EXPLORING CONNECTIONS BETWEEN COLLEGE MALE SEXUAL VIOLENCE RISK

FACTORS, ATTITUDES AND BEHAVIORS WITH RESPONSES TO

SEXUAL VIOLENCE VIGNETTES

by

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(Under the Direction of Jessica L. Muilenburg)

ABSTRACT

This study explored characteristics among college men for perpetrating sexual violence. The sequential mixed-methods study began with qualitative preliminary work, which led to the development of the cross sectional quantitative study implemented later. In the preliminary work phase, vignettes depicting sexual violence among college students were tested on undergraduate participants. Written participant responses shaped questions later used on the cross sectional quantitative survey. Following the preliminary work, a cross sectional survey on UGA college male undergraduates was conducted, which included a variety of measures on factors known to be related to sexual violence perpetration. The survey included the previously-tested vignettes, along with Likert-style questions formed from themes developed through the preliminary work. This study proposed that group membership, alcohol use, rape myth acceptance, hypermasculinity, sex-related alcohol expectancies, and empathy level could predict sexual violence acceptance, as measured through vignette responses, and previous sexually violent behavior. Results showed that males who scored higher on rape myth acceptance had higher sexual violence acceptance. Males who were members of a fraternity or club sport scored higher

risk on two of the four vignettes measuring sexual violence acceptance, though there were differences between the groups regarding which vignettes yielded higher scores. Fraternity membership predicted previous sexual violence behavior, while having no affiliation with a fraternity, club sport or other registered student organization predicted the lowest likelihood of having engaged in sexual violence. Participants who scored higher risk on alcohol use, rape myth acceptance, hypermasculinity and personal sex-related alcohol expectancies were more likely to have committed sexual violence compared with those who scored lower on those measures. Those who committed sexual violence scored higher risk on sexual violence acceptance for two of the four vignettes when compared with those who did not commit sexual violence. Implications for this study are that results may assist in the development of primary prevention programs targeting college men at high-risk for committing sexual violence, and shifting the focus away from survivor behavior that prevents being assaulted while placing the responsibility for change on preventing and reforming perpetrator behavior.

INDEX WORDS: Sexual violence, campus, college men, risk factors, vignettes

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DEDICATION

This study is dedicated to each and every one of the college women survivors of sexual violence at the University of Georgia. Thank you for your voice and having the courage to move forward. You are diamonds. Nothing can break you.

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INTRODUCTION

Background

Sexual Violence in the United States

In the United States, approximately 1 in 2 to 1 in 4 women report having been sexually assaulted at some point in their lifetimes, with nearly 1 in 5 having been raped during their lifetime (Black et al., 2011; Burgess & Crowell, 1996; Cantor et al., 2015). Sexual violence encompasses both sexual assault and rape. Sexual assault refers to a range of forced sexual acts including touching or kissing, verbally coerced intercourse, physically forced vaginal, oral and anal penetration by something other than a penis. Rape is defined as "forced sexual intercourse including both psychological coercion as well as physical force" (Bureau of Justice Statistics, 2015). Sexual assault can also be characterized by behaviors such as sexual coercion (experienced by 1 in 8 women), unwanted sexual contact (1 in 4 women), and non-contact unwanted sexual experiences (1 in 3 women) (Black et al., 2011). Prevalence of rape reported by women in the general population does not differ among Black and White non-Hispanic women in the U.S., with 1 in 5 reporting rape at some point in their lives (Black et al., 2011). In the general population of the U.S., more than half of female survivors (51%) of sexual violence (rape or sexual assault) reported that the perpetrator of at least one of their assaults was a current or former partner, 40% reported being raped by an acquaintance, and 12.5% reported being raped by a family member (Black et al., 2011).

The majority of sexual violence is perpetrated against women and perpetrated by men. In the U.S., 1 in 71 men report being survivors of sexual violence, and those who are survivors were most often attacked by other men (Black et al., 2011). One study indicated that 6.1% of college men reported being victims of attempted or completed sexual assault (Krebs, Lindquist, Warner, Fisher, & Martin, 2007). Given that the vast majority of reported sexual violence is perpetrated against women and committed by men, this research will focus on female victims and male perpetrators.

Survivors of sexual violence are most likely to be victimized between the ages of 18-24 years (Sinozich & Langton, 2014; Tjaden & Thoennes, 2000), making college-aged women at the highest risk for experiencing sexual violence (DeKeseredy & Schwartz, 1998). Several studies confirmed that about 1 in 2 college women have been sexually assaulted while over 1 in 4 or 1 in 5 have been raped (Burgess & Crowell, 1996; Fass, Benson, & Leggett, 2008; Fisher, Cullen, & Turner, 2000; Koss, 1998; Koss, Gidycz, & Wisniewski, 1987; Krebs, Lindquist, Warner, Fisher, & Martin, 2009). College women who are victimized once often become repeat victims, although it is not entirely understood why this happens. Fass, Benson, and Leggett (2008) found that among female college students who had been victimized once, 47% became repeat victims during the same academic year.

Sexual violence tends to occur at higher rates for college-aged women when compared to the general population, making college students one of the highest-risk populations for sexual violence (Krebs et al., 2007; Tjaden & Thoennes, 2000). Some studies indicate that college women are at higher risk for experiencing sexual violence than non-college women of the same age range (Fisher et al., 2000; Karjane, Fisher, & Cullen, 2005; Koss et al., 1987). One study conducted using the National Crime Victimization Survey (NCVS) recently found sexual

violence to be higher among non-students when compared to students (Sinozich & Langton, 2014), though this study defined sexual violence only using criminal definitions rather than sexual violence as defined by public health researchers, such as seen with the National Intimate Partner and Sexual Violence Survey (NISVS) (Black et al., 2011). The methodological differences between these surveys are important as question wording and definitions of violence impact the responses from participants. For instance, the NISVS asked questions about behaviors that meet legal definitions of sexual violence (i.e., alcohol-facilitated sexual violence) rather than using explicit terms such as "rape" or "assault." The NCVS asked questions in terms of crimes that have been committed, which requires the respondent to understand that what happened to them was a crime, and then to be able to label it in terms of a "rape" or "assault," which is often something survivors struggle to do. As a result, surveys asking questions solely about sexually violent crimes are likely to undercount the amount of sexual violence actually happening.

<center>*Sexual Violence Among U.S. College Population*</center>

Despite decades of research and an array of intervention strategies implemented on college campuses throughout the years, the prevalence of sexual violence has remained relatively consistent. Landmark studies over the past 60 years continue to show that consistently about 1 in 5 college women have experienced some type of unwanted sexual contact, sexual coercion or more severe forms of sexual violence during her time at a setting of higher education (Fass et al., 2008; Kanin & Parcell, 1977; Kirkpatrick & Kanin, 1957; Koss et al., 1987; Krebs et al., 2007, 2009; Muehlenhard & Linton, 1987). One of the most rigorous studies on sexual assault prevalence to date was conducted by Mary Koss (1987), on a sample of 6,159 college students representing 32 colleges. She found that 54% of the women surveyed had experienced sexual

assault of some kind, and 15% of those women's experiences met the legal definition of rape. Nothing has really changed in that span of 60 years. The grandmothers of women currently attending a university in the U.S. are likely to have experienced the same violence that their granddaughters can expect to experience during their time at college now.

The majority of research on the risks for alcohol-related sexual assaults has been on college women and factors that increase their risk for being assaulted. The goal of many of these studies was to provide information that would help women prevent being raped or assaulted. Unfortunately, the outcomes of the studies laid the blame for assault at the feet of the victim, rather than addressing the real problem which was stopping the person committing the assault. Additionally, these studies and the interventions resulting from them have had little impact on the actual prevalence of sexual violence (Adams-Curtis & Forbes, 2004).

Despite decades of research showing that the majority of perpetrators are known acquaintances and seemingly upstanding college men, many people involved in investigating such cases still seem to discount acquaintance rape and sexual assault as being a serious situation, dismissing it instead as a misunderstanding between intoxicated college students (Muehlenhard, 1988; Shotland, 1985). Still another argument for the lack of continuing investigation is the belief that many college women who report assaults are making false reports as a result of sexual regret. However, only between 2-8% reports are estimated to be false reports, which is about the same proportion of false reporting in any other crime, such as theft (Heenan & Murray, 2006; Kanin, 1994; Lisak, Gardinier, Nicksa, & Cote, 2010; Lonsway, Archambault, & Lisak, 2009; Spohn, White, & Tellis, 2014). Past and current societal beliefs in the U.S. about whether rapes are "real" are rooted in strong rape myth acceptance, consistently

excusing rapists for their actions, and erroneous beliefs that most rapes reported are false reports (Belknap, 2010; Lisak et al., 2010).

Risk Factors for Sexual Violence in the College Student Population

A college setting seems to set up the perfect storm of context and events that facilitate the occurrence of sexual violence. Many studies link a variety of variables to the sexual violence problem, including alcohol use (Abbey, 1991, 2002; Abbey & Harnish, 1995; Abbey, McAuslan, & Ross, 1998; Abbey, McAuslan, Zawacki, Clinton, & Buck, 2001; Abbey, Parkhill, Jacques-Tiura, & Saenz, 2009; Abbey, Ross, & McDuffie, 1994; Abbey, Ross, McDuffie, & McAuslan, 1996; Koss & Gaines, 1993; Krebs et al., 2007, 2009; Lisak & Roth, 1990; Muehlenhard & Linton, 1987), hypermasculinity (Kilmartin & Berkowitz, 2014; Rozee & Koss, 2001), and peer group membership influence (Boeringer, 1999; DeKeseredy & Schwartz, 1998; Jacques-Tiura et al., 2015; Sanday, 2007; Warshaw & Parrot, 1991). Although empirical evidence points to a consistent problem of sexual violence being perpetrated by college men against college women they know, myths have persisted that minimized the crimes to a misunderstanding or laid the blame for the assaults at the feet of the women who were traumatized (Belknap, 2010; Estrich, 1987; Koss, 2000; Lisak & Miller, 2002; Spears & Spohn, 1997). Studies indicate these assaults on college women are far from a misunderstanding or accidental overstepping of lines. Throughout the years, a murky picture has been forming of the characteristics of college men who are more likely to commit such assaults. These traits include alcohol abuse (Koss & Gaines, 1993; Lisak & Roth, 1990; Muehlenhard & Linton, 1987), stereotypical beliefs about gender roles and rape-supportive beliefs (Koss, Leonard, Beezley, & Oros, 1985; Malamuth, 1981; Pryor, 1987), affiliation with a high-risk peer group (DeKeseredy & Schwartz, 1998; Jacques-

Tiura et al., 2015; Sanday, 2007; Warshaw & Parrot, 1991), and low empathy (Jolliffe &

Farrington, 2004; Lisak & Ivan, 1995; Rice, Chaplin, Harris, & Coutts, 1994; Tharp et al., 2013).

Purpose of the Study

The goal of this study was to provide updated evidence that sexual violence among

college students may be related to attitudes, beliefs and characteristics of some college men.

This study also proposed to link high-risk attitudes, beliefs and characteristics with responses to

sexual violence vignettes and sexual violence behavior.

This study is a mixed-methods sequential study. Preliminary work was conducted first to

collect qualitative data, which then informed the development and implementation of the

quantitative portion of the study in the form of a cross sectional survey.

Specific Aims of Preliminary Work

The specific aims of the preliminary work are as follows:

Aim 1. Investigate the use of college sexual violence vignettes on a sample college student

population of both men and women to determine variability in responses to vignettes

Aim 2. Examine appropriateness of vignettes in target population to incorporate into cross

sectional survey phase of study through qualitative feedback from college student sample

Specific Aims and Hypotheses of Cross Sectional Study

Aim 1. Examine male participant high-risk vignette question responses in relation to male

participants' involvement in university-affiliated groups such as fraternities and club sports and

with reported personal high-risk beliefs, attitudes and behaviors such as alcohol use, rape myth

acceptance, hypermasculinity, sex-related alcohol expectancies, and empathy

Hypothesis 1: As male participant risk scores increase on alcohol use, rape myth acceptance, hypermasculinity, sex-related alcohol expectancies, and empathy, sexual violence acceptance (measured by vignette scales) will also increase.

Hypothesis 2: Men who are members of a college group or organization, such as a fraternity, club sport or student organization, will score higher on sexual violence acceptance (measured by vignette scales).

Aim 2. Examine alcohol use, rape myth acceptance, hypermasculinity, sex-related alcohol expectancies, and empathy of participants who report sexual violence behaviors

Hypothesis 3: As male participant risk scores on alcohol use, rape myth acceptance, hypermasculinity, sex-related alcohol expectancies, and empathy increase, the likelihood that they have engaged in at least one sexual violence behavior in the past year will also increase.

Hypothesis 4: Men who are members of a group or organization, such as a fraternity, club sport or student organization, will be more likely to commit sexual violence.

Aim 3. Examine whether sexual violence behaviors are linked with higher risk sexual violence acceptance (measured by vignette scales)

| Vignette Responses | → | Sexual Violence |

Hypothesis 5: As male participant scores for sexual violence acceptance (measured by vignette scales) increase, the likelihood that they have committed at least one sexual violence behavior in the past year will also increase.

The researcher hypothesizes that men who score higher risk on alcohol use, rape myth acceptance, hypermasculinity, sex-related alcohol expectancies, and empathy or are members of a selected group or organization will also score higher on sexual violence acceptance (measured by vignette scales). The researcher also hypothesizes that men who score higher risk on alcohol use, rape myth acceptance, hypermasculinity, sex-related alcohol expectancies, and empathy or are members of a selected group or organization will have also engaged in at least one sexual violence behavior. The researcher is hypothesizing that men who indicate having committed sexual violence behaviors will score higher on sexual violence acceptance.

The independent variables in this study are alcohol use, rape myth acceptance, hypermasculinity, sex-related alcohol expectancies (for men, for women, and for self), empathy level, and group membership (such as fraternity membership, club sport membership, affiliation with a registered student group, or no affiliation with the listed groups). The dependent variables are the responses to vignette questions and sexual violence behavior. It is expected that as scores for the independent variable measures increase, the scores for the dependent variable measures will also increase.

This study used a pragmatist paradigm through which research activities were conducted. The study was completed in two sections using qualitative methods first in the preliminary work and then implementing a cross sectional study using data collected during the qualitative phase.

Prior to testing in the preliminary work, a series of four vignettes were developed rooted in common themes of sexual violence among college students as have been reported to survivor advocates working at a large Southeastern university over a time period of two years. All vignettes involved varying degrees of violence, level of relationship between the partners, and differences in alcohol use. These vignettes were then tested in classroom settings of mixed-gender undergraduate students. The classroom testing sessions served to determine a variance in response to the vignettes and provide feedback on the believability of the plots and characters. The information was analyzed through thematic analysis to determine the range of responses to the vignettes among participants. Classroom testing of the vignettes also served to help formulate survey questions that were later used with the vignettes in a cross sectional survey.

During the cross sectional survey phase of the study, an internet research questionnaire was distributed to male undergraduate students attending the University of Georgia. This survey included questions measuring demographic variables, rape myth acceptance, hypermasculinity, sex-related alcohol expectancies, sexual experiences and behavior, and other characteristics such as empathy that are supported by research as related to sexual violence. Additionally, the survey included the finalized vignettes of sexual violence tested earlier in the classroom testing sessions. The four vignettes were split among two nearly identical surveys to ease the burden on survey participants. Each vignette was followed by a series of six Likert-style questions developed through classroom group written responses. The questions assessed the level of agreement with statements made about characters in the vignettes and the scenario between the characters.

Public Health Implications

Prevalence of sexual violence in college has remained consistent for decades, despite many prevention and intervention strategies implemented over time. For many years, the focus on decreasing sexual violence was on teaching young college women about rape prevention and risk reduction. More recently, a shift has been made to include bystanders in the prevention of sexual violence, taking some of the onus off of women to prevent themselves from being victimized. However, the most important missing piece of a comprehensive prevention program is addressing potential sexual violence perpetrators themselves. This research may serve to identify college males at higher risk for perpetrating sexual violence who may then be targeted for prevention and intervention strategies using vignettes of typical college sexual violence situations as well as to develop social norming strategies to decrease the acceptance of sexual violence attitudes, beliefs and behaviors. Without a focus on the perpetrator, any large-scale prevention or intervention strategy is not likely to impact the overall sexual violence prevalence on college campuses. Additionally, this research may help inform policy and increase the likelihood that more college male offenders of sexual violence are held accountable for their actions rather than their actions being dismissed as misunderstandings.

CHAPTER 2

LITERATURE REVIEW

The purpose of this chapter is to explore the literature that relates to sexual violence in the college student population, as well as the literature on selected methodologies used in the current research study. As noted in Chapter 1, sexual violence in the college student population differs in many ways from the general population. Colleges and universities are also under newly heightened political pressure to take action to mitigate the issue, though the issue itself has not changed much over the years. There are some risk factors that seem specific to a college setting that set up a perfect storm of events leading to sexual violence among this population. This chapter explores the culture of sexual violence and how it differs between the general population and the college population. It also examines what colleges and universities are doing to address the problem, and the risk factors among the student population that increase the risk of sexual violence occurring.

Defining Sexual Violence

The term sexual violence is often used to encompass all crimes of a sexual nature such as unwanted or nonconsensual sexual behavior, including rape and sexual assault. Anyone can be a victim of sexual violence (Becker, Israel, Schulz, Parker, & Klem, 2002), though most survivors are female and the majority of perpetrators are male (Centers for Disease Control and Prevention, 2014a). In a college campus setting, sexual violence is more likely to be perpetrated by known assailants. Up to 95% of sexual violence on college women is perpetrated by someone

the victims already know (Abbey & Ross, 1996; Fisher et al., 2000; Koss et al., 1987; Krebs et al., 2007).

Sexual assault and rape are more specific terms used to describe particular sex crime behaviors. However, the definitions of these terms vary greatly. The Bureau of Justice Statistics (Bureau of Justice Statistics) defines rape as any forced sexual intercourse, by physical force or psychological coercion. This includes penetration by an offender (Abbey, 2002) vaginally, anally, or orally without the freely given consent of a partner. This may also include penetration with a foreign object, such as a bottle or finger. It is important to note that the Bureau of Justice includes both male and female victims, and heterosexual as well as homosexual behaviors, to be considered rape when not meeting the terms of consent. However, individual states may define this differently. For instance, in the U.S. State of Georgia, rape is only defined as vaginal penetration by a penis. All other sexually violent acts perpetrated on an adult (over age 18) is considered sexual battery. Sexual battery includes things such as nonconsensual anal intercourse, vaginal penetration by a finger or other object, unwanted kissing, licking or touching. By this definition, a man who may have been raped according to the Bureau of Justice will be considered to have been a victim of sexual battery by Georgia state law as nonconsensual anal intercourse is considered battery rather than rape (O.C.G.A. § 16-6-1; O.C.G.A. § 16-6-22.1). Even the term "sexual battery" is inconsistent with many of the legal definitions. Most legal and federal websites use the term "sexual assault" (National Institute of Justice, 2010; Office on Violence Against Women, 2015).

Researchers have used the term sexual assault to describe a wide range of sexual acts that may be forced, coerced or committed when the victim is unable to freely give consent, such as when intoxicated or has a mental or physical disability preventing them from participating in the

act consensually. These acts may include touching or kissing, as well as vaginal, oral, or anal penetration, whether by force or coercion. The term rape may also be used, but is typically reserved only for sexual behaviors that involve some type of penetration due to force or threat of force, inability to give consent due to intoxication or mental status (Koss, 1992; National Institute of Justice, 2010; Office on Violence Against Women, 2015).

Another concern with the terminology involves what some scholars contend is only giving credence to particular sex crimes while ignoring some subjective experiences of women victims. This can create a hierarchy of sorts, putting some sex crime behaviors in a more serious category while considering others to be not as serious (Schwartz & DeKeseredy, 1997). Acquaintance rape is often seen as less serious or severe compared to stranger rape, and is even less likely to be investigated or prosecuted in the legal system (Estrich, 1987; Koss, 2000; Spears & Spohn, 1997). It is not uncommon for police and investigators to refer to acquaintance rape situations as "miscommunication" or "misunderstanding" between the offender and victim (Lisak & Miller, 2002; Muehlenhard, 1988), or for cases of sexual violence between acquaintances to be viewed with suspicion of validity (LeDoux & Hazelwood, 1985). These situations are most commonly seen in college campus settings, despite studies showing that undetected sexually aggressive men in college have similar traits and behaviors as incarcerated rapists (Bernat, Calhoun, & Adams, 1999; Lisak & Miller, 2002).

For the purposes of this dissertation and to clearly encompass all sexual behaviors under the terms rape and sexual assault, the term sexual violence (Forbes & Adams-Curtis, 2001) will be used. In defining it this way, all subjective and objective definitions of nonconsensual and coerced sexual behavior should be included, with no behavior holding more weight than another.

Women Victims of Sexual Violence

Victims Across U.S. Population

Almost 1 in 5 women (18.3%) in the U.S. reported having been raped during her lifetime, a number equating to almost 22 million women in the United States (Black et al., 2011). The most common form of sexual violence experienced by these women was completed forced penetration, reported by 12.3% of U.S. women. Other rape behaviors reported by U.S. women included attempted forced penetration (5.2% of U.S. women), and completed alcohol/drug facilitated penetration (8.0% of U.S. women). About 1 in 2 women (44.6%) experienced some form of sexual victimization other than rape during their lifetime, such as but not limited to attempted intercourse, forced touching of genitals or being forced to touch another person's genitals, and being penetrated by anything aside from a penis (Black et al., 2011).

Rates of rape vary by race and ethnicity in the U.S. (Black et al., 2011). About 1 in 5 White and Black non-Hispanic women experienced rape during their lifetime, while 1 in 7 Hispanic women in the United States reported experiencing rape at some point during their life. More than 1 in 4 women who identified as American Indian or Alaskan Native experienced rape in their lifetime. Between the years 1995-2013, females aged 18-24 reported the highest rate of rape and sexual assault victimizations when compared with all other females outside of this age group (Sinozich & Langton, 2014). This group includes both non-students and students enrolled at an institution of higher education. Non-students reported their rapes to police at higher frequency (32%) than did students (between 2%-13%) (Kilpatrick, Resnick, Ruggiero, Conoscenti, & McCauley, 2007; Krebs et al., 2007; U.S. Department of Justice, 2014). About three-quarters of sexual assaults in the general population of the U.S. are perpetrated by someone known to the survivor (Black et al., 2011; Tjaden & Thoennes, 2000).

College Student Victims of Sexual Violence

The number of survivors of sexual violence has long been estimated to be approximately 1 in 5 (Krebs et al., 2007). Campus rape deniers believe the research determining this number was flawed or inflated (MacDonald, 2008; Roiphe, 1993). However, new research on a large sample of college students at multiple universities provides further evidence that the campus sexual violence problem is as bad or worse than what previous research has indicated. In the fall of 2015, the Association of American Universities released its findings from a national campus climate survey of more than 150,000 students at 27 universities. The study found that nearly 1 in 4 college female undergraduates had been a victim of sexual assault during their time at an institution of higher education. More than 27% of college seniors reported having experienced some form of unwanted sexual contact since entering college (Cantor et al., 2015).

Some studies indicate that college women are at higher risk for experiencing sexual violence than non-college women of the same age range (Fisher et al., 2000; Karjane et al., 2005; Koss et al., 1987). Rates of sexual assault of women on college campuses has been reported to be as much as two to three times higher than that of the general population (Koss et al., 1987; Muehlenhard & Linton, 1987). The vast majority of sexual assaults against college women are perpetrated by an acquaintance, 95% compared with 75% of women survivors in the general population (Abbey et al., 1996; Black et al., 2011; Fisher, Cullen, & Turner, 2000; Tjaden & Thoennes, 2000).

Demographics on college women survivors of sexual violence are difficult to generalize due to the variances in samples and college populations. Little consistency exists across studies on the racial differences of college women survivors of sexual violence. In a study by Koss, et al. (1987), out of a sample of 3,187 college women, 53.7% of the women revealed some sort of

sexual victimization since the age of 14. Of the total sample, rape was reported by 16% of the White women (N=2655), 10% of Black women (N=215), 12% of Hispanic women (N=106), 7% of Asian women (N=79), and 40% of Native American women (N=20). Another study using a sample from a larger urban commuter university that was economically and ethnically diverse (Abbey et al., 1996) found that African American women were somewhat more likely than White women to have experienced some type of sexual assault (68% vs. 57%), with rape being reported by 39% of African American college women compared with 30% of White women. This study did not have enough representation of other ethnicities in the sample to make an effective comparison.

Male Perpetrators of Sexual Violence

Perpetrators Across U.S. Population

Not much is known about the male sexual aggressor in the general U.S. population. Most scientific studies have been conducted on college-aged men attending colleges or universities as they are a captive population for university research. Other studies have used selective samples for their research, which may include prisoners and treatment groups (Koss et al., 1994). This small subset of rapists is not representative of the general public for a few reasons. Only a small percentage (16-32%) of rapes ever get reported, and of that percentage much fewer lead to a conviction (2-18% convicted of those reported) (Federal Bureau of Investigation, 2015; Tjaden & Thoennes, 2000; U.S. Department of Justice, 2014). The likelihood of reporting a rape, an arrest happening and a conviction may be more closely related to social status and race (LaFree, 1989). Crime statistics alone would lead us to believe that the typical rapist is a young Black urban-dwelling male, often of lower social class. This picture, however, tells us more about who gets convicted for rape rather than the characteristics of the majority of rapists.

Research has been conducted by David Lisak and others (Lisak, Hopper, & Song, 1996; Lisak & Ivan, 1995; Lisak & Miller, 2002; Lisak & Roth, 1988, 1990; Malamuth, 1986) on incarcerated rapists to determine similarities in characteristics and behavior among these sexual offenders. Common traits shared by both incarcerated rapists and "undetected" (non-incarcerated) rapists include high levels of anger toward women including the need to dominate women, hypermasculinity, as well as lack of empathy. Some of these traits will be discussed in further detail later.

Studies looking into the recidivism rate of sex offenders show that of the sex offenders who were incarcerated and/or attended sex offender treatment programs, anywhere from 20% to 39% of them went on to reoffend after their release (Prentky, Lee, Knight, & Cerce, 1997; Quinsey, Rice, & Harris, 1995). Alarmingly, several studies showed that the number of sex crimes admitted by these incarcerated men far exceeded the number of sex crimes for which they were adjudicated. When given assurances of confidentiality, the 126 incarcerated rapist men participating in a study by Abel and colleagues (1987) admitted to 907 sexually violent acts against 882 victims. Another study, conducted by Weinrott and Saylor (1991) found that 37 rapists who had been charged with 66 offenses against a mean of 1.8 victims actually admitted under confidentiality to committing 433 rapes against a mean of 11.7 victims.

As mentioned above, there are some characteristics that are commonly seen among male perpetrators of sexual violence. These include but are not limited to high levels of anger toward women, hypermasculinity, excessive alcohol use, beginning sexual activities at a young age, having sex with many different partners, having sex without a personal connection with the partner, having low empathy, peer group beliefs about nonconsensual sex, witnessing or experiencing violence in one's childhood, exposure to norms that endorse sexual violence as

acceptable, and endorsing rape myth beliefs (Centers for Disease Control and Prevention, 2014b; Lisak et al., 1996; Lisak & Ivan, 1995; Lisak & Roth, 1988, 1990; Malamuth, 1986; Tharp et al., 2013). Another risk factor often discussed for increasing the risk of sexual violence perpetration is whether or not the perpetrator was a victim himself of childhood sexual or physical abuse. In a study conducted by Lisak, Hopper, and Song (1996), the researchers found that of the 126 perpetrators identified of 595 male participants, 70% of them had been abused during childhood. However, of the total number of male participants reporting childhood abuse (257), only 38% reported going on to perpetrate abuse or violence themselves. So, while most perpetrators experienced some sort of abuse, most abused men did not become perpetrators. The men who were abused but did not become perpetrators showed significantly less gender rigidity, less homophobia and less emotional constriction when compared to non-abused men. Abused men who did go on to perpetrate violence scored higher on measures of gender rigidity and emotional constriction when compared to non-abused men and abused men who were non-perpetrators. (Lisak et al., 1996)

People are often reluctant to see college men as capable of committing the same acts as incarcerated rapists and sex offenders. Below, the similarities in traits and characteristics between incarcerated offenders and male college student offenders are discussed.

College Student Perpetrators of Sexual Violence

College males report perpetrating sexual violence at about the rate or a little less than college women report receiving it, even if such cases are never reported to police. About 1 in 4 or 5 college women report experiencing rape or some form of sexual aggression while at college (De Keseredy & Kelly, 1995; Fisher et al., 2000; Koss et al., 1987). Survey research consistently shows that 5-15% of college men acknowledge forcing intercourse (Benson, Gohm, & Gross)

and 15-25% of college men report sexual aggression (sexual coercion or assault including behaviors other than rape) while at college (Abbey et al., 1998; Koss et al., 1987; Malamuth, Sockloskie, Koss, & Tanaka, 1991 & Tanaka, 1991). One study by Kanin (1985) found that 26% of college men in his research sample admitted to forcing sexual intercourse since entering college, which is much higher than some of the other studies noted. Between 12% and 14% of college men report perpetrating some form of sexual violence within the past 12 months (Abbey & McAuslan, 2004; Thompson, Swartout, & Koss, 2013). In Koss et al.'s (1987) national study of 6,159 college students, 25% of the men surveyed reported having committed some act of sexual violence since the age of 14, with 7.7% of those respondents' acts meeting the legal definition of rape. Similar results have been found in other studies (Abbey et al., 1998; Kanin, 1985; Muehlenhard & Linton, 1987; Rapaport & Burkhart, 1984). This means that sexual violence happening on college campuses may be happening in large part due to men who started committing these crimes long before entering the college setting.

David Lisak and colleagues (Lisak & Miller, 2002; Lisak & Roth, 1990) refer to college-aged male sexual violence perpetrators as "undetected rapists". This term refers to sexually violent offenders who remain unincarcerated because their crimes go unreported, are not taken seriously in the legal system, are often assumed to be the result of a misunderstanding, or involve the victimization of an acquaintance (Estrich, 1987; Koss, 2000; Lisak & Miller, 2002; Spears & Spohn, 1997). It may be difficult for many to see some college men as capable of the same crimes as violent sex offenders. However, in a study conducted by Malamuth (1989) during which 189 college men were asked how likely they would be to rape a woman if they could be assured of never getting caught, about one-third of the college men on average indicated they would be at least somewhat likely to very likely to do so.

When compared to sexually non-aggressive men, undetected rapists bear similar qualities to their incarcerated counterparts. These characteristics include previous offenses (DeKeseredy & Schwartz, 1998; Lisak & Miller, 2002; Prentky et al., 1997), sexual arousal to videotaped depictions of rape (Bernat, Calhoun, et al., 1999), hypermasculinity (Kilmartin & Berkowitz, 2014; Rozee & Koss, 2001), lack of empathy (Lisak & Ivan, 1995), acceptance of rape myths (Koss, Leonard, Beezley, & Oros, 1985; Malamuth, 1981; Pryor, 1987), alcohol use at high levels (Koss & Gaines, 1993; Lisak & Roth, 1990; Muehlenhard & Linton, 1987), being a member of an all-male exclusive peer group such as a fraternity or athletic team (DeKeseredy & Schwartz, 1998; Sanday, 2007; Warshaw & Parrot, 1991), and the report of some likelihood of raping if they could be assured of not being caught (Demaré, Lips, & Briere, 1993; Malamuth, 1981). This list of traits is not exhaustive. Additionally, of the college men at highest risk for being sexual violence perpetrators, they have not just one incident of sexual violence but several, and with that comes several victims of their crimes. The average number of victims per offender is reportedly between 7 and 11 (Abel & Rouleau, 1990; Weinrott & Saylor, 1991). Even back in 1957, a study by Kilpatrick and Kanin (1957) indicated that a total of 388 college men committed a total of 1022 acts of sexual aggression. The college men committing such assaults may possess a variety of traits that increase the risk that they will become perpetrators, and these characteristics may have developed long before they came to college (Abel & Rouleau, 1990; Nisbet, Wilson, & Smallbone, 2004). Not much has been done in terms of longitudinal research on rape myth acceptance and subsequent sexually coercive behavior, but of the research that does exist a correlation seems apparent (Lanier, 2001; Malamuth, Linz, Heavey, Barnes, & Acker, 1995). In a study by Lanier (2001), junior high and high school students were surveyed to determine their endorsement of rape myths. The study found that the participants who

strongly endorsed rape myths were nearly two times more likely to commit one or more sexually coercive acts over the next year.

Justifications and motivations for committing sexual violence have been rarely researched. In a 30-year-old study by Muehlenhard, Friedman, and Thomas (1985), between 5% and 15% of male college students report that it is justifiable to commit sexual violence. These respondents did not necessarily admit to committing such offenses themselves.

Sexual Violence on College Campuses

The prevalence of sexual violence on college campuses has remained relatively constant over the past 6 decades at institutions across the United States, despite the changing of administrations, polices, prevention strategies, and research on sexual violence. The discussion and media coverage of sexual violence, on the other hand, has hit an all-time high. It seems that the decades-long silence of the issue has finally bubbled to the surface and more women are coming forward to tell their stories. The current presidential administration of the United States has been vocal and consistent in its messages that sexual violence on college campuses is an epidemic that needs to be stopped (White House Task Force to Protect Students from Sexual Assault, 2014). Additionally, federal regulations for reporting campus crimes and ensuring safety and equality on campuses is more prominent now than in years past, with the Office of Civil Rights pursuing investigations into nearly 250 institutions of higher education for improper handling of sexual violence complaints and Title IX investigations in recent years (Anderson, 2014; Kingkade, 2015; The Chronicle of Higher Education, 2016). Universities stand to lose substantial federal funding should the Department of Education find them in violation of Title IX legal obligations (U.S. Department of Justice, 2015).

Reporting Sexual Violence

College women report sexual violence to authorities at a lower rate than women survivors in the general population. Fewer than 13% of college women who are victimized ever report to the police (Cantor et al., 2015; Fisher et al., 2000; Koss & Oros, 1982; Krebs et al., 2007; U.S. Department of Justice, 2014), while some research shows that women survivors in the general U.S. population report to police much more frequently (16-32%) though sexual violence is still vastly underreported (Federal Bureau of Investigation, 2015; Kilpatrick, Edmunds, & Seymour, 1992; Rennison, 2002; Tjaden & Thoennes, 2000; U.S. Department of Justice, 2014). Most college women survivors who do tell someone about their assault will tell their friends (66%), but do not tell family or university officials (Fisher et al., 2000). Many college women never tell anyone about their experience. A study by Koss (1987) on 6,159 college students found that 54% of the women surveyed had experienced some kind of sexual violence, while 15% of the women had been raped. Of those women who were raped, only 5% reported it to the police, while 42% told no one about the violence.

Underreporting in the college population may occur for several reasons. Some women have difficulty defining what happened as sexual violence (Bachman, 1998). This may be particularly true if the perpetrator was someone that they knew and trusted. In these cases, the survivors often minimized the incidents or believed that the perpetrator had not meant to hurt them. Many survivors are reluctant to get a friend or dating partner in trouble (Sable, Danis, Mauzy, & Gallagher, 2006). If alcohol or drugs were involved, the survivor may be worried getting in trouble herself for engaging in underage drinking or illegal drug use. These women often report a distrust of police or the justice system. Women survivors of a study by Greene and Navarro (1998) explained that reporting their assaults authorities felt akin to "a second rape."

College women survivors worry about confidentiality, their parents finding out about what happened, or possibly retaliation from the perpetrator (Krebs et al., 2007; Sampson, 2003). The biggest barriers to reporting, however, are feelings of shame, guilt or embarrassment, and fear of not being believed (Bachman, 1998; Sable et al., 2006).

