

An Exploratory Analysis of Sexual Violence and Rape Myth Acceptance
at a Small Liberal Arts University

By

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ABSTRACT

Male perpetrated sexual violence is a highly prevalent, but underreported, crime on college campuses. Experts state that in order to effectively deal with the problem of sexual violence, it is important to determine the severity and nature of the problem. The purpose of this study was to provide data based evidence to define the actual problem of sexual violence on a specific college campus in order to raise awareness and provide baseline data for further examination of the issue of sexual violence.

Risk factors for sexual violence were examined as well as demographic information for male and female students to determine the prevalence of sexual violence and the relationship of these known risk factors with incidents of sexual violence. Alcohol, Greek membership, athletic participation, and rape myth acceptance were analyzed to determine which factors contributed to the problem of sexual violence within this particular setting.

Results indicate that sexual violence is a problem that warrants attention and further examination on this campus. Fifty seven female students reported experiencing 229 incidents of sexual violence, with being taken advantage of while too drunk as the most common tactic used against them. Twenty-nine males reported perpetrating 129 incidents of sexual violence. Female athletes were found to have a higher level of acceptance of rape myths than female students not participating in athletics. Fraternity members were found to have a lower level of acceptance of rape myths than male students not belonging to a Greek organization.

Future research should be directed at repeat victims and perpetrators, as the numbers indicate a small number of men and women experienced a substantial portion of the sexually violent experiences. Implications for prevention and intervention were discussed to ensure that victims are being assisted and the student population, as well as the entire campus community, is educated on the realities of sexual violence.

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CHAPTER I-INTRODUCTION TO THE STUDY

Sexual violence is an issue that is dealt with in all cultures at one time or another, but the college campus seems to create an atmosphere where this behavior increases (Fisher, Cullen, & Turner, 2000; Koss, Gidycz, & Wisniewski, 1987). College women experience high rates of sexual victimization, with approximately 50% reporting some form of sexual violence (Koss et al, 1987). The majority of rapes occurring on college campuses are committed by men who are known to the victims (Fisher et al.; Sampson, 2002; Yeater, Treat, Viken & McFall, 2010). Unfortunately because the assault is committed by a known person, many times the violence is unacknowledged, as well as not reported, which further complicates the problem (Littleton, Radecki Breitkopf, & Berenson, 2008; Sampson, 2002). The unique situations and cultures that exist on college campuses complicate the numerous issues involved with college women's experiences of sexual violence.

Colleges and universities are considered by many to be the ideal environment in which to place the young people of our society. The "ivory towers" are thought of as safe and nurturing havens where parents send their offspring to get an education. However, research does not support this ideal vision. Research indicates that sexual violence has been a serious problem on college campuses for at least 50 years and the incidence rate has remained constant (Adams-Curtis & Forbes, 2004). Studies show that between 3 and 5% of college women experience rape or attempted rape during every academic year (Fisher et al, 2000; Mohler-Kuo, Dowdall, Koss, & Weschler,

2004). Institutions of higher education are required by law to publish and make available to the public the number of reported crimes occurring on their campuses each year, but those numbers do not include the non-reported incidents of sexual violence that are happening each year. If less than 5% of the women being sexually assaulted on college campuses are reporting the incidents to campus authorities and/or law enforcement, the numbers are much higher than indicated in the required federal reports (Fisher et al, 2000). Regardless of the exactness of the figures used to indicate the prevalence of sexually violent crimes on college campuses, it is unquestionably a problem that must be addressed.

Purpose of the Study

In order to deal with any problem, you must first define and determine the extent of the problem. According to a publication of the Higher Education Center for Alcohol and Other Drug Prevention, in order to deal with the problem of sexual violence, it is important to determine the severity and nature of the problem by conducting a needs assessment (Finn, 1996). The purpose of this study was to survey students on a particular campus that recently had to deal with several incidents of sexual violence committed by male students toward female students in the last ten years. The study attempted to measure the prevalence of sexual violence perpetrated by male students toward female students, as well as measure the attitudes of all students regarding their beliefs and attitudes about sexual violence committed against females by males. Conducting a needs assessment of sexual violence at this campus

provided evidence to be used in determining prevention and educational programs necessary for meeting the needs of students. The needs assessment measured the presence of students' attitudes that promote sexual aggression, specifically rape myth acceptance. Research indicates that the acceptance of rape myths is a predictor of sexual violence, and high rape myth acceptance is associated with perpetration of sexual assaults (Abbey, McAuslan, & Ross, 1998; Aosved & Long, 2006; Chapleau, Oswald, Russell, 2007; Koss, Dinero, Seibel & Cox, 1988; McMahon, 2008). Because most sexual aggression is male-initiated, this study analyzed men as perpetrators of sexual violence and women as victims of sexual violence (Hall & Hirschman, 1991; Tatum & Foubert, 2009). Sexual violence occurs across all spectrums of society, and it is not the intent to diminish sexual violence that occurs in other situations, but this particular study focused on heterogeneous situations with women as victims.

Research Questions

1. How likely are women on this college campus to be victims of sexual violence from male perpetrators, and what tactics were used?
2. How likely are men on this campus to be perpetrators of sexual violence toward women, and what tactics do they use?
3. What are the beliefs and attitudes about sexual violence, particularly about rape, that are held by male and female students at this university?
4. For women on this campus, what is the relationship between a student's race/ethnicity, semesters enrolled full-time, Greek membership, participation in athletics, problem drinking behavior, their rape myth acceptance score and whether they are a victim of sexual violence?

5. For men on this campus, what is the relationship between a student's race/ethnicity, semesters enrolled full-time, Greek membership, participation in athletics, problem drinking behavior, and their rape myth acceptance score and whether they are a perpetrator of sexual violence?
6. For female students on this campus, what is the relationship between beliefs about sexual violence-as measured by their rape myth acceptance score- and being a victim of sexual violence from male student perpetrators?
7. For male students on this campus, what is the relationship between beliefs about sexual violence-as measured by their rape myth acceptance score- and being a perpetrator of sexual violence toward female students?

Context of a Specific Campus Culture and Sexual Violence

The context of the study was unwanted sexual behavior and attitudes of traditional-age college students at a small private Midwestern University. This campus is a residential campus, requiring all full-time students to live in University-sponsored housing unless they qualify for an exemption (medical or financial need, live with a parent/guardian, married, fifth year student of 23 years of age or older, or transfer that has previously lived off-campus). Students approved for an exemption to live off-campus will have aid reduced by \$1,000. Students joining fraternities or sororities are allowed to live at the residential Greek houses after their freshmen year. Banyard concluded that the close proximity of numerous students in residence halls is an environmental at-risk factor for sexual violence (Banyard, Moyhihan & Crossman, 2009), and living in the residence hall is not only a possibility for students on the studied campus, but it is required.

