives for binge drinking, originally developed by Cooper (1994): enhancement, social, coping, and conformity. College-attending individuals typically binge drink for social and conformity purposes (Chauvin, 2012).

Similarly, Bird, Gilmore, George, and Lewis (2016) found drinking to conform is a standard drinking norm for college students.

Victim-Offender Relationship (VOR)

The most frequently compared VORs are stranger, acquaintance, and intimate partner. It is not uncommon to see only stranger and acquaintance compared or have additional VORs such as relative, authority figure, etc. (Drakulich, 2015; Hagemann et al., 2013; Larsen et al., 2014). Scholarship suggests the VOR has affected variables such as tactic used to facilitate a sexual assault, reporting an assault to law enforcement, and how victims perceive the sexual assault.

A large-scale study (N = 3,856,171) utilizing data from the 2000-2007 National Incident Based Reporting System measured how certain aspects of violent crimes affected reporting to law enforcement (Felson & Lantz, 2016). When controlling for the VOR 36.9% of sexual assaults were perpetrated by acquaintances, 8.8% by strangers, and 2.3% current or ex-spouses (Felson & Lantz, 2016).

Du Mont et al. (2016) concluded voluntary and involuntary ISA are most likely to be perpetrated by an acquaintance to the victim. Studies from London, Norway, and Denmark all found sexual assaults are most likely to be perpetrated by an acquaintance or someone known to the victim regardless of age or gender (Hagemann et al., 2013; Larsen et al., 2014; Morgan, Brittain, & Welch, 2015).

Peter-Hagene and Ullman (2014) suggest the VOR can affect tactics used by offenders. Cluster analysis revealed strangers and relatives are most likely to utilize high levels of violence, while acquaintances are most likely to use incapacitation, and

romantic partners are most likely to utilize moderate severity type tactics (such as verbal coercion of use of threats) (Peter-Hagene & Ullman, 2014). Strangers were found to utilize physical force most frequently (Larsen et al., 2014).

The VOR affects whether a victim reports a sexual assault to law enforcement. Stranger assaults were 60.8% more likely to be reported to law enforcement while known perpetrator assaults were only 34.7% more likely to be reported (Larsen et al., 2014). Snodgrass, Rosay, and Gover (2014) used a data mining technique called random forests, to measure whether the VOR significantly affected prosecutorial referral decisions. A total of four variables were found to predict referral choices in sexual assault cases, one of which was if the perpetrator was a stranger (Snodgrass et al., 2014).

College-attending population.

While the VOR is a variable frequently measured in general population studies, it is not discussed as frequently in college-attending population literature. Other variables such as perpetrator tactic, situational factors, presence of injury, and whether a weapon was used are typically measured (Krebs et al, 2009; Paul et al., 2013). One study assessed tactic use amongst college-attending men and a question asked whether use of authority was used to obtain intercourse (Untied et al., 2013).

My study focused on specific offender characteristics: male, college-attending, and being a member of a fraternity. Instead of comparing differences between VORs I have measured whether victims suspicious of ISA versus victims certain of ISA were likely of being assaulted by a fraternity member. There is no literature comparing these

two victim groups and perpetrator fraternal membership. This provides justification for the variables selected for my research.

Fraternity affiliation.

The first fraternal order began in 1717 A. D. in England (Schmidt & Babchuk, 1972). It wasn't until the 19th and 20th centuries when fraternal organizations were associated with universities. According to Vorhees (as cited by Schmidt & Babchuk, 1972), Phi Beta Kappa was the first collegiate fraternal organization, originating at the College of William and Mary in 1776 in Williamsburg, VA. Evidence suggests a considerable amount of Masonic rituals were adopted and used by the organization (Vorhees, as cited in Schmidt & Babchuk, 1972). It was a secret organization with a literary and social purpose, members would meet and discuss controversial issues (SJSU, n.d.). In the year 1827 two additional Greek fraternities began and in the 20th century more Greek fraternities were founded than ever before in history (SJSU, n.d.).

Harris and Schmalz (2016) discuss how the acceptance of traditional gender roles, sexism, excessive use of alcohol, and peer pressure to have sex aid in exerting control over female cohorts which leads to sexual violence. Seabrook, Ward, and Giaccardi (2016) hypothesized fraternity members were more likely to endorse traditional, hypermasculine norms, and accept rape myths. Confirmatory r indicated sexual violence was readily accepted within the fraternity population (Seabrook et al., 2016).

Carroll, Rosenstein, Foubert, Clark, and Korenman (2016) utilized a convenience sample of both college-attending and military affiliated males in the Midwest. Findings found the two most frequently endorsed rape myths were: consuming alcohol, drugs, or

wearing revealing clothing were a form of consent, and women often lie about being raped (Carroll et al., 2016). Instances such as fraternity members at Yale chanting "no means yes, yes means anal" during a student march highlight the sexist culture of some fraternal organizations (Decker & Baroni, 2012).

Fraternity members disclosed a preference for freshman women because they were impressionable, unexperienced, and naive, especially when consuming alcohol (Sweeney, 2011). Members reported feeling in control when female freshmen students acted overly passive (Sweeney, 2011). Fraternity members were significantly more likely to self-report perpetrating sexual assault, more likely to receive support for deviant sexual behavior and perceive pressure from other fraternity members to have sex (Franklin, Bouffard, & Pratt, 2012). In addition, instances of excessive drinking and viewing pornography was higher for fraternity members (Franklin et al., 2012). Until the culture of fraternal organizations changes, they will continue to be fraught with allegations of sexual assault (Harris & Schmalz, 2016).

Joining a fraternity affects the rate of sexual aggression and risky drinking. Kingree and Thompson (2013) recruited 1,472 male freshmen students from the Southeast and assessed them using a shorted Hostility Toward Women Scale, a revised Sexual Experiences Survey, in addition to original measures asking about fraternity membership, peer influences, and risk behaviors. A path analysis indicated male students who joined a fraternity between their first and second year of college showed increased perception of peer approval for deviant sexual behavior, risky drinking behaviors, and were encouraged by others to hook-up often (Kingree & Thompson, 2013).

Soule et al. (2015) utilized data from the fall 2010 American College Health Association-National College Health Assessment II with over 18,000 participants after participant exclusions were applied. Just 10% of the sample were members of either a fraternity or sorority (Soule et al., 2015). Binge drinking and having sex with someone without consent were two consequences associated with being in a fraternity or sorority (Soule et al., 2015). Members of a fraternity organization were at least twice as likely to engage in sexual activity without receiving consent as their non-fraternal cohorts (Soule et al., 2015).

Stinson et al., (2014) conducted a phenomenological study of three fraternity members, focused on how they perceived hook-ups. Sexual contact was discussed frankly with no mention of the woman's experience or satisfaction (Stinson et al., 2014). Alcohol was described as a catalyst for hook-ups, something the fraternity members could use to bolster their courage to initiate sexual encounters (Stinson et al., 2014). Fraternity members, in comparison to their non-fraternal cohorts, were 2.8 times more likely to engage in hook-ups (Kuperberg & Padgett, 2016).

Reporting to Law Enforcement

Sexual assault continues to be one of the least reported violent crimes. Walsh and Bruce (2014) found only 14% of their 834 male and female population reported sexual assault to law enforcement. When comparing sexual assault to physical assault and robbery, sexual assault victims were less likely than robbery victims to report to law enforcement (Felson & Lantz, 2016).

The VOR has been found to affect whether victims report sexual assault to law enforcement. One study found female victims are five times less likely to cooperate with law enforcement when they are victimized by an intimate partner and 2.4 times less likely to cooperate when they are assaulted by an acquaintance or relative, as compared to a stranger (Alderden & Long, 2016). Marchetti (2012) measured both male and female experiences with sexual assault, VOR, and reporting behaviors. Of the 78 male and female sexual assault victims only 36% of the participants reported to law enforcement (Marchetti, 2012). Sexual assault by a stranger correlated with increased rates of reporting to law enforcement ($p < .001$) (Marchetti, 2012).

Similar findings were made by Larsen et al. (2014) and Paul et al. (2014). Not only are victims more likely to report to law enforcement when they are assaulted by a stranger, law enforcement officers are more likely to refer cases for prosecution when the offender is a stranger to the victim (Alderden & Ullman, 2012).

Before mandatory and pro-arrest policies were enacted, few intimate partner sexual offenders were arrested. Durfee and Fetzer (2016) discovered officers were only arresting a sexual offender who had an intimate relationship with the victim prior 26.2% of the time, while arresting an offender who perpetrated a physical, but no sexual, assault 51.6% of the time.

Another variable affecting reporting decisions is the tactic used by the offender. In a review of seminal works on the topic, Lorenz and Ullman (2016) discuss how individuals experiencing ISA are the least likely to report to law enforcement. Of 445 women in a nationally representative probability sample, victims who experienced FSA

were three times as likely as those women who experienced ISA to report their assault (Walsh et al., 2016). Similar findings were made by Paul et al. (2014) who found a positive association between reporting to law enforcement and FSA but not ISA.

College-attending population.

In a representative sample of the college population ($N = 462$), James and Lee (2015) measured non-reporting rates amongst male and female students based on three assault variables: unwanted intercourse, unwanted sex acts, and unwanted sexual touching. A total of nine participants reported unwanted intercourse, three unwanted sexual acts, and 42 unwanted sexual touching (James & Lee, 2015). All victims who experienced unwanted sexual acts, under 90% of victims who experienced unwanted sexual intercourse, and over 90% of victims who experienced unwanted sexual touching did not report to law enforcement (James & Lee, 2015). The most common reason for not reporting to police unwanted sexual intercourse and unwanted sexual touching was fear of reprisal by the offender (James & Lee, 2015). Finally, how victims perceived law enforcement handling sexual assault cases and whether they referred cases for prosecution related to victim reporting decisions (Snodgrass et al., 2014).