Impact of Sexual Violence on Survivors

Adult women survivors of sexual assault are vulnerable to many short- and long-term consequences. Immediate health risks aside from injuries include unplanned pregnancy and sexually transmitted infections. Each year, more than 32,000 pregnancies occur as a result of rape, with the highest rates of rape-induced pregnancies occurring in women in abusive relationships (Holmes, Resnick, Kilpatrick, & Best, 1996; McFarlane et al., 2005).

Women who have experienced trauma from sexual violence face both immediate and chronic psychological consequences. The trauma from the event itself can cause the survivor to be unable to recall memories from the event or recall them out of order of the way they happened, often leading to victim blaming by investigators and others who think the survivor is making a false report or "can't keep their story straight" (Campbell, 2012). Many survivors will also have anxiety and confusion, difficulty concentrating, shock, denial, fear, shame, embarrassment and appetite and sleep disturbances that may include nightmares and flashbacks (Campbell, Dworkin, & Cabral, 2009; Gidycz, Orchowski, King, & Rich, 2008; Goodman, Koss, & Russo, 1993; Jordan, Campbell, & Follingstad, 2010; Yuan, Koss, & Stone, 2006). For college women, this often results in academic disruptions or drastic changes in progress, missing classes, as well as difficulty concentrating on and processing material. As a result, many choose to withdraw from school completely to recover. Chronic psychological consequences can

include depression and anxiety, attempted or completed suicide, loss of interest in sex or sexual dysfunction, and post-traumatic stress disorder (Basile & Smith, 2011; Chen et al., 2010).

Women who are victimized by sexual violence are also at a higher risk than the general population for many health risk behaviors. These women often engage in risky sex behavior following an assault, using alcohol or drugs to help them cope, and sometimes engage in unhealthy diet behaviors that can turn into eating disorders (Basile et al., 2006; Brener, McMahon, Warren, & Douglas, 1999). While these behaviors can often be linked to consequences of victimization, some research also suggests that these risk behaviors increase the survivor's vulnerability of being victimized again in the future, with as many as one-third of survivors being revictimized (Black et al., 2011; Brener et al., 1999; Lang et al., 2003).

False Reporting and Campus Rape Denier Controversies

One controversy that has drawn some attention from a small but loud crowd is the issue of false reporting. Challenges are made to debunk the public health problem of sexual violence, many asserting that the rates of sexual violence frequently reported in research studies are false, inflated or contrived for political reasons (MacDonald, 2008; Roiphe, 1993). False reporting by victims of sexual violence has long been an assertion when rape allegations are made. This happens so often that not being believed is a major reason many women never report their assault to anyone (Fisher et al., 2000; Sable et al., 2006). Depending upon which study one is reading, numbers of false sexual violence allegations have been estimated to happen anywhere from 1.5% of the time all the way up to 90% of reported sexual violence crimes (Rumney, 2006). To better understand the prevalence of false reporting, Lisak and colleagues (Lisak et al., 2010) analyzed ten years of published research on false allegations and determined that a variety of methodological issues have led to erroneous estimates of false reports of sexual violence.

Numerous studies have found that sexual violence reports were misclassified as "unfounded" when a victim was unable or unwilling to cooperate (which includes not wanting to report an assault to police at that time), when evidence was lacking, when victims made inconsistent statements (which often happens as a result of the neurobiological effects of trauma) (Campbell, 2012; Campbell, Wasco, Ahrens, Sefl, & Barnes, 2001), or when the victim was heavily intoxicated (Gregory & Lees, 1996; Kelly, Lovett, & Regan, 2005a). After reviewing this literature, Lisak and his team then conducted their own research on sexual assault reports.

In the study conducted by Lisak, Gardinier, Nicksa and Cote (2010), a 10-year sample of cases of sexual assault reported to a university police department were analyzed using systematic coding methods. The purpose of the study was to contribute another research-based estimate of the rate of false reporting. Researchers analyzed 136 sexual assault report summaries, returning when needed to gather more details from the university police who handled the cases in order to best code each case. Of the 136 cases analyzed, 8 (5.9%) were categorized as false reports, 61 cases (44.9%) did not proceed to prosecution, 48 (35.3%) did proceed to prosecution, and 19 (13.9%) contained insufficient information to be coded as one of the above.

Other studies applying similar scrutiny to police classifications have determined the overall number of false reports to be between 2% and 10% (Harris & Grace, 1999; Heenan & Murray, 2006; Kelly, Lovett, & Regan, 2005b; Lonsway et al., 2009; Lonsway & Fitzgerald, 1994).

How Colleges and Universities are Addressing the Issue of Sexual Violence

While college communities have long been established as hotbeds for sexual violence, there is great variability in the way campuses across the nation are addressing the issue (Karjane et al., 2005). All institutions of higher education that receive federal funding are required to

abide by laws regarding Title IX, the Clery Act, Campus SaVE Act, and any updated VAWA
Amendments as they apply to university and college settings. These laws are designed to
prevent sexual violence on college campuses and address it effectively when it happens.
Presented in Figure 2.1 is a timeline of acts, laws and policies that have impacted sexual violence
response on college campuses.

**Figure 2.1. Timeline of Acts, Policies and Laws Governing Campus Sexual Assault
Response**

1972	1994	1998	2005	2011	2014
Title IX	Violence Against Women Act	Clery Act Amendment	VAWA Reauthorization	"Dear Colleague" Letter	White House Task Force Report

1990	1997	2000	2008	2013
Jeanne Clery Act	OCR Sexual Harassment Guidance	Clery Act Amendment + VAWA Reauthorization	Clery Act Amendment	Campus SaVE Act
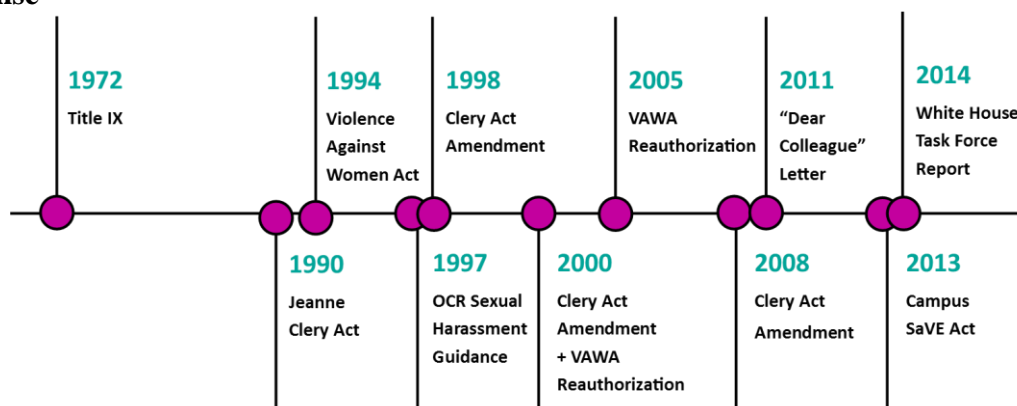
Title IX of the Education Amendments, first introduced in 1972, prohibits any public or
private educational institution from discriminating on the basis of sex in educational activities
and programs. Sexual violence and harassment falls under the umbrella of discrimination based
upon sex (U.S. Department of Justice, 2015). The Title IX gender equity law requires all of
these educational institutions to, among other things, publish a notice of non-discrimination and
grievance procedures for students accusing other students of sexual violence. Each university is
required to have a Title IX Coordinator in charge of overseeing these activities as well as
conducting internal investigations into complaints of sexual violence.

The Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics
Act (also known as the Clery Act) came about in 1990 and was named in memory of a student
who was raped and murdered in her dorm room in 1986 (Ward & Mann, 2011). The purpose of

the Clery Act covers many areas, but one purpose is to publish all crime data publicly to allow parents and students to be aware of crime trends and potential dangers at colleges and universities before making a decision to enroll at any particular place of higher education. The Clery Act requires institutions to report annually to the U.S. Department of Education all acts of sexual violence to be included in crime statistics, and for universities to have a process in place for people to report this anonymously so that an investigation does not happen unless a student requests it. The Clery Act also covers categories such as emergency notifications and evacuation procedures, thefts, murders, hate crimes, fire safety, and missing persons.

The Campus Sexual Violence Elimination Act, or Campus SaVE Act, was introduced in 2013 as an amendment to the Clery Act and the Higher Education Act of 1965 (Clery Center for Security on Campus, 2015). It requires institutions to now address not just sexual violence, but a broader range of interpersonal violence including stalking, dating violence and domestic violence. These offenses must now be reported annually to the U.S. Department of Education and published publicly on University websites and in Annual Security Reports. The Campus SaVE Act also now requires for institutions of higher education to provide awareness and prevention programming about sexual violence and intimate partner violence. It requires each college and university to publish and promote a definition of sexual consent by which all students and employees must abide, the implementation of bystander intervention programs, and conducting a campus climate survey with results published within 2 years of the date the Act was imposed.

Understanding of these policies, acts and laws is important because compliance with them is the driving force behind most institutional actions involving the prevention and intervention of sexual violence. For instance, many universities have named or are now in the

process of naming a Title IX Coordinator for their institution now that The Office for Civil Rights has recently issued an updated "Dear Colleague Letter" to remind schools that this is and has been a requirement of all school districts, colleges and universities receiving federal financial assistance (Brown, 2015; Lhamon, 2015). Investigations into sexual violence accusations are in the process of being standardized as previously each university would handle such investigations differently and sometimes inconsistently between cases. Additionally, universities are creating sexual violence prevention programming that generally includes information on sexual consent definitions as defined by each institution's policy (though not the same as legal definitions for consent). These programs often target the campus population by addressing risk reduction strategies for women to prevent being assaulted (i.e., limiting alcohol, arranging for a safe ride home, telling women not to walk alone at night), but do not often address the population of men who are committing the assaults. Many colleges and universities are also developing and implementing bystander intervention programs as a result of the Campus SaVE Act mandate that these programs be used as part of a comprehensive prevention strategy for sexual violence.

Nearly 250 colleges and universities are currently under investigation by the U.S. Department of Education's Office of Civil rights due to concerns that the institutions violated Title IX in handling of their sexual violence cases (The Chronicle of Higher Education, 2016). The number under investigation grew quickly following guidance reminders by the Office of Civil Rights and the White House Administration's making campus sexual violence a top policy issue. In May 2014, the number of schools under investigation was 55. That number nearly doubled to 94 by early January 2015. In April 2015, schools under investigation tallied up to 106, with some schools under multiple investigations (Anderson, 2014; Kingkade, 2015). Many of these investigations have found that institutions had not even designated a Title IX

coordinator, which is a clear violation of the Title IX requirement that requires institutions to quickly yet thoroughly investigate and adjudicate all claims of sexual violence (New, 2015).

Across the county, many college presidents and administrators are gathering to discuss how to better address the problem of sexual violence on college campuses. However, some studies are showing that while college administrators may recognize sexual violence to be a problem, they do not necessary believe it is a problem on their *own* campus. In the 2015 Inside Higher Ed Survey of College and University Presidents conducted by Gallup, about one-third (32%) of university and college presidents agreed that "sexual assault is prevalent at American colleges and universities" (Jaschik & Lederman, 2015). However, when asked if sexual assault is prevalent at their own institution, very few presidents agreed (6%). By far, most presidents agreed (77%) that their campus was doing a good job protecting women from sexual assault on campus, and 90% believed that their institution provides appropriate due process for those accused of sexual assault on campus.

Around the same time the Inside Higher Ed survey was released, another survey was published but this time the respondents were from the Millennial generation (Jones & Cox, 2015). This survey asked questions about a variety of topics, but when the survey polled American Millennial college graduates born between 1980 and 2000 about how common they thought sexual assault was at colleges and universities, 73% of respondents said that sexual assault is "very common" or "somewhat common." When compared with a similar question asked in the Inside Higher Ed survey, only 32% of college presidents "strongly agreed" (8%) or "agreed" (24%) that sexual assault is prevalent at colleges and universities (Jaschik & Lederman, 2015). When Millennials were polled about whether or not they thought colleges and universities are "doing enough to address the problem of sexual assault," only 32% indicated

"yes" (Jones & Cox, 2015), whereas 77% of university presidents "strongly agreed" (24%) or "agreed"(53%) that their campus was doing a "good job protecting women from sexual assault" (Jaschik & Lederman, 2015). There appears to be a large discrepancy between how college students and recent graduates perceive the problem of sexual assault on college campuses and how college and university presidents see the issue.

Interventions and Effectiveness of Prevention and Health Education

Increasing media coverage of sexual assaults in college settings has led to a barrage of strategies by colleges and universities across the U.S. to address the problem. While some say that the numbers of assaults are increasing on campuses, others argue that the increased numbers are due to factors that make reporting assaults safer and more accepted (Cooper, 2014; Rocheleau, 2014). This is most likely the case as the number of estimated sexual assaults of college women has remained relatively stable since 1957 (Cantor et al., 2015; Kanin & Parcell, 1977; Kirkpatrick & Kanin, 1957; Koss, 1998; Koss et al., 1987; Muehlenhard & Linton, 1987), with approximately 1 in 4 or 5 college women reporting having experienced sexual assault when surveyed. However, the rate of reporting a sexual assault by college women has been estimated to be between 5 and 13% of actual assaults (Fisher et al., 2000; Kilpatrick et al., 2007; Krebs et al., 2007). Still others believe that the increased resources and attention devoted to campus sexual assaults is unwarranted as these assaults are not actually happening (Gilbert, 1997; MacDonald, 2008; Roiphe & Roiphe, 1993).

Given the pervasive relationship between alcohol use and sexual coercion on college campuses, some campus authorities have responded by recommending or enforcing a ban on alcohol from campus (Bohmer, 1993). In recent years, many campuses have enforced alcohol bans on campus, including residence halls and social events. In research on the effectiveness of

these interventions, alcohol-free campuses do not appear to have reduced the incidence of sexual

violence (Schwartz & DeKeseredy, 1997). This is likely because alcohol alone does not have a

causal relationship with sexual violence, and there are many college men who consume high

amounts of alcohol and never perpetrate sexual violence.

A common and long-standing response to addressing sexual violence on campuses is to

develop sexual assault prevention programs for women college students, teaching them assertive

communication skills or self-defense tactics (Adams-Curtis & Forbes, 2004). These programs

are easily implemented and given the culture of fear women experience around sexual violence

in college settings, these programs are often well-attended and highly-praised by campus police

and administrators. In fact, many college and university police departments endorse and teach

Rape Aggression Defense (R.A.D.) programs, designed to teach women how to avoid being

assaulted (R.A.D.: Rape Aggression Defense Systems, 2015). In an online article from feminist

website Jezebel, the author was able to obtain a copy of the R.A.D. manual and disclosed that the

program provided tips for women's safety that included "try "casing" your own home, at night

and/or during the day. Attempt to gain access when locked and "secure"," "if drapes are thin or

worn, you may want to consider investing in a heavier fabric to prevent silhouetting," and "try to

keep bushes and shrubs trimmed for consistent shape, which will make it easier to detect motion

near windows" (Schorn, 2015). These types of programs perpetuate the myth that most rapes

and assaults are committed by strangers hiding in bushes or peeping through windows, and

strengthen the stance that women should be taking steps to prevent being raped. They also fail to

address the real cause of rape and assault, which is people committing rape and assault.

According to a current search of colleges and universities, R.A.D. programs are being used by

police departments at the University of Texas, University of Florida, University of Denver,

Harvard University, University of Missouri, Virginia Tech, Princeton University, Ohio University, University of Massachusetts Amherst, and many others.

Evaluating the effectiveness of these self-defense or personal safety programs by measuring female attendance and assessing female response is missing the mark of addressing the real problem of campus sexual violence. A better way to evaluate the impact of a program addressing sexual violence is to design and implement a wide-spread campus campaign and programming initiative that prevents college men from committing the sexual coercion, and then measuring how likely those men are to endorse the messages they learned and monitor sexual violence trends after the programming. It would also be helpful to measure the prevalence of sexual violence through anonymous surveys over time following the programs. Programs designed only for women to help them prevent being targeted may reduce their individual vulnerability, but the college male perpetrators will simply select other victims, thereby having no impact on the numbers of sexual violence incidents on campus (Lonsway, 1996).

Despite this outdated strategy, the New England Journal of Medicine published an article in June 2015 on a sexual assault prevention program that is being heralded among major news outlets and college publications as a new, ground-breaking and effective strategy (Hoffman, 2015; Senn et al., 2015). The program, which teaches assertiveness strategies and self-defense against verbal and physical assaults, did prove to be effective with the women who were trained to protect themselves compared to the control group who did not receive the training. Again, however, this concept puts the onus of preventing rape on women, and assumes that women will be comfortable enough or even sober enough to use self-defense skills on a rapist who is likely to be a boyfriend, partner, friend, or acquaintance. Also, it is unlikely to put a dent in the overall prevalence of campus sexual violence as the prevention program teaches individual women to

protect only themselves. A male student who commits sexual violence will likely seek out an easier target, or wait until the intended target is incapable of defending herself.

One factor that comes up often in sexual violence situations but is not addressed by self-defense programs is the common neurobiological response of tonic immobility (Campbell, 2012). Tonic immobility, or "freezing," is often experienced in one of two ways by the survivor. Some people describe a hyper-awareness of their environment while feeling extreme panic which immobilizes them. Others describe this as feeling paralyzed and trapped, making them unable to respond by escaping or taking action against the threat. Tonic immobility is estimated to occur in up to 50% of sexual violence situations, and renders the victim physically unable to respond by screaming, fighting back, or fleeing (Marx, Forsyth, Gallup, & Fusé, 2008; Rothschild, 2000). This response is one that our bodies choose for us, regardless of how much self-defense training we have had. The belief that a victim can and should fight off an assault if they did not want to have sex can be re-traumatizing to survivors whose bodies did not give them the option. Additionally, beliefs like these can place blame on the victim for not doing enough to protect themselves.

Another intervention used by universities to prevent sexual violence is to teach students better communication skills about giving and getting consent. These interventions are rooted in the belief that sexual violence on campus is the result of miscommunication or lack of understanding of consent between parties who may or may not have been drinking. However, the literature points out that improved communication and more accurate perceptions of what consent means will have little impact on the prevalence of sexual coercion (Adams-Curtis & Forbes, 2004), the reason being that the research supports most sexual coercion being intentional rather than a misunderstanding (Lisak & Miller, 2002; Muehlenhard & Hollabaugh, 1988; Norris

& Cubbins, 1992). Research into the social cognitions of sexually aggressive men has revealed that aggressive men are guided by "suspicious schema" when interacting with women, and this causes the men to be dismissive of a woman's reactions, particularly when those reactions are strong or "indicative of negative emotion". A woman's verbal cues, including firmly stating "no," are discounted or interpreted as seductive (Bernat, Calhoun, et al., 1999; Bernat, Wilson, & Calhoun, 1999; Malamuth & Brown, 1994). Given that a woman's strong verbal cue of "no" is ignored by aggressive men, it is not surprising that a nonverbal cue such as physical resistance or lack of physical engagement will also be dismissed. Further below is an examination of the various definitions and nuances of sexual consent, and an exploration into how determining sexual consent can seem confusing given the inconsistence among university policies, public health education best practices, and state laws governing sexual consent from state to state.

A recent strategy colleges and universities are implementing to mitigate sexual violence is *Bystander Intervention* training. These programs are designed to give campus community members a role in shifting the norms around sexual violence. These programs draw from the Health Belief Model (Rimer & Glanz, 2005), which links beliefs, attitudes, perceived risk of encountering the problem, benefits of engaging in the protective behavior weighed with the cons of intervening in a situation when a peer may need help. The programs provide students with the knowledge and skills to recognize a situation as a potential problem and determine how best to intervene given the situation while still maintaining personal safety (Banyard, Moynihan, & Crossman, 2009; Banyard, Plante, & Moynihan, 2004). Bystander programs encourage prosocial behavior among students, faculty and staff in the campus community as a way to shift and enforce social norms away from the acceptance of violence to improve the safety of the overall community. These informal helpers become protective resources (Banyard et al., 2009) as the

students are more likely to be in a position to observe and intervene in a potentially dangerous situation, such as at an off-campus party or other drinking situation where authorities are not likely to be on site. These programs take the onus of preventing sexual violence off of the shoulders of the women who are victimized and puts it into the hands of the surrounding community members, encouraging them to watch out for one another. We are likely to see an increase in campuses developing and implementing bystander intervention programs as they are now required by the 2013 Campus SaVE Act as an effective strategy to prevent sexual violence on college campuses.

Many bystander programs have been created in recent years and are available to colleges at varying costs from the companies and schools that developed them, including *Green Dot*, *Bringing In the Bystander*, *Step Up!*, and *Mentors in Violence Prevention (MVP).* Few evaluations have been done on these programs to determine their effectiveness. Of the evaluations available, bystander intervention programs appear promising as they show an influence on attitudes and beliefs of attendees regarding rape myths and prosocial behavior intentions. Bystander intervention programs appear to be effective at reaching men who scored higher on willingness to engage in rape prevention, who did not hold strong beliefs about rape myths and who were less comfortable with sexist behavior in others (Stein, 2007). Also, men who reported that they felt they had the support of their peers in endorsing rape prevention efforts were more likely to report that they would participate in prosocial bystander behaviors. In terms of long-term effects, more research is needed to determine if bystander intervention programs impact the overall rate of sexual violence on college campuses. It may be more effective as one piece of a comprehensive sexual violence prevention program as it still is not addressing the real cause of sexual violence, which is the college men who are perpetrating the

violence. However, it could be a step in the right direction to change campus norms around sexual violence, decreasing the acceptability of rape myth acceptance, which may indirectly lead to holding more offenders accountable.

Most men are not sexual perpetrators, but we need more information on what makes some higher risk and some at almost no risk at all. This information could later be used to design interventions to address the problem of sexual violence on college campuses. This would be an updated approach, as a common and long-standing response to addressing sexual violence on campuses is to develop sexual assault prevention and risk reduction programs for women college students, teaching them assertive communication skills or self-defense tactics (Adams-Curtis & Forbes, 2004; Hoffman, 2015; Senn et al., 2015).

Defining Consent

A fairly recent strategy for preventing sexual violence in middle schools, high schools, and post-secondary institutions is teaching students about sexual consent. The intention behind this strategy is to stop sexual violence from occurring through the teaching of consent as it is believed sexual violence is an unintentional consequence of students not understanding how to give and get sexual consent before engaging in sexual activity.

What is consent?

Research on the topic of sexual consent is a relatively new phenomenon. In the fall of 1990, Antioch College students and administrators collaboratively developed a sexual consent policy (Antioch College, 1990). At the time, such policies were unheard of. As a result, when the policy when public it was mocked from sources ranging from the New York Times to Saturday Night Live (Hickman & Muehlenhard, 1999; Muehlenhard, 1996). Up until this point, talk and research on sexual consent was reserved mostly for populations who had limited ability

to give consent due to developmental disabilities, for instance. Consent was defined differently

depending upon who was speaking or writing about it, if it was defined at all (Muehlenhard,

Powch, Phelps, & Giusti, 1992), which led to confusion and unease about the topic. When it was

defined, it was most often in the case of rape and defined as sex without consent.

   Similarly to the terms of sexual assault and rape, sexual consent definitions vary

depending upon the source of information. According to the Rape, Abuse, & Incest National

Network, or RAINN, consensual sexual activity must include that both persons are old enough to

consent, have the capacity to give consent and have agreed to the sexual contact (RAINN, 2014).

However, some states do not include as stringent of requirements for legal consent. In the state

of Georgia, for instance, the only requirement for sexual consent for intercourse is that both

parties be at least age 16 and that the act is not "forcibly and against her will" (O.C.G.A. § 16-6-

1). There is no language regarding intoxication, incapacitation or coercion. Some colleges and

universities in the U.S. refer to more 'gold standard' requirements of sexual consent, including in

their definitions that sexual consent be verbal, free of coercion, enthusiastic, and is an ongoing

process between partners (Cornell University, 2014; Emory University, 2014; University of

Georgia, 2014).

   The variation in definitions for consent can pose problems, however. For universities

that encourage students to use a 'gold standard' of sexual consent, there are not ways to impose

consequences when students do not engage in a consent process that includes these stipulations.

The situation only comes to light when a student accuses another student of violating the policy

by committing sexual assault and requests a Title IX investigation into the incident. Students can

only be required to uphold the law and university policy, which even differ themselves.

Typically, university policies are more stringent than the law in regards to sexual consent, but yet

are often not as encompassing as what sexual violence prevention advocates are encouraging students to comply with (Cornell University, 2014; Emory University, 2014).

Additional factors that make determining sexual consent difficult include alcohol use, coercion, and nonverbal communication. Alcohol use is often a complicating factor in sexual violence cases. While legal definitions of consent often state that a person may not be intoxicated or incapacitated by the effects of alcohol or drugs, they do not give a particular blood alcohol concentration at which someone is no longer able to consent. However, many would agree that consuming alcohol or using drugs and then engaging in sexual activity does not equal non-consensual sex either. The question becomes at what point do alcohol and drugs impair one's ability to consent to sexual activity.

The concern that alcohol use may be related to non-consensual sex is high (Abbey, McAuslan, McDuffie, Ross, & Zawacki, 1995; Abbey et al., 1998; Abbey et al., 1994; Abbey et al., 1996; Dermen & Cooper, 1994b). In a landmark study on date rape that included 6000 U.S. college students, more than one in four reported having been raped (Koss et al., 1987). Similarly, a study by Gross, Winslett, Roberts, & Gohm (2006), found that 27% of undergraduate females reported experiencing some form of unwanted sexual contact – including kissing, touching, oral, vaginal, or anal intercourse. Flack et al. (2007) investigated incidents of unwanted sexual contact in the hook-up culture and found that about 23% of the women studied reported one or more incidents of unwanted sex, and they often associated with impaired judgment from alcohol consumption. Studies have indicated that in the cases of college sexual assault, between 55% and 74% of the men were using alcohol before committing the assault, and between 53% and 55% of the women were using alcohol prior to being victimized (Abbey et al.,

1998; Koss, 1998; Muehlenhard & Linton, 1987). However, the connection between alcohol and sexual violence is not well understood.

In a college setting, it is not uncommon for crimes of sexual violence involving alcohol to be considered a miscommunication (Lisak & Miller, 2002; Muehlenhard, 1988), and for women who have been drinking and subsequently victimized to be seen as more culpable for the crime (Norris & Cubbins, 1992; Norris & Kerr, 1993; Richardson & Campbell, 1982). However, in studies on college male perpetrators of sexual violence, it is often found that the use of alcohol for the purposes of committing an assault or rape on an acquaintance was intentional. In a study by Kanin, 76% of male acquaintance rapists admitted to attempts at intoxicating a female date (Kanin, 1985). Similarly, Koss (1998) found that 74% of men who raped acquaintances used alcohol or drugs with intent to commit the violence. Other studies have linked aggressive male subjects with attributing less responsibility to male characters in vignettes who drink and then commit assault, as well as attributing more responsibility to the female character who was victimized by the intoxicated male (Abbey, Wegner, Woerner, Pegram, & Pierce, 2014; Bernat, Calhoun, & Stolp, 1998; Norris & Cubbins, 1992; Norris & Kerr, 1993; Richardson & Campbell, 1982).

Even without the use of alcohol or drugs, acquaintance rape is often seen as less serious or severe compared to stranger rape, and is even less likely to be investigated or prosecuted in the legal system (Estrich, 1987; Koss, 2000; Spears & Spohn, 1997). It is not uncommon for police and investigators to view cases of sexual violence between acquaintances with suspicion of validity (LeDoux & Hazelwood, 1985). These situations are most commonly seen in college campus settings, despite studies showing that undetected sexually aggressive men in college have similar traits and behaviors as incarcerated rapists (Bernat, Calhoun, et al., 1999; Lisak &

Miller, 2002; Lisak & Roth, 1988, 1990). Numerous studies on college men have found about a quarter of college men report perpetrating some form of sexual violence during their time at an institution of higher education, with 12% to 14% perpetrating sexual violence within the past 12 months (Abbey & McAuslan, 2004; Abbey et al., 1998; Koss et al., 1987; Thompson et al., 2013). It seems that alcohol is often treated as the culprit in college sexual violence situations, but given that cases without it still receive a biased review, the problem is likely much more pervasive and culturally ingrained.

Sexual coercion is not often mentioned in sexual violence laws, making it difficult to determine at what point consent is no longer freely given. According to Adams-Curtis and Forbes (2004), much of what is considered to be sexual coercion from a research perspective does not meet a legal standard for rape or sexual violence. In the literature, sexual coercion spans a wide range of behaviors, from verbal pressure to the use of a weapon to gain sexual advantage (Koss & Oros, 1982). In their review of the literature on sexual coercion involving college students, Adams-Curtis and Forbes (2004) suggest using the term "sexual coercion" to describe "any situation in which one party uses verbal or physical means (including administering drugs or alcohol to the other party either with or without her consent) to obtain sexual activity against freely given consent. Thus, wearing down an individual with repeated requests and entreaties would be coercive as consent would not be freely given".

There may be a bit of a gray area among students when determining what is coercion and what is consensual. However, there are some instances when male college students clearly feel that a certain type of coercion is crossing the line. In a study by Rapaport and Burkhart (1984), researchers surveyed college men, who were more likely to endorse less intrusive and aggressive tactics. While none of the participants endorsed the use of a weapon to sexually coerce a woman

into sex, they did report endorsing the use of verbal pressure or simply ignoring a woman's

protest to sexual activity. Similarly, in a Muehlenhard and Linton (1987) study on college men

who were asked about acceptability of coercive behaviors, the most common form of sexual

coercion was to continue on with the intended sexual behavior even after a partner said no,

essentially ignoring her response (58.6%). The next most common behavior of these men in

such situations was using "nonviolent physical coercion" (14.7%). The use of non-violent or

aggressive coercive tactics may be intentional. In a study by Bachman (1998) of the factors that

impact victim reporting, it was found that only two isolated factors could increase the chance that

a victim would report an assault to authorities: the use of a weapon and physical injuries from the

assault. In other words, if a perpetrator can coerce sexual activity through other means such as

verbal pressure or use of alcohol or drugs, they are likely to never be reported for their crime.

Lisak and Miller (2002) argued that by selectively choosing their victims from their own social

networks and from refraining from actions that would increase the likelihood of reporting, rapists

know they are creating cases that are not likely to be reported to police, and that prosecutors are

not likely to pursue for prosecution even if they are reported.

Even in a situation where a woman may verbally consent to sex, there still remains the

possibility that she felt coerced into that consent. Adams-Curtis and Forbes (2004) made it clear

that a statement of agreement alone does not imply consent. There are times when a verbal

agreement to consent may be elicited by means of implicit or explicit threats of abandonment,

threats of harm to perpetrator self or others, damage to victim's reputation, or use of alcohol or

drugs by the victim prior to an assault.

Another controversy has surrounded the communication of consent or how we know when

someone has consented. If consent were defined as purely a mental act, then one person can

never really know if another person has consented to sexual activity. This is problematic because it could lead to misunderstandings, or claims of such, that may result in sexual assault (Abbey, 1982, 1987). In fact, many studies report that men interpret friendly behavior by women to indicate sexual interest when the women did not intend this, creating additional confusion (Abbey, 1982, 1987; Muehlenhard & Hollabaugh, 1988). While laws and policies are not often written to include language requiring consent be verbal, many colleges and universities do include this in their expectations of students attending their campuses (Emory University, 2014; University of Georgia, 2014).

A standard for verbal consent is not always a solution either. Studies have consistently shown that sexual scripts do not often involve explicit verbal consent (Hickman & Muehlenhard, 1999; Muehlenhard, 1996; Muehlenhard et al., 1992). Another concern is that someone may verbally consent to sexual activity, but be under the influence of alcohol or drugs which would impair their abilities to freely consent. Consent as both a mental and a physical act does not often happen together. Additionally, there is research indicating that some people engage in a "token resistance," meaning that they verbally indicate they are not consenting to sex but may actually be trying to convey consent (Muehlenhard & Hollabaugh, 1988; Simon & Gagnon, 2011).

The theory of miscommunication between sexual partners leading to sexual violence has been contested by many researchers (Beres, 2010; Beres, 2014; McCaw & Senn, 1998; O'Byrne, Rapley, & Hansen, 2006). These researchers argue that consent is often clearly communicated by the female partner and that men are capable of interpreting it correctly, however aggressive men may be choosing to ignore the cues. This is not to say that no cases of miscommunication

are leading to sexual assault, but that the vast majority do not fall into the category of miscommunication.

Risk Factors for Perpetrating Sexual Violence

Many traits and characteristics have been determined as risk factors for perpetrating sexual violence. Two of the most basic risk factors are being male and heterosexual, as the majority of sexual violence is committed by adult males against adult females (Tjaden & Thoennes, 2000). However, most men are not high-risk for being perpetrators, even if most perpetrators are male.

The Undetected Rapist

David Lisak and colleagues (Lisak & Miller, 2002; Lisak & Roth, 1990) often refer to college-aged male sexual violence perpetrators as "undetected rapists." This term refers to sexually violent offenders who remain unincarcerated because their crimes go unreported, are not taken seriously in the legal system, are often assumed to be the result of a misunderstanding, or involve the victimization of an acquaintance (Estrich, 1987; Koss, 2000; Lisak & Miller, 2002; Spears & Spohn, 1997). When compared to sexually non-aggressive men, undetected rapists bear similar qualities to their incarcerated counterparts. These characteristics include previous offenses (DeKeseredy & Schwartz, 1998; Lisak & Miller, 2002; Prentky et al., 1997), sexual arousal to videotaped depictions of rape (Bernat, Calhoun, & Adams, 1999), hypermasculinity (Kilmartin & Berkowitz, 2014; Rozee & Koss, 2001), lack of empathy (Gold, Fultz, Burke, Prisco, & Willett, 1992; Lisak & Ivan, 1995; Mosher & Anderson, 1986), acceptance of rape myths (Malamuth, 1981; Pryor, 1987), alcohol use at high levels (Abbey, 2002; Abbey et al., 1998), being a member of an all-male group such as a fraternity or athletic team (DeKeseredy & Schwartz, 1998; Sanday, 2007; Warshaw & Parrot, 1991), and the report of

some likelihood of raping if they could be assured of not being caught (Demaré et al., 1993; Malamuth, 1981). This list of traits is not exhaustive. The college men committing such assaults may possess a variety of traits that increase the risk that they will become perpetrators, and these characteristics developed long before they came to college (Abel & Rouleau, 1990; Nisbet et al., 2004). Additionally, of the college men at highest risk for being sexual violence perpetrators, they have not just one incident of sexual violence but several, and with that comes several victims of their crimes. The average number of victims per offender is between 7 and 11 (Abel & Rouleau, 1990; Weinrott & Saylor, 1991).

For the purpose of this study, the focus will be on a selection of these factors described in more detail below: alcohol use, including sex-related alcohol expectancies, empathy, previous experiences with perpetrating sexual violence, rape myth acceptance, hypermasculinity, and peer group membership.

Alcohol

Of all the potential predictors for sexual violence, alcohol may be the most complicated. More than 50% of sexual violence that occurs in a college setting involves alcohol use by either the victim, the perpetrator, or both (Abbey, 2002; Abbey et al., 1998; Abbey et al., 1996; Copenhaver & Grauerholz, 1991; Krebs et al., 2007; Muehlenhard & Linton, 1987).