This university currently has five fraternities and four sororities, and seven of the nine are residential houses, while two recently chartered historically black chapters, exist as social organizations. According to the campus website:

The Greek community is an integral part of the University social scene. In addition to campus-wide events, Greeks sponsor a number of member-only activities such as after-game parties, date parties, formals, Greek Week, mixers with other student organizations and other special events and activities.

The fraternities are allowed to have alcohol on their premises, but the sororities do not; which creates a social trend where most of the parties are held at the fraternity houses. The residence halls are also non-alcoholic, except for the apartments. The social scene for students is vastly made up of fraternity parties, which would indicate an environment considered high risk for sexual violence according to the research (Abbey, 2002; Boswell et al, 1996; Fairlie, et al, 2010; Larimer et al, 1999; Wechsler, 1996).

The campus in this study has traditionally been a strong Greek campus with approximately 35% of the male population belonging to a fraternity and approximately 40% of all enrolled females belonging to a sorority. According to these numbers, many students participate in the Greek life system, which appears to make it at risk for drinking and sexual violence as well.

This campus sponsors 21 sport teams: ten men's, ten women's and one co-ed program, with student athletes representing approximately 47% of the degree-seeking

student body. Researchers have observed that athletes hold a higher level of rape myth acceptance and segregated gender groups provide a peer support for sexual violence (Boeringer, 1999; Carr & VanDeusen, 2004; Koss & Gaines, 1993). Again, it appears that the high level of athletes on this particular campus would make it an at-risk environment for sexual violence.

College Cultures and Sexual Violence

It is important to examine current normative sexual behavior among college students on a national trend, which indicates that approximately 70-75% of undergraduate students are sexually active (Adams-Curtis et al, 2004). College students often restrict the concept of having sex to penile-vaginal intercourse, and do not consider oral-genital contact as intercourse, and some do not consider penile-anal intercourse as having sex (Adams-Curtis, et al, 2004). The lack of clarity for sexual terms and the wide range of behaviors that are associated with sexual behavior supports the need for explicit language when surveying college students regarding their sexual experiences, which is incorporated into the Sexual Experience Survey, the instrument utilized in this study to measure the prevalence of sexual violence on a specific campus.

It is also important to remember that the vast majority of sexual activity occurring on college campuses is consensual, but there is considerable research that indicates that sexual violence is common on university campuses and there are three variables that are present when sexual violence occurs: a perpetrator, a victim and a

specific situation that provides an opportunity for the coercive act to happen, which are commonly referred to as situational or environmental variables (Adams-Curtis, et al, 2004).

Flood (et al, 2009) proposed that factors at an organizational level contribute to the cultural influence of attitudes of those inhabiting a culture, specifically attitudes toward violence against women. Group socialization within organizations contain mechanisms that promote attitudes and behavior that overtly and covertly support hostility and violence toward women, such as gender segregation, high alcohol consumption, general norms of women's subordinate status, among others (Flood, et al, 2009). It is important to examine the organizational variables and factors on the campus of this study that have been implicated in research to be at-risk factors for sexual violence toward women. Specific organization variables examined were gender segregation and high alcohol consumption. Social organizations on this campus that separate the male students from the female students are the athletic teams and the Greek houses. These two groups were examined within the study to analyze the sexual behavior and attitudes of students identified with these social organizations. Alcohol consumption was analyzed among the participants of this study to determine if a relationship existed between problem drinking and unwanted sexual experiences as well as problem drinking and attitudes that tolerate sexual violence toward women.

The National Institute on Alcohol Abuse and Alcoholism (2002) reported these findings on college student drinking habits: drinking rates were highest in fraternities and sororities, followed by on-campus housing, students who lived off-site drank less than students living on-site, while students commuting and living with families drank the least. The report also stated that alcohol and physical and sexual aggression are linked.

Terms

Many terms are used interchangeably when referring to sexual violence; sexual assault, sexual coercion, sexual aggression, and rape are common terms used to indicate behaviors that are considered sexually violent. States and regions of the United States use different terms in statutes for legal definitions and publications, but there is not a term that is consistently used in uniform matter. This study used the term *sexual violence* to include the full range of unwanted sexual acts that someone forces or manipulates on another person without their consent including unwanted sexual contact or touching, sexual harassment, child sexual assault, incest, intimate partner sexual assault, sexual exploitation, and rape or sexual assault (National Sexual Violence Resource Center, 2010). For clarification in their research, sexual violence was grouped into categories to reflect legal definitions and the continuum of unwanted sexual experiences of: sexual contact, sexual coercion, attempted rape and rape, which included criminal and noncriminal acts based on Ohio state statutes when updating the Sexual Experience Survey (SES), an instrument used

to measure sexual violence, (Koss, Abbey, Campbell, Cook, Norris, Ullman, West, & White, 2007). Sexual coercion is not considered criminalized sexual violence in many states, but research supports that this behavior is detrimental to victims so even though it is not criminal behavior, coercive sexual violence is included within the survey created by Koss to measure sexual violence. Key elements of legal definitions of sexual offenses are force, incapacitation, consent, and penetration (Koss, et al, 2007).

Sexual coercion describes 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 (Adams-Curtis, et al, 2004). The term *rape* in this study will refer to oral sex and vaginal sex without consent. Rape is typically reserved for sexual behaviors that involve some type of penetration due to force or threat of force; a lack of consent; or inability to give consent due to age, intoxication or mental status (Abbey, 2002); and *acquaintance rape* is referring to an incident of rape that was perpetrated by someone known to the victim, while stranger rape is sexual violence that was perpetrated by someone unknown to the victim (Romeo, 2004). *Rape myth acceptance* refers to the attitudes and beliefs that are generally false, blame victims, and justify or excuse sexual aggression against women (Payne, Lonsway, & Fitzgerald, 1999).