The only two significant variables effecting college-attending female's victims to report were race and presence of injury (Wolitzky-Taylor et al.,2011). Of 230 total female college students disclosing rape experiences, 11.5% reported the assault to law enforcement, and only 2.7% of ISAs were reported (Wolitzky-Taylor et al., 2011). Caucasians are just over five times more likely to report a sexual assault than any other

racial cohort (Wolitzky-Taylor et al., 2011). The presence of injury following the sexual assault is the only other variable found to be of any significance.

My research measured the likelihood of a victim who is certain they experienced ISA versus a victim only suspicious of experiencing ISA to report to law enforcement. Reasons victims choose to not report their sexual assault are commonly referred to as perceive barriers. My research measured whether there was a statistically significant difference between each victim group and most perceived barriers.

Barriers.

Cohn et al., (2013) established a list of barriers victims perceived, which hindered reporting to law enforcement. The eight barriers are: (a) did not want family to know, (b) did not want other people to know, (c) lack of proof assault happened, (d) fear of being treated poorly by law enforcement or the criminal justice system, (e) not being clear it was a crime, (f) did not know how to report, (g) afraid of reprisal by offender or others, and (h) did not believe incident was serious enough to report (Cohn et al., 2013).

Wolitzky-Taylor et al. (2011) utilized data from the National Women's Study – Replication (2006) which interviewed 3,001 females in two age groups, 18-34 years old, and 35+ years old. They published six perceived barriers parallel to those discussed by Cohn et al. (2013): (a) fear of reprisal, (b) did not want family to know, (c) did not want others to know, (d) not enough proof, (e) fear of the criminal justice system, and (f) did not know how to report. Fear of offender reprisal was reported by 68% of victims, not wanting family to know was reported by 59% of victims, and not wanting anyone else to know was reported by 57% of victims (Wolitzky-Taylor et al., 2011). Fear of the criminal

justice system was reported by only 43% of victims and was the least reported perceived barrier (Wolitzky-Taylor et al., 2011).

Cohn et al. (2013) conducted a national, probability telephone sample of 441 female sexual assault victims. Findings resulted in a list of barriers to police reporting for both ISA and FSA. The following are the most common barriers reported by ISA victims. The most common (87%) barrier victims experienced was being unclear if what happened was a crime (Cohn et al., 2013). The second most common barrier by ISA victims was feat of a lack of proof of a crime happened (64%), and third, did not think it was serious enough to report (63%) (Cohn et al., 2013). For those victims who experienced FSA, the most common barriers were being fearful of reprisal by the offender (73%), not wanting family to know (62%), and not wanting other people to know (61%) (Cohn et al., 2013).

Sexual assault victims not only experience barriers in reporting sexual assaults to law enforcement, they often delay, or never seek, medical or mental services following an assault. A South African study collected data on 534 total male and female (87.3% of the victims were female) victims of sexual assault to measure why victims chose to wait 72 hours or more to present at a hospital for treatment (Adefolalu, 2013). A victim's fear of offender reprisal was the most common barrier to seeking medical and mental health services (Adefolalu, 2013).

College-attending population.

College-attending victims experience similar perceived barriers to reporting sexual assault to law enforcement as the general population. Minimal literature has been published on college-attending barriers specifically, rather the discussion has remained broad in the past five years. Zinzow and Thompson (2011) compiled the following list of barriers often experienced by college-attending sexual assault victims: (a) assumed assault was the victims fault, (b) shame or embarrassment, (c) not wanting anyone to know, (d) doubt police could or would do anything, (e) didn't want the police involved, (f) uncomfortable with offender prosecution, (g) disbelief it was not a serious crime, or (h) the victim was able to handle it themselves.

Zinzow and Thompson (2011) recruited 719 first year, female, undergraduate students to take assessments measuring sexual victimization, victim and incident characteristics, barriers to reporting, and negative cognitions. Analysis revealed 68% of victims thought their experience wasn't serious enough or not a crime, 45% of victims didn't want anyone to know, 43% of victims didn't want police involved, and 42% of victims felt embarrassed (Zinzow & Thompson, 2011). Feeling shame and not wanting others involved were associated with physical injury and when the offender was a relative (Zinzow & Thompson, 2011).

How this specific population internalizes sexual assault experiences has a significant effect on whether victims report assaults to law enforcement. Cleere and Lynn (2013) assessed 302 college-attending women from the eastern United States and assessed them using the Sexual Experience Survey and The Brief Symptom Inventory. Using responses from both assessment tools, 118 of the participants were labeled non-

victims, 138 were labeled as unacknowledged victims, and 38 were labeled acknowledged victims (Cleere & Lynn, 2013). Amongst the unacknowledged victims 29% reported they were not victimized, 66% reported the event as miscommunication, and 5% labeled their experience as a crime other than rape or sexual assault (Cleere & Lynn, 2013). Based on responses to the Sexual Experiences Survey, 61% of participants from this group reported at least one experience meeting criteria for sexual assault (Cleere & Lynn, 2013). A victim will not report an assault if they do not believe it was a crime (Cleere & Lynn, 2013).

Summary

Empowerment theory suggests when victims take an active role in decisions and behaviors following a traumatic experience, (i.e. sexual assault), by reporting sexual assault to law enforcement they experience hopefulness which leads to empowerment. Victims who do not take an active role in the decisions following a sexual assault may experience powerlessness. Empowerment theory and the concept of power versus powerlessness guided this research by assuming victims who report their sexual assault to law enforcement experienced fewer perceived barriers.

Sexual assault continues to plague college campuses. Incapacitation, whether voluntary or involuntary, is the most common tactic used against college attending victims. Sexual assault by threat, or use of force, is less likely, but still does take place against college attending victims. College-attending women are at an increased risk for sexual assault, regardless of the tactic used by the offender.

Hook-ups on college campuses have become an impetus for sexual assault. When excessive amounts of alcohol and/or drugs are consumed, the ability to consent to sexual activity is eliminated. College attending victims of sexual assault are most likely to be assaulted by someone they know. Because of the history of excessive alcohol consumption and peer pressure to obtain sex, fraternal organizations, are plagued by allegations of sexual assault. The tactic used to obtain sexual activity, the use of alcohol and/or recreational drugs, and the VOR are all variables that can affect sexual assault reporting behaviors. Common barriers cited by college attending victims are questioning whether the experience was a crime, fear of reprisal, and shame or embarrassment. These barriers decrease the likelihood of reporting sexual assault, or suspected sexual assault, to law enforcement.

Comparing victims who are certain they were sexually assaulted and those who are only suspicious they were sexually assaulted has not yet been studied. Knowing whether differences exist between these victim populations is important for university resources, law enforcement, and advocacy groups, as results can assist in creating and tailoring prevention and intervention programs. This study is a springboard for additional research and comparison of these two victim populations.

The next chapter discusses the methodology used to test hypotheses. Archival data was used to test hypotheses. An operationalization of variables was discussed, in addition to how the quantitative data will be applied to each statistical test. Ethical considerations and statistical analysis are reviewed, discussed, and addressed.

Chapter 3: Research Method

Introduction

The purpose of my study was to test whether statistically significant differences exist between two specific college attending sexual assault victims (those who suspect versus those who know). Dependent variables tested were whether an assault took place at a part or social gathering, whether the offender was part of a fraternal organization, reporting decisions, and barriers victims experience which influence their decision on whether to report. In this chapter, I cover the following topics: rationale for the selected research design, methodology (research questions and hypotheses), participant population, sampling and sampling procedure, recruitment of participants, data collection, instrumentation and operationalization of variables, data analysis, and threats to validity (ethical procedures).

Research Design and Rationale

In this quantitative study, I used a comparative design with no random participant assignment (see Creswell, 2014). When it would be unethical to manipulate variables, a comparative or quasi-experimental design is recommended by Frankfort-Nachmias and Nachmias (2008). The greatest pitfall of this design is the inability to make causal inferences from findings (Frankfort-Nachmias & Nachmias, 2008). A comparative research design is also convenient when time and resources are limited, as, for instance, during the dissertation process.

The National Institute of Justice, the department which performs research for the DOJ, funded RTI International to conduct a study of incapacitated sexual assaults at two

universities. Krebs et al. (2007) created a web-based instrument to administer to students from these two universities, one in the Midwest and one in the South. The instrument created by Krebs et al. (2007) asks each participant if they have experienced unwanted sexual contact which included: forced sexual touching, oral sex, intercourse, anal sex, or penetration with a finger or object. Participants were asked about experiences of sexual assault by verbal coercion, physical coercion, or incapacitation (being certain of assault versus suspicion; Krebs et al., 2007). This study will measure differences between victim groups and location of assault, offender fraternity affiliation, reporting behaviors, and barriers to reporting to law enforcement.

This study included both independent and dependent variables. Independent variables are those which may or may not affect, or influence, dependent variables (Creswell, 2014). The independent variable for this study was whether victims are certain they experienced a sexual assault, or they suspect they were sexually assaulted while incapacitated. Dependent variables are those which depend, or are influenced, by the independent variable (Creswell, 2014). Dependent variables in this study were assault location (party), offender Greek fraternal affiliation, decisions reporting to law enforcement, and barriers to reporting sexual assault to law enforcement.