The fact that alcohol and sexual violence occur together so frequently does not demonstrate a causal connection, however. It also does not appear that alcohol could be the only factor increasing the risk for perpetrating sexual violence. There are many theories as to how they are linked, some of which are discussed below. Many people would likely agree that when someone consumes alcohol, something happens within their bodies that creates feelings, thoughts and behaviors that seem different or more exaggerated compared to when they are

sober. Studies done on the pharmacological effects show that alcohol can disrupt higher-order brain processes, including cognitive abilities like abstraction, conceptualization, interpretation of complex stimuli, and executive control functioning (ECF) (Giancola, 2000; Leonard, 1989). Major theories on the pharmacological effects of alcohol come from the studying of alcohol's effects on social behavior, because disruption of executive control functioning also impairs social skills. Our abilities to plan, self-regulate, initiate behaviors are directly impacted when ECF becomes impaired, in addition to being able to inhibit inappropriate behavior and activities that are normally suppressed when someone is sober. In addition to disruptions in ECF, studies show that alcohol causes deficits in some areas of executive functioning when consumed (Giancola, 2000; Parker, Alkana, Birnbaum, Hartley, & Noble, 1974). The results range from more amorous or assertive behaviors to increased aggression and the engaging of risky health behaviors (Hull & Bond, 1986; Steele & Southwick, 1985).

A connection has been found between propensity to abuse alcohol and lifetime sexual aggression. Men who commit aggression are more likely to be heavy drinkers and to be drinking at the time of their attacks (Berkowitz, 1992; Koss & Dinero, 1989; Muehlenhard & Linton, 1987). Alcohol use by the offender pre-assault does not appear to be correlated with the level of severity of the assault, such as increasing the risk from attempted assault to completed rape (Ullman, Karabatsos, & Koss, 1999). However, alcohol use by the male appears to be correlated with the likelihood of committing some type of assault overall (Abbey, Clinton-Sherrod, McAuslan, Zawacki, & Buck, 2003). There does appear to be an increase in the severity of an assault when victims are the ones drinking heavily (Ullman et al., 1999), perhaps because the perpetrator perceives there might be less victim resistance.

It is still not completely understood how alcohol interacts with the body to increase the risk of sexual violence for both the victim and the perpetrator. There is likely a combination of factors at play, rather than one factor that triggers the assault. Below are the most prominent theories explaining how alcohol impacts decision making and behavior when someone is intoxicated.

Alcohol Myopia Theory

Alcohol Myopia Theory is the most widely used theory to explain how alcohol interacts with our bodies to affect communication. Alcohol myopia can be defined as a "state of shortsightedness in which superficially understood, immediate aspects of experience have a disproportionate influence on behavior and emotion, a state in which we can see the tree, albeit more dimly, but miss the forest altogether" (Steele & Josephs, 1990). Steele and Josephs hypothesized that alcohol's impact on behavior affects the way information is processed in the brain of an intoxicated person. This function interacts with environmental cues surrounding the intoxicated person, creating an alcohol myopia that can be attributed to a combination of pharmacological effects of alcohol and environmental influences. Alcohol limits the range of social and environmental cues that a person would normally detect in any given situation. Alcohol also interferes with the ability to correctly encode and process meaning from those cues (Birnbaum, Hartley, Johnson, & Taylor, 1980; Rosen & Lee, 1976; Washburne, 1956). When this happens, a person experiences a restricted version of reality, where some environmental and social cues may have a disproportionate influence on behavior and emotion. People pick up some social cues and miss others entirely, attributing more meaning to some cues than they normally would, and not enough to other cues that might provide the context one needs for sound

judgment and decision making (MacDonald, Fong, Zanna, & Martineau, 2000; Steele & Josephs, 1990).

Alcohol myopia theory may play a role in how sexual violence happens between partners in which one or both are drinking. In a study by Abbey et al. (2006), the researchers found a concurrence of alcohol and sexual aggression. They were able to demonstrate that, for both men and women, alcohol diminished the accuracy in understanding social and sexual cues. In this case, men who were under the influence of alcohol believed that women were behaving more sexually and were more interested in sex than what the women reported. This misperception of sexual cues has been reported in other studies (Abbey, 1991; Abbey & Harnish, 1995; Abbey et al., 1994; Abbey et al., 1996; Abbey, Zawacki, & McAuslan, 2000). Kanin (1984) found that college male rapists sometimes used alcohol as a justification for their inappropriate behaviors. Of the college male rapists interviewed in the study, 62% indicated that their intoxicated state at the time caused them to initially misperceive cues about their partner's sexual interest, but that the intoxication also allowed them to feel comfortable using force later when the woman's lack of consent was finally clear to them.

Inhibition Conflict

Focusing specifically on a potential sexual perpetrator, the term inhibition conflict (Steele, Critchlow, & Liu, 1985; Steele & Southwick, 1985) might better explain the apparent changes in social behavior of the sexually aggressive man when under the influence as compared to his behavior when sober. When a person is sober, they receive implicit and explicit pressures to conform to certain aspects of society. As a simple example of this, a person who might really love chocolate cake may choose to have only a small piece if on a date or at a professional event to be polite and avoid appearing gluttonous. This is not because they do not want more

chocolate cake, but rather because they feel they must exert some self-control around others who may notice if he or she is having more chocolate cake than may be socially acceptable. If this same person were consuming alcohol, their inhibitions are lowered and the more salient cue is to fulfill their desire for more chocolate cake. Their desire for cake at that time, plus the lack of typical inhibitions, may lead to not only eating their own piece of cake but taking three more pieces from the platter at the table and shoving them into their mouth followed by stealing and eating the cake of the person sitting next to them. The stronger their sober desire for chocolate cake, the more aggressive they may be about the cake when intoxicated. The typical social cues that suppress that desire are not as salient at the time of intoxication. The chance that someone who is drinking will engage in typically inhibited behavior is higher because alcohol creates a myopia, restricting the users attention to what seems most immediate and which cues seem stronger. These cues are often for things that might seem inappropriate when sober. An important distinction is that these desires exist even when someone is sober, but when someone is intoxicated they may feel less inhibited and more likely to act on the desires than when sober.

We can apply this same situation to a sexual violence scenario. If a person, when sober, has some desire for obtaining sex at any cost, they may also understand when sober that this is a deviant thing to do and inhibitions prevent them from acting on such desires. When intoxicated they may be less concerned with social norms or even legalities of getting sex at any cost, which could result in ignoring resistance from the woman and instead continuing to pursue what they most desire at that moment.

Even when men are sober, they can misperceive friendly cues as being sexual more often than women intended for them to, and researchers have suggested that such misperceptions may sometimes contribute to sexual coercion (Abbey, 1982, 1987, 1991; Muehlenhard & Hollabaugh,

1988). Additionally, it is not just friendliness that men are misperceiving, but instead a wide variety of verbal, nonverbal or situational cues that come from a woman. This misperception is most often that the cues are for sexual interest or intent, when the cues were not intended by the woman to be taken as such. Add into that situation some alcohol, and the chance for misinterpretation of sexual cues is more likely to happen because a person is most likely to respond to the strongest cues they are perceiving, even if those cues are not accurate. This is how myopia narrows the focus to see some cues, even if inaccurately, and still miss others entirely.

The addition of alcohol to a situation where consent is not explicitly stated may mean that intoxicated individuals are not able to pick up less salient cues from their partner about what they are comfortable with. If sexual arousal is high, and so is intoxication, alcohol myopia effects may make the arousal most salient in this situation, while issues of consent may be minimized or ignored (Dermen & Cooper, 1994b; MacDonald, MacDonald, Zanna, & Fong, 2000). Earlier a study by Muehlenhard and Linton (1987) was discussed, referring to what some college men viewed as acceptable coercion and non-acceptable coercion. These men were *least* likely to endorse a strongly aggressive approach to coercing sex from a woman, such as using physical force or a weapon. However, they did see some types of coercion, such as using alcohol to decrease defenses, ignoring her requests to stop, or verbally pressuring her until she stops resisting, as acceptable. The way alcohol myopia may work in this situation is to allow the man to continue pressure for longer than he might if he were sober (Gross, Bennett, Sloan, Marx, & Juergens, 2001). However, the desire to pressure or accept some level of resistance must be there even when the man is sober for the alcohol to increase the chance that he will act on it

when he is intoxicated. Also, it is not likely he will suddenly endorse the use of a weapon for coercion when intoxicated if he did not hold such beliefs when sober.

Lastly, it is important to note that if a conflict pressure is low, meaning that someone may not have the desire to engage in the behavior when sober, it is less likely that a drastic change will be seen in someone who has been drinking. The most drastic changes in behavior from someone who is sober to when the person is drinking is when the conflict to engage or not engage in a behavior is high. The stronger the conflict, the more likely the person will engage in the behavior only when drunk. The pharmacological aspects of alcohol would likely suppress the inhibitions and self-control typically seen in a sober person, and "allow" the person to engage in such behaviors when drunk (Steele & Josephs, 1990).

Studies measuring the effects of alcohol use on behavior do this by surveying sober participants about their drinking behavior, or by testing vignettes on sober participants about a situation involving alcohol or a typical drinking situation. To determine the *actual* effects of alcohol on behavior, researchers often employ a balanced placebo design, in which some participants receive alcohol and others do not receive alcohol but believe they did. The design is a 2x2 balanced placebo design, with the conditions being 1) participant believes they received alcohol or were told they are consuming alcohol and actually were administered alcohol, 2) participant believes they received alcohol or were told they are consuming alcohol but were given a placebo (perhaps a non-alcohol drink with alcohol rimmed on the glass to simulate an alcoholic drink), 3) participant *did* get alcohol but does not believe it was alcohol or were told they were not administered alcohol, 4) participant was not administered alcohol and believes or were told they are not consuming alcohol. These types of studies help differentiate which effects from alcohol are pharmacological or expectancy, which will be discussed in a later section. In

balanced placebo design studies measuring the effects of alcohol, researchers found significant differences between the decision making of participants who had consumed alcohol or believed they had consumed alcohol and those who were sober and knew they were sober (LaBrie, Cail, Hummer, Lac, & Neighbors, 2009). Studies have shown that people who believe they have consumed alcohol but did not are more likely to engage in social behaviors that they think are in line with someone who has been drinking, compared with people who did not consume alcohol or believed they did not consume alcohol (Hull & Bond, 1986). This shows an influence of alcohol expectancy effects on behavior that cannot be explained simply by pharmacological effects alone.

Sex-Related Alcohol Expectancies

When it comes to "deviant" social behaviors, such as sexual aggression, studies often show that alcohol expectancies are better predictors of sexual coercion or violence than are the pharmacological effects of alcohol. In balanced placebo studies on this topic, it was found that endorsement of sexual coercion was high for both participants that consumed alcohol during the study and also for participants who thought they consumed alcohol but actually consumed a placebo (non-alcohol) drink (George & Marlatt, 1986; Hull & Bond, 1986). While some behavior seems to be related to the *belief* that one consumed alcohol, other behavior changes seem to be specific to actual alcohol consumption and can be attributed to the pharmacological effects of alcohol. These behaviors are related to cognitive processing, psychomotor and mood, which appear to have very little expectancy effects (Hull & Bond, 1986).

One reason for the difference in behavior may be due in part to effects of sex-related alcohol expectancy involvement in sexual decision making (Abbey et al., 1998, 1999; Dermen & Cooper, 1994b). Alcohol expectancies are defined as the expected effects from drinking alcohol.

Not surprisingly, these expectations are commonly linked with sexual behavior. Alcohol-sex expectancies, sometimes called sex-related alcohol expectancies, refer to the positive sexual consequences of drinking. Despite the possibility for sexual dysfunction at a higher blood alcohol concentration, there is a strong cultural belief that increased drinking will lead to increased pleasurable sexual experiences, referred to as Alcohol Expectancy Theory (Goldman & Roehrich, 1991). Commonly held beliefs about alcohol-sex expectancies are that alcohol increases sexual arousal, alcohol makes it easier to act on sexual feelings, and that the quality of sex will be enhanced when alcohol is used by one or both partners (Abbey, McAuslan, Ross, & Zawacki, 1999; Dermen & Cooper, 1994a; LaBrie, Grant, & Hummer, 2011). How the expectancies impact sexual behavior is not completely understood, but it is thought that holding a belief in alcohol's disinhibitory effects creates a kind of self-fulfilling prophecy, which results in the expected heightened sexual behavior which a person then attributes to the alcohol consumption (George, Dermen, & Nochajski, 1989). Many college students report drinking specifically because they believe alcohol will help facilitate sexual opportunities and increase sexual affect (Abbey et al., 1999).

While expectancies about alcohol and sex may be present even while people are sober, being in the actual social drinking environment during the time of decision making seems to strengthen those expectancies and their impact. Alcohol myopia may play a role in this context as alcohol-sex expectancies may be strongest when cues are activated in the social drinking environment within which behaviors play out (Cooper, 2002; Dermen, Cooper, & Agocha, 1998). LaBrie, Grant & Hummer (2011) found that for men, alcohol expectancies about sociability, tension reduction, "liquid courage" and overall sexuality was positively correlated with blood alcohol concentration (Abbey, Saenz, & Buck, 2005). Liquid courage refers to the

disinhibiting effect of alcohol, often decreasing anxiety and shyness. The higher their BAC, the more highly they endorsed the alcohol-sex expectancies. For women, these expectancies may be more strongly endorsed when simply being in the drinking environment, regardless of their BAC level (LaBrie et al., 2011).

Sex-related alcohol expectancies may predict when someone will choose to drink and how much they will consume. Dermen and Cooper (1994a) found that these expectancies did predict drinking in sexual situations. Additionally, the expectancies may moderate the relationship between drinking and sexual risk taking (Dermen et al., 1998). Expectancies may help explain how sexual attributes are ascribed to others who are drinking. In studies in which participants rated characters of a vignette for sexual responsiveness, non-drinking raters ascribed more sexual responsiveness to characters who were drinking when compared to characters who were not drinking, regardless of any other contextual cues. Participants rated a woman who was drinking as being more sexually available and more willing to engage in foreplay and sexual intercourse than non-drinking women (George, Gournic, & McAfee, 1988). Male characters consuming alcohol were perceived similarly (George et al., 1997). Other vignette studies involving drinking versus non-drinking characters found that those who were drinking were rated as being more sexy (Leigh, Aramburu, & Norris, 1992), as showing more sexual initiative (Corcoran & Thomas, 1991), and as having more sexual intent (Abbey & Harnish, 1995). According to these studies, participants seemed to expect that alcohol would enhance sexual responsiveness simply because they were drinking and then rated the vignette characters accordingly, regardless of whether these characters displayed such tendencies. In an actual drinking setting, should drinking women be misperceived as being more sexually interested than they are, this could set up a situation in which drinking men who already have sexually

aggressive tendencies may be more inclined to act on what they think is happening, without considering what is actually happening.

Despite the strong argument for alcohol expectancies alone, studies in which expectancies are controlled, alcohol still appears to have some effects on the drunken excess behaviors we see in people who are behaving much differently from when they are sober (Hull & Bond, 1986; Steele & Southwick, 1985). There must be some interaction between the two factors, and possibly the addition of or interplay of others, to cause the types of sexually aggressive behaviors we see in some college men, but not others.

Lab studies in which alcohol is administered to participants to determine attributions of alcohol can sometimes yield much different results compared to survey studies, which rely upon recall of behaviors when under the influence but have no way of measuring whether a behavior is related to alcohol itself. Additionally, lab studies are able to observe and monitor changes in participants as alcohol is introduced into the body, something that is impossible to conduct simply from a survey design. Conducting research on the effects of alcohol can be tricky and limitations exist for both studies where alcohol is administered in a lab or a survey is administered for recall of alcohol use. Lab studies, while important because they measure effects when a person has consumed alcohol, are not a natural setting and observed behaviors by participants may or may not be the same as they would be in a bar or party setting. Surveys outside of a lab setting rely on the recall of participants of their behavior, which may not be very accurate either due to poor recall and the inability to link the cause of a behavior to alcohol consumption or other factors.

While the pharmacological effects of alcohol on the body, such as relaxation and lowered inhibitions, may explain some of the changes in sexual behaviors when alcohol is involved, other

researchers believe there may be more involved than just the restricted cognitive processes. If alcohol consumption were the direct and only cause for changes in behavior and aggression, then those behaviors would predictably appear in the same way every time someone reached a particular blood alcohol level. Instead, the drunken behaviors that we see are different between two different people, and they differ between the same person on different days (Steele & Josephs, 1990).

The cause of behavior such as sexual violence may differ dependent upon the level of internal conflict about the behavior. Myopia seems to play a larger role in high-conflict situations and when alcohol is consumed in larger doses (Steele & Josephs, 1990). High-conflict situations might involve a person's desires to commit a serious crime, but the person may also know that this is ethically wrong. A lower conflict situation, in which a less conflictual desire is involved, may be more influenced by expectancies. Even in the absence of alcohol, such as in balanced placebo designs when someone believes they have consumed alcohol but did not, the belief alone seems to drive the social behavior. Studies have shown that people who believe they have consumed alcohol but did not, compared with people who did not consume or believed they did not consume, are more likely to engage in social behaviors that they think are in line with someone who has been drinking (Hull & Bond, 1986). Given these findings, alcohol myopia cannot be the sole cause for certain behaviors under the influence.

Alcohol and Sexual Violence

High amounts of alcohol use are strongly correlated with sexual violence (Abbey et al., 1994; Abbey et al., 1996; Krebs et al., 2007). The relationship between alcohol and sexual violence is multifaceted, with alcohol often being consumed by both the victim and perpetrator prior to the assault (Abbey, 1991; Koss et al., 1987; Muehlenhard & Linton, 1987). Alcohol has

been used for the purpose of decreasing defenses and inhibitions of victims, but also consumed by the perpetrator for the purpose of excusing violent behavior they commit (Kanin, 1984). While perpetrators may use alcohol to justify aggression and sexual violence, women by contrast often feel more responsible for sexual violence if they had been drinking (Norris, 1994). In cases of sexual violence, women are often seen as more culpable than men for the sexual violence because they may be accused of losing control of the situation, not protecting themselves from an assault, and not communicating lack of consent clearly. Studies on both male and female college students support these beliefs that women are perceived as less moral when drinking, while judgments about men drinking are not affected (Norris & Kerr, 1993). In a study by Richardson and Campbell (1982), male and female college students read vignettes about a female student being raped by a male at a party. Both male and female respondents perceived the perpetrator as less responsible for his actions because he was intoxicated, while perceiving the victim to be more responsible because she was intoxicated. Similar studies have replicated these findings (Hammock & Richardson, 1997; Stormo, Lang, & Stritzke, 1997). These findings may help explain the low number of college women coming forward to seek help after an assault. Many women fear being blamed or may likely blame themselves for the assault, and it seems these studies support their fears.

What seems to be showing up in research time and time again rather than a situation of misunderstanding involving alcohol, is that college women are actually targeted when they are drinking by college men for the purpose of perpetrating sexual violence (Kanin, 1985; Tyler, Hoyt, & Whitbeck, 1998). Given these findings, neither alcohol myopia nor sex-related alcohol expectancies alone can be the sole cause for sexual violence behaviors under the influence.

More likely, there is a combination of factors related to alcohol use, directly or indirectly, that increase the risk of sexual violence.

Peer Group Influence

Another factor that may influence a college male's risk of perpetrating sexual violence is their association with a peer group that endorses rape-supporting beliefs (Adams-Curtis & Forbes, 2004; Boeringer, 1999; Kanin, 1967; Martin & Hummer, 1989; Schwartz & DeKeseredy, 1997). Criminological theory predicts that community and peer norms may increase the motivation for offenders to use violence in intimate and dating situations, and increase the likelihood that offenders will see this violence as acceptable (Schwartz, DeKeseredy, Tait, & Alvi, 2001). When community and peer norms support the coercive behaviors of individuals in the community and provide excuses for those who use coercion, the community is likely to have a higher rate of sexual violence compared to other communities (Schwartz & DeKeseredy, 1997). According to several researchers, a college male's immediate circle of friends and those friends' beliefs about sexual coercion appears to be one of the most important predictors for the college male's own endorsement of rape-supportive beliefs (Kanin, 1985; Schwartz & DeKeseredy, 1997; Thompson, Koss, Kingree, Goree, & Rice, 2010). Self-identified college male perpetrators were much more likely than their counterparts to report that their friends would support their use of aggression in an effort to coerce or obtain sex from a resistant college woman. These men also reported that they felt pressure from their peer group, both implicit and explicit, to be sexually active (Abbey, McAuslan, et al., 2001; Craig, Kalichman, & Follingstad, 1989; Lisak & Roth, 1988; Martin & Hummer, 1989). DeKeseredy and Kelly (1995) found that male participants' association with a peer group that supported sexual aggression was correlated with their personal sexually coercive behaviors. Another

longitudinal study identified that friends' attitudes and behaviors were identified as risk factors

for personally engaging in sexual aggression (Jacques-Tiura et al., 2015). These researchers

found that friends' pressure of group members to engage in sex by any means, comfort with

friends making derogatory statements about women, and friends' use of objectifying statements

of women were significantly correlated with personally perpetrating sexual violence within the

past year. In complementary findings, these researchers saw that past year perpetrators were less

comfortable with their friends' use of egalitarian statements about women or use of egalitarian

language. Yet another study found that peer use of derogatory language toward women was a

significant predictor of perpetrating dating violence 5 years later (Capaldi, Dishion, Stoolmiller,

& Yoerger, 2001).

The most commonly mentioned college groups that fit these profiles in the research were

all-male fraternities and gender-segregated athletic teams (Adams-Curtis & Forbes, 2004;

Benedict, 1998; Boeringer, 1999; Humphrey & Kahn, 2000). While not all fraternities and male-

segregated athletic teams posed the same risk, the ones that seemed to have a higher risk of

including perpetrator members were groups that placed a high value on traditional male roles that

focused on money, power, ability to consume alcohol, loyalty to the group above all else, group

secrecy and select inclusivity, homophobic or hypermasculine ideologies, a culture that devalues

or objectifies women, and fostering male bonding through sexual exploitation of women

(Boeringer, 1999; Boeringer, Shehan, & Akers, 1991; Boswell & Spade, 1996; Kirkpatrick &

Kanin, 1957; Koss & Gaines, 1993; Sanday, 2007; Sanday, 1996). Members of both high-risk

fraternities and male-segregated athletic teams playing contact sports were associated with

sexual coercion, individual rapes, and gang rapes (Benedict, 1998; Crosset., Benedict, &

McDonald, 1995; Flores, 2002; Parrot & Bechhofer, 1991). Other studies found that these

groups were overall more supportive of rape (Boeringer, 1999) and found to be more likely to

sexually abuse women when compared to other college men (Chandler, Johnson, & Carroll,

1999; Garrett-Gooding & Senter, 1987). One study by Crosset et al. (1995) that included a

survey of 10 large universities with strong athletic programs, found that student-athletes

represented only 3.23% of the student population but were responsible for 19% of the sexual

crimes reported to campus police. Similar results were found in other studies (Boeringer, 1999;

Koss & Gaines, 1993). While in college settings, these higher risk groups might manifest as

fraternity organizations or student-athletic teams, outside of a college setting we might find

similar group norms and aggression expectations in groups such as the military (Rosen,

Kaminski, Parmley, Knudson, & Fancher, 2003; Turchik & Wilson, 2010).

Student-Athletes

It is estimated that approximately 1 in 3 to 1 in 4 college sexual assaults are committed

by student-athletes (Crosset et al., 1995; Eskenazi, 1990). Overall, findings indicate that male

student-athletes disproportionately represent sexual violence perpetrators, in addition to having

stronger sexual aggression attitudes and beliefs about rape myths (Boeringer, 1999; Crosset,

Ptacek, McDonald, & Benedict, 1996; Frintner & Rubinson, 1993; Koss & Gaines, 1993). In a

2014 review of the literature on Intercollegiate Athletes and sexual violence, McCray (2014)

found an overrepresentation of male student-athletes as perpetrators of reported sexual violence

on college campuses in the literature. In one study of 925 randomly selected women, 27.1% of

the women were victims of interpersonal violence (including battery). Victims self-identified

their perpetrators, and indicated that 22.6% of sexual assaults and 13.7% of attempted sexual

assaults were committed by student-athletes. For this study, student-athletes represented less

than 2% of the overall male student body (Frintner & Rubinson, 1993). Another study

examining incidences of sexual assaults reported to 10 judicial affairs offices during a 3-year period, researchers found that 35% of the perpetrators of sexual assault and battery were student-athletes (Crosset et al., 1996). Of that study population, student-athletes comprised only 3% of the student body.

In addition to actual reported sexually violent behavior, some studies indicate that student-athletes are also more likely than their non-athlete student counterparts to endorse rape myths (Sawyer, Thompson, & Chicorelli, 2002). Boeringer (1999) found that student-athletes were significantly more likely to indicate agreement with rape-supportive beliefs or statements than did non-athletes, and he hypothesized this was due to the hypermasculine environment of student-athletics. About 56% of the student-athletes surveyed responded positively to the rape-supportive myths, compared to only 8% of non-athletes agreeing with the same statements. Other noted possible risk factors in sport include male bonding that may intensify sexism or cause group loyalties to outweigh personal integrity, being a member of an aggressive or contact sport, being part of a team that sexualizes women and encourages the subordination of women, having celebrity status or entitlement on a campus that may lead to a sense of lack of accountability for one's actions off the field, and excessive group alcohol use (Benedict, 1998; Flood & Dyson, 2007).

It should be noted that not all student-athletes or intercollegiate athletic teams have a higher proclivity for rape. Rather, the trend appears in the athletic teams that endorse a hypermasculine environment, particularly among student-athletes who are younger and those playing a team-based sport (football, basketball) rather than an individual sport (golf, tennis, track and field) (Sawyer et al., 2002).

Fraternities

It is well-documented in the literature that fraternities are considered hotbeds for sexual violence, although it is not always clear why. Similar to student-athletes, fraternity members have been overrepresented among sexual aggressors on college campuses (Frintner & Rubinson, 1993; Lackie & de Man, 1997). Some studies suggest that fraternities attract men who are likely to be more sexually aggressive and endorse rape myths (Gwartney-Gibbs, Stockard, & Bohmer, 1987; Kalof & Cargill, 1991). Other studies point to sexual aggression being learned in fraternity settings, rather than being a characteristic the men have before membership (Boeringer et al., 1991). While not all fraternities are considered dangerous, some have reputations for being more high-risk for sexual violence (Boswell & Spade, 1996). Some suggest that high-risk fraternity organizations, more than their low-risk counterparts, endorsed drinking for the purposes of engaging in sex and engaged in heavy alcohol consumption regularly (Cashin, Presley, & Meilman, 1998; Koss & Gaines, 1993). In their study, Boswell and Spade (1996) found that there was a discrepancy between low-risk fraternities and high-risk fraternities at a private university which enrolled a high proportion of Greek membership students. When comparing parties between the two groups, high-risk parties and gatherings focused heavily on alcohol consumption. Men and women rarely knew each other prior to the gathering, and the fraternity culture endorsed frequent hook-ups while discouraging ongoing relationships with the women. The men routinely degraded women, and viewed them as faceless victims or acquaintances rather than friends. However, when women did engage in sexual behavior with the men, whether consensually or non-consensually, the men often heckled the women by yelling degrading remarks at them as they left the house the next morning. Observations at low-risk fraternities included more coed groups engaged in conversations, less of an emphasis on alcohol

use, and overall more respect for the women who attended – even extending to keeping the women's restrooms clean and well-stocked with supplies. Boswell and Spade did explain that peer pressures and social norms exist for both low-risk and high-risk fraternities. However, women threatened the brotherhood for men in high-risk fraternities, so women were stressed as outsiders, non-equals, and did not seem worthy of the same respect as fellow brothers in the fraternity. Rape culture is strengthened in high-risk fraternities where men are encouraged to demean women and where women and men are encouraged to remain segregated. However, just as there are differences in risk between fraternities on the same campus, it would be a mistake to assume all members of the same high-risk fraternity pose the same high-risk for sexual violence (Schwartz & DeKeseredy, 1997).

In terms of actually committing sexual violence, studies find fraternity male perpetrators greatly overrepresented (Copenhaver & Grauerholz, 1991; Frintner & Rubinson, 1993; Lackie & de Man, 1997). Fraternities are more often reported to be the sites of gang rapes (Sanday, 2007; Warshaw, 1988), though in a study by Boeringer et al. (1991), fraternity members were no more likely than non-fraternity members to use physical force to commit rape. They were, however, significantly more likely to use alcohol, drugs, or non-physical coercion such as threats to end a relationship or other false promises in an effort to get sex. In a study by Worth and colleagues (Worth, Matthews, & Coleman, 1990), 50% of abusive students found in the sample were in Greek organizations, and only 8% of non-abusive students were in Greek organizations.

To understand what makes some fraternities higher risk than others, some studies have explored specific characteristics of fraternities. Factors found to be connected to strong likelihood of victimization by fraternity members include strong pressures to conform or social norms that limit communication with outside groups, heavy alcohol use, values for group

secrecy, narrow conceptions of masculinity, and the sexual objectification of women (Koss & Gaines, 1993; Malamuth et al., 1991; Martin & Hummer, 1989; Sanday, 2007; Schwartz & DeKeseredy, 1997). Fraternities are certainly not the only all-male groups who endorse abuse of women. Outside of universities, similar values and treatment of women have been documented in groups that include U.S. male fraternal orders which were in operation over 100 years ago, as well as in men in police work operating in a fraternity-like atmosphere in which masculinity is asserted and women are denigrated (DeKeseredy & Schwartz, 1993; Martin, 1982; Schwartz & DeKeseredy, 1997; Turchik & Wilson, 2010). For this reason, when study statistics show a relationship between fraternities and sexual victimization initially, sometimes that relationship disappears with more complex statistical techniques. This is because what is happening inside fraternities that increases the risk of victimization can also be found outside of fraternities in other groups that hold similar values.

Holding a narrow concept of masculinity was something commonly found among fraternity members, as well as a stronger likelihood of political and personal conservativeness, when compared to students who were not members of a Greek organization. Fraternity men are also more accepting of traditional male dominant/female submissive attitudes, while non-Greek students were more rejecting of such attitudes and ideas (Kalof & Cargill, 1991; Schwartz & DeKeseredy, 1997). However, simply having beliefs about male dominance is not relate directly to sexual victimization (Rapaport & Burkhart, 1984).

Many fraternities are found, both in subtle and blatant ways, to promote racism and sexism (Goettsch & Hayes, 1990; Schwartz & DeKeseredy, 1997). Social norms of fraternity organizations dictate that members should not have what the group would perceive to be feminine physical or psychological personality traits, and men are discouraged from taking

college courses in the domains perceived to be for women or non-heterosexual men. These discouraged areas of study might include nursing, liberal arts, social work, and music (Martin & Hummer, 1989).

Silence and secrecy of fraternity brotherhood can perpetuate and legitimize sexual violence and gang rapes. In these groups, discussing or reporting a fellow brother's deviant or illegal behaviors to anyone outside of the organization, including campus or law enforcement, is a rejection of their loyalty to the group and a grave action (Martin & Hummer, 1989; Schwartz & DeKeseredy, 1997). As a result, few crimes committed in fraternities are reported and subsequently punished. In addition to secrecy, sexual objectification of women is highly endorsed in many fraternities, with brothers encouraged to view women as subordinate objects with less intelligence, status and accomplishments compared to men (DeKeseredy & Schwartz, 1993; Schwartz & DeKeseredy, 1997).

Hypermasculinity

One of the characteristics related to sexual aggression is hypermasculinity (Mosher & Anderson, 1986; Mosher & Sirkin, 1984). This typically consists of three dimensions: callous sexual attitudes toward women, the perception that aggression is masculine, and the attitude that danger is exciting. Mosher and Sirkin (1984) have found that hypermasculinity tends to be positively correlated with both high-risk alcohol use and aggression, with sexually aggressive men scoring higher on masculinity indices (Mosher & Anderson, 1986). A study conducted by Mosher and Anderson (1986) indicated that men who scored higher on masculinity tended to report less feelings of disgust, contempt or guilt when asked to imagine themselves committing sexual assault. Hypermasculinity is also linked with other high-risk college male characteristics,

such as being involved in a fraternity or an all-male student-athlete team (Boeringer, 1999; Koss & Gaines, 1993; Sanday, 2007; Sawyer et al., 2002).

Hypermasculinity is associated with aggression and dominance. Those who score higher on hypermasculinity also tend to score lower on traits such as nurturance, understanding, and empathy – which might be considered feminine characteristics (Gold et al., 1992; Mosher & Sirkin, 1984). Not surprisingly then, hypermasculinity has been associated with sexual aggression (Gold et al., 1992; Mosher & Anderson, 1986). Hypermasculinity may also include things such as hostility toward women, authoritarianism and high acceptance of rape myths – all of which have been linked to sexually aggressive behaviors (Boeringer, 1999; Lonsway & Fitzgerald, 1995; Malamuth et al., 1991). Some suggest that the connection between hypermasculinity and increased likelihood in engaging in sexual aggression is rooted in the inability show or feel empathy towards a woman expressing distress to sexual aggression (Rice et al., 1994).

Empathy

Empathy can be defined in many ways, but the themes arising in the research include the ability to assume another person's point of view (Regan & Totten, 1975), and as an affective reaction experienced vicariously through the perceived emotional experience of another (Aderman & Berkowitz, 1970; Clore & Jeffery, 1972). People who experience high empathy also tend to be less likely to commit an aggressive or violent act. In 1972, Mehrabian and Epstein (1972) conducted a study in which male participants were instructed to deliver what they believed to be a real shock to another student. Students who scored high on emotional empathy were less likely to act aggressively through shocking the fellow student when compared with male participants who scored low on emotional empathy. Other studies have continued to show

a negative correlation between empathy and aggression (Eisenberg & Miller, 1987; Gold et al., 1992; Rice et al., 1994). Similar results were seen in studies linking empathy and sexual aggression, in which a higher level of empathy with survivors is correlated with a lower risk for perpetrating sexual violence. Men with no proclivity to commit rape have shown a higher level of empathy for survivors, while men who indicate some level of proclivity to rape have lower empathy toward survivors (Deitz, Blackwell, Daley, & Bentley, 1982; Osland, Fitch, & Willis, 1996).

Empathy interventions designed to increase men's empathy toward rape survivors had strikingly different results depending upon the gender of the survivor. In six studies that assessed the impact of a male-on-male rape scenario with a male survivor (Foubert, 2000; Foubert & Marriott, 1997; Foubert & McEwen, 1998; Gilbert, Heesacker, & Gannon, 1991; Lee, 1987; Schewe & O'Donohue, 1993), results showed a decline in men's likelihood of raping and/or their rape myth acceptance beliefs and attitudes. However, in other studies that assessed the impact of a male-on-female rape scenario with a female survivor, results showed an increase in the male participants' rape myth acceptance, or even increasing the male participants' likelihood of sexual aggression (Berg, Lonsway, & Fitzgerald, 1999; Ellis, O'Sullivan, & Sowards, 1992). The creators of *The Men's Program*, an intervention targeting high-risk men, used these results to develop a program incorporating a male-on-male rape scenario with a male survivor for the purpose of increasing empathy for female survivors through fostering a better understanding of what rape feels like (Foubert & Cowell, 2004). This study showed promising results and supports the concept that as men better understand rape trauma, and have more aversion to rape, men's empathy towards survivors increases and their likelihood of coming rape decreases (Schewe & O'Donohue, 1993).

Acceptance of Rape Myths

Rape myths are false beliefs about rape, rape victims and rape perpetrators. In a review of the literature on rape mythology, Lonsway and Fitzgerald (1994) surmised that rape myths are "attitudes and beliefs that are generally false but are widely and persistently held, and that serve to deny and justify male sexual aggression against women." Possibly best conceptualized as stereotypes, many incidents of sexual violence do not conform to stereotypical beliefs about rape. For instance, while research supports that most sexual violence is perpetrated by people we trust as friends, partners or acquaintances, myths still persist that rape and sexual assault are more likely to happen when women walk alone at night and be perpetrated by strangers. A common rape myth is that women routinely falsely report and lie about rape. The myth is seemingly confirmed in the public eye by isolated examples of false or misleading charges that are widely publicized in the media, such as with the infamous and now retracted 2014 *Rolling Stone* magazine report of a 2012 gang-rape on the University of Virginia campus (see *Rolling Stone*, "'A Rape on Campus': What Went Wrong?"(2015)). Just as the topic of rampant sexual violence on college campuses was exploding in the media, the story of the sexual violence reported by anonymous student "Jackie" began to unravel in a series of follow up stories exposing that the details of that night's gang-rape could not be confirmed and may have been unfounded. As a result, many nay-sayers on the topic of sexual violence used this situation as an example that the sexual violence problem in the U.S. is a manufactured publicity stunt, and that most sexual violence reports are false.