Instruments Used to Explore Sexual Violence

Sexual violence is a complicated interplay of individual, relationship, social, political, and cultural factors (Lucey, 2005). The Sexual Experience Survey (SES) was a main portion of the survey used in this study. It has been used in various studies of sexual violence on college campuses (Carr & VanDeusen, 2004; Koss, et al, 2007). The Sexual Experience Survey (SES) accomplishes several important intentions: first it utilizes specific language to accurately assess the unwanted sexual experiences from the victim and the perpetrator's perspectives, and avoids the use of legal terms that are often construed as judgmental and having vague definitions that vary in interpretation (Koss, et al, 2007). Second, the SES includes identification of coercive tactics used by perpetrators to compel or force sexual acts on others without consent. Third, the SES categorizes unwanted sexual experiences into clear definitions of sexual violence within a dimension of clearly distinguished various degrees of sexual violence: sexual contact, sexual coercion, attempted rape and rape (Koss et al, 2007). The last aspect of the SES is the capability to measure the victim's identification of the experience, which can then be used to demonstrate the number of unreported incidents is higher than the numbers that are reported to campus authorities, law enforcement, or other agencies collecting this information (Koss et al, 2007). The SES utilizes features that are now standard in measurement of perpetration and victimization and has been widely used to study sexual violence on college campuses (Abbey et al, 2001; Fisher et al, 2000).

Koss (et al., 1982) believed that the true scope of rape was not reflected accurately in methods used to measure sexual violence in national crime statistics, criminal victimization studies, or conviction or incarceration rates, because they only included instances reported to police. Koss's (et al, 1987) research indicated that 53.7% of the women on college campuses were the victims of some form of sexual violence ranging from unwanted sexual contact to completed rape. The study surveyed 6,159 students enrolled in 32 institutions of higher education in the United States; indicating that rape is much more prevalent than previously believed or reported.

Koss (et al, 1982) suggested the existence of "hidden" victims, who are women who do not report their experiences of rape, and are not included in numbers to reflect the prevalence of sexual assault. There are various reasons that women give for not reporting their sexual assaults, but a growing number of studies indicate women experience an incident that meets the legal definition of rape, but personally do not label this experience as rape (Littleton et al., 2008). According to Flood (et al, 2009), stereotypical and narrow representations of sexual violence are the key reasons that women do not recognize their own experience as sexually violent, and if they do not name their violence, they certainly will not report it. Victims are reluctant to report sexual violence because of the perception of other's attitudes, such as family members, friends, professionals, and society; attitudes are a key factor in the perpetration of sexual violence against women (Flood, et al, 2009). The connection between societal attitudes and behavior has been made by numerous researchers, but

Martha Burt (1980) studied the cultural beliefs surrounding rape and created the first tool for measuring individual levels of endorsement for rape, the Rape Myth Acceptance Scale (RMAS). Burt's work concluded that sex role stereotypes have contributed to the high prevalence of rape in the United States (Payne et al, 1999).

The RMAS survey has been used extensively in studies to measure rape myth acceptance, but was re-conceptualized and redefined by Lonsway and Fitzgerald in 1994 (Payne et al, 1999). Lonsway and Fitzgerald defined rape myths in the context of women as victims and men as perpetrators of sexual violence and focused on the function of myths as a rationale to deny female victimization and justify male sexual aggression against women (Payne et al, 1999). Payne et al (1999) introduced a measure of rape myth acceptance that was developed from Burt's scale as well as other instruments used to assess rape myth acceptance, but the items were based on a clear and concise definition of rape myths and represented the content and structure of the rape myth domain. Six different studies were completed to address concerns about the construct and content of the instruments used to measure rape myth acceptance. The result was the Illinois Rape Myth Acceptance (IRMA) Scale, a 45-item survey which was found to be theoretically sound and statistically well-functioning (Payne et al, 1999). A 20-item short form (IRMA-SF) was created using items from each of the seven IRMA subscales, and was found to statistically indicate a correlation to the 45-item survey (Payne, et al, 1999). This study used the 20-item IRMA-SF to measure the rape myth acceptance beliefs of full-time students on this campus to determine if a culture supporting sexual violence was evident based on

scores on the IRMA-SF. Two surveys were utilized in this study to inquire about the sexual experiences that students on this campus have encountered during their time enrolled as full-time students. The female version utilized items from the Sexual Experience Survey Short Form Victimization (SES-SFV) created by Koss & Oros (1982) and updated in 2007 (Koss, et al). The SES survey has been used in many studies to determine the prevalence of sexual assault on college campuses. The Sexual Experience Survey Short Form Perpetration (SES-SFP) also created by Koss & Oros (1982) and updated by Koss et al (2007) was used to measure the sexual experiences committed by perpetrators. Both the female and male versions of the survey included identical items from the Illinois Rape Myth Acceptance survey to measure the attitudes present among the student population about sexual violence, in particular rape (Payne, Lonsway & Fitzgerald, 1999). Demographic information was examined from self-reported student characteristics including: race/ethnicity, Greek membership, athletes, gender, and problem (heavy/frequent) drinkers. The survey results provided information that identified at-risk populations on the campus, which indicated prevention and education needs.

Statement of the Problem

Attention to the sexual victimization of college women has been prompted by the increasing fear that college campuses are not safe havens, but instead have become hot spots for criminal activity as reported in the National College Women Sexual Victimization study (Fisher et al, 2000). The report warns that women

attending college are at greater risk for rape and other forms of sexual violence than women in the general population of the same age (Fisher, et al, 2000). Research indicates that this crime is prevalent: between one-fifth and one-quarter of college women are raped during the course of their college careers and 53.7% of college women report experiencing some form of sexual violence (Karjane, Fisher, & Cullen, 2005; Koss et al., 1987; Paul & Gray, 2011,).

Within the category of college women, sorority members are one of the highest at-risk groups for sexual violence (Abbey, McAuslan, Zawacki, Clinton & Buck, 2001). Studies have found that women are three times more likely to be victims of sexual violence if they live in a sorority house and also are more likely to be sexually assaulted while intoxicated (Kalof, 1993; Mohler-Kuo, et al, 2004). Although the importance of bonding and loyalty to one's sorority and its members is strongly emphasized, the organizational structure also promotes relationships between its members and members of brother fraternities through mutual projects and social mixers (Handler, 1995). Fraternity men consume alcohol more frequently and in larger amounts than the general student population of college campuses (Abbey, 2002; Boswell & Spade, 1996; Fairlie, DeJong, Stevenson, Lavigne & Wood, 2010; Larimer, Lydum, Anderson, & Turner, 1999; Wechsler, Kuh & Davenport, 1996). Socializing with fraternity members who are a high risk group for alcohol consumption and perpetrators of sexual assault contribute to the high-risk category for sexual assault of sorority women (Larimer, et al., 1999; Mohler-Kuo, et al., 2004).