Methodology

Research Questions and Hypotheses

This study was guided by four research questions:

RQ1: Are women who suspect they have been sexually assaulted while incapacitated significantly more likely than women who know they were assaulted while incapacitated to have been at a party or social gathering when the assault occurred?

$H_0$1: There is no difference between women who suspect, and women who know, they have been sexually assaulted while incapacitated and whether the incident took place at a social gathering or party.

H_a1: There is a difference between women who suspect, and women who know, they have been sexually assaulted while incapacitated and whether the incident took place at a social gathering or party.

RQ2: Are women who suspect they have been sexually assaulted while incapacitated significantly more likely than women who know they were sexually assaulted while incapacitated to be sexually assaulted by a fraternity member?

$H_0$2: There is no difference between women who suspect, and women who know, they have been sexually assaulted while incapacitated and whether the perpetrator was a fraternity member.

H_a2: There is a difference between women who suspect, and women who know, they have been sexually assaulted while incapacitated and whether the perpetrator was a fraternity member.

RQ3: Are rates of reporting to campus police or law enforcement significantly higher among women who know they have been sexually assaulted while incapacitated than women who suspect they were sexually assaulted while incapacitated?

$H_0$3: There is no difference in rates of reporting to campus police or law enforcement between women who know, and women who suspect they have been sexually assaulted while incapacitated.

H_a3: There is a difference in rates of reporting to campus police or law enforcement between women who know, and women who suspect they have been sexually assaulted while incapacitated.

RQ4: Is there a significant difference in barriers to reporting to campus security or law enforcement between women who suspect they were sexually assaulted while incapacitated and women who knew they were sexually assaulted while incapacitated?

$H_0$4: There is no difference in barriers to reporting to campus security or law enforcement amongst women who suspect they were sexually assaulted and women who knew they were sexually assaulted, while incapacitated.

H_a4: There is a difference in barriers to reporting to campus security or law enforcement amongst women who suspect they were sexually assaulted and women who knew they were sexually assaulted, while incapacitated.

Population

I used archival data obtained from the ICPSR (2016). Krebs et al. (2007) gathered data having to do with ISA on college campuses, demographic victim data, reporting behaviors, and barriers to reporting sexual assault. The National Institute of Justice (NIJ) funded this project to examine the prevalence, nature, and context under which sexual assaults are happening on college campuses (Krebs et al., 2016). There was no specific target population size. Between the two universities used in the original study, there were

over 6,800 students total (Krebs et al., 2016). The sampling subframe for the first university was 7,200 women, and the second university was 5,636 women. The total number of female participants who responded to the survey was 5,446. The sample target was 4,000 women consistently distributed across years of school. Data were collected quantitatively through web-based surveys and random sampling. I completed an application to ICPSR to receive access the selected dataset following Walden University's IRB approval.

Sampling and sampling procedure. Since this study involved archival data, the population and sample were not random. Participants were excluded from participating in the Krebs et al. (2007) study if they were not enrolled in school at least three-quarters time, were under the age of 18, or over the age of 25. Students were required to have been enrolled in the fall term of 2005. The female response rate for University 1 was 42.2% and for University 2 was 42.8%. Participants were only dropped from the study if the time it took to complete the survey was below the standard time found by the researchers (M = 12.32 minutes, SD = 6.88 minutes), resulting in 148 total responses being dropped, (*N* = 5,446, Krebs et al., 2007). Using G*Power, I computed a suggested sample size of 190 based on a power of .80, and an alpha level of 0.05. The dataset is expected to be effective in achieving statistical results.

Exclusionary data included offenses occurring before attending college, experiences reported by male victims, and sexual assaults where the perpetrator only threatened, or used, physical force. The goal of this research was to understand how incapacitation affects sexual assault experiences by college-attending, female students.

Recruitment.

Both emails and paper copy letters were mailed to students whose demographics fell within the inclusion frame. After an initial email was sent, which included a unique identification number and a hyperlink to the study, the next two weeks were spent sending follow-up emails to nonresponders (only identifiable by their identification number). The third week, researchers sent a paper copy follow-up letter, and finally nonresponders were sent a final email encouraging participation in the study (Krebs et al., 2007). Because this was a web-based questionnaire, informed consent was gathered passively (Krebs et al., 2011). Informed consent does not necessarily apply to this research as the data analyzed was archival.

Data collection.

Each university provided Krebs et al. (2007) with data files including detailed demographic information on all undergraduate students enrolled in the fall term of 2005. The following demographic data were provided: (a) full name, (b) gender, (c) race/ethnicity, (d) date of birth, (e) year of study, (f) grade point average, (g) full-time/part-time status, (h) e-mail address, and (i) mailing address (Krebs et al., 2007). Identification numbers were assigned to each participant, then a random sample was selected. Identifiers such as the participants name were excluded from the final dataset, all other demographic data remained (Krebs et al., 2007).

Initial data suggested 13.7% of female college students had experienced at least one completed sexual assault since entering college (Krebs et al., 2007). Freshmen students made up 29.9% of participants, sophomore students made up 22.8%, junior

students made up 20.7%, and senior students made up 26.6% of the study (Krebs et al., 2007). Incapacitation was defined as any unwanted sexual contact when the victim was unable to provide consent due to the following circumstances: she was asleep, passed out, drugged, drunk, or otherwise incapacitated (Krebs et al., 2007). Incapacitation was either voluntary or involuntary (Krebs et al., 2007).

This dataset was only available to my dissertation committee and me following Walden University's IRB approval and ICPSR approval. The ICPSR application includes the following: investigator information, research staff information, a research description, data selection, data format, confidential data security plan, a copy of Walden University's IRB approval, any additional forms, and the data use agreement which must be signed.. I have access to the ICPSR website because I am a student at Walden University. I only asked permission to access data to adequately test the hypotheses.

Instrumentation and operationalization of variables.

Krebs et al. (2007) designed a survey instrument for the Department of Justice's National Institute of Justice, which was used to gather data provided in the dataset I will apply for from ICPSR. A total of 216 items were included in the survey instrument, comprised of six different categories: background information, alcohol and other drugs, dating, experiences, and behaviors (Krebs et al., 2007). Question V5 asks whether a victim is certain they were sexually assaulted while incapacitated since entering college and Question V6 asks whether a victim is suspicious they were sexually assaulted while incapacitated since entering college, differentiating the two separate victim groups.

RQ1: Since entering college, are women who suspect they have been sexually assaulted while incapacitated significantly more likely than women who know they were assaulted while incapacitated to have been at a party or social gathering when the assault occurred?

To test RQ1, item V5 (e.g. Has someone had sexual contact with you when you were unable to provide consent or stop what was happening because you were passed out, drugged, drunk, incapacitated, or asleep? This question asks about incidents that you are certain happened.) from the Experiences section; item V6 (e.g. Have you suspected that someone has had sexual contact with you when you were unable to provide consent or stop what was happening because you were passed out, drugged, drunk, incapacitated, or asleep? This question asks about events that you think (but are not certain) happened.) from the Experiences and, item C30 (e.g. Were you at a party or social gathering when (the incident/any of the incidents) happened?) from the Experiences (female) section were analyzed.

RQ2: Are women who suspect they have been sexually assaulted while incapacitated significantly more likely than women who know they were sexually assaulted while incapacitated to be sexually assaulted by a fraternity member?

To test RQ2, item V5 (e.g. Has someone had sexual contact with you when you were unable to provide consent or stop what was happening because you were passed out, drugged, drunk, incapacitated, or asleep? This question asks about incidents that you are certain happened.) from the Experiences section; item V6 (e.g. Have you suspected that someone has had sexual contact with you when you were unable to provide consent or

stop what was happening because you were passed out, drugged, drunk, incapacitated, or asleep? This question asks about events that you think (but are not certain) happened.) from the Experiences section and, item C22 (e.g. (Was the person/were any of the people) a member of a fraternity at the time of (the incident/any of the incidents)?) from the Experiences section were analyzed.

RQ3: Are rates of reporting to campus police or law enforcement significantly higher among women who know they have been sexually assaulted while incapacitated than women who suspect they were sexually assaulted while incapacitated?

To test RQ3, item V5 (e.g. Has someone had sexual contact with you when you were unable to provide consent or stop what was happening because you were passed out, drugged, drunk, incapacitated, or asleep? This question asks about incidents that you are certain happened.) from the Experiences section; item V6 (e.g. Have you suspected that someone has had sexual contact with you when you were unable to provide consent or stop what was happening because you were passed out, drugged, drunk, incapacitated, or asleep? This question asks about events that you think (but are not certain) happened.) from the Experiences section; item R9 (e.g. After (the incident/any of the incident), did you report it to a law enforcement agency such as the police or campus security?) from the Experiences section; and item R9a (e.g. Who did you report it to?) from the Experiences section were analyzed.

RQ4: Is there a significant difference in barriers to reporting to campus security or law enforcement between women who suspect they were sexually assaulted while incapacitated and women who knew they were sexually assaulted while incapacitated?

To test RQ4, item V5 (e.g. Has someone had sexual contact with you when you were unable to provide consent or stop what was happening because you were passed out, drugged, drunk, incapacitated, or asleep? This question asks about incidents that you are certain happened.) from the Experiences section; item V6 (e.g. Have you suspected that someone has had sexual contact with you when you were unable to provide consent or stop what was happening because you were passed out, drugged, drunk, incapacitated, or asleep? This question asks about events that you think (but are not certain) happened.) from the Experiences section; item R9 (e.g. After (the incident/any of the incident), did you report it to a law enforcement agency such as the police or campus security?) from the Experiences section; and item R9d2 (e.g. Why did you decide to not report (the incident/any of the incidents) to the police or campus security?) from the Experiences section were analyzed.