The function of rape myths is important because it serves to minimize the experiences of survivors and shifts blame away from perpetrators to place it on the victim. Rape myths can be used by the population, then, to justify dismissing any incident of sexual assault as not fitting the

public perception of 'real rape', thereby absolving any fear that rape could happen to anyone at any time (Burt, 1991; Lonsway & Fitzgerald, 1994). It has also been suggested that rape myths serve to preserve the "Just World" phenomenon, where good things only happen to good people and bad things only happen to bad people or people deserving of such a fate. Rape myth acceptance would then protect this belief by encouraging people to look for evidence that rape survivors somehow instigated and assault or did something that would cause them to deserve their misfortune. This would also serve to reaffirm the sense of security people who endorse rape myths might hold, as it would mean they would be immune to rape if they just avoided the behaviors of these victims (Lerner, 1980). An additional suggestion for the function of rape myths more broadly is for the purpose of oppression and control of women (Brownmiller, 2013; Burt, 1980).

Many studies over the years have examined a relationship between Rape Myth Acceptance (RMA) and the proclivity of rape. Considerable amounts of literature link RMA with intended and actual sexual aggression in both the general population and among college men (Bohner, Jarvis, Eyssel, & Siebler, 2005; Bohner et al., 1998; Bohner, Siebler, & Schmelcher, 2006; Burt, 1980; Koss et al., 1985; Malamuth, 1981; Muehlenhard & Linton, 1987). It is possible that the college men who endorse RMA and also perpetrate sexual aggression are not aware that their attitudes and behavior are deviant. A large-scale study by Koss and Oros (1982) using the Sexual Experiences Survey found that 23% of the college men who were surveyed admitting to committing acts that met the legal definition of rape. However, the majority of these men did not perceive they had done anything aggressive or illegal in committing the acts. In another study asking men to report information on their "worst dates" found that one-third of college men respondents of the study had perpetrated some kind of sexual

assault on these dates (Abbey, McAuslan, et al., 2001). However, other research indicates that college male perpetrators who endorse RMA do have some understanding that sexual violence is a punishable crime and is morally wrong. Consistently over several studies, about 35% of college men surveyed expressed some likelihood of raping if they could be assured that they would not be caught or punished (Berkowitz, 1992; Malamuth, 1981; Osland et al., 1996).

It is important to make the distinction that sexual aggression is less about sexuality and motivated more by aggression and hostile attitudes toward women (Koss & Gaines, 1993; Koss et al., 1987; Lisak & Roth, 1988, 1990; Malamuth, 1986; Muehlenhard & Linton, 1987; Muehlenhard et al., 1985). When this is understood, it becomes easier to link rape myth acceptance, hostility toward women, and acceptance of violence against women to an increased likelihood of coming sexually violent acts.

Chapter Summary

The problem of sexual violence on college campuses is wide ranging and multi-faceted. While there are many individual factors that may increase risk for sexual violence, there does not appear to be one single factor that causes sexual violence. As demonstrated in the literature review, many of the factors overlap with one another and certain conditions seem to exacerbate risk while others do not. With over five decades of research on the causes of sexual violence, development of prevention programs and the creation of more stringent policies, the overall prevalence rate of sexual violence on college campuses remains unchanged.

The results of this study may provide implications for colleges and universities to target prevention and intervention strategies for specific groups of college males who may be at high-risk for perpetrating sexual violence. Results may also inform prevention initiatives on college campuses to decrease the number of sexual violence crimes, may inform investigative strategies

of campus police or other authorities, and may assist in the development of intervention

strategies for students who have been found in violation of sexual violence campus polices or

laws.

CHAPTER 3

PRELIMINARY WORK

The overall study was conducted using a mixed-methods design, which is characterized by the use of both qualitative and quantitative methods within the same study (Creswell, 2013). The qualitative portion of this study is referred to the Preliminary work, while the quantitative portion of the study is the Cross Sectional Survey. Mixed-methods research, while following a similar process of traditional research methods, adds an additional layer of a theoretical lens or paradigm through which decisions are made.

Theoretical Framework

Theoretical frameworks serve as a guide to the researcher for choosing concepts to investigate, select research questions and for presenting research findings. This study used a pragmatist paradigmatic stance for both the theoretical and methodological frameworks.

Pragmatism

Pragmatism is a philosophy often used in mixed-methods research (Biesta, 2010; Johnson & Onwuegbuzie, 2004; Morgan, 2014). Pragmatism as a paradigm or philosophical system is different than defining concepts as "pragmatic." The meaning of certain actions and beliefs can be found in the consequences of those actions or beliefs (Morgan, 2014). While pragmatism has its roots in European philosophy and was heavily influenced by European beliefs, it emerged in North America (Biesta & Burbules, 2003; Greene, 2007). The early development of pragmatism originated from the school of thought of Charles Sanders Peirce (philosopher), William James (psychologist and philosopher), and John Dewey (philosopher, psychologist and educationalist)

(Biesta & Burbules, 2003). George Herbert Mead was also heavily influential as his work served as the basis for symbolic interactionism (Morgan, 2014).

The use of pragmatism for this research appears to be a good fit for several reasons. Pragmatism is epistemologically and methodologically flexible, making it a natural choice for mixed-methods (Greene, 2008), though Biesta stresses that inquirers make a conscious decision when choosing pragmatism to understand its paradigmatic characteristics (Biesta, 2010). The pragmatic stance has no ties to any particular methodology, but typically require an action-knowledge framework for guiding the inquiry (Greene & Hall, 2010). Pragmatists seek "actionable knowledge" and aim for their work to be of consequence, addressing a real world problem and looking for workable solutions to that problem (Greene & Hall, 2010).

One element of pragmatism that Morgan (2014) outlines is that *actions cannot be separated from the situations and contexts in which they occur.* It can also be true for sexual violence, as it is rarely, if ever, an event that occurs from one action in a single point in time. There are situations and contextual factors that increase or decrease the likelihood that sexual violence will occur. The consequence of sexual violence is strongly related to the meaning of the actions leading up to the sexual violence and the beliefs held that increase or decrease the risk of that sexual violence occurring. Morgan also summarizes that "no objective concept of truth can be assigned to any particular action, because the consequences of any act can depend upon the situation in which it occurs." Instead, "warranted beliefs" underlie pragmatism, as they are the product of repeated experiences with predictable outcomes. We learn from our actions by experiencing consequences, from which we then develop beliefs about the world we live in.

A second element of pragmatism as explained by Morgan (2014) is that *actions are linked to consequences in ways that are open to change*. As we live in and experience the world,

we learn that consequences may change depending upon situational factors, making our beliefs amendable. This research on sexual violence operates on the assumption that a variety of situational factors, personal and societal beliefs, and experienced consequences work together to influence the likelihood of a person committing sexual violence to increase or decrease. Following this assumption means that a perpetrator who has committed sexual violence has the potential for belief change, leading to a change in lived actions and behavior in the world. Belief change and therefore behavior change, is based upon a change in consequences as a result of actions.

The third element of pragmatism as a philosophy mentioned by Morgan (2014) is that *actions depend on worldviews that are socially shared sets of beliefs*. Pragmatists approach beliefs as part of a system rather than isolated things. The system or interconnection of those beliefs shapes a worldview which can translate into actions and behaviors of an individual. Each person experiences the world differently, leading to individualized worldviews even when a person shares an experience with another person. An individual's worldview is shaped by that experience interconnecting with all the other experiences before it, which cannot be identical to anyone else's experience in the world. Pragmatism is unique as a philosophy in that it does not focus on the nature of truth, but rather the nature of experiences or the outcomes of one's actions. Shared beliefs lead to experiences and outcomes rather than individuals serving as isolated sources of beliefs.

Pragmatism's epistemology has at times been considered an "anti-epistemology" because knowledge is not built from a dualism of mind and matter, unlike many other epistemologies (Biesta & Burbules, 2003). Epistemology, defined as the theory of nature and acquisition of knowledge, and the limits or validity of that knowledge, varies by philosophy (Creswell, 2013).

According to Dewey (1929), knowledge is a construction of a moving whole of interacting parts, and the organism in its active environment is always changing. Dewey also believed that knowledge lives in the muscles, not in the mind. Knowledge and action are interconnected in a way that they cannot separate in their existence or function. Transactions with the environment serve to maintain a type of balance and result in the development of what Dewey called habits, or ways in which we respond and transact with our environment (Biesta & Burbules, 2003).

The ontology of pragmatism or belief about how reality is constructed is often referred to Dewey's *transactional realism*. By this construction of reality, it is meant that the organism is already in touch with reality and cannot separate reality from the organism. Dewey's transactional realism tries to account for a "point of contact" between human and environment (Biesta & Burbules, 2003). When determining what is true, pragmatism has the approach that truth comes from experience (Johnson & Onwuegbuzie, 2004). Dewey referred to intellectualist fallacy as the concept of connecting what is known with what is reality. His belief was that just because something was not proven scientifically did not make it any less real. For instance, things considered real, if not scientifically proven, might include things such as preferences, points of view, feelings and even a favorite color (Biesta & Burbules, 2003; Dewey, 1929).

Finally, the axiology, or what is considered to have value in pragmatism, includes the concepts of democracy, progress and action, and equality (Johnson & Onwuegbuzie, 2004). A pragmatism stance means that the work should be practical and of consequence. Action is what creates truth, and knowledge and action are connected (Greene, 2007).

Public health and health education lean heavily toward quantitative research methods, but pragmatism also takes into account the importance of the modern science for the acquisition of knowledge (Biesta & Burbules, 2003). Mixed-methods research would allow for the collection

of both quantitative and qualitative data in a meaningful way and provide a deeper, richer understanding of the phenomenon. As pragmatism is "not committed to any one system of philosophy and reality," it allows for the mixing of methods to acquire the depth of knowledge being sought (Creswell, 2013). This inquiry is based upon the assumption that collecting data using diverse methods would best provide an understanding of this research.

Pragmatism is also consequence-oriented and seeks actionable knowledge (Creswell, 2013), making it a better fit for the purposes of this study when compared to other philosophical paradigms. The purpose of this study is to explore the phenomenon of sexual violence from the perspective of campus sexual violence by the college men who may or may not be at risk for committing it. There is more research now on risk factors for perpetrating sexual violence by college men, but it is still limited and many studies ignore the interplay of factors that increase this risk. Most research is survey-based, so the understanding of the phenomenon continues to be superficial. To improve the understanding of why college men are committing sexual violence, mixed-methods studies could be conducted to gain a better grasp of campus sexual violence. Additionally, understanding why some men do not commit sexual violence even when they have some of the risk factors is of incredible importance.

Rationale for Mixing Quantitative and Qualitative Data

This mixed-methods study used the qualitative data and analysis from the Preliminary Work to inform and develop part of the quantitative cross sectional survey. There are two purposes for mixing methods in this study. The first purpose is for complementarity. As the problem of sexual violence is multifaceted and includes an interplay of factors, not just a combination of them, a mixed-methods study serves to develop a more comprehensive social understanding of what is happening and why (Greene, 2007). The use of a variety of methods

taps into the different dimensions of the same phenomenon. In the current study, several measures provide data on high-risk attitudes, beliefs and behaviors, though it is not understood how those factors interact to create an actual sexual violence scenario. To better understand the phenomenon, sexual violence vignettes were developed from actual stories of college student survivor. These vignettes mirror how a typical sexual violence scenario in a college setting might unfold, which means they do not reflect media portrayals of sexual violence and have more "gray areas" or nuanced interactions. In the Preliminary Work, pilot testing participants read the vignettes alone and provided written feedback on their beliefs and attitudes regarding the sexual violence scenario. These data were used to understand why and how students came to the conclusions they did about the characters in the vignettes, which would be difficult to gather from a cross-sectional survey.   Although not included in the preliminary data results and analysis, discussion with the students indicated many factors helped them come to their conclusions, though often the students disagreed among each other about which factors mattered. When the characters in the vignettes used alcohol, some students felt very strongly that the female student should have made lower risk decisions about drinking which would have prevented her from being assaulted. Others disagreed with this position, and stated they believed alcohol should not have been a factor in deciding whether or not consent occurred. This inconsistency in responsibility attribution has come up often in sexual violence vignette research. Alcohol is often a dividing factor, with participants attributing less responsibility for sexual aggression by intoxicated college men and more responsibility to intoxicated female victims for the violence occurring between vignette characters (Norris & Cubbins, 1992; Norris & Kerr, 1993; Richardson & Campbell, 1982). In developing the cross-sectional survey vignette questions later, statements were included that reflected this strong belief about alcohol leading to

sexual violence and then asked survey participants to select their level of agreement with the statements.

The creation of questions for the cross-sectional survey led to the second purpose for mixing methods, which is development. Development refers to using the results of one method to inform the development of another method (Greene, 2007). In this study, the written data collected from the qualitative phase of the study was used to refine vignettes that were later used in the quantitative phase of the study. Developing a better understanding for the beliefs and attitudes of students regarding these typical sexual violence scenarios allowed for the selection of appropriate measures for the cross-sectional survey (for example, Rape Myth Acceptance index and measures regarding sex-related alcohol expectancies) as well as to create questions for the survey that were rooted in the written qualitative data results collected from students in-person.

Researcher Subjectivity Statement

I am a 34-year-old white woman from a middle-class neighborhood situated in the Midwestern United States. I earned my first Bachelor's Degree in Psychology from Indiana University in Bloomington, Indiana, the flagship public research institution for the state located within a liberal college town much different from the rest of the state. Upon graduating, I worked for 4 years in community mental health with clients who had severe mental illness. I later returned to Indiana University to earn a second Bachelor's Degree in Human Development / Family Science and Applied Health Science with an emphasis on Human Sexuality. During this time, I took on discussion leader and teaching assistant positions in sexuality courses. I also earned an internship at the Kinsey Institute of Sex, Gender & Reproduction. Following this, I moved to Athens, Georgia to earn a Masters of Education Degree in Professional Counseling at the University of Georgia. Upon graduation with a Master's Degree, I began work as a health

education professional at the University Health Center at the University of Georgia doing prevention education for college students on alcohol and other drug abuse. While my passion was with sexual health and relationships, my work in alcohol and other drug abuse prevention was incredibly valuable to learning about the intersection of alcohol and sexual violence on college campuses. At the time, I had no idea it would become the basis of my doctoral research.

During my work in alcohol and other drug health education, I was accepted into the UGA College of Public Health's Health Promotion and Behavior doctoral program in 2010. I worked my way slowly through full-time work at the University Health Center, and part-time work on my doctoral degree. My professional work informed my school work as much as my school work seemed to inform my professional work. Over time, my position at the University Health Center transitioned from an alcohol and drug focus to one that had a broader prevention and assessment focus for several health education content areas. Most importantly though, my position now included survivor advocacy for UGA students impacted by relationship and sexual violence. In the past three years of doing advocacy work, I have learned so much from the survivors who have come to me broken and certain that they will never recover. Slowly but surely I have watched these women (and a growing number of men) become stronger and empowered in ways they never thought could happen after the trauma they experienced. It has been empowering for me as well, as it drives my passion for both continued advocacy work and research into how to chip away at the public health issue of interpersonal violence that plagues college campuses.

Discussing my progression to where I am now in my professional and educational career, however, would not be complete if I did not mention my own history with violence. Perhaps my passion for social justice and empowerment for women impacted by relationship violence really

started with the breaking and rebuilding I have witnessed first-hand in my own mother. At the time, she did not have the support and protective resources that are accessible today for women physically, emotionally, and psychologically abused by their husbands. She did the best she could with what she had, raising two young children to become gentle and loving (over)achieving adults. Sometimes that meant working multiple jobs and coming home to take care of her young children when I know she probably had little left to give of herself at the end of the day. The struggle with abuse didn't end with a divorce. It continued for years after through custody battles and manipulation, verbal and psychological abuses that were just shy of being tangible enough to pursue legally.

My father passed away at the age of 43. I was 22 years old. He was a police officer in a small rural town, a pillar of the community and revered by many. During his life, our years of struggles with the abuse were minimized, if believed at all. He was handsome, charismatic, and so convincingly dedicated to his job for community justice and "doing the right thing." When he died, so many grieved his loss and spoke of what an amazing man he had been in their community. For me, his death was confusing because I hardly grieved at all – at least not in a way I would expect a daughter would grieve for the death of her father. When I finally came to terms with the loss, I felt as though I was free. I would not be where I am today had he not passed away, had I not felt I finally had permission to pursue a line of work without his judgment, had I not felt I had my own authority to move out of state and become my own person. During my graduate years of counseling education, the director of the agency at which I interned had once commented that "*sometimes a parent has to pass away for a child to finally have permission to grow up.*" He was referencing the death of a therapy client's parent at the time, but I will never forget how those words seemed to define so much of who and where I am now.

Perhaps the words that have been most important for me throughout my personal, professional and educational career, though, have actually come from my own mother. During a particularly difficult time in my life in my early 20s, she said to me "*One day you will look back on this time and not remember how you ever got through it, but the most important thing will be that you did, and that you are stronger.*" I say this so often to the survivors I work with as words of comfort and hope, and I always hope that one day those women will come to know how true those words are for themselves.

This statement is intended to explain my connections with the topic area and my personal subjectivities as they may interact with my work and research.

Approach

The flow of research activities for this study, presented in Figure 3.1, includes an initial phase called the Preliminary Work and a secondary phase referred to as the Quantitative Study. The Preliminary Work began with the development of vignettes from survivor stories and literature supporting the use of vignettes on sensitive topics such as sexual violence. Next, the vignettes were pilot tested in undergraduate classes to collect written qualitative responses to the vignettes. Following the collection of the written responses to all four vignettes, the qualitative written responses were entered into a spreadsheet for organization, after which responses were assigned codes that were later used for the development of themes in thematic analysis. The vignettes were intended to be refined with written feedback from participants, but all participants agreed that the scenarios were realistic for a university setting. Themes from the qualitative data shaped the development of survey questions to accompany the vignettes in a larger cross sectional survey in the second phase of the study.

Figure 3.1. Flow of Research Activities
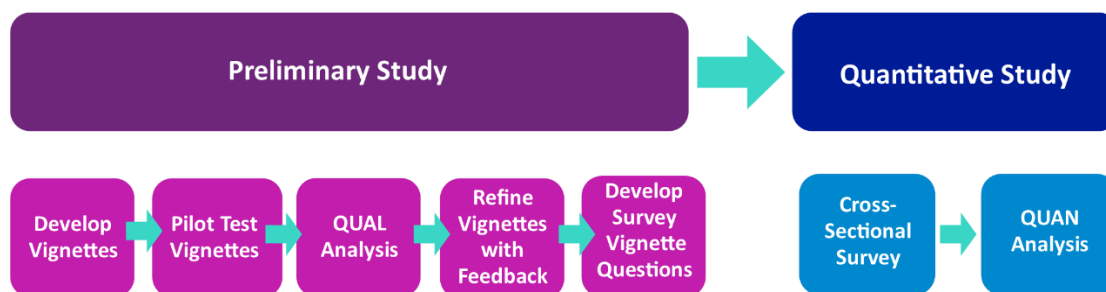
Specific Aims of Preliminary Work

The specific aims of the Preliminary Work are as follows:

Aim 1. Investigate the use of college sexual violence vignettes on a sample college student population of both men and women to determine variability in responses to vignettes

Aim 2. Examine appropriateness of vignettes in target population to incorporate into cross sectional survey phase of study through qualitative feedback from college student sample

Introduction to Preliminary Work

The Preliminary Work included initial vignette development, pilot testing of the vignettes, vignette refinement, and the development of vignette questions for the cross sectional study. Finch (1987) describes vignettes as "short stories about hypothetical characters in specified circumstances, to whose situation the interviewee is invited to respond." Another vignette researcher describes them as "stories about individuals, situations and structures which can make reference to important points in the study of perceptions, beliefs and attitudes" (Hughes, 1998).

Vignettes were chosen for this study for two reasons. First, vignettes are often used in research to further explore sensitive topics, such as ethical frameworks or moral codes, in a less personal and therefore less threatening manner (Barter & Renold, 1999). Second, it is difficult to measure actual participant sexual violence behavior that would occur during the course of data

collection for the study. Instead, some studies use vignettes as a type of proxy for behavior by measuring attitudes and beliefs of male participants who respond to interpersonal violence vignettes (Bernat, Calhoun, et al., 1999; Craig, 1990; Malamuth et al., 1991). While a connection cannot necessarily be drawn between participants' beliefs and attitudes and the behaviors in which they will engage, collecting data about previous behaviors in addition to attitudes and beliefs empirically correlated with sexual violence behaviors helps to make a stronger case that these variables may be correlated.

Qualitative Methodology

Vignettes have widely been used as a complementary data collection strategy as a way to generate additional data and explore phenomenon in a manner not easily accessed through quantitative data collection strategies alone (Barter & Renold, 1999; Hughes, 1998). Vignettes seem to be most useful when several principles are followed. First, stories should be plausible to participants, which has led some researchers to construct vignettes from real-life experiences. Barter and Reynold (1999) found that young people were more likely to participate in their vignette research when the participants learned that the vignettes were anonymized stories of real-life people with whom they might identify. Second, vignettes need to reflect 'mundane' occurrences that might be typical to the participants' lives or something that would be familiar (Finch, 1987; Hughes, 1998). Third, vignettes need to have enough information and context for participants to understand the situation depicted, but should also be vague enough to encourage participants to provide some detail into the factors that influence their decisions about the vignettes (Finch, 1987).

Development of the Vignettes

The vignettes for this study were developed through work done with over 70 survivors of sexual violence on the University of Georgia campus between the years of 2013 and 2016. While working as a survivor advocate in a campus setting during those years, I heard numerous student survivor accounts of sexual violence committed by fellow students. After some time, I started to notice that many of the stories shared common themes that were not represented in typical media portrayals of sexual violence. Most accounts of sexual violence involved alcohol use by both the survivor and perpetrator. The perpetrator was typically someone the survivor knew and trusted. To develop the vignettes, I started with a male perpetrator character and

female survivor character, as these were most representative of the population of survivors with whom I worked. I included an element of familiarity and trust between the two characters. Settings were selected from common locations of sexual violence acts, which were typically in the survivor's residence or the perpetrator's residence. Most sexual violence accounts included a party or bar setting earlier in the night, with the survivor and perpetrator moving to a more isolated setting later on that was familiar to one or both of the characters. There were also specific details that occurred across many of the accounts, such as the perpetrator driving or walking the survivor home which appeared at first to be an act of helping the survivor get home safely.

During the real-life experiences of the survivors, the sexual violence usually happened gradually, starting with some consensual sexual activity. At some point, the activity would become non-consensual, with the survivor indicating non-consent through verbal resistance (short of saying "no") or negotiations to wait, through physical disengagement during the act, sometimes using physical resistance and then resignation to hoping the violence would end sooner if they stopped fighting. Many survivors reported an inability to fight back or yell for help, a common neurobiological response to trauma, which led to self-blame for the violence. Some perpetrators washed away evidence from survivor clothing and bedding while the survivor slept, and many perpetrators texted or emailed the next day with kind messages that were confusing for survivors who were trying to come to terms with what had happened to them the night before. The next-day messages ranged from thanking the survivor for the evening before to trying to convince the survivor that what had happened was consensual. The vignettes that were developed included variations of the patterns in the sexual violence accounts shared with

me by college women survivors of sexual violence at the same university from which I collected this study data.

The vignettes were piloted in undergraduate level classes where students provided written feedback to determine believability of scenarios and language considerations. The stories were aggregated to create scenarios that appeared to reflect typical campus sexual violence situations. Many student survivors do not see their experiences as sexual violence at first, as those experiences do not reflect how media commonly represents sexual violence. Beliefs about what constitutes sexual violence was also common among the survivors at the University of Georgia, and became even more visible in interactions with other UGA students in classrooms when having health education discussions about sexual violence. While students may have learned through prevention education that most perpetrators of sexual violence are people they are likely to know and trust, they were still more likely to envision a real-life sexual violence scenario as one that includes a stranger, happens on a dark street, and involves extreme physical violence or a weapon. This belief, however, did not match with the overwhelming majority of sexual violence survivor stories of those coming forward for support. In talking with other advocates both on college campuses and from a rape crisis center in the community, it was clear that the survivors they encountered reported similar stories and scenarios that do not match the media representation of sexual violence.

The result of the inconsistency in beliefs about what sexual violence looks like and who commits it seemed to lend itself to non-survivor students being less likely to believe peer victims when there had been a report of sexual violence against someone who they knew to be a "good guy" or a student leader. More often than not, students were inclined to believe these situations were false reports. It is easy to see how this cycle of events – survivor coming forward, story not

matching media representation, disbelief that a seemingly upstanding peer could commit sexual violence, blaming the victim for the violence – could prevent a survivor from coming forward. Additionally, these beliefs and attitudes that perpetuate rape myth beliefs, victim blaming, and a culture of secrecy around sexual violence on college campuses, which in turn leads to more violence and a system that is unlikely to hold offenders accountable.

In developing the vignettes for this study, scenarios were created to represent most typical sexual violence situations that have been reported from survivors, yet would likely not be the type of scenario a typical student would have seen in the media. While all four of the vignettes were different, they did share common themes, such as rape myth acceptance, the use of alcohol by both the male and female characters, and a vague situation intended to bring about critical thinking along with strong attitudes and beliefs about whether or not sexual violence occurred. To ensure the vignettes met some of the primary principles guided by the research, the vignettes were piloted with undergraduate students in the classes mentioned earlier to ensure they were easily understood, reflected realistic scenarios but were vague enough to elicit strong discussion, and resulted in a variety of viewpoints from discussion participants (Barter & Renold, 1999; Finch, 1987; Hughes, 1998).

Vignettes and Class Feedback Questions

The four vignettes have some concepts in common. For instance, there is an element of trust or familiarity between all of the characters and the scenarios do include some consensual activity at the beginning which then turns non-consensual. None of the vignettes involve a clear "no" and most do not include physical resistance by the female character. Another concept was alcohol, although varied among the vignettes. In Vignette 1, there is no alcohol use, while in others there is a range of intoxication that can be assumed from the storyline details and physical

responses by the characters (lack of physical response to sex, blackout out or passing out).

Alcohol use is an important factor as people who hold strong rape myth acceptance beliefs are

likely to blame the victim for the assault because the victim was drinking. People are also less

likely to attribute responsibility to the offender if he had been drinking before or during the

assault (Abbey et al., 2014; Bernat et al., 1998; Norris & Cubbins, 1992; Norris & Kerr, 1993).

These concepts are common in real life sexual violence situations among college students,

although they do not reflect what many college students believe sexual violence looks like.

Vignette 1 Description

Vignette 1 describes a scenario between characters Sally (female) and David (male).

This vignette was intentionally developed to not include character alcohol use. Additionally,

these characters were familiar with one another and Sally appeared to trust David. This scenario

includes some rape myth acceptance beliefs, such as the Sally character consenting to some

sexual activity at the beginning which could be construed as leading on to the male character.

This scenario also includes some concepts that may not look like true rape to most college

students, including pressure and coercion, beliefs that if someone did not want to be raped that

they could have stopped it somehow, and that if someone did not want to have sex that they

would verbally say no.

Vignette 1

Sally and David first met in their freshman year at college. They were never very close,

but recently reconnected at a mutual friend's party. They are now in their third year of

undergraduate school. While at the party, neither Sally nor David consumed any alcohol which

is typical for them both. Sally and David flirted with one another at the party and at one point

Sally kissed David on the lips, which David reciprocated. Things continued to progress

throughout the night at the party and as everyone was leaving, David invited Sally to come see his new apartment. Sally agreed but had already made up her mind that she did not want to have sex with David. When she got to David's apartment, he continued to kiss and fondle her. At first, Sally was okay with this and reciprocated. As things became more heated, she was concerned that David may try to have sex with her. She tells David that she likes him but asks David if they can wait until another time to have sex when she feels ready. He seems upset and tells her that she's "led him on" all night, even agreeing to come back to his apartment, which he claims was obvious what would happen after that. Sally feels guilty and David continues to pressure her. Sally does not verbally agree but also does not say no. When David takes off her clothes, Sally seems anxious, but does not stop him. After David has sex with her using a condom, she is glad that it's over. She does not have a way to get home because David drove her to his place and does not want to drive her home now that it's so late. He asks her to stay over and she agrees, feeling like she doesn't have another option. She did not bring pajamas so she asks for a pair of David's boxers and a t-shirt to sleep in. While she is asleep on the couch, David washes her clothes and his sheets. The next morning, Sally can't find her clothes and asks David if he did something with them. He smiles and said that he thought he'd help her out by washing them since someone had spilled a drink on them at the party. Sally thinks this is odd, but thanks him. David takes her home and later that day Sally cries uncontrollably as she explains to a friend what happened. Her friend is concerned for her and encourages her to talk to the police. It is then that Sally realizes that her clothing has been cleaned, David used a condom during sex, and without any evidence of an assault the situation may be seen as her word against his.

Vignette 1 Testing Questions

Age _____   Gender _____

1. Do you think Sally was raped?   ☐ Yes   ☐ No   ☐ I'm not sure

    a. Please explain why you chose your response to the question above.

2. Do you think this scenario is likely to happen in a university setting?   ☐ Yes ☐ No

    a. Why or why not?

3. Optional: Please provide any additional comments you may have on this scenario.

Vignette 2 Description

Vignette 2 describes a scenario between Shoshana (female) and Toby (male). This vignette involves the use of alcohol by both the female and male characters. As with all of the other vignettes, these characters are familiar with one another, and it is made clear at the beginning of the vignette that Shoshanna has a romantic interest in Toby. Similar to Vignette 1, this scenario includes some rape myth acceptance beliefs, such as the Shoshanna character consenting to some sexual activity before the activity becomes non-consensual. Some may construe the initial consensual activity as the female character leading on the male character. The female character also does not give a verbal indication of non-consent, but rather conveys this through non-verbal communication and signs that she is too drunk to consent. This scenario includes concepts that may not look like true rape to most college students, including beliefs that if someone did not want to be raped that they could have stopped it somehow, and that if someone did not want to have sex that they would verbally say no.

Vignette 2

Shoshanna has had a crush on Toby for a year and when he invites her over to hang out with him and some friends, she is ecstatic. She is nervous and asks if she can bring her friend

Julie with her. Toby agrees and says he'll have lots of single guy friends there if Julie is "looking".
At Toby's house, everyone is playing beer pong in addition to having mixed drinks. The girls feel
okay with this because they mix their own drinks and decide against playing beer pong so they can
monitor how much they are drinking and protect their drinks. Later on in the night, Toby puts on
music and everyone is dancing. Shoshanna and Toby are dancing closely, kissing each other and
touching each other throughout the night. Julie checks on Shoshanna to see if she is okay with it.
Shoshanna verbally tells her that she is "definitely okay with it" and so excited that Toby likes her
too. Shoshanna gets progressively drunker throughout the night and does not want to leave when
Julie is ready to go home. Toby agrees to let Shoshanna stay on the couch and Shoshanna tells
Julie that she is happy to stay and promises she'll be fine. Julie leaves. Shoshanna and Toby go
up to his room to "mess around". Shoshanna verbally consents to all of this sexual activity, but
when it gets to the point of intercourse, Shoshanna says verbally that she wants to wait. After Toby
talks to her more about how turned on he is, Shoshanna reluctantly lets him continue but she does
not verbally agree and becomes distant. Toby just assumes she's really drunk and continues on.
He knows that if she says "no," he'll have to stop. Afterwards, Shoshanna seems upset and
anxious. Toby asks her if she is okay and she says "yes, I just want to go home". He lets her walk
home by herself since she lives only a few blocks from him. Shoshanna is very upset about what
happened and plans to tell Julie the next day to get some advice and support. Before Shoshanna
can tell Julie during breakfast, Toby texts Shoshanna to tell her he "had a great time last night"
and wondered if she might want to get together later in the week. Shoshanna is now not sure if
she should tell Julie because she thinks maybe she is overreacting. Shoshanna feels like she may
have led Toby on or not been clear with him about her wanting him to stop, so she feels like she

cannot blame him for not "reading her mind". Besides, he contacted her to say what a great time he had, so maybe he doesn't think anything wrong happened.

Vignette 2 Testing Questions

Age _____   Gender _____

1. Do you think Shoshanna was raped?   ☐ Yes   ☐ No   ☐ I'm not sure

   a. Please explain why you chose your response to the question above.

2. Do you think this scenario is likely to happen in a university setting?   ☐ Yes ☐ No

   b. Why or why not?

3. Optional: Please provide any additional comments you may have on this scenario.

Vignette 3 Description

Vignette 3 describes a scenario between Alice (female) and Ben (male). Alice and Ben have started dating and are familiar with one another, and there is an element of trust between them. They are both consuming alcohol in the scenario, and similar to the other vignettes there is consent to some initial sexual activity which later turns non-consensual. This concept was included because some people with higher rape myth acceptance beliefs may see this initial consent to leading the male character on, after which the withdrawing of consent by the female character may be seen as unfair. The scenario includes indications that Alice may be too drunk to consent to sexual activity, and at the point when she is coherent and sees what is about to happen, she tells Ben to put a condom on. This is an important concept because some readers may see this as her consenting to the sexual activity, while others indicate this is a protective behavior. In real life scenarios, survivors sometimes see this as their last line of defense to prevent further unwanted consequences (pregnancy or sexually transmitted infections) from an imminent assault. There is also some rape myth acceptance concepts in this vignette, including

beliefs that if the female character had not wanted to be raped, she could have done something to stop it from happening.

Vignette 3

Alice and Ben have been on one date and have both agreed to keep seeing each other. Alice thought their first date was sweet and that Ben was a "complete gentleman". She can't wait to see him again and when he invites her to his fraternity party on Friday, she is excited that he wants his friends to meet her so soon. She thinks this is a good sign that they will start a more serious relationship soon. When she gets to the party, Ben greets her and gets her some punch. He said it's what all the girls usually drink, and since she Alice has never been to a fraternity party, she wants to do what will help her fit in. Ben does not spend much time with her after that and tells her he has a lot of fraternity obligations during the party, but that he'll be back later on to check on her and spend more time with her. Alice understands and socializes with others at the party. Alice usually drinks beer or wine when she's out at a bar with friends, with an occasional mixed drink. She really likes the punch because it hardly tastes like alcohol at all. Almost all of the other women are drinking the punch and the men are drinking mostly from kegs. After just a couple drinks, she feels really relaxed and increasingly social. She is anxious for Ben to come back and when he does, she is feeling particularly amorous. She starts to kiss him and he reciprocates. After this, she can't remember much of the night. She does remember waking up at some point later on in Ben's room with her clothes off. She doesn't know how she got there or if she took her own clothing off. Ben is naked as well and about to have sex with her. She is stunned but quickly says, "Put a condom on!" before he proceeds. He obliges and then she blacks out again. The next morning, she wakes up and Ben is still asleep. She remembers bits and pieces of the night before and quickly leaves. She is still trying to process

what happened. Later, she thinks what occurred must have been a misunderstanding because she got more intoxicated than she intended to and Ben was probably just trying to take care of her by taking her to his room. She decides not to say anything to him about it because she really hopes he will still want to date her and possibly have a long term relationship. She is sure that he would not intentionally hurt her.

Vignette 3 Testing Questions

Age _____   Gender _____

1. Do you think Alice was raped?   ☐ Yes   ☐ No   ☐ I'm not sure

    a.   Please explain why you chose your response to the question above.

2. Do you think this scenario is likely to happen in a university setting?   ☐ Yes ☐ No

    b.   Why or why not?