Alcohol consumption has been implicated as a significant factor in the commission of sexual violence, and approximately 90% of college students consume alcohol (Abbey, 2002; Bernat, Calhoun & Stolp, 1998; Krebs, Lindquist, Warner, Fisher & Martin, 2009; Palmer, McMahon, Rounsaville & Ball, 2009). Typically if either the victim or perpetrator is drinking alcohol, then both are (Abbey, 2002). For female students, college is a high-risk period for sexual assault by male acquaintances because of the frequent socializing, which many times involves alcohol and opportunities for physical isolation (Nurius, Norris, Dimeff, Graham, 1996; Palmer et al, 2009).

Nurius, et al (1996) also examined expectations regarding sexual aggression, concluding that the psychological processes that recognize danger cues in a stranger attack are different than ones used to cue danger in a familiar situation. Women expect sexual assault to occur in unfamiliar public places by a stranger, and are not prepared to deal with sexual advances from a known friend or acquaintance at a place where they spend lots of time. This expectation is reinforced by programs that target stranger rape prevention, but do not address acquaintance rape as a high risk possibility of sexual violence (Nurius, et al 1996; Sampson, 2002). Sorority women may regard the Greek system as a safe interface, when in fact behavior occurs that women would deem as inappropriate in other places, but because of the network established in the Greek community, it does not register as dangerous or at-risk until it is too late (Nurius et al, 1996).

Sexual violence on college campuses is highly underestimated due to numerous problems associated with reporting the crime (lack of awareness of what constitutes sexual violence as well as perceived lack of confidentiality in the process), which results in victims not reporting the crime to authorities (Paul & Gray, 2011). The closer the relationship of the perpetrator of sexual assault to the victim, the less likely the victim is to disclose the incident (Koss et al, 1988). Other reasons that victims give for not reporting their sexual assaults to authorities is the awareness of derogatory treatment toward victims in the process of reporting sexual assaults, which is termed as re-victimization or second victimization (Abbey et al, 2001). According to Abbey (et al, 2001) re-victimization also occurs when classmates or friends of the perpetrator react negatively if the victim reports the incident to campus authorities or local police.

Researchers have demonstrated that the acceptance of rape myths is an indicator of problem attitudes, but also as a predictor of perpetration of sexual violence (Abbey, McAuslan, Zawacki, Clinton & Buck, 2001; Koss, Dinero, Seibel, & Cox, 1988; McMahon, 2008). Perpetrators of sexual violence and many men and women in the general population ascribe to rape myths that tolerate and support sexual violence, which indicates a high need for education and awareness to the issue in order to change the cultural beliefs that deny and justify sexual violence toward women (Asoved, et al, 2006; McMahon, 2008; Payne et al, 1999). The behavior of perpetrators of sexual violence is obviously a problem, but the beliefs and attitudes of society, especially within the culture of a college campus, contribute to the problem.

Much of the current research is focused on changing the attitudes and beliefs of the overall population of the college to prevent sexual violence, which is referred to as the bystander or socio-cultural approach (Banyard, Moynihan, Crossman, 2009; Stein, 2007). As stated by Flood and Pease (2009, p 125),

Attitudes play a role in the perpetration of this violence, in victims' responses to victimization, and in community responses to violence against women. With good reason, attitudes have been a key target of community education campaigns aimed at preventing violence against women.

Sexual violence is an extensive problem for colleges and despite documented incidents by Koss, Gidycz, and Wisniewski over 20 years ago, the prevalence rate remains constant, even though other crimes have declined nationally (Banyard et al, 2009; McMahon, 2008). To add to the multi-dimensional problem, laws in each state differ on the definition and ramifications for sexual violence, so prevention and intervention is dependent upon the legal statutes of the state in which the college is geographically located. Even though institutions of higher education are required to disclose their security procedures, report crime data, and ensure victims' rights, the National Institute of Justice (Karjane, et al, 2005) reported in their study that "Institutions of higher education vary widely in how well they comply with Clery Act mandates and respond to sexual victimization. Only 37 percent of the schools studied report their statistics in the required manner" (p. 3). The report (Karjane, et al, 2005)

summarized that despite prevention programs, legislation and policy changes; sexual assault is a pervasive and prevalent problem on college campuses, and most of the sexual violence is perpetrated by other students on the campus.

Importance of the Study

Acquaintance rape is the most common violent crime on American college campuses, and there is research to support the notion that prevention programs are insufficient (Finn, 1995; Karjane et al, 2005). Many campus administrators maintain false impressions that current efforts to prevent and intervene with sexual violence are adequate because rapes are unreported and therefore the problem is not obvious or recognized (Sampson, 2002). Analyzing the local problem by first gathering the basic facts will help design a more effective strategy to deal with sexual violence on each campus; and this is done by asking critical questions within a victimization survey (Sampson, 2002).

The most recent annual security report for the campus in this study included crime statistics for the years 2006-2010, which indicated that only one forcible sex offense was committed on the campus. According to these required annual security reports, sexual violence has not occurred at a high rate on this campus, with only one reported incident brought to the attention of the local police or campus officials. The sexual violence needs assessment of this study asked critical questions to gain information about the prevalence of sexual violence that has occurred on the campus, but was *not* reported to police or authorities.

Information was collected on the prevalence of rape supportive attitudes among students, and the results provided details that will assist the campus community, particularly the office of Student Affairs, to determine appropriate steps for the prevention of sexual violence on the campus as indicated by the results of the study. The office of Student Affairs orchestrates these services: Counseling Services, Fraternity and Sorority Life, Health Services, Residential Life and Housing, and Student Activities and Organizations, as well as others, but the previously listed ones are directly connected to factors that affect sexual violence. This study provided useful information to be utilized by the Office of Student Affairs in planning and providing what is promised to prospective students on the Office of Student Affairs website “assistance for the challenges and concerns that come your way, and assist you in all aspects of your campus life” Data from the needs assessment provided information that could assist in convincing administrators to financially support education efforts designed to minimize and reduce the prevalence of rape supportive attitudes and sexual violence on the campus in this study.