All four research questions were comprised of dichotomous variables, meaning each variable only has two categories. Analysis tested whether there is statistical significance between the predictor and outcome variables. Findings from analyses either rejected or failed to reject the null hypothesis for each research question.

Data Analysis

The first three research questions were tested using binary logistical regression and the fourth using a chi-square test. The independent (predictor) variable is dichotomous (categorical). All four research questions also have a dependent (outcome) variable. Field (2013) recommends using binary logistic regression when outcome variables are categorical.

Binary logistic regression was used to test the first three hypotheses and a chi-square test was used to test the fourth hypothesis. Binary logistic regression assumes the following will not be violated: the dependent variable is dichotomous, there are no outliers in the data, and no multicollinearity (Field, 2013). The chi-square test is non-parametric and assumes both variables are categorical, and each group is mutually exclusive (Field, 2013). None of these assumptions were violated. Both tests effectively addressed all four research questions.

Threats to Validity

Creswell (2014) described internal validity as experimental experiences of the participant which inhibit accurate inferences being drawn from findings. Three limitations exist when using archival data: access to data, incomplete understanding of how data were collected, and purpose and scope of research differences between the original researcher and the archival study (Frankfort-Nachmias & Nachmias, 2008). These limitations threaten validity, particularly when the purpose differs between research, issues with internal validity may arise. Despite these potential pitfalls, after thorough review of the instrument, I am confident in this dataset's ability to address my research questions and test hypotheses.

Social desirability bias, or self-report bias, is a threat to internal validity when a self-report instrument is used (Gittelman et al., 2015). This type of threat to internal validity occurs when the individual who is being assessed answers questions in a way, they deem desirable by society or by the assessor (Gittelman et al., 2015). Because the

archival nature of this study, I assumed Krebs et al. (2007) created the assessment tool with the threat of social desirability in mind and did their best to avoid it.

The most pertinent threat to external validity is the ability to generalize findings. Because the nature of my research is a self-selected sample of convenience, generalizing findings was limited to this sample. To avoid threatening external validity, only generalizations were made within the parameters set by the original researchers' population.

Ethical Procedures

Before Krebs et al. (2007) could collect data and conduct the study, three IRBs approved the methodology. RTI's IRB, in addition to, both university IRBs, approved of Krebs et al. (2007) plan for data collection. The participant data I gained access to did not have any personal identifiers included (or the name of either participant universities) other than age, race, year in school, and other basic demographic information. Any ethical concerns related to the original recruitment process were addressed during the extensive IRB processes by each university and RTI.

The dataset I applied for required I receive conditional IRB approval before applying for access to the data. I gained access to the data after approval by the ICPRS and official approval from Walden University's IRB. My program chair was also granted access to the dataset. Data stored on my computer, including analysis, will be retained in accordance with both Walden University's data retention requirements in addition to any requirements made by the ICPRS. All data supplied by ICPRS was anonymous.

Summary

This chapter described the research design and rationale for scholarship. A quantitative, comparative methodology was discussed and justified. Research questions and hypotheses were reiterated. Because this study utilized archival data, the population, sampling, sampling procedure, and recruitment were done by Krebs et al. (2007).

Each research question was clarified, and instrumentation and operationalization of variables was discussed. A brief reasoning and justification of data analysis was completed. Internal and external threats to validity were discussed and plans to approach violations were laid out. Because archival data was used and the nature of the study, ethical violations are slim.

My study explored the differences amongst the location of where sexual assaults take place on college campuses, the VOR, reporting the sexual assault to law enforcement, and perceived barriers to reporting sexual assault to law enforcement. The nature of this study was quantitative, using archival data from Krebs et al. (2007). An application for access to data through ICPSR was submitted upon IRB conditional approval. Data was shared after ICPSR approval and IRB official approval. Binary logistical regression and chi-square tests were conducted to test each hypothesis. Results of the data analysis are discussed in Chapter 4.

Chapter 4: Results

Introduction

The purpose of this research was to understand whether statistically significant differences exist between victims who were certain versus victims who were suspicious they were sexually assaulted while incapacitated. Four research questions were posed, and four hypotheses were tested. The organization of this chapter addresses each research question and the corresponding hypotheses testing.

Research Questions and Hypotheses

RQ1: Are women who suspect they have been sexually assaulted while incapacitated significantly more likely than women who know they were assaulted while incapacitated to have been at a party or social gathering when the assault occurred?

$H_0 1$: There is no difference between women who suspect, and women who know, they have been sexually assaulted while incapacitated and whether the incident took place at a social gathering or party.

$H_a 1$: There is a difference between women who suspect, and women who know, they have been sexually assaulted while incapacitated and whether the incident took place at a social gathering or party.

RQ2: Are women who suspect they have been sexually assaulted while incapacitated significantly more likely than women who know they were sexually assaulted while incapacitated to be sexually assaulted by a fraternity member?

$H_0 2$: There is no difference between women who suspect, and women who know, they have been sexually assaulted while incapacitated and whether the perpetrator was a fraternity member.

$H_a 2$: There is a difference between women who suspect, and women who know, they have been sexually assaulted while incapacitated and whether the perpetrator was a fraternity member.

RQ3: Are rates of reporting to campus police or law enforcement significantly higher among women who know they have been sexually assaulted while incapacitated than women who suspect they were sexually assaulted while incapacitated?

$H_0 3$: There is no difference in rates of reporting to campus police or law enforcement between women who know, and women who suspect they have been sexually assaulted while incapacitated.

$H_a 3$: There is a difference in rates of reporting to campus police or law enforcement between women who know, and women who suspect they have been sexually assaulted while incapacitated.

RQ4: Is there a significant difference in barriers to reporting to campus security or law enforcement between women who suspect they were sexually assaulted while incapacitated and women who knew they were sexually assaulted while incapacitated?

$H_0 4$: There is no difference in barriers to reporting to campus security or law enforcement amongst women who suspect they were sexually assaulted and women who knew they were sexually assaulted, while incapacitated.

H_a4: There is a difference in barriers to reporting to campus security or law enforcement amongst women who suspect they were sexually assaulted and women who knew they were sexually assaulted, while incapacitated.

Data Collection

Because this study involved archival data, conditional IRB approval was granted while I applied to access the restricted data set available from the ICPSR. It took approximately four weeks to have my application granted by ICPSR. Following submission of the ICPSR data use agreement, I was granted final IRB approval (10-05-18-0400754). No major discrepancies took place between the data collection plan outlined in Chapter 3.

Demographically, the majority of the 5,446 female participants were between the ages of 18-21 (N = 4,531; Table 2) and evenly distributed amongst college classifications (freshman = 1291, sophomore = 1349, junior = 1353, and senior = 1370; Krebs et al., 2007; Table 2). The total sample was predominately white (81.4%) with just 9.7% of the population being black (Table 3). Participants were asked myriad questions about drug and alcohol use, and then about experiences sexual in nature. Specifically, participants were asked if they were certain, or if they were suspicious, they had experienced sexual assault while incapacitated. A total of 32 participants (N = 32) reported being certain they had experienced incapacitated sexual assault. A total of 105 (N = 105) reported being suspicious they had experienced incapacitated sexual assault.

Despite the dataset used for this research being archival, it was a fair representation of age and college classification disbursement. Unfortunately, the racial

diversity is not necessarily representative of the greater sample population. As I stated in Chapter 3, generalizations of findings are only extended to the individual participants within this sample's frame to avoid threatening external validity.

Results

Binary logistic regression was used to test the first three hypotheses and a chi-square test was used to test the fourth hypothesis. Binary logistic regression assumes the following will not be violated: the dependent variable is dichotomous, there are no outliers in the data, and no multicollinearity (Field, 2013). The chi-square test is non-parametric and assumes both variables are categorical, and each group is mutually exclusive (Field, 2013). None of these assumptions were violated.

Table 1

Descriptive Statistics – Sample Age

Age	*N*	%
18	867	15.9
19	1311	24.1
20	1195	21.9
21	1158	21.3
22-24	833	15.3
25-29	74	1.4
30-39	1	0.0
40 or older	7	0.1
Total	5446	100.0

Note. *N* = total cases, % = percent of cases

Party Attendance

To address the first research question, I performed a binary logistic regression to ascertain the effects of party attendance on the likelihood that participants were certain they experienced incapacitated sexual assault. The binary logistic regression was not

statistically significant, $x^2(1) = .54$, $p = .461$ (see Table 4). These findings failed to reject the null hypothesis. Within this sample of victims certain they were sexually assaulted while incapacitated, being at a party or a social gathering had no significant effect.

Table 2

Descriptive Statistics – Sample College Classification

Classification	*N*	%
Freshmen	1291	23.7
Sophomore	1349	24.8
Junior	1353	24.8
Senior	1370	25.2
Other	80	1.5
Total	5443	99.9

Note. *N* = total cases, % = percent of cases

Table 3

Descriptive Statistics – Sample Race

Race	*N*	%
White	4435	81.4
African American	526	9.7
Latino	160	2.9
Asian	338	6.2
Native American/Pacific Islander	21	0.4
American Indian/Alaska Native	84	1.5
Total	5564	102.1

Note. *N* = total cases, % = participants were able to select all that applied

A binary logistic regression was performed to ascertain the effects of party attendance on the likelihood that participants were suspicious they experienced sexual assault. The binary logistic regression was not statistically significant, $x^2(1) = 2.43$, $p = .119$ (see Table 4). These findings failed to reject the null hypothesis. Similar to victims

who were certain, victims who were suspicious of being sexually assaulted while incapacitated, being at a party or a social gathering had no significant effect.