3. Optional: Please provide any additional comments you may have on this scenario.

Vignette 4 Description

The scenario is Vignette 4 is between Jamie (female) and Dustin (male). These characters are familiar with one another, and there is an element of trust between them. Alcohol is consumed by both characters, but the scenario indicates that the female character has limited her alcohol consumption and therefore does not appear incapacitated in her decision making. The male character engages in what appears to be protective and trustworthy behavior by walking the female character home. As with the other scenarios, there is some initial consensual sexual activity between Jamie and Dustin, but this then turns non-consensual. Jamie does not verbally say no, but her nonverbal actions are clear that she is resisting. There are some rape myth acceptance concepts in this scenario with the initial consent to sexual activity (kissing), the female character allowing the male character to walk her home and then allowing him into her

room, which all could be construed by some as leading the male character on and therefore inviting him to have sex with her. While she initially resists physically to the assault, she later stops resisting, which some may believe indicates consent. This part of the scenario is related to the rape myth acceptance belief that if someone did not want to be raped, they could have done something to stop it.

Vignette 4

Jamie has a big exam coming up on Monday but her friends really want her to go out with them to celebrate a friend's birthday. Jamie also knows that Dustin will be out and she would really like to see him. She's only known him a couple of weeks since school started, but she senses he's a good guy and would love to get to know him better. On Friday night, Jamie meets up with Dustin and her other friends at a party and has a great time dancing and having a couple of drinks. Jamie has 3 drinks and her friends are ready to head to another party. Jamie decides to break off and head back to her residence hall so that she can get to bed soon and get up early to study for her exam. Her residence hall is within walking distance so she feels fine walking alone, but Dustin asks to accompany her to make sure she gets home safely. Jamie agrees to let him and appreciates how respectful and caring he is.

When Jamie and Dustin arrive back at Jamie's residence hall, Dustin asks to come in to see her room and hall. Dustin promises he won't stay long because he knows she needs to get to sleep so she can study for her exam early in the morning. Jamie agrees and walks him to her room. When they get into the room, Dustin closes the door and kisses Jamie for the first time. Jamie is flattered and kisses him back. She tries to pull away but Dustin holds her tight. She starts giggling because she thinks Dustin is just playing around. She stops laughing when he doesn't let go and starts to become forceful, taking off her clothes and leading her to the bed.

Jamie does not say a word or resist but she does not participate. Jamie is frozen and appears scared, but Dustin continues to remove all of her clothing without speaking to her. Dustin then has sex with Jamie while she lays on the bed and avoids eye contact with him. Afterwards, Dustin puts his clothes on and leaves the room. Jamie is confused and stunned about what just happened.

Jamie doesn't tell anyone about the night with Dustin at first. She studies for her exam on Saturday but has trouble concentrating. Finally on Sunday, a friend checks in with Jamie and asks if she's been doing okay because she has seemed distant for the past couple of days. Jamie tells her about Friday night, but says she's not sure what happened. The friend tells Jamie she thinks Dustin may have raped her. Jamie isn't sure if it was rape because she didn't resist him or yell for help, which is what she had always thought she would do if she were raped.

Vignette 4 Testing Questions

Age _____   Gender _____

1. Do you think Jamie was raped?   ☐ Yes   ☐ No   ☐ I'm not sure

    a. Please explain why you chose your response to the question above.

2. Do you think this scenario is likely to happen in a university setting?   ☐ Yes ☐ No

    b. Why or why not?

3. Optional: Please provide any additional comments you may have on this scenario.

Inviting Participants for Vignette Testing

The sample of students for the Preliminary Work were invited from undergraduate classes who agreed to participate in pilot testing the initial vignettes and provide some written feedback on them. Participant demographics are presented in Table 3.1. A total of 40 students participated, 13 in the First Year Odyssey Class and 27 from the Health and Wellness class.

Students indicated their age and gender. Aside from one student, all students identified as either male or female.

Table 3.1. Qualitative Phase Participants Recruitment Information

	Male	Female	Total	Average Age
Health Promotion & Behavior Class	3	23	27*	21.1 years
First Year Odyssey Class	5	8	13	18.2 years
Total	8	31	40*	

One participant did not indicate gender.

To assuage inherent researcher biases as a survivor advocate and with a personal history of interpersonal violence indicated in the researcher subjectivity statement, the vignettes were tested on both male and female undergraduate participants attending the same university as the survivors currently or previously attended. The vignettes were tested for language, variability in response and realism in a college setting, and allowed for additional feedback from the classroom participants for improving the vignettes.

Qualitative Data Collection and Management

Written data were collected from students enrolled in one of two undergraduate classes. This data collection strategy will be referred to as pilot testing of the vignettes. Memoing (Glesne, 2011) was used to track processes, researcher subjectivities and ideas during the development of vignettes, pilot testing and initial qualitative data analysis. These memos were used to inform the thematic coding process and survey question development in a later phase of the study.

For these pilot testing sessions, there were a total of four vignettes, and two of the four vignettes were presented in each class. Each student received the first vignette printed on a piece of colored paper, along with a half-sheet of associated questions on the same color paper to ensure the written responses were associated with the correct vignette. Prior to providing written

responses for each vignette separately, each student read the vignette alone and was instructed to underline any sentences or phrases in the vignettes that seemed concerning to them. After students had a chance to read the vignette and answer the questions, the written responses were collected. Response sheets were separated into corresponding color groups prior to data analysis.

Qualitative Data Analysis

Data from the written responses was coded and organized to examine variability in responses among participants and develop themes. Data were coded for the purpose of reducing the data into summarized concepts, which were then organized into themes. Data were first input into Microsoft Excel spreadsheets, with a separate worksheet per vignette. The separation of data by sheet allowed for analysis of written data per vignette, and then across vignettes. Per vignette, each response was coded with words or phrases to help capture the element of the response. Following this, the codes were reviewed across the vignette before moving on to coding the responses from the next vignette. After developing the codes for all four vignettes, the vignettes were reviewed again individually and then as a group. Codes were refined and collapsed to limit redundancy and improve consistency.

Finally, written data was analyzed using thematic analysis to identify important themes and statements of students in response to vignettes (Patton, 1980; Saldaña, 2015). Codes were better defined into themes that were representative of common responses across the four vignettes. Data analysis was inductive, meaning that patterns and themes were allowed to emerge from the data through analysis rather than being imposed. Data collection and analysis of qualitative data served two purposes. First, information collected from the class participants was intended to be used to update and improve the vignettes based upon responses and reactions

to the stories. These finalized vignettes were presented in the survey implemented during the quantitative portion of the study. The second purpose for the qualitative data analysis was to use themes developed from written data and language from participants themselves in their written data to develop Likert-style questions that then accompanied the vignettes in the survey during quantitative phase of the study.

During the analysis of the written qualitative responses from participants, themes began to emerge that aligned with some of the quantitative measure items that were later chosen for the cross-section survey. For instance, when students first indicated in writing whether they believed the character gave consent (*Do you think *character* was raped?*), they then provided a rationale to explain why they chose this response (*Please explain why you chose your response to the question above*). Written rationale responses indicated that alcohol expectancy beliefs and rape myth beliefs attributing less responsibility to the male sexual aggressors were common among participants even after they reported that they believed non-consensual sexual activity had taken place. This finding was an interesting and unanticipated inconsistency in participant beliefs.

Table 3.2 summarizes the nine themes generated from thematic analysis and provides select quotes to illustrate the theme. The theme appears first in the table and is intended to encompass an overall category of responses that were found to be common among many participants. The next column titled *Responses Meeting Criteria* explains the number of times a written response was coded with this theme for each vignette. The code V1: 23/27 means for Vignette 1, there were 23 participants out of 27 in the class who indicated a comment that fell into that specific theme. The memo explains the conditions of this theme, such as when a written

response fell within this theme or met criteria for the theme. The quotes provided illustrate

examples of written responses that met the theme conditions included in the memo.

Table 3.2. Preliminary Work Themes from Written Responses

Theme	Responses Meeting Criteria	Memo	Quote
No consent was given	V1: 23/27 V2: 22/27 V3: 5/13 V4: 13/13	When a student indicated via a checked box that the female character did not give consent, the student was asked to explain why they believed this via an open ended written response. Participants were able to reference indicators in the scenario that led them to make that decision. Students overwhelmingly indicated they did not believe the situations in the vignettes were consensual.	"Sally initially asked if they could wait, she was pressured, and she never gave her consent." "She did not coherently give consent or know what was going on."
Typical campus situation	V1: 15/27 V2: 20/27 V3: 12/13 V4: 5/13	Students were asked to indicate with a check box whether they believed "this situation could happen on campus". They then provided open ended responses to why they did or did not believe this. Students often referred to specific situations in their responses that seemed to show up consistently among other student responders. These included terms and phrases such as "drinking," "parties," "hook up," "fraternity," "trying to have sex with someone," and "going to someone's house after drinking".	"This is a classic situation where everyone is drinking the punch but no one knows what's in it so girls get very intoxicated and black out." "There are lots of parties and drinking in a college setting, and alcohol can influence these decisions or be used as an excuse."
Victim blame	V1: 6/27 V2:2/27 V3: 4/13 V4: 0/13	Students often used statements that qualified as blaming the victim for their actions that led to the assault. I included statements by students that indicated the survivor was somehow responsible for the assault occurring – ranging from going to someone's house, allowing him in her dorm, drinking too much, and not fighting back. Even for students who strongly believed that rape or sexual assault occurred, they often included a statement about how the violence could have been prevented by the survivor doing something different.	"Shoshanna didn't do anything to stop Toby. She did not say no." "Personally, I think this is a hard situation because Sally did not want to have sex, but also did not do much to fight it. However, David should not have made her feel guilty about "leading him on". He should not have forced her to have sex with him."
Consent beliefs and expectations	V1: 9/27 V2: 9/27 V3: 6/13 V4: 3/13	Participants provided specific details about what they believe qualifies as consent. For instance, many mentioned that it must be "sober" or that it should be "verbal". Some students also believed that consent was given because of something the survivor did or did not do, regardless of whether this is actually a	"Even though she didn't verbally say "no," she had non-verbal actions that said no."

		component of consent education or law. For instance, if a survivor woke in the middle of an assault and told the perpetrator to put on a condom, this was seen as consent rather than an action to minimize the negative impact of an imminently dangerous situation.	"She was blacked out, but before she blacked out she told him to use a condom. If she would have told him no or to stop then I think it would have been rape."
"Gray area"	V1: 5/27 V2: 4/27 V3: 3/13 V4: 0/13	Students mentioned in their open ended responses that the outcome of the situation may have come from a miscommunication or they believed that whether or not something was considered sexual violence was a "gray area". I also included "unintended consequence" here because this phrase was typically used to minimize sexual violence, therefore indicating that a behavior may not have been considered severe enough to be stated as sexual violence.	"It seems like a likely scenario because flirting is common, and miscommunication and guilt for that can lead to unintended things from happening." "Both the boy and girl were in the wrong. They were both drunk and did not know what they were doing. It is very hard to distinguish the true victim in this case or if it was just a major misunderstanding."
Coercion or pressure	V1: 13/27 V2: 9/27 V3: 2/13 V4: 7/13	Many students used the words "coerced" or "pressured" when describing why they believed sexual violence occurred. Students also indicated words or phrases that seemed to best fit under the category of coercion and pressure, such as "force," "guilt" and "uncomfortable" or indicating that the female character had no choice or autonomy regarding the sexual act.	"Although she did not resist physically or verbally consent, she felt like she had no choice and was uncomfortable with the whole situation." "David coerced her into having sex by making her feel guilty. Sally had already decided she didn't want to have sex, but she doesn't feel like she can stop it."
Typical male behavior	V1: 5/27 V2: 5/27 V3: 1/13 V4: 0/13	In attempting to explain why sexual violence happened or how likely a scenario might be for a college campus, many students mentioned stereotypical beliefs about how men and women interact, how men behave or their lack of control over their sexual behavior – particularly when drinking.	"Boys can be v. persuasive and girls sometimes just wanna make them happy even at their own expense." "Guys can put a lot of pressure on girls if they feel they have a chance to have sex."
Perpetrator protecting self	V1: 5/27 V2: 1/27 V3: 1/13 V4: 5/13	Some students noted behaviors that the male characters engaged in that the students perceived to be ways the male characters protected themselves, attempted to appear trustworthy to the female characters, or otherwise behaved in a manner that	"The fact that he washed everything makes me think he's done it before."

		might help them commit sexual violence without fear of consequence.	"The girl thinks the guy is just being nice when he wants to walk her home."
Alcohol expectancies	V1: 0/27 V2: 8/27 V3: 5/27 V4: 0/13	Students sometimes referenced personal or societal expectations and beliefs about how alcohol impacts sexual behavior or how alcohol seems to be linked with sexual violence. These beliefs were mentioned by students who were explaining why sexual violence on campus is common and in what context it is likely to occur.	"There are lots of parties and drinking in a college setting, and alcohol can influence these decisions or be used as an excuse." "When people are at parties, they are more likely to engage in sexual activity when drunk."

Originally, edits to the vignettes were to be completed following analysis of written data regarding how likely a situation in the scenario might occur in a campus setting. However, 100% of the participants from each class indicated that that for each of the four vignettes they thought the scenarios were realistic and were able to give feedback about why they thought this. Ultimately, the vignettes were kept the same as they were originally written and quantitative questions were developed based upon their original content.

Preliminary Work Results

Participants among the two classes differed in gender and average age. The dynamics between the two classes seemed very different, which could have been related to both gender and age differences. For instance, the class that had a higher number of younger participants as well as more men in the class seemed to do less critical analysis of the vignettes in their written responses. This class also seemed understand less the meaning of consent, and reported more "gray area" regarding what transpired between the characters of the vignettes. In contrast, the class that included more women and self-identified as older in age were more likely to have strong beliefs about non-consent rather than indicating something as a "gray area" or

misunderstanding. These students clearly articulated why they believed something was or was

not sexual violence.

Table 3.3 presents written results from pilot testing the vignettes in classrooms. The

average age of pilot testing participants for Vignette 1 and Vignette 2 was 21 years, and the class

was mostly female (85%). For Vignette 1, all but one participant believed that the Sally

character was raped, with 96% indicating *yes* and 4% indicating *no*, and 100% of the participants

believed that the scenario was realistic for a university setting. In Vignette 2, most people

believed that the Shoshanna character was raped, with 78% of the participants indicating *yes* and

3.7% indicating *no*. However, 18.5% of the class was not sure if the character was raped. Still,

100% of the class agreed that the scenario is likely to happen in a university setting.

The average age of participants for Vignette 3 and Vignette 4 was 18 years, and the class

was mostly female (61.5%). When responding to the Vignette 3 question *Do you think Alice was*

raped?, there was a range of responses, with 47% indicating *yes*, 31% indicating *no*, and 23%

not sure. The group was unanimous in indicating that the scenario is likely to happen in a

university setting (100%). With regard to Vignette 4, 100% of the participants agreed that the

Jamie character had been raped. Also, 100% indicated that they believed the scenario was

realistic for a university setting.

Table 3.3. Preliminary Work Vignette Question Results

Vignette 1	Yes	No	Not Sure
1. Do you think Sally was raped?	26 (96.3%)	1 (3.7%)	0 (0%)
2. Do you think this scenario is likely to happen in a university setting?	27 (100%)	0 (0%)	n/a

Class respondent demographics: Female – 23(85%), Male – 3 (11%), Average Age - 21.1 years

Vignette 2	Yes	No	Not Sure
1. Do you think Shoshanna was raped?	21 (77.8%)	1 (3.7%)	5 (18.5%)
2. Do you think this scenario is likely to happen in a university setting?	27 (100%)	0 (0%)	n/a

Class respondent demographics: Female – 23(85%), Male – 3 (11%), Average Age - 21.1 years

Vignette 3	Yes	No	Not Sure
1. Do you think Alice was raped?	6 (46.6%)	4 (30.7%)	3 (23%)
2. Do you think this scenario is likely to happen in a university setting?	13 (100%)	0 (0%)	n/a

Class respondent demographics: Female – 8(61.5%), Male – 5 (38.5%), Average Age – 18.2 years

Vignette 4	Yes	No	Not Sure
1. Do you think Jamie was raped?	13 (100%)	0 (0%)	0(0%)
2. Do you think this scenario is likely to happen in a university setting?	13 (100%)	0 (0%)	n/a

Class respondent demographics: Female – 8(61.5%), Male – 5 (38.5%), Average Age – 18.2 years

Preliminary Work Discussion

Specific Aims of Preliminary Work

Aim 1. Investigate the use of college sexual violence vignettes on a sample college student population of both men and women to determine variability in responses to vignettes

Aim 2. Examine appropriateness of vignettes in target population to incorporate into cross sectional survey phase of study through qualitative analysis

Preliminary Work aims were met by testing the sexual violence vignettes in two different classrooms. The results of this testing indicated that the vignettes elicited a range of responses from class participants and were found to meet language and believability expectations. Finch (1987) indicates that vignettes need to have enough information and context for participants to

understand the situation depicted, but should also be vague enough to encourage participants to provide some detail into the factors that influence their decisions about the vignettes. During the analysis of the written qualitative responses from participants, themes began to emerge that aligned with some of the quantitative measure items that were later chosen for the cross-section survey. The qualitative data from the vignettes informed the selection of survey measures as well as the development of questions associated with each vignette, which were also part of the survey.

<center>*Development of Cross Sectional Survey Vignette Questions*</center>

Similar to other studies using interpersonal violence vignettes and associated questions about attitudes and beliefs in quantitative survey data collection (Abbey & Harnish, 1995; Corcoran & Thomas, 1991), the purpose of this study was to explore the connection of participant personal beliefs, attitudes and behaviors and their responses to realistic sexual violence vignettes used a part of a cross-sectional survey. Vignette measures used in the survey were designed to measure sexual violence acceptance attitudes and beliefs.

To develop the Likert-style questions/statements for each vignette, qualitative data associated with each vignette was reviewed followed by a reflection upon unique and common themes among all of the vignettes. Measures were developed that included questions both unique to each vignette but also some questions that remained the same across all four vignettes. For example, for the Alice/Ben Vignette (Vignette #3), participants were asked to indicate their level of agreement with statements such as *Alice is probably responsible for what happened to herself because she drank too much* and *Alice consented to have sex with Ben because she told him to put a condom on*. These questions/statements are unique to this vignette's content, and these statements align with the beliefs of many student respondents in written response data for

this vignette. However, for each vignette's measure, some questions were included that were the same across all vignettes. Statements such as *This was probably a misunderstanding between (character) and (character)* as well as *If (character) did not want to have sex with (character), she would have stopped him* were included because these beliefs seemed to arise in qualitative written data. The measures developed for each vignette were later added to the cross sectional quantitative phase of data collection. Each vignette included a 5-point Likert-type response scale associated with six questions. See below for the questions associated with each vignette.

Vignette 1 Survey Questions

The scenario for Vignette 1 included no alcohol use by either Sally or David who were previous acquaintances from earlier in their time at college. The scenario also included a party after which David invites Sally to see his apartment. Some of the questions for this vignette include the concept of rape myth acceptance (leading on male character, belief that female character could have stopped or prevented the assault), no alcohol use, and gray area or misunderstanding. Respondents were asked to indicate their level of agreement with the following statements. Responses were scored on a 5-point Likert-type scale ranging from *strongly disagree* to *strongly agree*.

1. Sally consented to have sex with David by going to his apartment.

2. David was probably within his right to have sex with Sally because she led him on.

3. David had sex with Sally without her consent.

4. If Sally did not want to have sex with David, she would have stopped him.

5. Sally was upset and told her friend she was raped because she probably regretted having sex with David.

6. This was probably a misunderstanding between Sally and David.

Vignette 2 Survey Questions

This vignette involved the characters Shoshanna and Toby. Both characters were drinking at a house party, and the scenario indicates that Shoshanna has a crush on Toby. Concepts included in this vignette include alcohol use, gray area or misunderstanding, hypermasculinity (male character had a right to have sex), and rape myth acceptance (female character leading on male character, belief that female could have stopped the assault). Respondents were asked to indicate their level of agreement with the following statements. Responses were scored on a 5-point Likert-type scale ranging from *strongly disagree* to *strongly agree*.

1. Shoshanna consented to have sex with Toby by because she consented to messing around.

2. Toby was probably within his right to have sex with Shoshanna because she led him on.

3. Toby had sex with Shoshanna without her consent.

4. If Shoshanna did not want to have sex with Toby, she would have stopped him.

5. The reason Toby texted Shoshanna the next day was because he really likes her and had a good time the night before.

6. This was probably a misunderstanding between Shoshanna and Toby.

Vignette 3 Survey Questions

Vignette 3 included the characters Alice and Ben, who recently started dating and were both drinking during the fraternity party. Concepts covered by these questions include alcohol use, rape myth acceptance (consent to some activity may be considered leading the male character on, female character could have stopped the assault if she wanted to), hypermasculinity (Ben had the right to have sex with Alice), and the belief that Alice telling Ben to use a condom was

communicating consent. Respondents were asked to indicate their level of agreement with the following statements. Responses were scored on a 5-point Likert-type scale ranging from *strongly disagree* to *strongly agree*.

1. Alice is probably responsible for what happened to herself because she drank too much.

2. Ben was probably within his right to have sex with Alice because she kissed him first and later ended up in his room.

3. Ben had sex with Alice without her consent.

4. If Alice did not want to have sex with Ben, she would have stopped him.

5. Alice consented to have sex with Ben because she told him to put a condom on.

6. This was probably a misunderstanding between Alice and Ben.

Vignette 4 Survey Questions

The scenario in Vignette 4 involved characters Jamie and Dustin who were familiar with one another. Both were drinking alcohol, and when Jamie leaves to go home, Dustin walks her home and Jamie invites him to her room. Concepts in this vignette include alcohol use, trust of male character (male walks female home for safety), and rape myth acceptance (initial consent to sexual activity may be seen as leading on the male character, female could have stopped rape if she had wanted). Respondents were asked to indicate their level of agreement with the following statements. Responses were scored on a 5-point Likert-type scale ranging from *strongly disagree* to *strongly agree*.

1. The reason Dustin was walking Jamie home to make sure she got there safely.

2. Dustin was probably within his right to have sex with Jamie because she allowed him into her room and when he kissed her, she kissed him back.

3. Dustin had sex with Jamie without her consent.

4. If Jamie did not want to have sex with Dustin, she would have stopped him.

5. Jamie consented to have sex with Dustin because she did not say no or resist.

6. This was probably a misunderstanding between Jamie and Dustin.

CHAPTER 4

EVALUATION OF RELATIONSHIP BETWEEN SEXUAL VIOLENCE RISK FACTORS, SEXUAL VIOLENCE BEHAVIORS AND RESPONSES TO SEXUAL VIOLENCE VIGNETTES

This chapter describes methodology used for the quantitative portion of the study.

Methodology

This study used a variety of measures in addition to previously piloted vignettes and questions developed through the Preliminary Work. While there are individual factors, such as alcohol use or group membership, that are supported by the literature as contributing to higher risk for sexual violence perpetration, most researchers contend that sexual violence is determined by the convening of several factors together to create the highest risk for perpetrating sexual violence (Craig, 1990; Lisak & Miller, 2002; Lisak & Roth, 1988; Malamuth et al., 1991). For this reason, this study used a range of scales designed to measure several aspects that may influence sexual violence behavior.

Institutional Approval

Approval to distribute this survey was granted from the Institutional Review Board at the University of Georgia in March 2016.

Sample

Undergraduate college males were the population of interest for this cross-sectional survey study, the sample was randomly selected from the population of traditionally enrolled full-time male undergraduate students between the ages of 18-24 at a large Southeastern public

university. Students under the age of 18 were excluded as they would have needed parental

consent to participate. A sample of 3000 undergraduate males was requested from the

University's registrar's office and included only the email addresses of the students in the

sample. The information was shared with the researcher through secure file sharing (SendFiles).

The students in the sample were then invited through an email invitation sent to their school-

issued email address to request their participation in the study (see Appendix C). Additionally,

male participants were invited with an email sent to UGA's Greek Life Interfraternity Council

Members and traditional fraternity presidents with a request for disbursement to their members.

Another invitation email was sent to instructors of introductory health classes to disburse to

students enrolled in several sections of the course within the university's College of Public

Health.

Criteria for participation in the survey included that the students identify as a male, be

enrolled full-time as an undergraduate student at the University of Georgia main campus

(Athens), and identify as heterosexual.

Quantitative Data Collection and Management

Students who read the Informed Consent (Appendix B) and agreed to participation were

directed to a secure online survey using Qualtrics software that was not linked to their email or

any identifying information. The survey was estimated to take approximately 30-45 minutes to

complete and included a variety of measures and demographic questions. Following completion

of the survey, results were electronically stored and the participant's role in the study was

completed. Qualtrics data files were downloaded and stored in a password-protected file not

accessible to anyone aside from the researcher and the advising committee chair person.

Participants who took the survey were automatically entered into a drawing to win one of five

UGA Bookstore gift cards in the amount of $25 per card. Those who wished to be entered into the drawing without participating in the survey were given the option to send the researcher their contact information to be entered.

<div align="center">*Quantitative Measures*</div>

The survey questionnaire included several measures that were edited for length or appropriateness for this study. Information about each full measure is below. Data were collected using two nearly identical surveys (Survey 1 and Survey 2), with the only differences between surveys being the vignettes and associated vignette questions. Each survey contained two of the four vignettes, and the survey was distributed equally to each half of the sample. The internal reliability of each measure used in this study can be found in the Results section. The final cross sectional surveys used can be found in Appendix C.

Demographic Information

Demographic information was collected on participant age, race and ethnicity, sexual orientation, year in school, membership in organizations or athletics, and relationship status. This 6-item multiple choice measure appeared at the beginning of the survey. To create the group membership variable, individuals received a score of 1 for each organization they belonged to. Each group membership was used separately, so summed percentages of group memberships equal over 100% at times.

High-Risk Alcohol Use

This section of the survey measures high-risk alcohol use, which previous literature links to sexual violence (Abbey et al., 1998; Benson et al., 2007; Frintner & Rubinson, 1993). Eight multiple choice questions asked participants about their typical alcohol use during a 30-day period (2 questions), the number of drinks consumed on a typical night out (1 question), and

consequences experienced from alcohol use during that period (5 questions). Regarding alcohol behavior in the past 30 days, the items that were asked include *How often did you have a drink containing alcohol?*, *About how many days per week have you consumed alcohol?*, *On the days you consumed alcohol, how many drinks did you consume on average during those days?* Participants were also asked to indicate how often they had experienced one of the following consequences due to drinking in the past six months: *A blackout state or memory loss, Passing out, Getting sick or vomiting, Been in trouble with police, residence hall staff, or other college authorities,* and *Got into an argument or fight.* The response options for these alcohol consequence questions were (1) *never*, (2) *once*, (3) *twice*, (4) *3-5 times*, (5) *6+ times*. A drink of alcohol was defined by the standard measurements of 12 ounces of beer, 4 ounces of wine, and 1 ½ ounce of liquor. Responses to 30-day alcohol consumption questions were designed to indicate relative frequency of consuming alcohol on average over a span of time. The number of drinks reported for a typical night out provided some indication of typical level of intoxication when drinking.

For the data analysis, only the highest risk behavior questions were used (*Black out or memory loss, Passing out, Getting sick or vomiting, Been in trouble with police, residence hall staff or other college authorities, Got into an argument or fight*), for a total of 5 items. The other questions from the alcohol measure were not used in analysis because they were not as effective at determining high-risk alcohol use. A higher score indicates higher risk alcohol behaviors. For the remaining 5 items used in analysis, having experienced any of these as consequences from drinking was considered to be high-risk (Read, Kahler, Strong, & Colder, 2006) so the items were recoded as 0 for never experienced the consequence and 1 as having experienced it one time or more over the past 6 months. Scores were summed for total Alcohol Risk score.

Possible total score ranges for this measure were 0 to 5, with 0 being that someone did not experience any of the consequences and with 5 being that someone experienced all 5 of the consequences over the past 6 months due to drinking alcohol.

Rape Myth Acceptance

The Rape Myth Acceptance scale was used to measure the level of rape myth acceptance among participants. Rape myths are false beliefs about rape, rape victims and rape perpetrators. The Rape Myth Acceptance Scale (RMAS) (Burt, 1980) is the most widely used instrument to determine the degree to which subjects endorse false beliefs about rape victims and sexual violence. The RMAS is a 19-item questionnaire with a 7-point Likert-type scale ranging from *strongly agree* to *strongly disagree*. Internal consistency for the scale was established by Burt (1980) to be 0.88 when tested on a sample of 589 adults. Malamuth et al. (1991) reported an alpha coefficient of 0.81 when using the scale in a nationally-representative study of 2,652 college males.

This study used 17 items from the original 19-item measure to measure rape myth supportive attitudes and beliefs. Language was updated in the questions to reflect more current language around social interactions and sexual experiences. For instance, the original measure includes the item *If a girl engages in necking or petting and she lets things get out of hand, it is her own fault if her partner forces sex on her.* In this study, the question was reworded to say *If a girl initiates kissing or hooking up, she should not be surprised if a guy assumes she wants to have sex.* Participants were asked to read each item and indicate their level of agreement with each statement. Responses were selected from a 7-point Likert-type scale ranging from *strongly disagree* to *strongly agree*. Scores from this measure were summed, with the lowest possible score being 15 and the highest being 105. A higher score indicates higher rape myth acceptance.

Hypermasculinity

The Auburn Differential Masculinity Inventory was used to measure the level of hypermasculinity among participants. Hypermasculinity is comprised of three dimensions: callous sexual attitudes toward women, the perception that aggression is masculine, and the attitude that danger is exciting (Mosher & Anderson, 1986; Mosher & Sirkin, 1984). The Auburn Differential Masculinity Inventory (ADMI) was developed out of criticisms to existing measures such as the Hypermasculinity Inventory (HMI) and the Expanded Hypermasculinity Inventory (EHMI) (Burk, Burkhart, & Sikorski, 2004). The ADMI provides an updated measure that includes more appropriate language, phrasing and conceptual categories. It is a 60-item measure, and scale reliability is well within acceptable ranges. In two different Burk, Burkhart and Sikorski (2004) studies measuring the reliability of the scale, Cronbach alpha coefficients for the ADMI-60 were 0.83 for Study 1 and 0.85 for Study 2.

This study used a 15-item adapted version of the original scale to measure the construct of hypermasculinity among respondents. Participants were asked to read each statement that described a belief and then answer the item with how well it aligned with their personal beliefs. Responses were selected from a 5-point Likert-type scale which ranged in response options from *very much like me* to *not at all like me*. Summed scores ranged from a possible lowest score of 15 to a possible highest score of 75, with higher scores being indicative of higher risk beliefs.

Sex-Related Alcohol Expectancies

The Alcohol Expectancies Regarding Sex, Aggression, and Sexual Vulnerability Questionnaire (AESASVQ) (Abbey et al., 1999) is a questionnaire designed to measure alcohol expectancies in the domains thought to contribute to sexual assault: (1) aggression, (2) sexual affect, (3) sexual drive, and (4) vulnerability to sexual coercion. The questionnaire asks

respondents to evaluate their beliefs about the perceived effects of alcohol on the average female drinker, the average male drinker, and on themselves. Responses to each statement were rated on a 5-point Likert-type scale ranging from *not at all* to *very much*. The AESASVQ responses from participants scored low in relation to social desirability, and the questionnaire scored high on internal consistency reliability (Cronbach alphas ranging from 0.82 to 0.96) and had good discriminant validity.

This study separated questions between alcohol expectancy effects on other males (4 items), alcohol expectancy effects on females (6 items), and alcohol expectancy effects on self (4 items). As in the original survey, responses were scored on a 5-point Likert-type scale with response items ranging from *not at all* to *very much*. During analysis, items were recoded to represent a range from 0 (*not at all*) to 4 (*very much*) for each item. Summed scores for alcohol expectancy effects for males ranged from 0 to 16, with higher scores indicating higher risk beliefs. Summed scores for alcohol expectancy effects for females ranged from 0 to 24, with high scores indicating higher risk beliefs. Summed scores for alcohol expectancy effects for self ranged from 0 to 16, with higher scores indicating higher risk beliefs.

Sexual Experiences

This study used an adaptation of the Sexual Experiences Survey (Koss et al., 2007) to measure self-reported sexual violence behaviors. The original survey asks questions about personal victimization as well as perpetration behaviors. Questions intentionally avoid use of words such as *rape* and *assault*, but rather use language that represents those acts by specific description of the act. For instance, rather than asking a question of personal experience committing rape, the question is worded as *In the past year, how often have you done or tried to do the following: Put your penis into a woman's vagina without her consent?* Internal

consistency reliabilities for this measure have been reported between α = 0.70 and α = 0.89 (Koss et al., 2007; Koss & Oros, 1982; Koss et al., 1987).

This study used a 15-item version of the Sexual Experiences Survey and included only the portion asking questions about perpetrating sexually aggressive behaviors. The question response categories were simplified to ask only the number of times a respondent engaged in the behavior, as opposed to the original measure which asks about number of times engaged in behavior as well as by what means they engaged in the behavior. For instance, the question asking how often someone engaged in *fondling, kissing, rubbing up against the private areas of someone's body or removing clothes* without their consent also asks by what manner they achieved this, including *telling lies, threatening to end a relationship...* and *using force, for example holding them down with my body weight.* Survey responses were selected from a scale of frequency ranging from *never* to *6+ times*. Prior to analysis, one item was removed from the survey as it may or may not be an indication of assault and depended upon other factors. This item was *engaged in sexual activity with someone who was intoxicated.* During analysis, items were recoded for 0 to indicate that a respondent had never engaged in a behaviors and 1 to indicate that a respondent had engaged in the behaviors at least one time. The final measure was 14 items, with a summed score range of 0 to 14. Any score over 0 indicated the respondent engaged in at least one act of sexual violence over the past year.

Empathy

Level of empathy was measured using the Impersonal Reactivity Index (IRI), a 28-item inventory used to assess general empathy. Empathy is defined as an affective reaction experienced vicariously through the perceived emotional experience of another (Aderman & Berkowitz, 1970; Clore & Jeffery, 1972). Originally developed by Davis in 1980, the IRI is the

most commonly used scale used to measure empathy in studies of sexual violence (Davis, 1980). Cronbach alpha coefficients for the IRI subscales range from 0.71 to -0.77.

This survey used a 7-item version of the original measure. Respondents were asked to answer the question by indicating how similar the statements were to their own beliefs. Responses were selected from a 5-point Likert-type scale that ranged from *not at all like me* to *very much like me*. Some items were then reverse-scored to ensure that risk level associated with the responses matched the pattern in the other measures for clarity in data analysis. Summed scores ranged from 7 to 35, with a higher score on this measure indicating lower empathy and, therefore, higher risk for sexual violence attitudes, beliefs and behaviors.

Vignette Attitude and Belief Questions

The vignette questions were used to measure sexual violence acceptance attitudes and beliefs in response to the scenarios presented in the vignettes. The Likert-style vignette questions were developed from the Preliminary Work data collection and analysis. The scale measures attitudes and beliefs of respondents in response to the sexual violence vignettes. Each of the 6 questions was in the form of a statement, from which a participant indicated his agreement from a 5-point scale ranging from *strongly disagree* to *strongly agree*. One item in each vignette measure was reversed scored to match the pattern in the other measures for clarity of data analysis. Summed scores ranged from 6 to 30, with higher scores indicating high-risk responses to the vignette questions. Higher Vignette scores (sexual violence acceptance) indicate stronger support for sexual violence behaviors.

Reliability of Adapted Measures for this Study

Reliability analysis was conducted on the adapted scales and subscales used for this survey. All measures scored well on internal reliability. Internal reliability was measured using Cronbach's Alpha, which is the most widely used measure of reliability for scales.