The critical factor in dealing with the complex issues surrounding sexual violence on college campuses is conducting a needs assessment to accurately indicate the extent and nature of the problem. Research and evidence pertaining to the specific campus and sexual violence must be used to differentiate the vulnerability of specific populations on campus (Sampson, 2002). Based on previous research on sexual violence on college campuses, there are various societal factors such as a large number of students living on campus, as well as participating in athletics and the

Greek system, that would likely make this university an at-risk campus for sexual violence, so conducting a needs assessment of the situation seemed not only appropriate, but necessary.

CHAPTER II-REVIEW OF THE LITERATURE

The following literature review examined the significance of the work of Mary Koss to the field of sexual violence on college campuses. Second, the prevention principle utilized in the public health approach to sexual violence was the framework in which the four levels of risk factors for perpetration and victimization of sexual violence were reviewed. The four levels of influences are individual, relationship, community and societal, and according to the Centers for Disease Control and Prevention (2004), prevention depends on understanding the circumstances and factors influencing the occurrence of sexual violence. Each level of influence and the risk factors identified at that level were reviewed. Individual influences included risk factors of alcohol use and attitudes and beliefs that support sexual violence. Relationship influences included risk factors of association with Greek members and athletes. Community influences included risk factors of university policies and general tolerance of sexual violence. Societal influences included gender and race. Last the specific population-based and environmental situations specific to college campuses that promote or enable sexual violence were reviewed.

Koss and the SES

Prior to 1987, the National Crime Survey reported that sexually violent crimes, such as sexual assault, were infrequent and rare in the United States (McMahon, 2008), but the groundbreaking study done by Koss, Gidycz, and

Wisniewski (1987) indicated that sexual assault was indeed occurring on the campuses of various institutions of higher education. This landmark study by Koss et al, (1987) surveyed 6,159 students enrolled in 32 institutions of higher education in the United States with results indicating that 15.4% of the college women surveyed had experienced completed rape, 12.1% had experienced attempted rape, and 53.7% were the victims of some form of sexual violence ranging from unwanted sexual contact to completed rape. The male students in this study reported that 25.1% had been involved in some form of sexual aggression, with 3.3 % attempting rape, and 4.4% admitted raping. The sampling goal of the project was to represent the higher education student population in student diversity and type of educational institution, such as technical colleges, community colleges, Ivy League schools, private universities and public universities to indicate that sexual aggression is found across all types of educational settings throughout the United States (Koss et al, 1987).

The 1987 (Koss, et al) study was done to extend the scope of a previous study done by Koss & Oros in 1982 to a national basis. The 1982 study was done with two goals in mind: first to develop an updated instrument to collect data on sexual aggression that represented a continuum of behaviors, rather than a one dimensional act; and second to accurately reflect the prevalence of sexual aggression by obtaining information from hidden victims and undetected offenders. The researchers were attempting to create an instrument that would reflect unreported incidents of sexual violence while assessing the prevalence of sexual violence of college students enrolled at Midwestern universities (Koss, et al, 1987). The instrument used in the

study, the Sexual Experience Survey (SES), a self-reporting questionnaire, created by Koss & Oros (1982) in the late 1970's was administered to 2,016 female students and 1, 846 male students at Midwestern universities. Results of the 1982 study indicated that 13% of the female college students revealed a sexual experience that involved sexual intercourse against their consent (Koss et al, 1987).

The SES introduced features that utilized very specific language about unwanted sexual encounters to facilitate the respondent's ability to identify and recall experiences while measuring victimization and perpetration of unwanted sexual behavior. The survey avoided the use of the words sexual assault, rape or other legal terms and asked about specific behaviors with non-judgmental language to determine previous sexual experiences. For example the first item of the Sexual Experience Survey Short Form Victimization (SES-SFV) states "Someone fondled, kissed, or rubbed up against the private areas of my body (lips, breast/chest, crotch or butt) or removed some of my clothes without my consent" rather than stating I was "violated" or "sexually assaulted" (Koss et al, p. 167, 1987). The Sexual Experience Survey Short Form Perpetration (SES-SFP) measures perpetration of sexual violence by changing four words in the first item "I fondled, kissed, or rubbed up against the private areas of someone's body (lips, breast/chest, crotch or butt) or removed some of their clothes without their consent". Words have been underlined within this item for clarification purposes, but they are not underlined within the actual item in the survey. The SES has been utilized in numerous studies in psychological,

criminological, and health research settings and has been revised and updated in 2007 (Koss, Abbey, Campbell, Cook, Norris, Testa, Ullman, West, & White, 2007).

The overall purpose of studies done by Koss using the SES was to suggest that sexual violence was much more prevalent than indicated by actual and official crime statistics published by the Bureau of Justice Statistics in 1984 that reported rape as infrequent and rare in the United States (Koss et al, 1987). Koss et al, (1982) recognized that the official government approach of only using figures that were actually reported to the police used by the Federal Bureau of Investigation to estimate the scope of sexual violence was not an accurate indicator of the prevalence of the crime. Studies conducted during 1984 in South Carolina and California to determine the prevalence of sexual victimization of randomly selected female residents of those states disclosed that only 29% and 9.5% of victims that described experiences that involved forced intercourse reported their experience to police (Koss et al, 1987).

One reason that Koss stated for studying college students to determine prevalence of sexual assault is because college students are automatically at risk for sexual violence because of their age. The victimization rate for women peaks in the 16-19 year old age group and the second highest rate occurs in the 20-24 year old age group (Koss et al, 1987). There are also unique situations on college campuses, such as alcohol consumption, living arrangements, and social networking that increase this behavior and complicate the issues involved with sexual violence. Koss was one of the first to study sexual violence on college campuses, but her work awakened society

to the problem of sexual victimization of college women and opened doors to the awareness of intricate characteristics of campus cultures that create at-risk conditions for sexual violence.

Prevention of Sexual Violence

Carmody et al (2009) expressed the need and importance of preventive measures by service providers to minimize re-victimization and help sexual violence victims through the post-assault experience, and states that most campuses have sexual assault crisis centers designed to assist victims as well as educate the college community. Unfortunately, a sexual assault crisis center does not exist on the campus of this study, but a counseling center provides mental health services for victims, and crisis intervention is provided by local law enforcement with assistance from county sexual assault centers. Educating the college community is an important task of the sexual assault crisis center as suggested by Carmody, et al (2009), but without an official office that is specifically trained and responsible for the mission of informing and training all constituents of sexual violence issues, it is understandably an overlooked piece to the overall puzzle of the prevention and intervention of sexual violence.