Table 4

Incapacitated Sexual Assault at a Party

	B	*SE*	*Wald*	*p*	*OR*	*95% CI OR*
Certain	-0.28	0.39	0.54	0.46	0.75	[0.4, 1.6]
Suspicious	0.39	0.25	2.40	0.12	1.50	[0.9, 2.4]

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

While being at a party or social gathering was not statistically significant, being on a date with the offender at the time of the certain or suspected sexual assault was statistically significant within both predictor variables (Krebs et al., 2007). This analysis was conducted ad hoc. For victims certain of incapacitated sexual assault, $x^2(1) = 9.43$, $p = .002$ (see Table 5). The model explained 3.5% (Nagelkerke R^2) of the variance in certainty of incapacitated sexual assault and correctly classified 96% of cases. Victims certain of being sexually assaulted while incapacitated were 3.3 times more likely to have been on a date with their offender than not.

Table 5

On a Date With Offender at Time of Sexual Assault

	B	*SE*	*Wald*	*p*	*OR*	*95% CI OR*
Certain	1.18	0.39	9.43	.002**	3.27	[1.53, 6.95]
Suspicious	0.58	0.26	5.03	.025*	1.79	[1.10, 2.96]

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

For victims suspicious of incapacitated sexual assault, $x^2(1) = 5.03$, $p = .03$ (see Table 5). The model explained 1% (Nagelkerke R^2) of the variance in suspicion of

incapacitated sexual assault and correctly classified 88% of cases. Victims suspicious of being sexually assaulted while incapacitated were 1.8 times more likely to have been on a date with their offender than not.

Fraternity Membership

To address the second research question, a binary logistic regression was performed to ascertain the effect of offender fraternal membership on the likelihood that participants are certain they experienced incapacitated sexual assault. The binary logistic regression was not statistically significant, $x^2(1) = .002$, $p = .969$ (Table 6). These findings fail to reject the null hypothesis. These findings suggest within this sample, victims who are certain they experienced sexual assault while incapacitated are not significantly more likely to be sexually assaulted by a fraternity member.

Table 6

Incapacitated Sexual Assault Offender Fraternal Membership

	B	*SE*	*Wald*	*P*	*OR*	*95% CI OR*
Certain	0.02	0.62	0.00	0.97	1.02	[0.3, 3.4]
Suspicious	-1.13	0.28	16.84	0.00***	0.32	[0.2, 0.6]

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

A binary logistic regression was performed to ascertain the effect of offender fraternal membership on the likelihood a participant was suspicious they had experienced incapacitated sexual assault. The binary logistic regression was statistically significant, $x^2(1) = 16.84$, $p = .000$ (Table 6). The model explained 32% (Nagelkerke R^2) of the variance in suspicion of incapacitated sexual assault and correctly classified 88% of cases. Offender fraternal membership was .3 times more likely to be involved in

suspected instances of incapacitated sexual assault than non-fraternal membership offenders. These findings reject the null hypothesis.

Reporting to Law Enforcement

To address the third research question, a binary logistic regression was performed to ascertain he effect of reporting to law enforcement or campus police on the likelihood that participants were certain they experienced incapacitated sexual assault. The binary logistic regression was statistically significant, $x^2(1) = 4.23$, $p = .04$ (Table 7). The model explained 6% (Nagelkerke R^2) of the variance in certainty of experiencing incapacitated sexual assault and correctly classified 99.5% of cases. Reporting to law enforcement was 8.39 times more likely to happen when victims were certain they were sexually assaulted while incapacitated. These findings reject the null hypothesis.

Table 7

Incapacitated Sexual Assault and Reporting to Law Enforcement or Campus Police

	B	*S.E.*	*Wald*	*P*	*OR*	*95% CI OR*
Certain	2.13	1.04	4.23	.040*	8.40	[1.10, 63.78]
Suspicious	2.44	0.55	19.89	.000***	11.53	[3.9, 33.9]

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

A binary logistic regression was performed to ascertain the effect of reporting to law enforcement or campus police on the likelihood that participants suspected they had experienced incapacitated sexual assault. The binary logistic regression was statistically significant, $x^2(1) = 19.69$, $p = .000$ (Table 7). The model explained 12% (Nagelkerke R^2) of the variance in suspicion of incapacitated sexual assault and correctly classified 98.5% of cases. Reporting to law enforcement was 11.52 times more likely to happen when

victims were suspicious, they experienced incapacitated sexual assault. These findings reject the null hypothesis.

A few additional tests were conducted ad hoc. One tested the outcome variable 'did perpetrator get arrested?' against the predictor variables (Krebs et al., 2007). While victims who were certain of incapacitated sexual assault was not significant, $x^2(1) = 2.40$, $p = .12$, victims who were suspicious of incapacitated sexual assault was statistically significant, $x^2(1) = 6.51$, $p = .01$ (Table 8). The model explained 1% (Nagelkerke R^2) of the variance in suspicion of incapacitated sexual assault and correctly classified 88% of cases. Offender arrest was 1.94 times more likely to happen when victims were suspicious, they experienced incapacitated sexual assault.

Table 8

Incapacitated Sexual Assault and Offender Arrest

	B	*SE*	*Wald*	*p*	*OR*	*95% CI OR*
Certain	0.61	0.40	2.40	.122	1.87	[0.85, 3.96]
Suspicious	0.66	0.26	6.51	.011**	1.94	1.17, 3.22]

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

Additional ad hoc testing was performed on the outcome variable, 'did perpetrator receive disciplinary action [by the university]?'against the predictor variables (Krebs et al., 2007). Victims who were certain of incapacitated sexual assault was statistically significant, $x^2(1) = 12.41$, $p = .000$ (Table 9). The model explained 4% (Nagelkerke R^2) of the variance in certainty of incapacitated sexual assault and correctly classified 96% of cases. Offender disciplinary action was 2.6 times more likely to happen when victims were certain they experienced incapacitated sexual assault.

Victims who were only suspicious of sexual assault while incapacitated was also statistically significant, $x^2(1) = 5.14$, $p = .02$ (Table 9). The model explained 1% (Nagelkerke R^2) of the variance in suspicion of incapacitated sexual assault and correctly classified 88% of cases. Offender disciplinary action was 1.7 times more likely to happen when victims were suspicious, they experienced incapacitated sexual assault.

Table 9

Incapacitated Sexual Assault and Offender Disciplinary Action by University

	B	*S.E.*	*Wald*	*p*	*OR*	*95% CI OR*
Certain	0.95	0.27	12.41	.000***	2.60	[1.53, 4.40]
Suspicious	0.51	0.22	5.14	.023*	1.66	[1.07, 2.58]

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

Barriers to Reporting to Law Enforcement

To adequately address research question four, chi-square tests were performed. Chi-square results test how likely an observed distribution is to chance. Therefore, when a chi-square result has a small *p* value, one can assume the relationship between the variables it not simply due to chance. Each barrier is listed with its chi-square and whether it was statistically significant (*p* value) (see Table 10).

Table 10

Barriers to Reporting Incapacitated Sexual Assault

	N	x^2	*p*
Did not want anyone to know.	59	0.22	0.64
Didn't think it was serious enough.	56	1.71	0.19
Unclear it was a crime.	45	0.04	0.85
Didn't have proof.	35	0.69	0.41
Didn't remember or know what really happened.	76	0.23	0.63
Thought you were partially or fully responsible.	63	0.55	0.46
Didn't know how to report.	23	12.76	0.00***
Didn't think police would think it was serious enough.	33	4.06	0.04*
Thought you'd be treated poorly.	19	7.05	0.01**
Didn't think anything could be done.	21	8.10	0.00***
Didn't want to admit using drugs or alcohol.	27	0.47	0.50
Afraid of offender reprisal.	27	3.50	0.06

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

As indicated, four barriers had statistical significance, 'didn't know how to report' (see Figure 1), 'didn't think police would think it was serious enough' (see Figure 2), 'thought you'd be treated badly' (see Figure 3), and 'didn't think anything could be done' (see Figure 4). 'Fear of offender reprisal almost reached statistical significance, $x^2(1) = 3.50$, $p = .06$ (see Figure 5). These findings reject the null hypothesis by showing there are differences in barriers amongst victims who are certain versus victims who are only suspicious they were sexually assaulted while incapacitated.