Cronbach's alpha levels for Alcohol Use ($\alpha = 0.82$) showed good reliability despite not having been established as a formal measure prior to use. The Rape Myth Acceptance measure was heavily adapted for this survey, yet still was found to have very high reliability ($\alpha = 0.89$). The Hypermasculinity measure, adapted from the Auburn Differential Masculinity Inventory (ADMI), was shown to have good internal reliability as well ($\alpha = 0.83$). The Alcohol Expectancy measure, adapted from the Alcohol Expectancies Regarding Sex, Aggression, and Sexual Vulnerability (AESASVQ) also had good internal reliability ($\alpha = 0.84$).

The Sexual Experiences measure, or measure of sexual violence behaviors, reliability ($\alpha = 0.72$) indicated that participants did not answer as reliably as they did on all of the other scales, but this reliability level is still considered acceptable. This difference in internal reliability may be due to discomfort in answering questions about personal sexually aggressive behaviors. The final measure of the survey, Empathy, had good internal reliability ($\alpha = 0.83$). See Table 4.1. for reliability data for each of the scales.

Table 4.1. Internal Reliability Results for Characteristic Measures

Measure	Number of items	Cronbach's Alpha
Alcohol Use	4	0.822
Rape Myth Acceptance	15	0.889
Hypermasculinity	15	0.825
Alcohol Expectancy	14	0.842
Sexual Experiences (SV)	15	0.724
Empathy	7	0.834

Sexual violence acceptance (measured by vignette scales) measured attitudes and beliefs toward the vignette scenarios. Each vignette had six associated questions. Some items were common throughout all vignette measures *(*character* had sex with *character* without her consent; if *character* had not wanted to have sex with *character*, she would have stopped him; this was probably a misunderstanding between *character* and *character*)* while some differed due to varied concepts among the vignettes (alcohol vs. no alcohol use, actions or lack of actions for consent). Each set of vignette questions had high or acceptable internal reliability when analyzed following quantitative data collection. The internal reliability for Vignette 1 (Sally Vignette) was 0.82. The internal reliability for Vignette 2 (Shoshanna Vignette) was 0.83. The internal reliability for Vignette 3 (Alice Vignette) was 0.84. The internal reliability for Vignette 4 (Jamie Vignette) was 0.72. See Table 4.2. for internal reliability results for the vignette measures.

Table 4.2. Internal Reliability Results for Vignette Attitude and Belief Questions

Vignette Number	Vignette Characters	Number of Items	Cronbach's Alpha
1	Sally/David	6	0.827
2	Shoshanna/Toby	6	0.833
3	Alice/Ben	6	0.843
4	Jamie/Dustin	6	0.720

Quantitative Data Analysis

Following data collection, data were downloaded from Qualtrics software into a secure file. Data were cleaned and sorted using IBM SPSS Statistical Predictive Analytics Software (version 23.0), and then analyzed using a variety of methods. Data analysis was completed using a combination of SPSS and R software packages. Demographic data was analyzed with descriptive statistics using chi-square analysis. Responses to survey questions were analyzed

using statistical regression analysis to determine predicted relationships. Regression modeling

was also used to explore how groups of variables predicted an outcome, such as response to

vignettes and sexual violence behaviors.

CHAPTER 5

RESULTS

This chapter explains the statistical analyses and results of the quantitative data. The

analyses were based upon the aims and hypotheses for this study:

Aim 1. Examine male participant high-risk vignette question responses in relation to male

participants' involvement in university-affiliated groups such as fraternities and club sports and

with reported personal high-risk beliefs, attitudes and behaviors such as alcohol use, rape myth

acceptance, hypermasculinity, sex-related alcohol expectancies, and empathy

> **Hypothesis 1**: As male participant risk scores increase on alcohol use, rape myth
>
> acceptance, hypermasculinity, sex-related alcohol expectancies, and empathy, sexual
>
> violence acceptance (measured by vignette scales) will also increase.

> **Hypothesis 2:** Men who are members of a college group or organization, such as a
>
> fraternity, club sport or student organization, will score higher on sexual violence
>
> acceptance (measured by vignette scales).

Aim 2. Examine alcohol use, rape myth acceptance, hypermasculinity, sex-related alcohol

expectancies, and empathy of participants who report sexual violence behaviors

Hypothesis 3: As male participant risk scores on alcohol use, rape myth acceptance, hypermasculinity, sex-related alcohol expectancies, and empathy increase, the likelihood that they have engaged in at least one sexual violence behavior in the past year will also increase.

Hypothesis 4: Men who are members of a group or organization, such as a fraternity, club sport or student organization, will be more likely to commit sexual violence.

Aim 3. Examine whether sexual violence behaviors are linked with higher risk sexual violence acceptance (measured by vignette scales)

Hypothesis 5: As male participant scores for sexual violence acceptance (measured by vignette scales) increase, the likelihood that they have committed at least one sexual violence behavior in the past year will also increase.

There were four vignettes total, which were separated into two different surveys to ease the burden on survey participants. Survey 1 contained Vignette 1 (Sally) and Vignette 2 (Shoshanna), while Survey 2 included Vignette 3 (Alice) and Vignette 4 (Jamie).

Results are presented with surveys combined when the results do not include vignette response analyses. When the analyses did include sexual violence acceptance (measured by vignette scales), the results were separated into Survey 1 and Survey 2 as these samples differed

in which vignettes they received. The number of respondents for Survey 1 was 106 and for Survey 2 the number was 109, with a total number of combined respondents of 215.

Descriptive Statistics and Categorical Predictors

Table 5.1. presents the demographic characteristics of respondents. All participants were undergraduate men (N=215) between the ages of 18 and 24, with an average age of 20 years. The majority of participants were White (78.6%) or Asian/Pacific Islander (12.9%), with a small group identified as Black/African American (3.8%), or Hispanic/Latino (3.3%). The participants varied in their year in school, with first year students being the majority (30.7%). Most students identified their relationship status as *single* (50.0%) or *dating one person* (40.5%). A small number of participants identified as *dating multiple people* (0.5%) or *not dating, but engaging in sexual activity with others* (9.0%).

Regarding group membership, most participants identified as members of a registered student organization (43.3%), followed by membership in a club sport (30.2%), and membership of a fraternity (23.7%). A quarter of the sample reported that they had no affiliation with any of the listed groups (25%). Only one student-athlete responded to the survey, making up 0.5% of the sample. Fraternities and club sports may also be considered registered student organizations themselves, and members of fraternities and club sports may belong to additional registered student organizations. Therefore, the summed percentages of group memberships equal over 100%.

Table 5.1. Frequencies and Percentages of Sample (n=215)*

Demographic	*N*	%
Age		
18	10	4.7
19	72	33.5
20	51	23.7
21	51	23.7

22 or older	25	11.6
Race/Ethnicity		
White/Caucasian	165	76.7
Black/African American	8	3.7
Asian or Pacific Islander	27	12.6
Hispanic or Latino	7	3.3
Native American, Alaskan Native, or Native Hawaiian	0	0
Other	3	1.4
Sexual Orientation		
Heterosexual	206	95.8
Bisexual	3	1.4
Gay	1	.5
Other		
Year in School		
1st Year	66	30.7
2nd Year	54	25.1
3rd Year	53	24.7
4th Year	32	14.9
5th+ Year	5	2.3
Current Relationship Status		
Single	105	48.8
Dating one person	85	39.5
Dating multiple people	1	.5
Not dating, but engaging in sexual activity with others	19	8.8
Married	0	0
Other	0	0
Group Membership		
Fraternity	51	23.7
Club Sport	65	30.2
Student-Athlete	1	.5
Registered Student Organization	93	43.3
No affiliation with above listed groups	54	25.1

Approximately 5 participants chose not to disclose demographic data.

Missing Data

Some participants skipped questions, which was allowable during survey participation.

Since this led to missing observations, these participants were not included in analysis for

continuous variables. The data presented in the tables include only participants who provided

complete data for that measure. For instance, the mean, standard deviation and other statistics for the alcohol use measure do not include the 27 deleted observations because these participants did not complete all of the questions in this measure. For concerns about statistical power of surveys given missing data from respondents, see the power analysis at the end of this chapter.

<div align="center">Continuous Variables</div>

Each survey contained questions regarding personal demographic information, group membership status, alcohol use, rape myth acceptance, hypermasculinity, sexual violence, alcohol expectancies and empathy level. In addition, each survey contained two vignettes (out of four) and a 6-item measure associated with each vignette. For some analyses, results from the surveys are separated by Survey 1 and Survey 2 as each survey included different vignettes and cannot be compared directly on all constructs.

Tables 5.2 and 5.3 detail continuous variables of interest in Survey 1 and Survey 2, respectively. For the overall sample, the mean for alcohol risk score was 1.17 (SD=1.31). The mean for rape myth acceptance scores was 43.65 (SD=15.67). The mean score for hypermasculinity was 27.19 (SD=7.82). The mean score for alcohol expectancies for other males was 14.14 (SD=3.14). The mean score for alcohol expectancies for females was 22.54 (SD=4.48). The mean score for alcohol expectancies for self was 10.53 (SD=4.69). The mean score for empathy level was 15.13 (SD=4.98). The mean score for sexual violence was .57 (SD=1.26). For all variables, the higher the score, the higher the risk for attitude, belief, characteristic or behavior.

Table 5.2. Summary of Continuous Variables

Variable	Mean	SD	Median	Min	Max	n
Alcohol Risk	1.17	1.31	1.00	0.00	5.00	168
Rape Myth Acceptance	43.65	15.67	43.00	15.00	99.00	162

Hypermasculinity	27.19	7.82	26.00	15.00	75.00	163
Male Alcohol Expectancy	14.14	3.14	14.00	4.00	20.00	160
Female Alcohol Expectancy	22.54	4.48	23.00	6.00	30.00	160
Personal Alcohol Expectancy	10.53	4.69	11.00	4.00	20.00	159
Low Empathy	15.13	4.98	15.00	7.00	35.00	154
Sexual Violence	0.57	1.26	0.00	0.00	9.00	154

The summary of vignette continuous variables, or acceptance of sexual violence, is separated by surveys. Survey 1 vignette variables are presented in Table 5.3. and Survey 2 vignette variables are presented in Table 5.4. The mean score for Vignette 1 (Sally) was 15.84 (SD=3.62) and the mean score for Vignette 2 (Shoshanna) was 17.21 (SD=3.19). The mean score for Vignette 3 (Alice) was 15.92 (SD=3.53), and the mean score for Vignette 4 (Jamie) was 13.48 (SD=3.25).

Table 5.3. Summary of Vignette Variables (Acceptance of Sexual Violence) for Survey 1

Variable	Mean	SD	Median	Min	Max	N
Sally Vignette	15.84	3.62	16.00	9.00	25.00	89
Shoshanna Vignette	17.21	3.19	17.00	10.00	25.00	85

Table 5.4. Summary of Vignette Variables (Acceptance of Sexual Violence) for Survey 2

Variable	Mean	SD	Median	Min	Max	N
Alice Vignette	15.92	3.53	16.00	9.00	23.00	87
Jamie Vignette	13.48	3.25	13.00	6.00	26.00	80

Bivariate Correlations

Bivariate correlations were conducted between the continuous research variables to determine significant correlations between beliefs, attitudes, behaviors and responses to vignette questions.

The first correlation matrix includes the entire sample (n=215) and variables not including Vignette scores (sexual violence acceptance). This analysis is designed to explain what variables show a relationship and the direction of the relationship. This analysis is related to *Aim 2: Examine alcohol use, rape myth acceptance, hypermasculinity, sex-related alcohol expectancies, and empathy of participants who report sexual violence behaviors, Hypothesis 3: As male participant risk scores on alcohol use, rape myth acceptance, hypermasculinity, sex-related alcohol expectancies, and empathy increase, the likelihood that they have engaged in at least one sexual violence behavior in the past year will also increase* and *Hypothesis 4: Men who are members of a group or organization, such as a fraternity, club sport or student organization, will be more likely to commit sexual violence.*

The correlation analysis of the entire sample (n=215) presented in Table 5.5 shows that sexual violence is positively correlated with rape myth acceptance ($p=.021$), hypermasculinity ($p<.001$), alcohol expectancies for self ($p=.01$), and having low empathy ($p=.016$). Having committed sexual violence was negatively correlated with alcohol expectancies for females ($p=.01$) and with having no affiliation with the listed groups (fraternity, club sport, and registered student organization) ($p=.017$).

Table 5.5. Correlation Matrix for Entire Sample (n=215)

	1	2	3	4	5	6	7	8	9	10	11	12
1 Alcohol Risk	--											
2 Rape Myth Acceptance	.10	--										
3 Hypermasculinity	.13	.38**	--									
4 Male Alcohol Expectancy	.23**	.17*	.10	--								
5 Female Alcohol Expectancy	-.17*	-.20*	-.19*	.15	--							
6 Personal Alcohol Expectancy	.50**	.22**	.15	.56**	-.13	--						
7 Low Empathy	-.02	.49**	.35**	.03	-.21*	.14	--					
8 Committed Sexual Violence	.13	.19*	.38**	.08	-.21*	.21*	.20*	--				
9 Fraternity	.27**	.14	.20*	.19*	-.14	.33**	-.00	.16	--			
10 Club Sport	.18*	.07	.10	.05	-.08	.09	.04	.01	.04	--		
11 Reg Student Organization	.11	.01	.04	.13	.04	.03	-.08	.04	-.11	.08	--	
12 No Affiliation with Group	-.23**	-.02	-.14	-.18*	.06	-.20*	.02	-.20*	-.32**	-.38**	-.51**	--

** Correlation significant at the .01 level (2-tailed)

* Correlation significant at the .05 level (2-tailed)

Hypothesis 3 was partially supported by the correlation analysis because some variables, such as rape myth acceptance, hypermasculinity, personal alcohol expectancy, and low empathy are all significantly positively correlated with having committed sexual violence. Interestingly, another significant finding was that having committed sexual violence was negatively correlated with alcohol expectancy for females, which is the opposite of what was expected for this variable. Variables that were not significantly correlated with having committed sexual violence were alcohol risk, alcohol expectancy for other males, and being involved in a fraternity, a club sport, or a registered student organization.

Hypothesis 4 is not supported through this correlation analysis, which did not show any significant positive correlations between having committed sexual violence and being a member of a fraternity, club sport, or registered student organization. However, having no affiliation with a listed group (fraternity, club sport, or registered student organization) was significantly negatively correlated with having committed sexual violence. Men who are not members of one of the listed groups were less likely to commit sexual violence.

Vignettes were then included in the analysis so the matrices were separated between Survey 1 (n=106) and Survey 2 (n=109). This analysis was conducted to meet *Aim 1: Examine male participant high-risk vignette question responses in relation to male participants' involvement in university-affiliated groups such as fraternities and club sports and with reported personal high-risk beliefs, attitudes and behaviors such as alcohol use, rape myth acceptance, hypermasculinity, sex-related alcohol expectancies, and empathy* and *Hypothesis 1: As male participant risk scores increase on alcohol use, rape myth acceptance, hypermasculinity, sex-related alcohol expectancies, and empathy, their sexual violence acceptance (measured by vignette scales) will also increase.* Data from these analyses are presented in Tables 5.6 and 5.7.

In Survey 1, presented in Table 5.6., sexual violence behaviors were significantly positively correlated with rape myth acceptance (p=.012), personal alcohol expectancy (p=.038), and Sally sexual violence acceptance (measured by vignette scales) (p=.013). Sally sexual violence acceptance (measured by vignette scales) were positively correlated with rape myth acceptance (p<.001). Shoshanna sexual violence acceptance (measured by vignette scales) were positively correlated with rape myth acceptance (p<.001) and with Sally sexual violence acceptance (measured by vignette scales) (p<.001).

Table 5.6. Correlation Matrix for Survey 1 (Sally/Shoshanna Vignettes) (n=106)

	1	2	3	4	5	6	7	8	9	10
1 Alcohol Risk	--									
2 Rape Myth Acceptance	.37	--								
3 Hypermasculinity	.06	.35**	--							
4 Male Alcohol Expectancy	.32**	.24*	.14	--						
5 Female Alcohol Expectancy	-.19	-.16	-.17	.08	--					
6 Personal Alcohol Expectancy	.52**	.19	.11	.55**	-.07	--				
7 Low Empathy	-.08	.54**	.26*	.15	-.00	.15	--			
8 Sexual Violence	.13	.28*	.20	.09	-.18	.23*	.14	--		
9 Sally Vignette	.05	.77**	.17	.12	.01	.14	.43	.28*	--	
10 Shoshanna Vignette	-.03	.74**	.17	.19	-.14	.12	.45	.22	.73**	--

** Correlation significant at the .01 level (2-tailed)

* Correlation significant at the .05 level (2-tailed)

In Survey 2, presented in Table 5.7., sexual violence behaviors were positively correlated with hypermasculinity (p<.001) and low empathy (p=.025). Alice Sexual violence acceptance (measured by vignette scales) were positively correlated with rape myth acceptance (p<.001) hypermasculinity (p=.003), and low empathy (p=.006), but were negatively correlated with female alcohol expectancy (p=.005). Lastly, the Alice Sexual violence acceptance (measured by vignette scales) were positively correlated with the Jamie Sexual violence acceptance (measured by vignette scales) (p<.001) Jamie Sexual violence acceptance (measured by vignette scales)

were positively correlated with rape myth acceptance ($p<.001$) hypermasculinity ($p=.001$), empathy ($p<.001$) and sexual violence behaviors ($p=.028$). Jamie Sexual violence acceptance (measured by vignette scales) were negatively correlated with alcohol expectancies for women ($p=.003$).

Table 5.7. Correlation Matrix for Survey 2 (Alice/Jamie Vignettes) (n=109)

	1	2	3	4	5	6	7	8	9	10
1 Alcohol Risk	--									
2 Rape Myth Acceptance	.11	--								
3 Hypermasculinity	.21	.39**	--							
4 Male Alcohol Expectancy	.13	.10	.07	--						
5 Female Alcohol Expectancy	-.15	-.25*	-.19	.21	--					
6 Personal Alcohol Expectancy	.47**	.27	.22	.57**	-.19	--				
7 Empathy	.05	.38**	.48**	-.10	-.47**	.13	--			
8 Sexual Violence	.14	.06	.58**	.09	-.23	.18	.26*	--		
9 Alice Vignette	.12	.64**	.32**	.16	-.32**	.33**	.32**	.17	--	
10 Jamie Vignette	.16	.53**	.37**	.10	-.33**	.22	.42**	.26*	.53**	--

** Correlation significant at the .01 level (2-tailed)

* Correlation significant at the .05 level (2-tailed)

Hypothesis 1 was partially supported through the correlation analysis for Surveys 1 and 2. The only variable that was correlated with all four vignette sexual violence acceptance was rape myth acceptance. Vignette 1 (Sally), Vignette 2 (Shoshanna), Vignette 3 (Alice) and Vignette 4 (Jamie), were all positively correlated with rape myth acceptance. Vignette 3 (Alice) was also positively correlated with hypermasculinity and low empathy, and negatively correlated with female alcohol expectancy. Similar to Vignette 3, Vignette 4 (Jamie) was positively correlated with hypermasculinity and low empathy, and was negatively correlated with female alcohol expectancy. However, Vignette 4 (Jamie) was also positively correlated with sexual violence behaviors. No vignettes measuring sexual violence acceptance were significantly correlated with alcohol risk, male alcohol expectancy, or alcohol expectancies for self.

Sexual Violence Analysis

The sexual violence variable was analyzed on its own as well as how it relates to a variety of variables. This analysis relates to *Aim 2: Examine alcohol use, rape myth acceptance, hypermasculinity, sex-related alcohol expectancies, and empathy of participants who report sexual violence behaviors* and *Hypothesis 4: Men who are members of a group or organization, such as a fraternity, club sport or student organization, will be more likely to commit sexual violence.* It is important to note that any score greater than or equal to 1 on the Sexual Experiences measure indicates at least one act of violence (or repeated acts) within the past year. There were 23 respondents indicating previous violence in Survey 1, and 17 respondents indicating previous violence in Survey 2, for a total of 40 respondents engaging in sexually aggressive behavior at least once over the past year. Some respondents reported engaging in a variety of sexually aggressive behaviors and some reported they had done these multiple times. The total number of respondents across surveys indicating sexual aggression in the past year

represents 18.6% of the entire sample of 215 respondents. The 40 students engaging in at least

one sexual violence behavior over the past year had an average of 4.23 sexually violent acts per

SV reporting student, with a total of 169 acts total.

An analysis is provided in Table 5.8. of respondents committing sexual violence by group

membership, including fraternity membership, club sport membership, membership with a

registered student organization and no affiliation with any of the listed groups. Given that this

portion of the analysis was unrelated to vignette response, the data from Survey 1 and Survey 2

were combined into a single table below. It should be noted that the original survey

implemented for this study included the item *Engaged in sexual activity with someone who was*

intoxicated. Many respondents marked this as having engaged in this behavior. However, given

that intoxication level can mean a variety of things (i.e., one drink versus 5 drinks, a 90-lb female

versus a 150-lb female) and does not necessarily mean the sexual activity was non-consensual

(depending upon intoxication level), this item was removed from the index before analyzing the

data.

As presented in Table 5.8., those who had a history of committing at least one sexually

violent act within the past year were more likely to be involved in either a fraternity or have

some other affiliation with one of the listed groups of club sports, fraternity, or member of a

registered student organization. The least likely to have committed sexual violence were survey

participants who had no affiliation with any of the listed groups (12.5% of all participants

committing sexual violence, p=.012). Overall, participants having affiliation with some group

(club sport, fraternity, registered student organization) were also the most likely to commit

sexual violence (87.5% of all participants committing sexual violence, p=.012). The group

membership participants with the highest reports of committing sexual violence were members

of a fraternity (30% of all fraternity member participants, p=.016). While the sexual violence

reports of participants in club sports and registered student organizations appeared to be high

initially, the differences between participants in those groups who did commit violence versus

those who did not was not significant.

Table 5.8.: Chi-square Analysis of Participants' Sexual Violence History by Group Membership (n=40)

Group Membership	Sexual Violence History	No Sexual Violence History	*p*-value
Member of Club Sports			
Yes	37.5	28.9	.315
No	62.5	71.1	
Member of a Fraternity			
Yes	**30.0**	**13.2**	**.016**
No	**70.0**	**86.8**	
Member of a registered student organization			.031
Yes	55.0	45.6	
% No	45.0	54.4	
Affiliation with any above group			
Yes	**87.5**	**66.7**	**.012**
No affiliation	**12.5**	**33.3**	

Hypothesis 4 was supported through data analysis to show men who are members of a

fraternity or have any affiliation with any listed group (fraternity, club sport, registered student

organization) were more likely to commit sexual violence when compared to participants who

had no affiliation with any of the above groups.

Table 5.9. presents the specific sexual violence behaviors reported by those who

committed sexual violence. The majority of those committing sexual violence engaged in

fondling, kissing, rubbing up against someone's body or removing someone's clothes without

their consent (58%). Other behaviors that were most often perpetrated by men in this sample

were persuading someone to change their mind after saying no (42.5%), verbally pressuring

someone after they said no (32.5%), and giving someone alcohol for the purpose of having sex

(25%). No one reported using a weapon or threatening to use a weapon to get sex, which is in

line with the research about college male perpetrators.

Table 5.9. Descriptive Statistics Analysis of Sexually Violent Behaviors Reported (n=40)

Type of Behavior Without Consent	Frequency Reported	% Behavior of SV Reporters
Fondled, kissed, rubbed up against body, removed clothes	23	57.5%
Persuaded someone to change mind after they said no	17	42.5%
Verbally pressured after they said no	13	32.5%
Gave alcohol for purpose of having sex	10	25.0%
Fingers or other objects into vagina	9	22.5%
Oral sex	7	17.5%
Made promised about future that were untrue to have sex	7	17.5%
Penis into vagina	5	12.5%
Fingers or other objects into anus	3	7.5%
Penis into anus	3	7.5%
Used force, holding someone down, pinning arms	3	7.5%
Sexual activity with someone passed out	2	5.0%
Threatened to end relationship, tell lies to get sex	1	2.5%
Used or threatened to use a weapon to get sex	0	0%

The next analysis on individual respondents reporting sexual violence, presented in Table

5.10. was designed to meet *Aim 2: Examine alcohol use, rape myth acceptance,*

hypermasculinity, sex-related alcohol expectancies, and empathy of participants who report

sexual violence behaviors and *Hypothesis 3: As male participant risk scores on alcohol use, rape*

myth acceptance, hypermasculinity, sex-related alcohol expectancies, and empathy increase, the

likelihood that they have engaged in at least one sexual violence behavior in the past year will

also increase. Significant differences between the groups were found with alcohol risk, rape

myth acceptance score, hypermasculinity and alcohol expectancies for self.   The mean alcohol

risk (AR) score was 1.78 for students perpetrating sexual violence, while the mean AR for those

not committing sexual violence was .921 (*p*<.05) (possible range 0 to 5). The average rape myth

acceptance (RMA) score was 49.38 for students perpetrating sexual violence, which is higher

than the mean RMA for students not committing sexual violence at 41.75 (*p*<.05) (possible range

15 to 105). SV reporting students had an average hypermasculinity (HM) score of 31.68

compared to the mean HM of those not committing sexual violence, which was 25.74 (*p*<.001)

(possible range of 15 to 75). The only other significant difference of characteristics between

men committing sexual violence and those who did not was for alcohol expectancies for self, the

mean of which was 12.55 for those committing sexual violence and 9.72 for those who did not

(*p*<.001) (possible range of 0 to 16). Differences that were not significant between SV reporting

students and those who did not commit SV were for alcohol expectancies of other men (MA)

(possible range of 0 to 16), alcohol expectancies for females (FA) (possible range of 0 to 24),

and empathy scores (E) (possible range of 7 to 35).

**Table 5.10. Differences in Mean Scores of Those Who Committed Sexual Violence vs.
Those Who Did Not**

History of Sexual Violence	**Did not Commit Sexual Violence**	**Committed sexual Violence**	**p-value**
Alcohol Risk	**0.92**	**1.78**	***p* < .001**
Rape Myth Acceptance	**41.75**	**49.38**	**.009**
Hypermasculinity	**25.74**	**31.68**	***p* < .001**
Alcohol Expectancies for Men (NS)	13.96	14.77	.158
Alcohol Expectancies for Women (NS)	22.89	21.97	.266
Alcohol Expectancies for Self	**9.72**	**12.55**	**.001**
Empathy (NS)	14.61	16.28	.072

Analysis completed using independent between-groups t-test.

Hypothesis 3 was partially supported through the analysis, indicating that those who did commit sexual violence scored higher on average for alcohol risk, rape myth acceptance, hypermasculinity, and alcohol expectancies for sex when compared to those who did not commit sexual violence. However, there were no significant differences between those committing sexual violence and those who did not for the variables alcohol expectancies for other men, alcohol expectancies for women, and for empathy.

The next analysis will address *Aim 3: Explore whether high-risk sexual violence acceptance (measured by vignette scales) are linked with reports of previous sexual violence behaviors* and *Hypothesis 5: Men who score higher on sexual violence acceptance (measured by vignette scales) will have committed at least one sexual violence behavior in the past year.* As demonstrated in Table 5.11., Vignette scores (sexual violence acceptance) for students reporting sexual violence (SV) behaviors were higher overall when compared to non-SV reporting students, although not all differences were significant. Possible scores for each vignette range from 6 to 30. The mean differences between Vignette 3 (Alice) scores and Vignette 4 (Jamie) scores for SV reporting students and those not reporting sexual violence were significant. For Vignette 3 (Alice), SV reporting students indicated a mean score of 18.12, compared to a mean score of those not reporting SV at 15.21 ($p<.05$). For Vignette 4 (Jamie), SV reporting students indicated a mean score of 14.94, while those did not report SV scored a mean of 12.65 ($p<.05$). The mean differences between Vignette 1 (Sally) scores and Vignette 2 (Shoshanna) scores for SV reporting students and those not reporting sexual violence were not significant.

Table 5.11. Vignette scores (sexual violence acceptance) for Participants Who Committed SV and Did Not Commit SV

Vignette Score vs. SV	Did Not Commit SV	Committed SV
Sally Vignette Score (NS)	15.41	16.95

Shoshana Vignette Score (NS)	16.94	18.00
Alice Vignette Score*	**15.21**	**18.12**
Jamie Vignette Score*	**12.65**	**14.94**

, p<.05, NS= Not Significant

Hypothesis 5 was partially supported through the analysis. Both Vignette 3 (Alice) and Vignette 4 (Jamie) scores were significantly different between participants who committed sexual violence and those who did not. Those who had committed sexual violence had higher mean scores for the Alice and Jamie vignettes compared with those who did not commit sexual violence. There were no significant differences in Sally and Shoshanna mean scores between those who committed sexual violence and those who did not.

Regression Modeling

Regression modeling is used to predict which variables or groups of variables best predict an outcome. To understand how relationships between certain variables, or groups of variables, interact, linear regression models were constructed. Regression modeling was used here to predict which attitudes, beliefs and behaviors were most likely to predict higher vignette response scores. These analyses will address *Aim1: Examine male participant high-risk vignette question responses in relation to male participants' involvement in university-affiliated groups such as fraternities and club sports and with reported personal high-risk beliefs, attitudes and behaviors such as alcohol use, rape myth acceptance, hypermasculinity, sex-related alcohol expectancies, and empathy*, *Hypothesis 1: As male participant risk scores increase on alcohol use, rape myth acceptance, hypermasculinity, sex-related alcohol expectancies, and empathy, sexual violence acceptance (measured by vignette scales) will also increase,* and *Hypothesis 2: Men who are members of a college group or organization, such as a fraternity, club sport or*

student organization, will score higher on sexual violence acceptance (measured by vignette

scales).

Sally Vignette Modeling

The scenario for Vignette 1 (Sally) included no alcohol use by either Sally or David who were previous acquaintances from earlier in their time at college. The scenario also included a party after which David invites Sally to see his apartment. Some of the questions for this vignette include the concept of rape myth acceptance (leading on male character, belief that female character could have stopped or prevented the assault), no alcohol use, and gray area or misunderstanding.

Preliminary modeling using univariate analysis, presented in Table 5.12. shows that the only individual variables that were significant in predicting Sally Vignette scores (sexual violence acceptance) were Club Sport membership (Adj R^2 = .065, p = .009) , Rape Myth Acceptance (Adj R^2 = .593, p < .0001), Empathy level (Adj R^2 = .178, p < .0001), and Sexual Experiences (sexual aggression) (Adj R^2 = .066, p = .013). A modified version of R^2 known as Adjusted R^2 was used to adjust for the number of predictors included in the model. Males involved in a Club Sport were predicted to have a lower Sally Vignette score, meaning involvement in a Club Sport indicated a lower-risk response to the Sally Vignette questions. Males scoring higher on Rape Myth Acceptance or engaging in sexual violence behaviors as indicated in the Sexual Experiences survey were predicted to have higher Sally Vignette scores (sexual violence acceptance) . Additionally, males scoring lower on Empathy were predicted to also have higher Sally Vignette scores (sexual violence acceptance). These models show a strong relationship between the individual variable and Sally Vignette scores (sexual violence acceptance).

Table 5.12. Univariate Models for Sally Vignette Index (n=106)

Model	Predictor	$\hat{\beta}_0$	$\hat{\beta}_i$	*p*-value $\hat{\beta}_i$	R^2	Adjusted R^2
1	Fraternity	15.594	1.106	.231	.016	.005
2	**Club Sport**	**16.569**	**-2.085**	**.009**	**.076**	**.065**
3	Reg Stud Org	15.808	.084	.915	.000	.000
4	No Affiliation	15.818	.095	.914	.000	.000
5	Alcohol Risk	15.741	.151	.630	.003	.000
6	**Rape Myth Acceptance**	**8.456**	**.163**	**< .0001**	**.598**	**.593**
7	Hypermasculinity	13.672	-.076	.116	.031	.019
8	Male Alcohol Exp	14.405	.144	.261	.016	.003
9	Female Alcohol Exp	15.677	.008	.933	.000	.000
10	Personal Alcohol Exp	15.108	.108	.215	.019	.007
11	**Empathy**	**11.325**	**.286**	**< .0001**	**.188**	**.178**
12	**Sexual Violence**	**15.326**	**.852**	**.013**	**.078**	**.066**

To determine if groups of variables might best explain the Sally Vignette scores (sexual violence acceptance), Backward Selection Modeling was used along with a significance level of $\alpha = .10$. Results of the backward selection procedure are included in Table 5.13. Beginning with the entire model which included Fraternity membership, Club Sport membership, Registered Student Org membership, Alcohol Risk, Rape Myth Acceptance, Hypermasculinity, Male Alcohol Expectancies, Female Alcohol Expectancies, Personal Alcohol Expectancies, Empathy and Sexual Violence as predictors, variables were eliminated in the model starting with those with the highest *p*-values. Predictors were removed until the entire model shows significance. Model selection criteria included choosing the model with the lowest AIC (Akaike Information Criterion), which is a measure of relative quality of model, and using the Adjusted R^2 to give a more accurate strength of the model rather than R^2 alone due to the number of predictors used. The final model included Club Sport membership, Rape Myth Acceptance, and Female Alcohol Expectancy Beliefs.

Table 5.13. Sally Vignette: Backward Selection Model with Highest Significance

Predictor(s)	$\hat{\beta}_0$	$\hat{\beta}_i$	p-value $\hat{\beta}_i$	R^2	Adjusted R^2	AIC	n
Club Sport	7.307	-1.382	.013	0.653	.639	131.774	79
Rape Myth Acc.		.164	< .0001				
Female Alc Exp		.098	.0944				

Shoshanna Vignette Modeling

Vignette 2 involved the characters Shoshanna and Toby. Both characters were drinking at a house party, and the scenario indicates that Shoshanna has a crush on Toby. Concepts included in this vignette include alcohol use, gray area or misunderstanding, hypermasculinity (male character had a right to have sex), and rape myth acceptance (female character leading on male character, belief that female could have stopped the assault).

Preliminary modeling using univariate analysis, presented in Table 5.14, shows that the only variables that are significant in predicting Shoshanna Vignette scores (sexual violence acceptance) were Rape Myth Acceptance (Adj R^2 = .545, p < .0001) and Empathy level (Adj R^2 = .192, p < .0001). A modified version of R^2 known as Adjusted R^2 was used to adjust for the number of predictors included in the model. Males with higher Rape Myth Acceptance scores and lower Empathy scores are predicted to have higher-risk Shoshanna Vignette scores (sexual violence acceptance).

Table 5.14. Univariate Models for Shoshanna Vignette Index (n=106)

Model	Predictor	$\hat{\beta}_0$	$\hat{\beta}_i$	p-value $\hat{\beta}_i$	R^2	Adjusted R^2
1	Fraternity	17.000	.947	.257	.015	.004
2	Club Sport	17.691	-1.358	.061	.042	.030
3	Reg Stud Org	16.860	.854	.227	.018	.006
4	No Affiliation	17.468	-.946	.228	.017	.006
5	Alcohol Risk	17.309	-.082	.764	.001	.000

6	**Rape Myth Acceptance**	**10.882**	**.139**	**< .0001**	**.550**	**.545**
7	Hypermasculinity	15.318	.065	.127	.029	.017
8	Male Alcohol Exp	15.287	.192	.088	.036	.024
9	Female Alcohol Exp	18.788	-.101	.210	.020	.007
10	Personal Alcohol Exp	16.594	.085	.272	.015	.003
11	**Empathy**	**12.944**	**.262**	**< .0001**	**.203**	**.192**
12	Sexual Violence	16.872	.600	.051	.049	.037

Following preliminary modeling for the Shoshanna Vignette predictors, a backward selection procedure was used to find the best overall model fit, which is presented in Table 5.15. Beginning with the full model of predictor variables, variables with the highest p-values were eliminated. This was continued until all predictors in the model remained significant. Model selection criteria included choosing the model with the lowest AIC (Akaike Information Criterion), which is a measure of relative quality of model, and using the Adjusted R^2 to give a more accurate strength of the model rather than R^2 alone due to the number of predictors used. The final model included club sport membership, no affiliation to any group, rape myth acceptance, and alcohol risk behavior.