Senn (2010) asserted that education on sexual violence could not reasonably be expected to be done when it is in addition to all of the other duties carried out by mainstream mental and physical health services or broad multi-education programs provided by Student Services staff that lack input from those with expertise in sexual

violence. The reality is that on the campus of this study, the “mainstream” mental and physical health office, along with Student Services, is responsible for the education, prevention and intervention of sexual assault. The Health & Counseling Center on this campus is staffed by one full-time counselor, a full-time nurse and a full-time receptionist. As a result of having numerous duties that involve direct service to students, the Health & Counseling Center, along with Student Services, is likely unable to devote the necessary time and efforts required to educate the entire campus on effective strategies for the prevention and intervention of sexual violence. A campus lacking a person or office that is clarified as being responsible for prevention of sexual violence may inadvertently contribute to a rape supportive culture.

Sampson (2002) stated that fewer than 5 percent of college women who are victims of rape or attempted rape report it to the police, but around two-thirds of the victims tell a friend or roommate, which supports the notion that the entire community of the campus must be informed and trained to deal with sexual violence. The underreporting of acquaintance rape prevents victims from receiving adequate help, it leaves many offenders unaccountable for their behavior, and many times the college officials are unaware of the extent of the problem or prevalence of acquaintance rape on their campus (Sampson, 2002).

College women are most likely to be raped during the first few weeks of school and research shows that many rapes occur after 6 pm, with most occurring

after midnight (Sampson, 2002). Many acquaintance rape victims do not label their assault as rape, even when it clearly meets the legal definition of rape. These victims are referred to as unacknowledged rape victims, and researchers theorize that the reason the victims do not acknowledge their rape experience as rape is because it is inconsistent with their own idea of rape, or views of society about rape (Littleton, et al, 2008). Minimizing the violence or behavior of the perpetrator while making excuses or accepting the behavior as normal is one of the common characteristics of rape myth acceptance.

Individual-level influences

Individual-level influences are personal factors that increase the likelihood that an individual will become a victim or perpetrator of violence. Two specific individual level influences examined on this campus were alcohol use and attitudes and beliefs that support sexual violence, specifically rape myth acceptance.

Alcohol

Alcohol consumption has been implicated as a significant factor in the commission of sexual violence, and approximately 90% of college students consume alcohol (Abbey, 2002; Bernat, Calhoun & Stolp, 1998; Krebs, Lindquist, Warner, Fisher & Martin, 2009; Palmer, McMahon, Rounsaville & Ball, 2009). Alcohol appears to be the most common factor within the college campus that is correlated to sexual violence and it increases the risk of sexual violence in several ways (Crawford, Wright & Birchmeier, 2008). According to Crawford et al (2008) men tend to use

alcohol to justify their behavior and tend to perceive women as more interested in having sex with them than they actually are. Women on the other hand, may be physically inhibited to resist sexual advances by excessive alcohol consumption or the inability to assess the situation as potentially dangerous, and there is a strong correlation between quantity of alcohol consumed by women and vulnerability to sexual violence (Crawford, 2008).

Alcohol is clearly the most common drug associated with sexual violence, but there have been numerous drugs used to facilitate sexual violence by incapacitating the victims (Sampson, 2002). A substance often associated with “drug-facilitated sexual assault” is Rohypnol, gamma hydroxybutyrate (GHB). These types of drugs are easy to administer by putting in a drink and the symptoms are similar to the effects of alcohol: dizziness, lack of motor skills, blurred vision and nausea. The detection of these drugs would need to be done with toxicology screening within hours after ingesting the substance, which hinders the process of determining the presence of this drug in cases involving sexual violence (Sampson, 2002). By the time women suspect they may have been drugged, the drug is likely out of their system.

Alcohol use that leads to problematic behavior such as sexual violence affects the entire campus and incidents compromise the safety and well-being of not only the victims, but all inhabitants of the campus community. College campuses are expected to provide a safe and inviting environment that fosters development and

growth for students as they complete their educational process. The role of alcohol in violence is greater for students that live on campus (Scribner, et al, 2010), and because the campus in this study requires all full-time students to live on campus, students are likely to be more at-risk than students living off campus. The two types of living arrangements provided by the college in this study that allow the presence of alcohol were the apartments and the four fraternity houses.

Rape Myth Acceptance

Rape myths were originally defined by Martha Burt in 1980 as stereotypical or false beliefs about rape, and later were described by Lonsway and Fitzgerald as “attitudes and beliefs that are generally false yet widely and persistently held, and that serve to deny and justify male sexual aggression against women” (1994, p.134). The acceptance of rape myths is an indicator of problematic attitudes, but is also important in the prevention and intervention of sexual violence (Aosved et al, 2006; Bleeker et al, 2005, Chapleau et al, 2007; Yeater et al, 2010). Rape myths are complex because they involve various constructs that focus on beliefs about the act of rape, the victim and the perpetrator. These complex myths are further complicated among college students, who likely have been exposed to rape prevention education in high school, and have learned that some rape myths are not socially acceptable (McMahon, 2010). McMahon (2008) reported that rape myths exist in covert forms regarding victim-blaming, such as expressing that rape could happen unintentionally in certain

situations and men should not be held entirely accountable for sexually violent behavior in these circumstances.

The significance of rape myths is in their function to normalize sexual victimization and blame victims (Payne et al, 1999). Students who endorse more rape myths are less likely to intervene as bystanders when they witness situations that indicate sexual violence is a possibility (McMahon, 2008). This supports the need for education about rape and to inform all members of the campus communities about the laws and effects of sexual violence while dispelling the myths about rape that are common among society. The current study measured the level of rape myth acceptance among the participants and the results identified populations that adhered to rape tolerant attitudes, as well as groups that had lower levels of rape myth acceptance.

Assessing rape myth acceptance has recently become more common as the field of rape prevention has shifted to focus on the role of community members, which have been recognized as playing important roles in the primary prevention of sexual violence (Aosved et al, 2006; Banyard et al, 2009; Fabiano, Perkins, Berkowitz, Linkenbach & Stark, 2003; McMahon, 2008). McMahon (2008) suggested that the bystander approach could be a useful prevention strategy, even though research on this approach is limited. Community members are often present in the pre-assault phase, and if bystanders are equipped with skills and strategies to intervene when situations that appear to be high risk for sexual violence, there is

potential for reducing the occurrence of rape (McMahon, 2008). The importance of rape myth acceptance in the bystander approach was implicated by McMahon (2008) when her study suggested that students who endorse rape myths are less likely to intervene when they observe a situation that appears likely to lead to sexual violence toward female students.