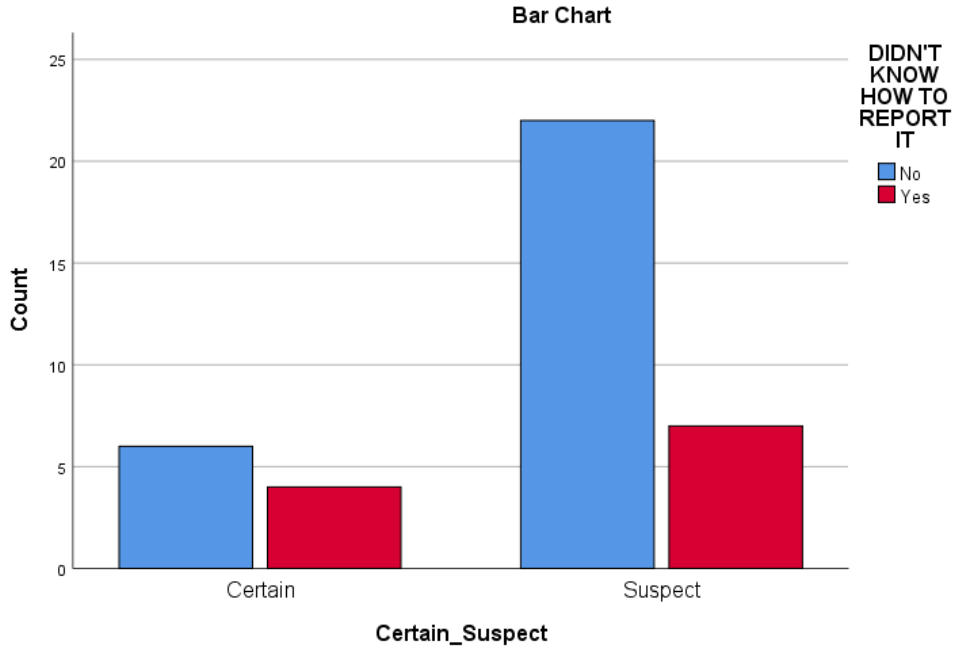

Figure 1. Didn't know how to report it.

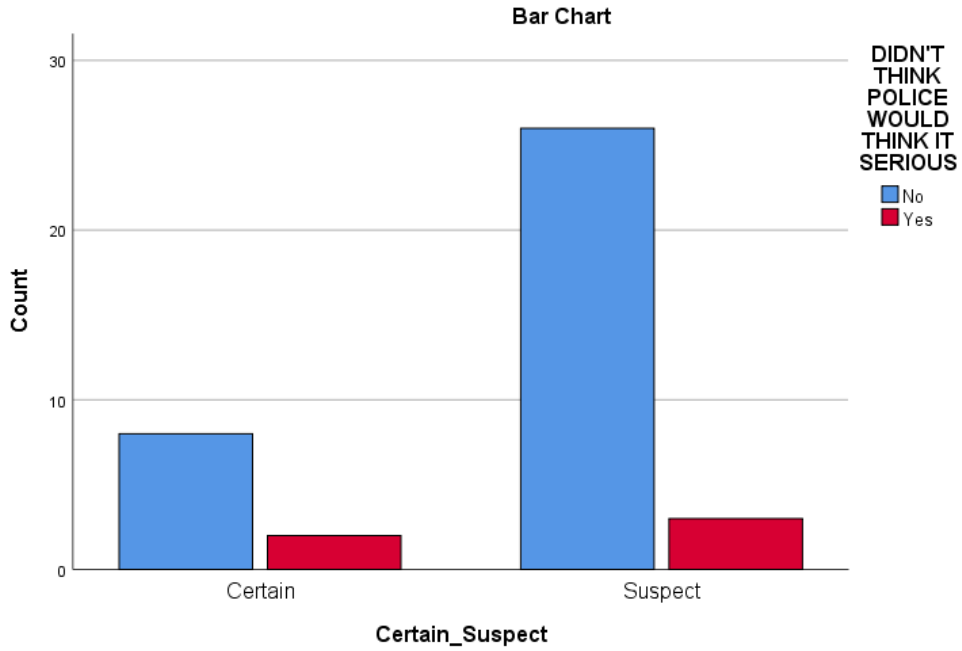

Figure 2. Didn't think police would think it serious.

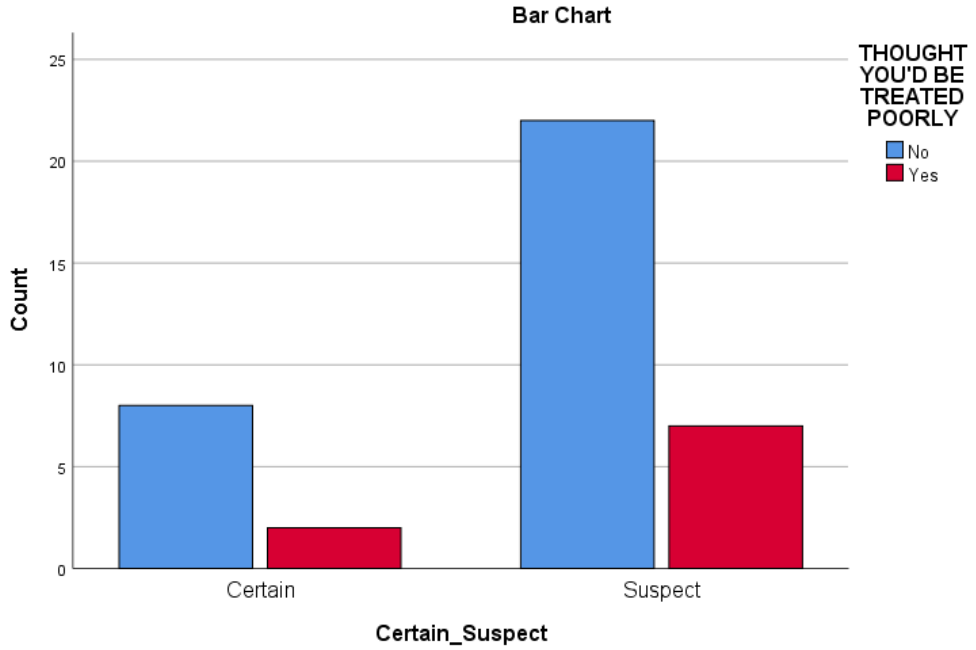

Figure 3. Thought you'd be treated poorly.

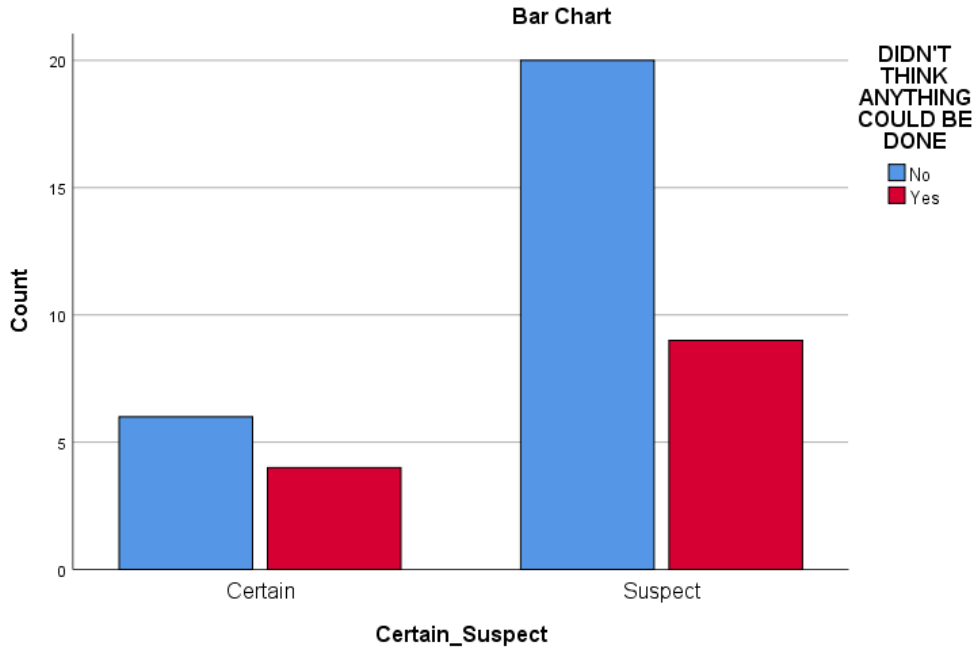

Figure 4. Didn't think anything could be done.

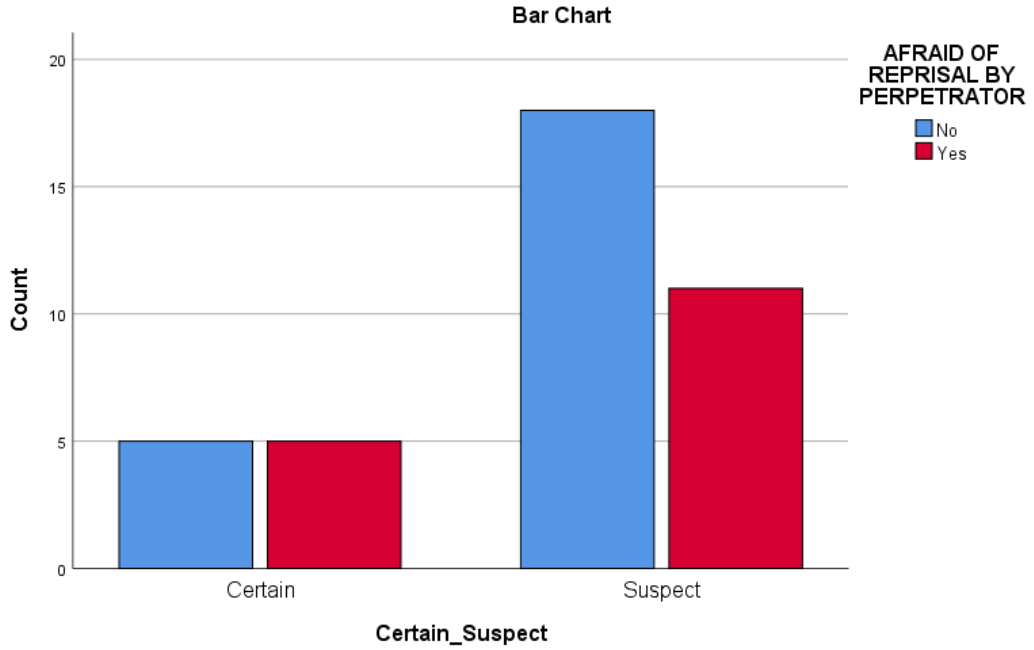

Figure 5. Afraid of reprisal by perpetrator.