Table 5.15. Shoshanna Vignette: Backward Selection Model with Highest Significance

Predictor(s)	$\hat{\beta}_0$	$\hat{\beta}_i$	p-value $\hat{\beta}_i$	R^2	Adjusted R^2	AIC	n
Club Sport	12.393	-1.299	.023	.606	.586	124.449	81
No Affiliation		-1.616	.008				
Rape Myth Acc		.135	< .0001				
Alcohol Risk		-.369	.051				

Alice Vignette Modeling

Vignette 3 included the characters Alice and Ben, who recently started dating and were both drinking during the fraternity party. Concepts covered by these survey questions include alcohol use, rape myth acceptance (consent to some activity may be considered leading the male

character on, female character could have stopped the assault if she wanted to), hypermasculinity (Ben had the right to have sex with Alice), and the belief that Alice telling Ben to use a condom was communicating consent.

Preliminary regression analysis, presented in Table 5.16., indicated that the only variables that were significant in predicting Alice Vignette response were Fraternity membership (Adj R^2 = .076, p=.006), Club Sport membership (Adj R^2 = .051, p=.020), Rape Myth Acceptance (Adj R^2 = .398, p>.0011), Female Alcohol Expectancies (Adj R^2 = .088, p=.005), Personal Alcohol Expectancies (Adj R^2 = .096, p=.004), and Empathy (Adj R^2 = .088, p=.006). A modified version of R^2 known as Adjusted R^2 was used to adjust for the number of predictors included in the model. Males who were members of a fraternity or a club sport, who had higher rape myth acceptance scores, hypermasculinity, higher female or personal alcohol expectancies, or lower empathy levels were expected to have higher Alice scores. As with the Jamie Vignette, an interesting finding was that males with lower female alcohol expectancies were predicted to have higher Alice Vignette scores (sexual violence acceptance).

Table 5.16. Univariate Models for Alice Vignette Index (n=109)

Model	Predictor	$\hat{\beta}_0$	$\hat{\beta}_i$	p-value $\hat{\beta}_i$	R^2	Adjusted R^2
1	**Fraternity**	**15.391**	**2.553**	**.006**	**.087**	**.076**
2	**Club Sport**	**15.424**	**2.052**	**.020**	**.062**	**.051**
3	Reg Stud Org	15.756	.309	.686	.002	.000
4	No Affiliation	16.286	-1.327	.118	.029	.017
5	Alcohol Risk	15.561	.332	.267	.016	.003
6	**Rape Myth Acceptance**	**8.892**	**.168**	**< .0001**	**.405**	**.398**
7	**Hypermasculinity**	**11.216**	**.184**	**.003**	**.106**	**.095**
8	Male Alcohol Exp	13.912	.193	.163	.026	.013
9	**Female Alcohol Exp**	**20.328**	**-.262**	**.005**	**.100**	**.088**
10	**Personal Alcohol Exp**	**14.312**	**.256**	**.004**	**.109**	**.096**
11	**Empathy**	**12.025**	**.277**	**.006**	**.100**	**.088**

| 12 | Sexual Violence | 15.604 | .496 | .133 | .031 | .018 |

To develop best fitting models of groups of variables predicting Alice Vignette score, backward selection modeling was used, the results of which are presented in Table 5.17. Beginning with the full model of predictor variables, variables with the highest *p*-values were eliminated. This was continued until all predictors in the model remained significant. Model selection criteria included choosing the model with the lowest AIC (Akaike Information Criterion), which is a measure of relative quality of model, and using the Adjusted R^2 to give a more accurate strength of the model rather than R^2 alone due to the number of predictors used. The final model includes Rape Myth Acceptance and Female Alcohol Expectancy beliefs.

Table 5.17. Alice Vignette: Backward Selection Models with Highest Significance

Predictor(s)	$\hat{\beta}_0$	$\hat{\beta}_i$	*p*-value $\hat{\beta}_i$	R^2	Adjusted R^2	AIC	n
Rape Myth Acc	11.346	.163	< .0001	.432	.416	157.466	75
Female Alc Exp		-.135	.085				

Jamie Vignette Modeling

The scenario in Vignette 4 involved characters Jamie and Dustin who were familiar with one another. Both were drinking alcohol, and when Jamie leaves to go home, Dustin walks her home and Jamie invites him to her room. Concepts in this vignette include alcohol use, trust of male character (male walks female home for safety), and rape myth acceptance (initial consent to sexual activity may be seen as leading on the male character, female could have stopped rape if she had wanted).

Preliminary modeling for the Jamie Vignette variable, presented in Table 5.18., indicated that the only predictors that were significant were Fraternity Membership (Adj R^2 = .044, *p*=.034), Rape Myth Acceptance (Adj R^2 = .280, *p* >.001), Hypermasculinity (Adj R^2 = .124,

p>.001), Female Alcohol Expectancy (Adj R^2 = .100, *p* = .003), Empathy level (Adj R^2 = .165,

p>.001), and Sexual Violence behaviors (Adj R^2 = .053, *p*=.028). A modified version of R^2

known as Adjusted R^2 was used to adjust for the number of predictors included in the model.

Males who report being in a fraternity, having higher rape myth acceptance scores, identifying

with a hypermasculine ideology, having low empathy or previously engaging in sexual violence

behaviors within the past year were all factors that predicted a higher-risk Jamie Vignette score.

Interestingly, males with lower female alcohol expectancies (beliefs about alcohol's impact on

women) predict higher Jamie Vignette score.

Table 5.18. Univariate Models for Jamie Vignette Index (n=109)

Model	Predictor	$\hat{\beta}_0$	$\hat{\beta}_i$	*p*-value $\hat{\beta}_i$	R^2	Adjusted R^2
1	**Fraternity**	**13.121**	**2.022**	**.034**	**.056**	**.044**
2	Club Sport	13.217	1.033	.221	.019	.007
3	Reg Stud Org	13.684	-.399	.587	.004	.000
4	No Affiliation	13.807	-1.155	.152	.026	.014
5	Alcohol Risk	13.142	.280	.307	.013	.001
6	**Rape Myth Acceptance**	**7.974**	**.129**	**< .0001**	**.289**	**.280**
7	**Hypermasculinity**	**8.429**	**.194**	**.001**	**.135**	**.124**
8	Male Alcohol Exp	12.275	.112	.380	.010	.000
9	**Female Alcohol Exp**	**17.643**	**-.252**	**.003**	**.112**	**.100**
10	Personal Alcohol Exp	12.403	.161	.051	.051	.038
11	**Empathy**	**8.753**	**.327**	**.0002**	**.177**	**.165**
12	**Sexual Violence**	**12.881**	**.562**	**.028**	**.066**	**.053**

Backward selection modeling was used to choose a model with the best fit of variables

predicting Jamie Vignette scores (sexual violence acceptance), the results of which are presented

in Table 5.19. Beginning with the full model of predictor variables, variables with the highest *p*-

values were eliminated. This was continued until all predictors in the model remained

significant. Model selection criteria included choosing the model with the lowest AIC (Akaike

Information Criterion), which is a measure of relative quality of model, and using the Adjusted

R^2 to give a more accurate strength of the model rather than R^2 alone due to the number of

predictors used. The final model included Rape Myth Acceptance and Hypermasculinity.

Table 5.19. Jamie Vignette: Backward Selection Models with Highest Significance

Predictor(s)	$\hat{\beta}_0$	$\hat{\beta}_i$	p-value $\hat{\beta}_i$	R^2	Adjusted R^2	AIC	n
Rape Myth Acc.	6.252	.111	$< .0001$	.314	.295	159.249	77
Hypermasculinity		.096	.089				

Hypothesis 1 was partially supported through analysis, though results varied by vignette. Univariate model analysis indicated that participants who scored higher on rape myth acceptance, had low empathy, or committed an act of sexual violence were predicted to score higher on Vignette 1 (Sally) scores. Participants who scored high on rape myth acceptance and had low empathy were predicted to have higher Vignette 2 (Shoshanna) scores. Participants who scored higher on rape myth acceptance, hypermasculinity, alcohol expectancies for females, alcohol expectancies for self, and had low empathy were predicted to score higher on Vignette 3 (Alice). Participants who scored high on rape myth acceptance, hypermasculinity, alcohol expectancies for females, having low empathy, and having committed some act of sexual violence were predicted to have higher Vignette 4 (Jamie) scores.

Hypothesis 2 was partially supported as well but as with Hypothesis 1, results varied by vignette. Univariate model analysis shows that club sport participants were predicted to have higher Vignette 1 (Sally) scores, but there were no other significant predictors from group membership for this vignette. Vignette 2 (Shoshanna) scores had no significant group membership predictors. Fraternity members and Club Sport members were predicted to score

higher on Vignette 3 (Alice). Being a member of a fraternity was the only significant group membership predictor for high Vignette 4 (Jamie) scores.

Univariate analyses indicated single variables that predicted higher scores for each vignette. Backward selection modeling indicated groups of variables that predicted higher scores for each vignette. Interestingly, some variables that were not significant in predicting a vignette score on their own sometimes emerged as a predictor when part of a group of variables. This may mean that when the variable became part of a model, it may be accounting for some of the variance after the other significant variables in the model are included.

For Vignette 1 (Sally), the group of variables most likely to predict a high vignette score was a combination of being a member of a club sport, having high rape myth acceptance, and endorsing alcohol expectancy beliefs for females. For Vignette 2 (Shoshanna), the group of variables most likely to predict a high vignette score were being a member of a club sport, having no affiliation with a fraternity or registered student group, having high rape myth acceptance, and having a higher alcohol risk. The group of variables predicting higher Vignette 3 (Alice) scores includes having high rape myth acceptance and endorsing alcohol expectancies for females. Lastly, the group of variables predicting higher Vignette 4 (Jamie) scores includes having high rape myth acceptance as well as hypermasculinity scores.

Logistic Regression of Sexual Violence Behaviors

Sexual Violence Behaviors

Sexual violence behaviors were measured by the Sexual Experiences Survey, asking only questions about perpetrating sexually aggressive behaviors in the past year. Logistic regression was used to analyze the relationship between group membership, characteristic risk variables, Vignette scores (sexual violence acceptance), and sexual violence. This analysis addresses *Aim*

2: Examine alcohol use, rape myth acceptance, hypermasculinity, sex-related alcohol expectancies, and empathy of participants who report sexual violence behaviors, *Hypothesis 3: As male participant risk scores on alcohol use, rape myth acceptance, hypermasculinity, sex-related alcohol expectancies, and empathy increase, the likelihood that they have engaged in at least one sexual violence behavior in the past year will also increase,* and *Hypothesis 4: Men who are members of a group or organization, such as a fraternity, club sport or student organization, will be more likely to commit sexual violence.* Additionally, the analysis supports *Aim 3: Explore whether sexual violence behaviors are linked with higher risk sexual violence acceptance (measured by vignette scales)* and *Hypothesis 5: As male participant scores for sexual violence acceptance (measured by vignette scales) increase, the likelihood that they have committed at least one sexual violence behavior in the past year will also increase.* Analysis is presented in Tables 5.20. through 5.23.

Given that Vignette scores (sexual violence acceptance) are included in this analysis and the vignettes are divided between two surveys, the analysis will appear separately for Survey 1 and Survey 2. First, univariate regression models were created at the $\alpha = .05$ significance level to determine which individual variables were the most significant in predicting previous sexual violence behavior.

Survey 1

For Survey 1, this method indicated that the only predictors that were significant were Fraternity membership, Alcohol Risk, and Personal Alcohol Expectancies at the $\alpha = .05$ level. Interestingly, Rape Myth Acceptance, which was very significant in predicting Vignette scores (sexual violence acceptance), is not a meaningful predictor of previous sexual aggression behaviors in this data.

Table 5.20. Univariate Logistic Regression Models for Sexual Violence for Survey 1

Model	Predictor	$\hat{\beta}_0$	$\hat{\beta}_i$	*p*-value $\hat{\beta}_i$	AIC	n
1	**Fraternity**	**-1.163**	**1.163**	**.045**	**95.339**	**79**
2	Club Sport	-.999	.305	.553	98.951	79
3	Reg Stud Org	-.901	.025	.960	99.298	79
4	No Affiliation	-.719	-.728	.242	97.815	79
5	**Alcohol Risk**	**-1.403**	**.421**	**.037**	**94.808**	**79**
6	Rape Myth Acceptance	-2.036	.026	.080	94.716	77
7	Hypermasculinity	-2.474	.056	.078	95.671	79
8	Male Alcohol Exp	-2.034	.114	.161	97.227	79
9	Female Alcohol Exp	-.609	.017	.750	99.199	79
10	**Personal Alcohol Exp**	**-1.872**	**.138**	**.014**	**92.696**	**79**
11	Empathy	-1.828	.057	.195	93.766	76
12	Sally	-2.736	.115	.096	95.750	78
13	Shoshanna	-2.640	.101	.194	96.885	78

Now, using backwards selection procedure to choose a meaningful model of predictors for sexual violence, we start with all possible variables including Sally Vignette Index and Shoshanna Vignette Index, and begin removing variables that have the highest *p*-values. Below is the final model of significance using this procedure. Predicted probability of committing sexual violence was calculated using the following equation:

$$ln\left(\frac{p}{1-p}\right) = \beta_0 + \beta_1 \times X$$

In this model, *p* is the probability that an act of sexual violence is committed. The left side of the equation is the *In(*odds) of success, where odds of an event is defined as *P*(event of sexual violence occurs) divided by *P*(event of sexual violence does not occur). Assuming *X* is a continuous variable, and β_0 represents the *In(*odds) of success when *X*=0. β_1 represents the

change *In(odds)* for each unit increase of *X*. For categorical predictor variables, β_0 represents the

expected *In*(odds ratio) under the baseline (*X*=0) condition where event does not occur, while β_0+

β_1 represents the expected *In*(odds ratio) when the event of sexual violence occurs (*X*=1).

Because *In(odds)* does not lend itself to interpretability, predicted probability of success

can also be calculated using the equation below:

$$\hat{p} = \frac{e^{\beta_0 + \beta_1 \times X}}{1 + e^{\beta_0 + \beta_1 \times X}}$$

Logistic regression models may have multiple *X*s which can be a mix of categorical and

continuous variables. Using this model, if a student has an alcohol and hypermasculinity score of

10, his predicted probability of committing sexual violence is 87.2%.

Table 5.21. Survey 1: Backward Selection Logistic Regression Models for Sexual Violence

Predictor(s)	$\hat{\beta}_0$	$\hat{\beta}_i$	*p*-value $\hat{\beta}_i$	AIC	n
Alcohol Risk	-3.044	.439	.035	93.023	79
Hypermasculinity		.057	.067		

Survey 2

For Survey 2, this method indicated that the only predictors that were significant at the α

= .05 level were No Affiliation to any group, Alcohol Risk, Hypermasculinity, Personal Alcohol

Expectancies, Jamie Vignette, and Alice Vignette.

Table 5.22. Univariate Logistic Regression Models for Sexual Violence for Survey 2

Model	Predictor	$\hat{\beta}_0$	$\hat{\beta}_i$	*p*-value $\hat{\beta}_i$	AIC	n
1	Fraternity	-1.367	.807	.249	83.023	75
2	Club Sport	-1.363	.447	.448	83.721	75
3	Reg Stud Org	-1.792	.945	.112	81.577	75

4	**No Affiliation**	**-.838**	**-2.206**	**.039**	**77.056**	**75**
5	**Alcohol Risk**	**-2.057**	**.572**	**.005**	**75.828**	**75**
6	Rape Myth Acceptance	-3.037	.040	.071	77.349	73
7	**Hypermasculinity**	**-6.05**	**.174**	**.002**	**67.619**	**74**
8	Male Alcohol Exp	-1.941	.066	.473	83.765	75
9	Female Alcohol Exp	.125	-.082	.217	82.694	75
10	**Personal Alcohol Exp**	**-2.161**	**.133**	**.043**	**79.317**	**74**
11	Empathy	-2.224	.070	.305	82.698	74
12	**Jamie**	**-5.450**	**.304**	**.008**	**72.459**	**73**
13	**Alice**	**-5.342**	**.243**	**.007**	**72.798**	**74**

Using backwards selection procedure to choose a meaningful model of predictors for sexual violence, we start with all possible variables including Jamie Vignette Index and Alice Vignette Index, and begin removing variables that have the highest *p*-values. The final model of significance using this procedure included membership in a registered student organization, alcohol risk behavior, hypermasculinity and high Jamie Vignette score. In the model, if a student is a member of a registered student organization and has alcohol risk, hypermasculinity and Jamie vignette index scores all equal to 10, his predicted probability of sexual violence is 51.9%.

Table 5.23. Survey 2: Backward Selection Logistic Regression Model for Sexual Violence

Predictor(s)	$\hat{\beta}_0$	$\hat{\beta}_i$	*p*-value $\hat{\beta}_i$	AIC	n
Registered Stu Org	-11.031	1.688	.048	60.894	72
Alcohol Risk		.511	.038		
Hypermasculinity		.143	.041		
Jamie Vignette		.288	.067		

Hypothesis 3, regarding attitudes, beliefs and characteristics predicting sexual violence, was partially supported by the analysis. Univariate logistic regression modeling indicated which attitude, belief and characteristic variables individually predicted sexual violence. For Survey 1, those variables were alcohol risk and endorsing alcohol expectancies for self.

Univariate logistic regression modeling for Survey 2 indicated that alcohol risk, hypermasculinity, and alcohol expectancies for self were individually able to predict sexual violence.

Hypothesis 4, regarding group membership predicting sexual violence*,* was partially supported by the analysis. For Survey 1, being a member of a fraternity was the only individual predictor of significance from the univariate logistic regression modeling. For Survey 2, having no affiliation with a fraternity, club sport or other registered student organization was the only individual predictor of sexual violence from the univariate logistic regression modeling.

Hypothesis 5, regarding sexual violence acceptance (measured by vignette scales) predicting sexual violence, was partially supported by the analysis. Having a high Vignette 3 (Alice) score, and having a high Vignette 4 (Jamie) score were individual predictors of sexual violence. Neither Vignette 1 (Sally) nor Vignette 2 (Shoshanna) predicted sexual violence behaviors.

Using backward selection modeling to determine which grouping of attitude, belief and characteristic variables best predicted sexual violence for Survey 1, the most significant group included alcohol risk and hypermasculinity. While hypermasculinity alone did not predict sexual violence, it may be accounting for some of the variance in the model once alcohol risk was included as significant. For Survey 2, the group of variables most likely to predict sexual violence were being a member of a registered student organization, having alcohol risk, scoring higher on hypermasculinity, and scoring higher on Vignette 4 (Jamie). All of these variables were individually significant predictors except for membership with a registered student organization. While this variable alone was not a strong predictor of sexual violence, it's

possible that it is accounting for some of the variance in the model once the other significant predictors were included.

Power Analysis

To assess whether the results of the linear models were significant, a power analysis was conducted for each model and is presented in Table 5.24. The power of a test or model is defined as the probability of rejecting the null hypothesis, given that it is false. For the models included in the results of this study, the power represents the probability that the coefficients are significant given that there is likely some non-zero relationship between the response and the predictors. Ideally, power should be at least 80%. Assuming a moderate effect size of 0.15, power was calculated for the regression models for vignette and sexual violence indices, given that these models were based upon a smaller sample in Survey 1 and Survey 2. The power for all models was larger than .70, and all models except for the Survey 1 Shoshanna Vignette model and Survey 2 Sexual Violence model had power greater than .80. This suggests that had there been fewer missing values or a larger sample size, the models for Survey 1 Shoshanna Vignette and Survey 2 Sexual Violence model may have been more powerful.

Table 5.24. Power Analysis Results for Survey 1 and Survey 2 Models

Model	Power Calculation
Survey 1 Sally Vignette	.813
Survey 1 Shoshanna Vignette	.778
Survey 2 Alice Vignette	.845
Survey 2 Jamie Vignette	.856
Survey 1 Sexual Violence	.865
Survey 2 Sexual Violence	.719

CHAPTER 6

DISCUSSION

The purpose of this study was to provide updated evidence that sexual violence among college students is related to attitudes, beliefs and characteristics of some college men. This study also proposed to link high-risk attitudes, beliefs and characteristics with responses to sexual violence vignettes as well as reports of engaging in sexual violence within the past year.

The major findings from this study were as follows:

Aim 1. Examine male participant high-risk vignette question responses in relation to male participants' involvement in university-affiliated groups such as fraternities and club sports and with reported personal high-risk beliefs, attitudes and behaviors such as alcohol use, rape myth acceptance, hypermasculinity, sex-related alcohol expectancies, and empathy

Rape myth acceptance was the only variable consistently associated with high-risk sexual violence acceptance (measured by vignette scales). Other high-risk beliefs and attitudes were positively associated with some vignettes and not others, such as hypermasculinity and low empathy. Alcohol expectancies for other males, for females and for self were not consistent across the study. Only one vignette was correlated with sexual violence behaviors. Correlations indicated only a relation between variables but did not serve to predict any other variables. There was not consistency in particular group memberships predicting Vignette scores (sexual violence acceptance), although specific group memberships did predict high-risk responses on specific vignettes. Club sport affiliation predicted Vignette 1 and Vignette 3 responses.

Fraternity affiliation predicted Vignette 3 and Vignette 4 responses. No group membership affiliation predicted Vignette 2 responses.

While each vignette was different, the overall data most often indicated that rape myth acceptance, low empathy, hypermasculinity, and alcohol expectancies for self and women predicted high-risk Vignette scores (sexual violence acceptance). Others have found these same variables as being indicative of sexual violence risk (Abbey & Harnish, 1995; Abbey et al., 1995; Abbey, McAuslan, et al., 2001; Abbey et al., 2009; Burt, 1991; Humphrey & Kahn, 2000; Jolliffe & Farrington, 2004; Lisak et al., 1996; Lisak & Ivan, 1995; Lonsway & Fitzgerald, 1994). Some group memberships predicted high-risk Vignette scores (sexual violence acceptance). While there has not been much research on the use of vignettes to predict sexual violence, the literature does support specific group memberships, such as fraternity affiliation, and proclivity towards sexual violence (Boeringer et al., 1991; Frintner & Rubinson, 1993; Koss & Gaines, 1993; Koss & Cleveland, 1996; Murnen & Kohlman, 2007; Sanday, 2007).

For this study, connecting overall sexual violence acceptance with risky beliefs and behavior did not yield a strong consistent pattern of particular risk variables. Instead, different characteristics predicted different sexual violence acceptance. This is likely related to the variance in vignette story lines (Barter & Renold, 1999; Finch, 1987) and may also be related to differences between the samples responding to Survey 1 and Survey 2. Each participant comes to the study with their own history of experiences, attitudes and beliefs, and without the vignettes remaining consistent aside from the varying of specific constructs, it is difficult to tell what beliefs and characteristics yield the strongest pattern in vignette response.

On the other hand, if the vignettes were being used as a teaching tool, it would be important to have a variety of scenarios with nuanced interactions as these most closely reflect

real life scenarios (Finch, 1987). For this research study, the differences seemed to muddy the waters, making it difficult to understand which vignette constructs were related to which attitude, belief or behavior variables.

Hypothesis 1: As male participant risk scores increase on alcohol use, rape myth acceptance, hypermasculinity, sex-related alcohol expectancies, and empathy, sexual violence acceptance (measured by vignette scales) will also increase.

Hypothesis 1 was partially supported. Males scoring higher on rape myth acceptance had higher Vignette scores (sexual violence acceptance) overall.

Hypothesis 2: Men who are members of a college group or organization, such as a fraternity, club sport or student organization, will score higher on sexual violence acceptance (measured by vignette scales).

Hypothesis 2 was partially supported. Males who were members of a fraternity scored higher on two out of four vignettes. Males who were members of a club sport scored higher on two out of four vignettes as well. There were no consistencies across all four vignettes in relation to group membership predicting vignette score.

Aim 2. Examine alcohol use, rape myth acceptance, hypermasculinity, sex-related alcohol expectancies, and empathy of participants who report sexual violence behaviors

Men who scored higher on alcohol risk, rape myth acceptance, hypermasculinity, and alcohol expectancies for self were significantly more likely to have committed at least one act of sexual violence in the past year. Variables that were not significantly different between those who committed sexual violence and those who did were alcohol expectancies for men, alcohol expectancies for women, and empathy level. Alcohol expectancies for men, women and self were inconsistent across the study in correlations and as prediction variables. This inconsistent

result may be due to the variance of alcohol expectancies across the population and may be a product of cultural beliefs and norms that shape how alcohol use is viewed by U.S. society. High sex-related alcohol expectancies may be linked with sexual decision making (Abbey et al., 1998; Abbey et al., 1999; Dermen & Cooper, 1994a), but it does not necessarily mean that the sexual decision making is risky or deviant. The relation between alcohol expectancies and sexual risk taking is not completely understood and has not been shown to have a direct link to sexual violence, but rather a peripheral relationship that likely involves other factors, such as pharmacological effects of alcohol (George & Marlatt, 1986; Hull & Bond, 1986).

The literature indicates that the majority of sexual violence behaviors would have been reported from students who were members of a fraternity or were student-athletes (Boeringer et al., 1991; Frintner & Rubinson, 1993; Koss & Gaines, 1993; Koss & Cleveland, 1996; Murnen & Kohlman, 2007; Sanday, 2007). Only one student-athlete responded for the entire sample, and this respondent did not complete the sexual experiences survey to indicate past sexual violence behavior. This study did find that of the 40 participants who did commit sexual violence, they were statistically more likely to have been members of a fraternity. Those who were statistically least likely to commit sexual violence were participants who had no affiliation with a fraternity, a club sport, or a registered student organization.

Regarding other variables that were individual predictors of sexual violence, high-risk alcohol use, hypermasculinity, personal alcohol expectancies, and scoring high on both Jamie and Alice vignette questions were all significant predictors of those who committed sexual violence. Aside from sexual violence acceptance (measured by vignette scales) which have not been previously tested, all of these individual predictors have been found in the literature (Abbey, Zawacki, Buck, Clinton, & McAuslan, 2001, 2004; Benson et al., 2007; Bernat, Wilson,

et al., 1999; Malamuth, 1981; Muehlenhard & Linton, 1987). While these individual variables may indicate an increased risk for sexual violence, people typically possess a variety of characteristics that may increase the propensity for sexual aggression (Lisak & Roth, 1988).

Regression modeling indicated that those most likely to engage in sexual violence will both endorse hypermasculine ideologies as well as engage in high-risk drinking behaviors. According to the literature, hypermasculinity and high-risk drinking behaviors are routinely found in peer groups such as traditional fraternities and all-male student-athlete teams. While not all fraternities and male-segregated athletic teams posed the same risk, the ones that seemed to have a higher risk of including perpetrator members were groups that placed a high value on traditional male roles that focused on money, power, ability to consume alcohol, loyalty to the group above all else, group secrecy and select inclusivity, homophobic or hypermasculine ideologies, a culture that devalues or objectifies women, and fostering male bonding through sexual exploitation of women (Boeringer, 1999; Boeringer et al., 1991; Boswell & Spade, 1996; Kirkpatrick & Kanin, 1957; Koss & Gaines, 1993; Sanday, 2007; Sanday, 1996).

According to the literature, college men who perpetrate sexual violence are more likely to use persuasion, coercion, or the use of alcohol to gain sexual activity (Muehlenhard & Linton, 1987; Rapaport & Burkhart, 1984). This study found that participants who reported engaging in sexual violence behavior over the past year gave alcohol to someone for the purpose of having sex with them (25% of those engaging in SV), verbally pressured someone to engage in sexual activity after they said no (33% of those engaging in SV), and persuaded someone to change their mind after they said no (43% of those engaging in SV).

Hypothesis 3: As male participant risk scores on alcohol use, rape myth acceptance, hypermasculinity, sex-related alcohol expectancies, and empathy increase, the likelihood that they have engaged in at least one sexual violence behavior in the past year will also increase.

This hypothesis was partially upheld as men who scored higher risk on some of the attitudes, beliefs and characteristic variables were more likely to have committed sexual violence than those who scored lower. Men who scored higher on alcohol risk, rape myth acceptance, hypermasculinity, and alcohol expectancies for self were significantly more likely to have committed at least one act of sexual violence in the past year.

Hypothesis 4: Men who are members of a group or organization, such as a fraternity, club sport or student organization, will be more likely to commit sexual violence.

This hypothesis was partially upheld. Men in this study who committed sexual violence were statistically more likely to be members of a fraternity. Men in this study who were least likely to have committed sexual violence had no affiliation with a fraternity, a club sport, or a registered student organization.

Aim 3. Examine whether sexual violence behaviors are linked with higher risk sexual violence acceptance (measured by vignette scales)

The participants who reported engaging in at least one sexual violence behavior in the past year were significantly more likely to score higher on Vignette 3 (Alice) and Vignette 4 (Jamie) when compared to participants who did not report committing sexual violence in the past year. Neither response scores for Vignette 1 (Sally) nor Vignette 2 (Shoshanna) were significant in predicting sexual violence. The connection between vignette and sexual violence behavior is complicated, and may depend upon the specific concepts or order of concepts, such as alcohol use and how consent was or was not conveyed, in each vignette (Barter & Renold, 1999; Finch,

1987). Interestingly, Vignette 1 (Sally) and Vignette 4 (Jamie) yielded the strongest responses

by the qualitative discussion groups in the preliminary qualitative study, which were almost

unanimous in identifying these scenarios as non-consensual encounters, and having more

difficulty with concluding the other vignettes as assault. However, for male survey respondents

to score highly on these vignettes means that they likely indicated that the female characters did

consent, that the male character had a right to engage in sex with them because of some behavior

that could be construed as leading the male on (hypermasculinity), and that the survey

respondents also held strong rape myth acceptance beliefs (*If *character* did not want to have

sex with *character*, she would have stopped him*, and *This was probably a misunderstanding

between *character* and *character**). When examining the variable of hypermasculinity,

which includes the dimensions of callous sexual attitudes toward women, the perception that

aggression is masculine, and the attitude that danger is exciting, these factors may help explain

the trend of high-risk responses among these participants (Mosher & Anderson, 1986; Mosher &

Sirkin, 1984).

While rape myth acceptance and low empathy were both highly correlated with and

predictive of high-risk responses for all vignettes, they did not show up as significant predictors

of sexual violence. Rape myth acceptance and low empathy are indicated in the literature as risk

factors for sexual violence (Berg et al., 1999; Ellis et al., 1992; Koss & Dinero, 1989;

Muehlenhard & Linton, 1987). However, they are also beliefs and attitudes that can be found in

those who do not commit sexual violence (Deitz et al., 1982; Eisenberg & Miller, 1987; Regan &

Totten, 1975; Rice et al., 1994). For instance, in the qualitative written data from the

Preliminary Work, many of the female respondents engaged in victim blaming and exhibited

rape myth acceptance beliefs, though they are unlikely to be the ones committing sexually

aggressive behaviors against other women. Rape myth acceptance may be more indicative of a culture that endorses victim blaming and is less likely to believe reported sexual violence by peers when the perpetrator is not a stranger. While these beliefs may not directly cause sexual violence, they may be indirectly perpetuating a campus culture that makes sexual aggression acceptable and neglects to hold offenders accountable for their actions (Bohner et al., 2006; Burt, 1980; Forbes & Adams-Curtis, 2001; Gordon, Leah, & Kay, 2004; Lonsway & Fitzgerald, 1994). The majority of sexual violence on college campuses is perpetrated by someone the survivor knows. Acquaintance rape is often seen as less serious compared to stranger rape, and is less likely to be investigated or prosecuted in the legal system (Estrich, 1987; Koss, 2000; Spears & Spohn, 1997). As mentioned earlier, it is not uncommon for police and investigators to refer to acquaintance rape situations as a "miscommunication" or "misunderstanding" between the offender and victim (Lisak & Miller, 2002; Muehlenhard, 1988). If rape myth acceptance and victim blaming continue to be pervasive among campus cultures, few survivors will be believed and few offenders will face consequences.

Hypothesis 5: As male participant scores for sexual violence acceptance (measured by vignette scales) increase, the likelihood that they have committed at least one sexual violence behavior in the past year will also increase.

This hypothesis was met for only two of the four vignettes. Participants who reported having committed sexual violence within the past year were also statistically more likely to score higher on Vignette 3 (Alice) and Vignette 4 (Jamie) than those who did not commit violence.

Previous research has pointed to several attitudes, beliefs and behaviors as being predictors for sexual violence (Abbey et al., 2003; Abbey & McAuslan, 2004; Abbey et al., 1995; Bernat, Calhoun, et al., 1999; Bohner et al., 2005; Crosset et al., 1995; Muehlenhard &

Linton, 1987; Norris & Cubbins, 1992; Norris, Davis, George, Martell, & Heiman, 2002; Norris,

George, Davis, Martell, & Leonesio, 1999) and some research links these same attitudes, beliefs

and behaviors with responses to vignettes. Studies have found that vignettes may be useful in

determining attributions for responsibility of sexual violence (Norris & Cubbins, 1992;

Richardson & Campbell, 1982) and also correlating sexually aggressive subjects with higher risk

sexual violence acceptance (Abbey & Harnish, 1995; Malamuth & Brown, 1994; Norris & Kerr,

1993), though these are primarily done in laboratory studies and can be difficult to generalize to

a real life situation.

This study demonstrates that there is considerable overlap between the attitudes, beliefs

and behaviors of men who engaged in sexual violence behaviors and of men who scored higher

risk in their responses to these sexual violence vignettes. Further research is needed to explore

whether there is a causal link between vignette response and sexual violence behavior.

Alcohol Risk

This study examined the relationship between alcohol risk with sexual violence and

alcohol risk with vignette response. While alcohol risk did have significant correlations with

other variables, such as fraternity membership and alcohol expectancies, this study did not show

a consistent relationship between alcohol risk behavior and sexual violence behavior or between

alcohol risk behavior and vignette response. Alcohol risk behavior has been shown to be

correlated with sexual violence, though the relationship is multifaceted, with alcohol often being

consumed by both the survivor and perpetrator before sexual violence occurs (Abbey, 1991;

Koss et al., 1987; Krebs et al., 2007; Muehlenhard & Linton, 1987). It is unlikely that alcohol

risk behavior has a direct relationship with sexual violence as not all people who drink commit

sexual violence, and not all people who commit sexual violence consume alcohol. However, in a

college setting, it seems to be an important contributing factor. While alcohol may be used by college male perpetrators prior to sexual violence, alcohol is often used as a weapon by perpetrators to lower defenses of women when targeting them for violence (Kanin, 1985; Tyler, Hoyt, & Whitbeck, 1998). In these circumstances, high-risk alcohol use by the perpetrator may not be what influences the decision to commit sexual violence. However, alcohol use by the perpetrator may also be used to justify their own sexual violence behaviors as being caused by alcohol use (Norris & Cubbins, 1992). Alcohol risk behavior may be indirectly related to sexual violence, but the relationship is more complicated than can be explained by the results of this study.

Rape Myth Acceptance

Rape myth acceptance, or false beliefs about rape, rape victims, and rape perpetrators, was an important variable in both sexual violence behavior and sexual violence acceptance (measured by vignette scales). Rape myth acceptance predicted high scores for all vignettes, and was significantly higher for participants who committed sexual violence when compared to those who did not. When considering that rape myth acceptance beliefs are more closely aligned with aggression or hostile attitudes toward women rather than sexual urges (Koss & Gaines, 1993; Lisak & Roth, 1988, 1990), it may help explain the difference seen in this study between those committed violence and those who did not. However, rape myth beliefs can also be held by people who do not commit sexual violence. As with alcohol, the relationship between rape myth beliefs are not a direct cause for sexual violence and cannot stand alone as the only variable to determine the likelihood of sexual violence perpetration. As a survivor advocate, I speculate based upon years of discussion with students on the topic of sexual violence, that rape myth acceptance is a persistent issue in the culture of not only this campus, but throughout U.S.

society. Rape myth acceptance beliefs are held by people of all genders, regardless of risk for perpetrating sexual violence.