Rape myths are measured by rape myth scales, and McMahon (2010) reported the Illinois Rape Myth Acceptance Scale is arguably the most reliable and psychometrically demonstrated rape myth scale because the authors conducted numerous studies to construct the validity of the IRMA items to specific variables of rape myth acceptance. High rape myth acceptance is associated with perpetration of sexual violence, but it also includes the belief that a rape victim deserved to be raped or is at fault for the experience (Aosved, et al, 2006). Previous research has indicated the importance of changing attitudes of both men and women to reduce sexual violence toward women (Banyard, et al, 2009). The role of bystander intervention has been promoted by researchers as an effective approach to sexual violence because it shifts the focus of prevention from victims and perpetrators to community members, suggesting that community members will intervene if they are aware and informed of strategies to prevent and stop sexual violence (McMahon, 2010).

Interpersonal Relationship-level Influences

Sexual violence is influenced by a hierarchy of social forces and a review of the literature reveals numerous studies that have examined the relationship of sexual

violence and membership in campus organizations (Koss & Gaines, 1993; Murnen & Kolhman, 2007). As stated in the previous section, excessive use and abuse of alcohol on college campuses is a widespread concern and students' drinking behavior is influenced most by their immediate social network (Juth, Smyth, & Thompson, 2010). Drinking in college is primarily a social event, with the heaviest drinking occurring in groups with close friends; making alcohol consumption most prevalent within socially centered environments such as the Greek system and sporting events (Juth, et al, 2010). According to another study that examined the social factors that influence students' drinking behaviors, there is a great deal of variation found in the characteristics of the students and the social environment of colleges and identification of these factors is essential for developing intervention for the problems associated with high-risk drinking behaviors such as death, injuries, physical assaults, unprotected sex, and sexual assault (DuRant, McCoy, Champion, Parries, Mitra, Martin, Newman, & Rhodes, 2008).

Greek Affiliation

Affiliation with on-campus organizations such as fraternities and sororities may increase a students' risk for health problems because of the rituals and socially endorsed behaviors associated with Greek organizations (Scott-Sheldon, Carey, & Carey, 2008). According to Abbey (2002), the peer group norms in some college social environments, including many sororities and fraternities, accept getting drunk and engaging in behaviors that would usually be considered embarrassing. A study

(Fairlie, DeJong, Stevenson, Lavigne & Wood, 2010) that analyzed the behaviors of leaders in Greek organizations found that fraternity and sorority leaders more often reported unhealthy behaviors such as: driving under the influence, feeling nauseous or vomiting, missing class, and doing things they regretted due to the use of alcohol. The socialization activities of these organizations would seem to offer useful information to prevention efforts that focused on safe behaviors.

The fraternity culture includes group norms that reinforce within-group attitudes that perpetuate sexual violence against women (Adams-Curtis & Forbes, 2004; Boswell & Spade, 1996). Fraternity membership is positively associated with attitudes related to sexual aggression such as believing that women pretend to not want sex but instead want to be forced into sex, that men should be controllers of relationships, that sexually liberated women are promiscuous, and that women secretly desire to be raped (Boeringer, 1999; Murnen et al, 2007). Over half of all gang rapes on college campuses are committed by fraternity men, and because they are considered high risk for perpetration, rape prevention programs target this population (Foubert & Newberry, 2006). Martin and Hummer, (1989) claimed that fraternities operate in a social-cultural context in which violence, rape, female objectification, and the use of coercion in sexual relations are commonplace. All male groups such as fraternities play a role in generating and perpetrating attitudes and behaviors that support sexual violence and recruit other men with similar values (Bleeker & Murnen, 2005). Fraternity brotherhood emphasizes traditional gender roles which are positively correlated with the acceptance of rape myths (Berkel,

Vandiver & Bahner, 2004). These attitudes are promoted and expected within the climate of fraternities and extend onto the climate of the entire campus if not countered with contrasting views.

Sororities are directly related to fraternities based on their socialization norms and lifestyles connected to fraternities which might explain the higher drinking rates: active Greek affiliated women consume an average of 5.5 drinks per week, more than twice the amount of non-Greek female college students (Wuthrich, 2009). This direct affiliation puts them at a greater risk for sexual violence than any other organized group on college campuses (Larimer, et al, 1999; Mohler-Kuo, Dowdall, Koss, Wechsler, 2004). Sorority members that live in sorority houses are three times likely to be sexually victimized while intoxicated than other college women not living in a sorority (Danis, et al, 2008). Historically sororities were founded in the late 1800's when young women were first admitted to colleges or universities and were ridiculed for attending male dominated populations. Sororities were founded to provide a safe haven from the harassment of male students, faculty, and society in general for females that were pioneers in higher education (Danis, et al, 2008). Ironically today those same sororities that were founded to protect the women students are found to be more at-risk for sexual violence than women on the same campus that do not belong to the sorority (Kalof, 1993; Martin et al, 1989). Danis (et al, 2008) suggested in their study of 41 national collegiate sororities that undergraduate sorority leaders lack information and willingness to acknowledge that domestic and sexual violence is an issue for their members. Danis (et al, 2008) recommended that collegiate sororities

be added to the list of underserved populations and targeted for sexual violence outreach programs. Another study suggested that if sorority membership puts women at risk of any type of violence, the phenomenon should be studied so effective programs can be implemented by appropriate practitioners (Mohler-Kuo, et al, 2004).

Wuthrich (2009) stated that efforts have been made to improve the campus safety for sorority women, but the culture of the sorority membership is difficult to examine from the outside, and maintaining the isolated culture is important, so efforts are not easily implemented. One important aspect of the culture of a sorority is the attitude of the female members, particularly the attitudes toward victims of sexual violence. Social norms portrayed through the media of traditional gender-role attitudes teach women to blame themselves for sexual violence, and females who identify with traditional gender roles are less likely to report incidents to the police or authorities (Flood, et al, 2009). Flood (et al, 2009) also found that social relations within a particular culture, such as a sorority, influence the attitudes of other members. Specifically members of a sorority recruit and retain women that have similar attitudes, sorority women have held more traditional gender role attitudes (Adams-Curtis, et al, 2004), and positive relationships have been found between traditional gender roles and rape myth acceptance (Berkel, et al, 2004).