Summary

Overall, hypothesis testing found statistically significant results, if not from initial hypothesis testing, but from ad hoc testing. The first research question posed was: are women who suspect they have been sexually assaulted while incapacitated significantly more likely than women who know they were assaulted while incapacitated to have been at a party or social gathering when the assault occurred? Hypothesis testing determined victims of incapacitated sexual assault (whether certain or suspicious) are neither more likely to experience sexual assault while at a party or social gathering.

Ad hoc testing discovered being on a date with the offender was statistically significant for both victim groups. These findings challenge other studies such as Cranney (2015), who found college students (most frequently freshmen), experience

sexual assault or attempted sexual assault during a party. They do provide valuable information about dating experiences and how victims from this participant pool were at a higher risk for suspected or certain incapacitated sexual while on a date versus at a party.

The second research question: are women who suspect they have been sexually assaulted while incapacitated significantly more likely than women who know they were sexually assaulted while incapacitated to be sexually assaulted by a fraternity member, was partially significant. Victims who were certain of ISA had no statistical significance when it came to offender fraternal membership. However, victims suspicious of ISA were more likely (*OR* = 0.32) to have reported being suspicious of ISA by an offender who was a fraternity member.

Directly addressing the research question, this analysis did find women suspicious of ISA are more likely to have been assaulted by a fraternity member. These findings support contemporary research suggesting fraternity members were more likely than non-fraternity members to report committing sexual assault (Franklin et al., 2012). Committing sexual assault was one of two consequences associated with being in a fraternity (Soule et al., 2015).

Research question three: are rates of reporting to campus police or law enforcement significantly higher among women who know they have been sexually assaulted while incapacitated than women who suspect they were sexually assaulted while incapacitated, had statistically significant findings. Binary logistic regression findings suggest both victim groups were likely to report to campus police or law

enforcement, however, victims suspicious of ISA were more likely (*OR* = 11.53) than victims certain of ISA (*OR* = 8.40) to report their experience to campus police or law enforcement. Until this research, no other studies had addressed whether certainty versus suspicion of ISA had any effect on reporting to law enforcement or campus police.

Additional tests were conducted ad hoc, one tested the outcome variable 'did perpetrator get arrested?'. Findings suggested no statistical significance amongst victims who were certain of ISA, $x^2(1) = 2.40$, $p = .12$. However, there was statistical significance amongst victims who were suspicious of ISA, $x^2(1) = 6.51$, $p = .000$, offenders were almost two times as likely to be arrested (*OR* = 1.94).

Most interestingly, the outcome variable 'did perpetrator receive disciplinary action [by the university]?' was statistically significant for both victim groups (Table 8). This suggests that the two universities used in the Krebs et al. (2007) study were actively disciplining offenders of ISA. Of course, this requires the victim to report either their certainty or suspicion of ISA and be certain of their offender. These findings suggest the need for additional research on these particular outcome variables and certainly versus suspicion of ISA.

For the final research question: is there a significant difference in barriers to reporting to campus security or law enforcement between women who suspect they were sexually assaulted while incapacitated and women who knew they were sexually assaulted while incapacitated, findings were mixed. Of the twelve barriers Krebs et al. (2007) used in their study (Table 9), four met the level necessary to be statistically

significant and an additional barrier, afraid of offender reprisal, almost reached statistical significance $x^2(1) = 3.50$, $p = .06$.

Barriers to reporting sexual assault, particularly amongst college-attending ISA victims, is a relatively new area of research and there is little literature on what barriers are most often experience. Cohn et al. (2013) studied the general population of sexual assault victims and found the most common barriers to reporting ISA were: victim being unclear if what happened was a crime, fear there was no proof a crime happened, and did not think it was serious enough. A National study on women aged 18-34 reported fear of offender reprisal, not wanting family or others to know, not enough proof, fearing the criminal justice system, and not knowing how to report were the most frequently experienced barriers to reporting sexual assault (Wolitzky-Taylor et al., 2011). A South African study found women are most afraid of offender reprisal and cite that as their reason for not seeking medical care after a sexual assault (Adefolala, 2013).

One of the few studies focused specifically on college-attending students, conducted by Zinzow and Thompson (2011) suggest victims do not report because; they didn't think it was serious enough or a crime, didn't want anyone to know, didn't want police involved, and felt embarrassed.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The purpose of this quantitative study was to answer specific questions regarding college-attending students and the certainty or suspicion of ISA. Answers to these questions contribute to contemporary findings on sexual assault experiences amongst college-attending females. Each research question asked whether there is a statistical significance between college-attending women who are certain, versus those who only suspect they were sexually assaulted while incapacitated. Additional variables measured included location of sexual assault incident, whether the offender was a member of a Greek fraternal organization, reporting decisions, and experienced barriers leading the victim to not report the assault.

This was a comparative, quantitative study using archival data. While this design means no random participant assignment, a comparative design does not require variable manipulation (Creswell, 2014; Stangor, 2011). While archival data use may be convenient, it does have advantages such as increased sample size, cost effectiveness, and mitigation of ethical risk (Frankfort-Nachmias & Nachmias, 2008).

I obtained archival data from the ICPSR (2016). The dataset was comprised of quantitative responses to an assessment created by Krebs et al. (2007). College-attending women from two universities in the United States (N = 5,446) were asked specific questions relating to sexual assault experiences before entering, and since entering college. Following IRB approval, Dr. Julie Lindahl (Dissertation Chair) and I were

granted access to the dataset. Logistic regression and chi-Square tests were used to test each research question, which allowed me to reject or accept the null hypotheses.

The National Institute of Justice funded RTI International to conduct a study of incapacitated sexual assaults at two universities. Krebs et al. (2007) created a web-based instrument, administered to students from the two universities, one in the Midwest and one in the South. The instrument covered a wide variety of variables related to ISA on college campuses. Some of the variables in the instrument included: tactic used by offender, the relationship between the victim and offender before the assault happened, offender substance use, voluntary drug use by the victim, physical location of sexual assault, and weapon use.

In this study, I compared the independent variable, being suspicious versus being certain ISA took place, to the following dependent variables: likelihood of the offender being a member of a fraternity, reporting behaviors, and barriers to reporting. For the purposes of this study, incapacitation is the tactic used to sexually assault a victim, regardless of whether the victim voluntarily consumed alcohol and/or drugs or if they were unknowingly incapacitated by the offender. Suspicion versus knowing refers to whether the victim is sure, or believes, she was sexually assaulted. Furthermore, I sought to measure how often members of a fraternity perpetrate incapacitated sexual assault. The variable of reporting refers to quantifying whether victims reported sexual assault to law enforcement or campus police. Lastly, this study highlighted barriers that lead to not reporting a sexual assault.

Logistic regression and chi-square analysis showed mostly significant results: fraternal membership, reporting to law enforcement, and barriers to reporting to law enforcement were statistically significant. In addition, ad hoc tests were significant, suggesting being on a date with the offender, university disciplinary action taken, and whether the offender was arrested were all statistically significant variables.

Interpretation of the Findings

I posed four research questions and tested their associated hypotheses.

The first research question was: Are college-attending women who suspect they have been sexually assaulted while incapacitated significantly more likely than college-attending women who know they were assaulted while incapacitated to have been at a party or social gathering when the assault occurred? Binary logistic regressions measured the effects of party attendance on the likelihood that participants were either certain or suspicious they experienced ISA. There was no statistical significance amongst those victims certain or only suspicious they experienced ISA, failing to reject the null hypotheses. These findings disconfirm empirical literature, which has suggested that sexual assault perpetrated against college-attending females (specifically ISA) is likely to take place during a party or social gathering (Flack et al., 2015; Stinson et al., 2014).

Ad hoc testing indicated that being on a date with the offender (regardless of whether the victim was certain or only suspicious of ISA) was statistically significant. This finding is important because it proves within this sample of college-attending women that being on a date has a higher likelihood of resulting in ISA, where the same cannot be said for a victim attending a party.

The second research question was: Are college-attending women who suspect they have been sexually assaulted while incapacitated significantly more likely than college-attending women who know they were sexually assaulted while incapacitated to be sexually assaulted by a fraternity member? Hypothesis testing was mixed, showing victims who were certain of ISA were no more likely to be sexually assaulted by an offender associated with a fraternal organization than those who were not. These findings failed to reject the null hypothesis. For those victims only suspicious of ISA, offenders were more likely to be associated with a fraternal organization. This finding was successful in rejecting the null hypothesis. These findings indicated that within this sample, only victims who are suspicious of ISA are more likely to have an offender who is part of a fraternity.

These findings partially confirm other contemporary research. The culture of fraternal organizations has become conducive to acts of sexual violence, fueled by alcohol and recreation drug use (Kingree & Thompson, 2013; Seabrook et al., 2016; Sweeny, 2011). Franklin et al. (2012 reported fraternity members were more likely to self-report having sexually assaulted someone while fraternal cohorts were likely to endorse sexual aggression and assault. Findings from this research suggest this victim group (suspicion of ISA) within this population support empirical findings. Interestingly enough, Sweeny (2011) found fraternity members preferred freshmen women because they were naive and impressionable, especially when provided with excessive amounts of alcohol.