Hypermasculinity

Hypermasculinity, as measured in this study, did have a strong relationship with sexual violence behaviors, although the relationship between hypermasculinity and vignette response was less consistent. Hypermasculinity is associated with aggression and male dominance, callous attitudes toward women, acceptance of rape myths and lower empathy levels (Lonsway & Fitzgerald, 1995; Mosher & Sirkin, 1984). Additionally, hypermasculinity has been linked with other high-risk group memberships, such as being a member of a fraternity or all-male student athlete team (Boeringer, 1999; Sanday, 2007). Hypermasculinity was found to be an important factor in this study for participants who committed sexual violence, though the intersection of hypermasculinity with other variables makes it difficult to isolate hypermasculinity as a direct cause for sexual violence. As with some of the other variables, the cause of sexual violence is likely rooted in a combination of factors working together to increase the risk for sexual violence.

Alcohol Expectancies

This study measured sex-related alcohol expectancies for other men, for women and for self to determine if endorsing these beliefs increased the risk for committing sexual violence or predicted higher Vignette scores (sexual violence acceptance) among participants. Scores for sex-related alcohol expectancies in this study were not consistent at all across those committing sexual violence behaviors or in participant responses to vignettes. Sex-related alcohol expectancies are defined as the anticipated impact of alcohol on sexual feelings and behavior, which are strongly ingrained in cultural beliefs about alcohol and sexual behavior. Sex-related

alcohol expectancies for men include increased virility and courage when drinking, whereas sex-related alcohol expectancies for women are related to their risk of being victimized through sexual violence. Interestingly, the results of this study found that male alcohol expectancy beliefs were negatively correlated with female alcohol expectancy beliefs. This means that as beliefs about sex-related alcohol expectancies for men (virility and liquid courage) increased, beliefs about sex-related alcohol expectancies for women (risk for sexual violence) decreased. In real world terms, this means that when people have strong beliefs that alcohol will improve the sexual benefits for men, they also believe the effects of alcohol will decrease the sexual violence risks for women or that women will be more interested in sex when drinking as opposed to resistant. This may be a key piece of the puzzle to understanding why men who have been drinking may misinterpret sexual cues from women, or why men tend to be seen as less responsible for sexual violence when drinking.

Given that there are such strong cultural norms surrounding alcohol use and sexual behavior in college settings, college students may endorse alcohol expectancies even if they themselves have not experienced these effects. Alcohol expectancies are held by those who do not commit sexual violence as well, so endorsing these expectancies is not a direct cause of sexual violence. Alcohol expectancies are not necessarily indicative of risk for sexual violence alone, but rather may be associated with other factors (fraternity membership, hypermasculinity) and when acting collectively, these factors increase the risk of sexual violence happening.

Empathy

Empathy was included in this study because men who indicate some proclivity to commit sexual violence have lower empathy toward survivors of sexual violence, and men with higher levels of empathy have a lower risk for perpetrating sexual violence (Deitz et al., 1982;

Eisenberg & Miller, 1987; Osland et al., 1996). This study supported that empathy was a significant individual predictor variable for all four vignettes, meaning that those who scored higher risk on vignettes also scored lower on empathy on average and those who scored lower on vignettes had higher empathy scores. Empathy has been referred to in the literature as the ability to assume another person's point-of-view (Regan & Totten, 1975), which was likely to happen when a participant read the vignette and had to imagine the scenario for themselves. Those who had high empathy may have aligned with the female characters more often than the male characters for a couple of reasons. First, the stories provided more insight into the thoughts and feelings of the female characters in all of the vignettes, allowing the reader to assume the point-of-view of the female character more easily. Second, the vignettes highlighted the distress and confusion of the female character after the assault occurred, which may not have been as overt had the situation happened in a real life situation.

There was no significant relationship between empathy and participants who reported committing sexual violence in this study. Having low empathy alone is not likely to cause sexual violence, but it does appear in the literature in connection to other high-risk beliefs, attitudes and behaviors. Men who score higher on hypermasculinity have also been found to score lower on empathy (Gold et al., 1992; Mosher & Sirkin, 1984), and thus it may be the variable of hypermasculinity or a combination of both hypermasculinity and low empathy that explains a stronger propensity towards sexual violence.

Sexual Violence

The total number of respondents across surveys indicating sexual aggression in the past year was 40, which was approximately 18.6% of the entire sample of 215 respondents. When initially looking at the data, this number appeared too low to include in a separate analysis of

meaningful data. However, after reviewing previous literature on the topic of college male sexual violence perpetrators, it was determined that this 18.6% fell right between the range of reported sexual violence of other studies. As mentioned earlier, survey research consistently shows that 5-15% of college men acknowledge forcing intercourse (Benson, Gohm, & Gross) and 15-25% of college men report some form of sexual aggression (sexual coercion or assault including behaviors other than rape) while at college (Antonia Abbey et al., 1998; Mary P. Koss et al., 1987; Malamuth, Sockloskie, Koss, & Tanaka, 1991 & Tanaka, 1991). Between 12% and 14% of college men report perpetrating some form of sexual violence within the past 12 months (Antonia Abbey & McAuslan, 2004; Thompson, Swartout, & Koss, 2013), which is lower than the 18.6% of the college men in this study who reported engaging in some form of sexual violence in the past 12 months.

The results of this study indicate that the vast majority of college men are not committing sexual violence. However, there is a small subset of college men that are sexual predators, engaging in multiple sexual violence behaviors with multiple victims over time. The 40 participants in this study who reported committing some act of sexual violence over the past year engaged in an average of 4.23 acts per perpetrator, with a total of 169 sexually violent acts committed overall in one year. If these numbers were representative of an entire male undergraduate population of 10,000, it would indicate that 1,860 of those men were sexual violence perpetrators. If this group averaged 4.23 sexually violent acts on average per perpetrator, the total number of sexually violent acts per year would total over 7,800.

Group Membership

Group membership was measured in this study because peer group influence has been found to be a factor in college males' risk of committing sexual violence, particularly when the

group has strong rape-supportive beliefs (Adams-Curtis & Forbes, 2004; Boeringer, 1999; Schwartz & DeKeseredy, 1997). This study found that being a member of a fraternity increased the risk of committing sexual violence when compared to participants who were not members of a fraternity, and that those who committed sexual violence were more likely to have been in a fraternity than any other group affiliation. Those who were not affiliated with a university group were the least likely to commit sexual violence. While student-athletic team memberships have been predictors of sexual violence in other research, this study did not have any student-athletes responding to the sexual violence portion of the survey.

<div align="center">**Limitations**</div>

While results of this study were aligned with much of the literature regarding sexual violence, results may not be generalizable to a population outside of this Southeastern public university. Other limitations include the small sample size (n=215) and the number of students indicating previous sexually aggressive behavior (n=40), therefore findings from this study should be interpreted with caution. Many participants skipped questions or provided incomplete data at times, which led to a missing data and decreased the power of the analyses. Power was likely also impacted when the sample size was split between two separate surveys. Samples may have differed between those who took Survey 1 and those who took Survey 2, which limits the generalizability across the surveys.

Another limitation of this study is that all responses to measures were self-reported, and as a result the findings could be biased. This study asked specific questions about sexually violent acts that are considered crimes or at the very least in violation of university policy. Although participants were assured confidentiality, there were likely some participants who felt discomfort answering questions about their behaviors and this may be reflected in the findings.

Another limitation of this study was the varied scenarios used in the vignettes. This study may have been improved by using a single vignette with only a couple of varied constructs, allowing for a closer examination of variable interactions. If vignettes with varied constructs are used in future studies, it may be best to maintain some consistency across all vignettes when assessing attitudes and beliefs toward the scenarios.

Additionally, while the regression models provided some prediction statistics for proclivity to commit sexual violence, this may or may not have real world significance. People are complex, as are their decisions to engage in certain behaviors. While these results may not show a full explanation for relationships between attitudes, beliefs and sexual violence or vignette response, they may point us in the right direction about which variables or groups of variables warrant further attention. The results of this study should be approached with caution as there may be other factors interacting with sexual violence proclivity that have not been identified here. Lastly, this study was limited by the cross-sectional design, which impacts the ability to make conclusions about causality of sexual aggression in college men. Future research is needed to explore causal relationships between factors found significant here and subsequent sexually aggressive behaviors.

<div style="text-align:center">Implications for Practice and Future Research</div>

These findings have important implications for further research and education in the field of campus sexual violence. Despite the limitations listed above, this study adds considerable information to the literature. Still more work is needed to understand the interactions between variables that increase or decrease the risk of sexual aggression. Given the findings of this study, sexual violence vignettes are likely to be a useful educational tool for prevention in a college setting. Rather than simply focusing on definitions of sexual violence and consent like many

prevention programs, vignettes allow for the exploration and discussion of typical campus sexual violence scenarios. Using such scenarios may also help to normalize what most sexual violence looks like, which is unlikely to match the media representation, and this may lead to an increase in survivors identifying what happened to them as sexual violence and then seeking help. Some research supports that sexual violence behaviors start long before college matriculation (Abbey et al., 1998; Kanin, 1985; Muehlenhard & Linton, 1987; Rapaport & Burkhart, 1984), indicating that use of sexual violence vignettes with adolescents and teens may be even more impactful.

It is further warranted that college male undergraduates who fall into high-risk peer groups such as fraternities and all-male athletic teams, college men who engage in high-risk drinking, or endorse high-risk attitudes and beliefs should be targeted with prevention efforts. Previous prevention efforts to educate college women on risk reduction should be used with caution. Additionally, social norming campaigns that decrease the acceptance of hypermasculine ideologies and rape myths may be useful in shifting campus cultures from those of victim blaming to those who start first by believing survivors and are prepared to hold offenders accountable for their sexual aggression, regardless of their social status or socio-economic level.

Conclusion

In conclusion, the hypotheses from this study were partially supported and the findings contribute to the literature by supporting previous findings on risk factors for sexual violence behaviors. It is hoped that research on the beliefs, attitudes and behaviors of college men at risk for perpetrating sexual violence will continue to grow and impact policies and prevention practices on U.S. college campuses. It is also anticipated that campuses will shift away from holding survivors accountable for being victimized, and place the accountability on those who

commit sexual violence. Taking a stand against sexual violence is the responsibility of every

student, staff, faculty, and administrator on every campus. One more is too many.

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APPENDIX A

Qualitative Preliminary Work Procedures

The following is an outline of the procedures used for collecting qualitative written data in the Preliminary Work phase of the study. Preliminary Work included testing each of the four vignettes in classrooms and collecting written data from participants regarding language of the vignettes, realism of the scenarios and any other feedback for improving the vignettes. Italicized text in quotation marks indicates sample script followed.

1. Introduction (5 minutes)
    a. *"Hello! My name is Deanna and I've been invited by your instructor to come talk to you about sexual violence on college campuses. I am also an advocate at the University Health Center for students impacted by interpersonal violence."*
    b. Discuss services available at the Health Promotion Department in the University Health Center, including services for survivors of interpersonal violence
    c. Trigger warning – *"Some of the things we'll be discussing today can be difficult for people who may have been impacted by interpersonal violence. Please do what you need to take care of yourself during this time. If you need to step out for a minute, please do so. I'm also available to talk after class or any other time at my office."* (provide office information)
2. Vignette Activity (repeat for each vignette tested – 2 per class)
    a. *"I'm going to pass out a colored sheet of a paper that has a sexual violence scenario, or vignette, typed on one side. I'm also passing out a half-sheet of questions in the same color. I'd like you each to read through the vignette on your own and answer the questions on the half-sheet of paper. There are no right or wrong answers. Please respond with your personal beliefs and thoughts. Do not put your name on the paper as responses are meant to be confidential."*
    b. Pass out vignette sheets and coordinated half-sheet.
    c. Allow class time to read and answer questions (5-7 minutes)
    d. Collect half-sheet of responses.
    e. *"Let's start the discussion by any thoughts you have initially about the vignette"*
        i. *"The question sheet asked whether you thought the situation was consensual. Would anyone like to share what they indicated and why?"*
        ii. Facilitate discussion among class participants (15 minutes)
        iii. Sample questions to facilitate:
            1. *"How do you know when someone has given consent?"*
            2. *"How do you know when someone is not consenting?"*

     3. *"How might alcohol use by the characters influence your beliefs?"*
     4. *"Do you feel this scenario is believable? Why or why not?"*

3. Wrap up
  a. Collect vignette sheets from students
  b. Answer any questions students may have
  c. Remind students about campus and community resources
  d. Thank students for their time and participation

APPENDIX B

Informed Consent Letter

Consent Letter

April 2016

Dear UGA student:

I am a graduate student under the direction of Dr. Jessica L. Muilenburg in the Department of Health Promotion in the College of Public Health at The University of Georgia. I invite you to participate in a research study entitled Exploring Sexual Beliefs and Behaviors in College Men. The purpose of this study is to better understand how the sexual attitudes, beliefs and behaviors of college men are connected to their responses to sexual violence vignettes.

To be eligible to participate, you must be a UGA undergraduate student at the UGA Main Campus (Athens), and be between the ages of 18-24. For the purposes of this study, we are primarily interested in men who identify as heterosexual.

Your participation will involve the completion of a confidential survey and should take about 20-30 minutes to complete. Your involvement in the study is voluntary, and you may choose not to participate or to stop at any time without penalty or loss of benefits to which you are otherwise entitled. Your decision to not participate in this study will have no bearing on your grades, class standing or access to services at the University of Georgia.

This survey is confidential. Participants are contacted via email initially, but are given a separate secure link from which to access the survey. Internet communications are insecure and there is a limit to the confidentiality that can be guaranteed due to the technology itself. However, once materials are received by the researcher, standard confidentiality procedures will be employed. Survey data will be downloaded following the completion of data collection and stripped of IP addresses by Qualtrics software before turned over to and analyzed by the investigator. All data will be kept on a secure server for data analysis, after which all data will be destroyed. The results of the research study may be published, but your name or any identifying information will not be used. In fact, the published results will be presented in summary form only.

The findings from this project may provide information on attitudes, beliefs and behaviors of college men regarding sexual experiences and sexual violence. This study will ask personal questions about your behaviors and illegal activities including underage drinking and acts of sexual violence. Your personal identifying information will not be linked with your responses, and you will not be penalized for your responses. There are some risks associated with participating in this study, which include possible discomfort with survey content. To help

alleviate some of this discomfort, please see a list of campus resources below available to you. Additionally, participants will be automatically entered into a drawing to win one of five $25 gift cards to the UGA Bookstore, which can be used towards anything in the store including books, apparel, electronics, and gifts. Eligibility for the drawing is not dependent upon survey participation. Students who decline participation but wish to be entered into the drawing may send their name and UGA email address to dwalters@uhs.uga.edu to be entered into the drawing which will take place following the closing of the survey.

If you have any questions about this research project, please feel free to call me at (706) 542-8690 or send an e-mail to dwalters@uhs.uga.edu. Questions or concerns about your rights as a research participant should be directed to The Chairperson, University of Georgia Institutional Review Board, who can be reached by telephone (706) 542-3199 or via email address at irb@uga.edu.

By continuing to the next page of the survey through the link below, you are consenting to participate in this research study.

Thank you for your consideration! Please keep this letter for your records.

Sincerely,

Deanna Walters

Doctoral Candidate
Department of Health Promotion & Behavior
College of Public Health
University of Georgia

Should you have feelings of discomfort from this survey, please consider contacting one of the following resources for support or information:

For counseling:
Counseling and Psychiatric Services (CAPS) – (706) 542-2273
Located on the second floor of the University Health Center.

If you are a survivor of sexual violence looking for support and advocacy:
UGA Relationship and Sexual Violence Prevention (RSVP) & Advocacy – (706)542-7233/SAFE
Located on the first floor of the University Health Center

APPENDIX C

Recruitment Email Language

SUBJECT LINE: Invite to participate in UGA College of Public Health Study

Dear UGA student,

Are you an undergraduate male student at UGA between the ages of 18-24 years old and identify primarily as heterosexual? Then we'd love to invite you to participate in our study! The purpose of this study is to better understand male college students' sexual attitudes, beliefs and behaviors. The study is conducted by graduate student Deanna Walters under the direction of Dr. Jessica Muilenburg in the College of Public Health's Department of Health Promotion and Behavior.

Participation in the study is voluntary and should take around 20-30 minutes to complete. To thank you for your participation, we will automatically enter you into a drawing to win one of five $25 gift cards to the UGA Bookstore!*

To learn more about the study, read the informed consent and continue to participate in the study, please click the link below.

Thank you so much for your time!

Deanna Walters

Doctoral Candidate
Department of Health Promotion & Behavior
College of Public Health
University of Georgia

* Eligibility for the drawing is not dependent upon survey participation. Students who decline participation but wish to be entered into the drawing may send their name and UGA email address to dwalters@uhs.uga.edu to be entered into the drawing which will take place following the closing of the survey.

APPENDIX D

Cross-Sectional Survey

Demographic Information

1. Age
   a. 18
   b. 19
   c. 20
   d. 21
   e. 22+
2. Race or Ethnicity
   a. White/Caucasian
   b. Black/African American
   c. Asian or Pacific Islander
   d. Hispanic or Latino
   e. Native American, Alaskan Native, or Native Hawaiian
   f. Other
3. Sexual Orientation
   a. Heterosexual
   b. Bisexual
   c. Homosexual
4. Year in school
   a. 1st year
   b. 2nd year
   c. 3rd year
   d. 4th year
   e. 5th+ year
   f. Graduate or professional program
5. Relationship status
   a. Single
   b. Dating one person
   c. Dating multiple people
   d. Not dating, but engaging in sexual activity with others
6. Membership in groups
   a. Pledging or membership of a traditional fraternity
   b. Pledging or membership of a social fraternity
   c. Club Sport or Intramural Sport
   d. Division I Athletics

e. UGA Registered Student Organization

f. No affiliation with the above

Vignettes

Below are a series of 4 vignettes. Each survey participant will receive 2 of the 4 vignettes and answer the questions below each vignette with a response on a Likert-type scale.

Vignette 1

Sally and David first met in their freshman year at college. They were never very close, but recently reconnected at a mutual friend's party. They are now in their third year of undergraduate school. While at the party, neither Sally nor David consumed any alcohol which is typical for them both. Sally and David flirted with one another at the party and at one point Sally kissed David on the lips, which David reciprocated. Things continued to progress throughout the night at the party and as everyone was leaving, David invited Sally to come see his new apartment. Sally agreed but had already made up her mind that she did not want to have sex with David. When she got to David's apartment, he continued to kiss and fondle her. At first, Sally was okay with this and reciprocated. As things became more heated, she was concerned that David may try to have sex with her. She tells David that she likes him but asks David if they can wait until another time to have sex when she feels ready. He seems upset and tells her that she's "led him on" all night, even agreeing to come back to his apartment, which he claims was obvious what would happen after that. Sally feels guilty and David continues to pressure her. Sally does not verbally agree but also does not say no. When David takes off her clothes, Sally seems anxious, but does not stop him. After David has sex with her using a condom, she is glad that it's over. She does not have a way to get home because David drove her to his place and does not want to drive her home now that it's so late. He asks her to stay over and she agrees, feeling like she doesn't have another option. She did not bring pajamas so she asks for a pair of David's boxers and a t-shirt to sleep in. While she is asleep on the couch, David washes her clothes and his sheets. The next morning, Sally can't find her clothes and asks David if he did something with them. He smiles and said that he thought he'd help her out by washing them since someone had spilled a drink on them at the party. Sally thinks this is odd, but thanks him. David takes her home and later that day Sally cries uncontrollably as she explains to a friend what happened. Her friend is concerned for her and encourages her to talk to the police. It is then that Sally realizes that her clothing has been cleaned, David used a condom

during sex, and without any evidence of an assault the situation may be seen as her word against his.

Please indicate your level of agreement with the following statements:

1. Sally consented to have sex with David by going to his apartment.
2. David was probably within his right to have sex with Sally because she led him on.
3. David had sex with Sally without her consent.
4. If Sally did not want to have sex with David, she would have stopped him.
5. Sally was upset and told her friend she was raped because she probably regretted having sex with David.
6. This was probably a misunderstanding between Sally and David.

Vignette 2

Shoshanna has had a crush on Toby for a year and when he invites her over to hang out with him and some friends, she is ecstatic. She is nervous and asks if she can bring her friend Julie with her. Toby agrees and says he'll have lots of single guy friends there if Julie is "looking". At Toby's house, everyone is playing beer pong in addition to having mixed drinks. The girls feel okay with this because they mix their own drinks and decide against playing beer pong so they can monitor how much they are drinking and protect their drinks. Later on in the night, Toby puts on music and everyone is dancing. Shoshanna and Toby are dancing closely, kissing each other and touching each other throughout the night. Julie checks on Shoshanna to see if she is okay with it. Shoshanna verbally tells her that she is "definitely okay with it" and so excited that Toby likes her too. Shoshanna gets progressively drunker throughout the night and does not want to leave when Julie is ready to go home. Toby agrees to let Shoshanna stay on the couch and Shoshanna tells Julie that she is happy to stay and promises she'll be fine. Julie leaves. Shoshanna and Toby go up to his room to "mess around". Shoshanna verbally consents to all of this sexual activity, but when it gets to the point of intercourse, Shoshanna says verbally that she wants to wait. After Toby talks to her more about how turned on he is, Shoshanna reluctantly lets him continue but she does not verbally agree and becomes distant. Toby just assumes she's really drunk and continues on. He knows that if she says "no," he'll have to stop. Afterwards, Shoshanna seems upset and anxious. Toby asks her if she is okay and she says "yes, I just want to go home". He lets her walk home by herself since she lives only a few blocks from him. Shoshanna is very upset about what happened and plans to tell Julie the next day to get some advice and support. Before Shoshanna can tell Julie during breakfast, Toby texts Shoshanna to tell her he "had a great time last night"

and wondered if she might want to get together later in the week. Shoshanna is now not sure if she should tell Julie because she thinks maybe she is overreacting. Shoshanna feels like she may have led Toby on or not been clear with him about her wanting him to stop, so she feels like she cannot blame him for not "reading her mind". Besides, he contacted her to say what a great time he had, so maybe he doesn't think anything wrong happened.

Please indicate your level of agreement with the following statements:

1. Shoshanna consented to have sex with Toby by because she consented to messing around.
2. Toby was probably within his right to have sex with Shoshanna because she led him on.
3. Toby had sex with Shoshanna without her consent.
4. If Shoshanna did not want to have sex with Toby, she would have stopped him.
5. The reason Toby texted Shoshanna the next day was because he really likes her and had a good time the night before.
6. This was probably a misunderstanding between Shoshanna and Toby.

Vignette 3

Alice and Ben have been on one date and have both agreed to keep seeing each other. Alice thought their first date was sweet and that Ben was a "complete gentleman". She can't wait to see him again and when he invites her to his fraternity party on Friday, she is excited that he wants his friends to meet her so soon. She thinks this is a good sign that they will start a more serious relationship soon. When she gets to the party, Ben greets her and gets her some punch. He said it's what all the girls usually drink, and since Alice has never been to a fraternity party, she wants to do what will help her fit in. Ben does not spend much time with her after that and tells her he has a lot of fraternity obligations during the party, but that he'll be back later on to check on her and spend more time with her. Alice understands and socializes with others at the party. Alice usually drinks beer or wine when she's out at a bar with friends, with an occasional mixed drink. She really likes the punch because it hardly tastes like alcohol at all. Almost all of the other women are drinking the punch and the men are drinking mostly from kegs. After just a couple drinks, she feels really relaxed and increasingly social. She is anxious for Ben to come back and when he does, she is feeling particularly amorous. She starts to kiss him and he reciprocates. After this, she can't remember much of the night. She does remember waking up at some point later on in Ben's room with her clothes off. She doesn't know how she got there

or if she took her own clothing off. Ben is naked as well and about to have sex with her. She is stunned but quickly says, "Put a condom on!" before he proceeds. He obliges and then she blacks out again. The next morning, she wakes up and Ben is still asleep. She remembers bits and pieces of the night before and quickly leaves. She is still trying to process what happened. Later, she thinks what occurred must have been a misunderstanding because she got more intoxicated than she intended to and Ben was probably just trying to take care of her by taking her to his room. She decides not to say anything to him about it because she really hopes he will still want to date her and possibly have a long term relationship. She is sure that he would not intentionally hurt her.

Please indicate your level of agreement with the following statements:

1. Alice is probably responsible for what happened to herself because she drank too much.
2. Ben was probably within his right to have sex with Alice because she kissed him first and later ended up in his room.
3. Ben had sex with Alice without her consent.
4. If Alice did not want to have sex with Ben, she would have stopped him.
5. Alice consented to have sex with Ben because she told him to put a condom on.
6. This was probably a misunderstanding between Alice and Ben.

Vignette 4

Jamie has a big exam coming up on Monday but her friends really want her to go out with them to celebrate a friend's birthday. Jamie also knows that Dustin will be out and she would really like to see him. She's only known him a couple of weeks since school started, but she senses he's a good guy and would love to get to know him better. On Friday night, Jamie meets up with Dustin and her other friends at a party and has a great time dancing and having a couple of drinks. Jamie has 3 drinks and her friends are ready to head to another party. Jamie decides to break off and head back to her residence hall so that she can get to bed soon and get up early to study for her exam. Her residence hall is within walking distance so she feels fine walking alone, but Dustin asks to accompany her to make sure she gets home safely. Jamie agrees to let him and appreciates how respectful and caring he is.

When Jamie and Dustin arrive back at Jamie's residence hall, Dustin asks to come in to see her room and hall. Dustin promises he won't stay long because he knows she needs to get to

sleep so she can study for her exam early in the morning. Jamie agrees and walks him to her room. When they get into the room, Dustin closes the door and kisses Jamie for the first time. Jamie is flattered and kisses him back. She tries to pull away but Dustin holds her tight. She starts giggling because she thinks Dustin is just playing around. She stops laughing when he doesn't let go and starts to become forceful, taking off her clothes and leading her to the bed. Jamie does not say a word or resist but she does not participate. Jamie is frozen and appears scared, but Dustin continues to remove all of her clothing without speaking to her. Dustin then has sex with Jamie while she lays on the bed and avoids eye contact with him. Afterwards, Dustin puts his clothes on and leaves the room. Jamie is confused and stunned about what just happened.

Jamie doesn't tell anyone about the night with Dustin at first. She studies for her exam on Saturday but has trouble concentrating. Finally on Sunday, a friend checks in with Jamie and asks if she's been doing okay because she has seemed distant for the past couple of days. Jamie tells her about Friday night, but says she's not sure what happened. The friend tells Jamie she thinks Dustin may have raped her. Jamie isn't sure if it was rape because she didn't resist him or yell for help, which is what she had always thought she would do if she were raped.

Please indicate your level of agreement with the following statements:

1. The reason Dustin was walking Jamie home to make sure she got there safely.
2. Dustin was probably within his right to have sex with Jamie because she allowed him into her room and when he kissed her, she kissed him back.
3. Dustin had sex with Jamie without her consent.
4. If Jamie did not want to have sex with Dustin, she would have stopped him.
5. Jamie consented to have sex with Dustin because she did not say no or resist.
6. This was probably a misunderstanding between Jamie and Dustin.

Alcohol Use (Adapted from the Alcohol Use Disorder Identification Test/AUDIT and the Core Alcohol and Other Drug Survey)

1. In the past 30 days, how often did you have a drink containing alcohol?
   a. Never
   b. Monthly or less
   c. 2-4 times per month
   d. 2-3 times per week
   e. 4 or more times per week

2. In the past 30 days, about how many days per week have you consumed alcohol?
    a. 0 days
    b. 1-2 days
    c. 3-4 days
    d. 5+ days
3. On the days you consumed alcohol, how many alcohol drinks did you consume on average?
    a. Not applicable – did not drink
    b. 1-2 drinks
    c. 3-4 drinks
    d. 5-6 drinks
    e. 7-9 drinks
    f. 10+ drinks
4. Please indicate how often you have experienced the following due to your drinking during the past 6 months: (responses on a scale: Never, Once, Twice, 3-5 times, 6+ times)
    a. A black out state or memory loss
    b. Passing out
    c. Getting sick/vomiting
    d. Been in trouble with police, residence hall, or other college authorities
    e. Got into an argument or fight

Rape Myth Acceptance (adapted from Burt, 1980; Payne, Lonsway, & Fitzgerald, 1999; McMahon & Farmer, 2011)

All items below are statements that describe certain beliefs. Please read each item carefully and decide your level of agreement with each statement. Rate each item on the following Likert-type scale: 1=strongly agree, 2, 3, 4, 5, 6, 7=strongly disagree.

1. A girl who goes to the home or apartment of a man on their first date implies that she is willing to have sex.
2. One reason that girls falsely report a rape is that they frequently have a need to be the center of attention.
3. If a girl goes to a room alone with a guy at a party, it is her own fault if she is raped.
4. If a girl acts like a slut, eventually she is going to get into trouble.
5. If a girl initiates kissing or hooking up, she should not be surprised if a guy assumes she wants to have sex.
6. If a guy is drunk, he might rape someone unintentionally.
7. It shouldn't be considered rape if a guy is drunk and didn't realize what he was doing.
8. If both people are drunk, it can't be rape.
9. Rape accusations are often used as a way to get back at guys.
10. A lot of times, girls who claim they were raped have emotional problems.

11. The majority of rapes reported by college girls are from girls who agreed to have sex and then regretted it later.
12. If a girl doesn't say "no," she can't claim rape.
13. If a girl was really raped, she would go straight to the police instead of waiting a long time to tell anyone.
14. If a girl doesn't physically fight back, you can't really say it was rape.
15. Girls who get caught cheating on their boyfriends sometimes claim rape.

Auburn Differential Masculinity Inventory (Burk, Burkhart, & Sikorski, 2004)

All items below are statements that describe certain beliefs. Please read each item carefully and decide how well it describes you. Rate each item on the following Likert-type scale: 1=very much like me, 2 = like me, 3 = a little like me, 4 = not much like me, 5 = not at all like me

1. Women, generally, are not as smart as men.
2. I consider men superior to women in intellect.
3. I know feminists want to be like men because men are better than women.
4. I think women who are too independent need to be knocked down a peg or two.
5. If a woman struggles while we are having sex, it makes me feel strong.
6. If a woman puts up a fight while we are having sex, it makes the sex more exciting.
7. I don't mind using verbal or physical threats to get what I want.
8. Women need men to help them make up their minds.
9. I feel it is unfair for a woman to start something sexual but refuse to go through with it.
10. I wouldn't have sex with a woman who had been drinking*
11. I think it's okay to have sex with a woman who is drunk.
12. I like to brag about my sexual conquests to my friends.
13. My attitude regarding casual sex is "the more the better".
14. If another man made a pass at my girlfriend, I would tell him off.
15. I think men should be generally aggressive in their behavior.

*These items are reverse-scored.

Alcohol Expectancies Regarding Sex, Aggression, and Sexual Vulnerability (AESASVQ) (Abbey, McAuslan, Ross, Zawacki, 1999)

Rate each item on a 5-point Likert-type scale: 1=not at all, 2=rarely, 3=sometimes, 4=often, 5=very much

When drinking alcohol:

1. Men have a strong sex drive.
2. Men are likely to initiate sex.
3. Men feel sexually aroused.
4. Men are interested in having sex.

5. Women are at greater risk of being coerced into having sex.
6. Women are more sexually vulnerable.
7. Women are taken advantage of sexually.
8. Women are likely to be forced by their date to have sex.
9. Women are likely to be pressured to have sex.
10. Women become easy targets for sexual advances.
11. I have a strong sex drive.
12. I am more likely to initiate sex.
13. I feel sexually aroused.
14. I am interested in having sex.

Adapted from the Sexual Experiences Survey (Koss, Abbey, Campbell, Cook, Norris, Testa, Ullman, West, White, 2007)

Rated on a 5 point Likert-type scale: 1=Never, 2= One time, 3= 2-3 times, 4= 4-5 times, 5 = 6+ times

In the past year, how often have you done or tried to do the following:

1. Fondled, kissed, or rubbed up against the private/genital area of someone's body (lips, breast/chest, vaginal area, or butt) or removed some of their clothes without their consent?
2. Had oral sex with someone or had someone perform oral sex on yourself without their consent?
3. Put your fingers or other objects (besides a penis) into a woman's vagina without her consent?
4. Put your penis into a woman's vagina without her consent?
5. Put your fingers or other objects (besides a penis) into a woman's anus without her consent?
6. Put your penis into a woman's anus without her consent?
7. Engaged in sexual activity with someone who was intoxicated?
8. Engaged in sexual activity with someone who was passed out?
9. Gave someone alcohol for the purpose of trying to have sex with them?
10. Persuaded someone to change their mind and agree to engage in sexual activity after they said no?
11. Verbally pressured someone to engage in sexual activity after they said no?
12. Threatened to end a relationship, spread rumors, or tell lies to get someone to engage in sexual activity?
13. Made promises about the future I knew were untrue to get someone to engage in sexual activity?
14. Used force, such as holding someone down with body weight or pinning their arms, to get them to engage in sexual activity?
15. Used or threatened to use a weapon to get someone to engage in sexual activity?

Adapted from Interpersonal Reactivity Index (Empathy Concern Scale) (Davis, 1980)

Rated on a 5-point Likert-type scale: 1=not at all like me, 2=, 3=, 4 =, 5=very much like me

1. I often have thoughts and concerns for people less fortunate than me.*
2. Sometimes I don't feel very sorry for other people when they are having problems.
3. When I see someone being taken advantage of, I feel kind of protective towards them.*
4. Other people's misfortunes do not usually disturb me much.
5. When I see someone being treated unfairly, I sometimes don't have much pity for them.
6. I am often touched or emotionally impacted by the things I see happen around me.*
7. I would describe myself as a pretty caring person.*

*These items are reverse scored.

APPENDIX E

Sexual violence behaviors reported per survey

Table E.1. Survey 1: Sexually Violent Behaviors Reported

Type of Behavior Without Consent	Frequency Reported	% Behavior of SV Reporters
Fondled, kissed, rubbed up against body, removed clothes	13	56.5%
Oral sex	5	21.7%
Fingers or other objects into vagina	6	26.1%
Penis into vagina	4	17.4%
Fingers or other objects into anus	2	8.7%
Penis into anus	2	8.7%
Sexual activity with someone passed out	1	4.3%
Gave alcohol for purpose of having sex	6	26.1%
Persuaded someone to change mind after they said no	11	47.8%
Verbally pressured after they said no	9	39.1%
Threatened to end relationship, tell lies to get sex	1	4.3%
Made promised about future that were untrue to have sex	2	8.7%
Used force, holding someone down, pinning arms	1	4.3%
Used or threatened to use a weapon to get sex	0	0%

Table E.2. Survey 2: Sexually Violent Behaviors Reported

Type of Behavior Without Consent	Frequency Reported	% Behavior of SV Reporters
Fondled, kissed, rubbed up against body, removed clothes	10	58.8%
Oral sex	2	11.8%
Fingers or other objects into vagina	3	17.6%
Penis into vagina	1	5.9%
Fingers or other objects into anus	1	5.9%
Penis into anus	1	5.9%
Sexual activity with someone passed out	1	5.9%

Gave alcohol for purpose of having sex	4	23.5%
Persuaded someone to change mind after they said no	6	35.3%
Verbally pressured after they said no	4	23.5%
Threatened to end relationship, tell lies to get sex	0	0%
Made promised about future that were untrue to have sex	5	29.4%
Used force, holding someone down, pinning arms	2	11.8%
Used or threatened to use a weapon to get sex	0	0%