The third research question was: Are rates of reporting to campus police or law enforcement significantly higher among college-attending women who know they have been sexually assaulted while incapacitated than college-attending women who suspect they were sexually assaulted while incapacitated? Findings from both binary logistic regressions extend contemporary and historical findings suggesting ISA, even if a victim is only suspicious of ISA, does affect reporting instances of sexual assault to law enforcement. Certainty and suspicion of ISA were statistically significant in predicting whether victims were more likely to report experiences to law enforcement. Victims certain of ISA were 8.39 times more likely to report their experience to law enforcement. Victims suspicious of ISA were 11.52 times more likely to report their assault experience to law enforcement.

While findings indicated statistical significance, a very small percentage of the sample population reported to law enforcement. Only 1% of those victims certain of ISA reported, and 1.2% of those victims suspicious of ISA reported. Low rates of reporting sexual assault are common. One study of the general population showed that only 14% of male and female victims of sexual assault report their experience to law enforcement (Walsh & Bruce, 2014). College-attending populations are even less likely to report; just 10% of James and Lee's (2015) population reported unwanted sexual touching, and none of those students who reported unwanted sexual acts or intercourse reported to law enforcement. Similarly, Wolitzky-Taylor et al. (2011) found a total of 11.5% of sexual assaults against female undergraduate students were reported. Only 2.7% of those instances of ISA were reported to law enforcement (Wolitzky-Taylor et al., 2011).

Supplementary ad hoc testing revealed some interesting findings. I found that offender arrest was a statistically significant outcome variable for those victims who were certain of ISA. Offender arrest was 1.94 times more likely to happen when victims were suspicious that they experienced incapacitated sexual assault. Whether an offender received disciplinary action by the university was also statistically significant for both predictor variables. Certainty of ISA had a slightly higher likelihood of happening, 2.6 times more likely (assumed because of the victim's certainty). Victims only suspicious of ISA predicted only a 1.7 times more likely chance their alleged offender would see disciplinary action from the university.

The fourth research question was: Is there a significant difference in barriers to reporting to campus security or law enforcement between college-attending women who suspect they were sexually assaulted while incapacitated and college-attending women who knew they were sexually assaulted while incapacitated?

To adequately address RQ4, I performed chi-square tests. Krebs et al. (2007) identified 12 potential barriers college-attending students may face when deciding whether to report a sexual assault to law enforcement: (a) Not wanting anyone to know, (b) not thinking the experience was serious enough, (c) being unclear what happened was a crime, not having proof, not remembering what happened, (d) a victim thinking they were partially or fully responsible, (e) not knowing how to report, (f) not thinking police would take the experience serious, (g) a victim afraid of being treated poorly, (h) not thinking anything could be done, (i) not wanting to admit using drugs or alcohol, and (j)

being afraid of offender reprisal. All 12 barriers are organized with their chi-square and *p* value in Table 10.

Four of the 12 barriers tested were statistically significant. Not knowing how to report (see Figure 1), didn't think police would think it was serious enough (see Figure 2), the victim thought they would be treated badly (see Figure 3), and the victim not believing anything could be done (see Figure 4) all held statistical significance. Rejection of the null hypothesis indicated there is a difference between victims who are certain versus victims who only suspect they experienced ISA and which barriers inhibited them from reporting their experience to law enforcement.

Barriers to reporting ISA to law enforcement amongst the general population have been found to be (a) not wanting family to know, (b) not wanting other people to know, (c) lack of proof, (d) fear of being treated poorly by law enforcement, (e) not clear it was a crime, (f) not sure how to report, (g) offender reprisal, and (h) the crime was not serious enough (Cohn et al., 2013; Wolitzky-Taylor et al., 2011). The three most common barriers victims experienced in Cohn et al. (2013) work were (a) not clear what happened was a crime (87%), (b) lack of proof (64%), and (c) what happened was not serious enough (63%). Fear of offender reprisal (68%), not wanting family to now (59%), and not wanting anyone else to know (57%) were the three most common barriers in the Wolitzky-Taylor et al. (2013) study.

A substantial gap exists in contemporary literature surrounding college-attending victims' specific barriers to reporting ISA. Zinzow and Thompson (2011) discussed their own eight barriers that college-attending victims of sexual assault experience; (a) believe

the assault was the victim's fault, (b) shame or embarrassment, not wanting anyone to know, (c) doubt the police would do anything, (d) didn't want the police involved, (e) uncomfortable with the offender being prosecuted, (f) not believing it was serious crime, and (g) the victim planned to handle it themselves. Female undergraduate students self-reported that they did not believe what happened was a crime 68% of the time, they didn't want anyone to know 45% of the time, they didn't want to police involved 43% of the time, and they felt too embarrassed to report 42% of the time (Zinzow & Thompson, 2011).

Findings from this research confirmed some of the findings by Zinzow and Thompson (2011). Not believing what happened was a serious crime, and not wanting police involved were two of the most common barriers in Zinzow and Thompson's (2011) research, while both of these barriers had statistically significant *p* values in my research. Interestingly, not knowing how to report was one of the least common barriers reported by the general population (Wolitzky-Taylor et al. 2011; Cohn et al. 2013) yet was statistically significant here. While the current population cannot be generalized, this is a trend that can be built on for extending the current knowledge in this area of sexual assault research.

Fear of reprisal by the offender after reporting almost reached statistical significance ($p = .06$; see Figure 5). Recent studies of sexual assault have indicated that fear of reprisal is one of the more frequent barriers experienced by victims of sexual assault (Adefolalu, 2013; James & Lee, 2015; Walsh & Bruce, 2014). Therefore, this

almost significant finding confirms knowledge in the discipline while expanding knowledge in the specific discipline of college-attending ISA victims.

Theoretical Foundation

Empowerment theory is guided by Lord and Hutchison's (1993) concept of power versus powerlessness. Kiefer (1984) describes powerlessness as the perceived inability to make decisions in one's life. Powerlessness leads to helplessness (Frazier et al. 2009) and mastering one's life and choices promotes empowerment (McDermott & Garofalo, 2004). Sexual assault victims, particularly victims of ISA are more likely to experience powerlessness as they were commonly unable to physically resist the assault (Padmanabhanunni & Edwards, 2012).

Each research question is guided by these ideas, assuming when a victim reports a sexual assault to law enforcement, they have experienced fewer barriers, and therefore will experience empowerment. Additional outcome variables such as location of the assault and offender characteristics, and predictor variables such as being certain versus being suspicious were assumed to (and partially) affect reporting decisions.

Limitations of the Study

Because the nature of this study was use of archival data by Krebs et al., (2007) a few limitations existed. First, use of archival data assumes the original data is meant for a purpose. Prior to analyzing data, there were no assurances this data would answer the proposed research questions and would allow accurate analyses. Second, my research was limited in generalization.

I was able to address the limitation of the original data's purpose by only using variables necessary to test hypotheses. Ad hoc testing was only done after dutiful variable selection. I addressed the issue of generalization by only generalizing these findings to this sample frame.

Recommendations

The first recommendation for future study is using primary versus secondary (archival) data. Because the data here was already collected, I was unable to generalize any of the findings to a greater sample population above and beyond the participants from the original work. Perhaps formulating a new assessment tool with the purpose of building on the work Krebs et al. (2007) did would also continue to address specific variables used here such as ISA and certainly versus suspicion.

The culture of the college campus continues to evolve. Sexual norms change rapidly so I would recommend future research to focus on contemporary variables. For instance, researching and measuring how new tactics are being used by offenders. While there is not much literature or a standard list of barriers perceived to reporting sexual assault to law enforcement by college-attending victims, creating a study to discover this standard would fill a significant gap.

Implications

Differences between victim groups do exist based on evidence suggested here. Now that a comprehensive examination of these specific variables has been done, this begins to address the significant gap which exists in current literature and understanding. These outcomes do create positive social change.

These findings create implications for social change at two levels: organizational and societal. The purpose of this study was to measure specific variables and how those findings could assist a college campus and the resources near that campus. Evidence based outcomes, such as the findings provided here can assist with prevention, intervention, and treatment programs for college-attending victims. When sexual assault advocates and agencies understand the types of variables affecting reporting sexual assault (which is in the best interest of the university to safeguard other students), they are equipped to provide the best services to victims of sexual assault.

A societal level of social change happens when findings such as those in this study are disseminated, the culture of understanding and acknowledging sexual assault, particularly against female college students, will begin to change. Perceived barriers to sexual assault exist for a reason, and one of those reasons is societal belief in rape myths and the misunderstanding of sequel from sexual assault, especially ISA.

Conclusion

Sexual assault is a pervasive health and safety issue which has plagued the United States for many years. Campus sexual assault continues to happen at alarming rates. Thousands of victims will not report a sexual assault experience to law enforcement or campus police (if available). This means offenders are rarely held accountable for these crimes. This research suggests some victims are not even certain they have experienced sexual assault due to being incapacitated by drugs or alcohol.

Variables such as being on a date and offender fraternal membership were likely to be associated with ISA amongst this specific population. While both certain and

suspicious ISA victims were likely to report to law enforcement, victims who were only suspicious of ISA were almost twelve times more likely to report. These findings are completely new information being added upon contemporary and seminal findings. When victims did choose to report there was a higher chance of the offender receiving some type of disciplinary action by the university.

Barriers to reporting a sexual assault to law enforcement amongst this sample population were the victim being unclear if what happened was a crime, fear there was no proof a crime happened, and did not think it was serious enough. A fifth barrier, fear of victim reprisal, almost reached statistical significance. Because the study of barriers experienced by college-attending victims has just begun, these findings have begun to fill the significant gap in literature.

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