Athletes

Members of athletic teams, particularly gender-segregated teams playing contact sports, have been associated with sexually violent behavior (Adams-Curtis,

2004). Research suggested that all-male groups create an environment that reinforces rape supportive attitudes and fosters peer pressure to conform to social norms of groups on college campuses (Abbey, 2002). Research has also established that student-athletes drink more alcohol compared to their non-athlete peers (Lewis, 2008). However, the prevalence of literature directly linking athletes and sexually violent behavior does not exist. The literature is more abundant on the hyper-masculine attitudes and group bonding of athletes on college campuses, and the aggressive group values that are reinforced and intensified within these groups (Murnen, 2007). As a whole, research indicated that men who have friends that are sexually aggressive are more likely to exhibit sexually aggressive behaviors (Adams-Curtis, 2004). The implication for prevention is to examine the unique environment of collegiate athletics on each campus to determine the multiple influences that impact behavior, and create educational programs that are effective for the identified social influences (Lewis, 2008).

Community and Societal Influences

Sexual violence is an extensive problem for colleges and it is vital that cultural norms that possibly facilitate tolerance of sexual violence be examined and analyzed in order to identify problems and solutions surrounding sexual violence on college campuses (Banyard, et al, 2009; McMahon, 2008). Banyard et al, (2009) mentioned several at-risk environmental factors that promote sexual violence of students on a college campus: heavily populated individuals in the most at-risk age

group for sexual violence, the absence of capable guardians, frequent social situations, and the close proximity of many students in residence halls/apartments. Sampson (2002) suggested that the varying rate of acquaintance rape on different campuses could be attributed to various features of the college environment, such as: type of school and region, frequent unsupervised parties, easy access to alcohol, single students living on their own, and the availability of private rooms.

Koss et al. (1987) found in their study that the governance of the institution was a variable that affected the victimization rate of female students; private colleges reported a victimization rate of 14%, major research universities reported a rate of 17%, and religious affiliated institutions reported a rate of 7%. Another environmental variable that Koss et al. (1987) reported having an effect on prevalence of sexual violence was the regional location of the higher education institutions. The study (Koss et al, 1987) indicated that college men attending institutions from the Southeast states reported perpetration of sexual aggression at rates of 6%, while men attending school in the Plains states reported a 3% rate of sexual aggression, and the West a reported rate of 2%. Later research indicated similar findings; private colleges and major research universities have higher than national averages for acquaintance rape, and religiously affiliated schools have lower than national average rates (Sanday, 1996).

McMahon (2008) suggested that one of the unique situations on college campuses that complicate issues of sexual violence involves the living arrangements

provided within the environments of college campuses. The reality of these living arrangements is that the victim(s) of sexual violence on the college campus may live near or in the same residence hall as the perpetrator. They may be enrolled in the same classes, belong to the same organizations, or attend the same functions (McMahon, 2008). The higher education institution studied requires all full-time students to live in university-sponsored housing and states closer interaction with classmates as justification for this requirement to live on campus. The close proximity of many students in living quarters that Banyard (2009) mentions as an at-risk environmental factor is particularly a problem at small colleges, and re-victimization (victims feel violated again by peers and administration due to adverse reactions to reporting their situation) is common where classmates and friends are known to each other. The study was done on a campus with less than 1,000 students, which would necessitate the need for extra precautionary measures to be in place to ensure that victims of sexual violence are protected from threats, intimidation, and other acts of mental cruelty from others within the college environment that may cause even more emotional and psychological damage to victims (Carmody, Ekhomu, & Payne, 2009).

Gender is the strongest variable in predicting attitudes that endorse rape among college students; males consistently score higher than females on rape myth acceptance instruments (Aosved, et al, 2006; Banyard, et al, 2009; Flood et al, 2009; McMahon, 2008; Tatum, et al, 2007). According to Flood (et al, 2009) it is the gender orientation, not the actual sex of an individual, that shapes and forms attitudes

and beliefs; and traditional gender-role attitudes are associated with greater acceptance of violence against women.

Summary

The incidence of sexual violence at institutions of higher education does not appear to be decreasing. The evidence is plentiful to support the magnitude of the problem. However, because of the complicated and multidimensional variables involved with sexual violence, evidence for solutions is not as universal. Victims and perpetrators of sexual assault many times do not perceive the situation as coercive, which indicates an extensive need for education and a strong push for changing attitudes and environments that support sexual violence. Each institution has its own unique characteristics and set of circumstances that create the need for individualized prevention and educational programs. The important first step is determining the extent of the problem and then allocating human and monetary resources to ensure effectiveness of the prevention and educational practices to decrease sexually violent behavior.

The IRMA-SF was incorporated into the survey to measure the beliefs that blame victims of sexual violence, rather than hold the perpetrators accountable for their actions. The needs assessment and evaluation of sexually violent behaviors and attitudes must be an ongoing process for institutions that are committed to dealing with this problem effectively. The study of this campus provided the data for the

initial steps of the prevention of sexual violence by defining the problem and identifying risk factors on the campus.

CHAPTER III-METHODOLOGY

The Centers for Disease Control and Prevention (CDC) define sexual violence prevention as:

the efforts to modify and/or eliminate the events, conditions, situations, or exposure to influences (risk factors) that result in the initiation of sexual violence and associated injuries, disabilities, and deaths. Additionally, sexual violence prevention efforts address perpetration, victimization, and bystander attitudes and behaviors, and seek to identify and enhance protective factors that impede the initiation of sexual violence in at-risk populations and in the community (2004, p.1).

This study specifically examined risk factors of drinking, rape myth acceptance, Greek membership, athletic participation, on-campus housing; as well other variables of gender, ethnicity, and class rank of students to determine if any of these variables were predictors of attitudes that promote sexual violence. Data from this study provided answers to the question of what are the risk factors for sexual violence, and how much sexual violence is happening on this particular campus.

Participants and Sample Selection

In an effort to obtain a sample of the entire student population of this particular institution, a convenience sample of interterm courses was used to determine participation in the study. Interterm courses are only offered during the month of January and students may only enroll in one interterm course, which

eliminated the chance of students being asked to take the survey in more than one course. All graduates of this university are required to take three interterm courses, and all freshmen are required to take an interterm course after completing their first semester on campus. The other two required interterm courses may be taken anytime in the years before graduation, so interterm enrollment consists of a variety of levels of students in their academic years, but freshmen students are the largest group enrolled in interterm because it is required.

There were 27 courses offered during January 2012 interterm, but only the non-travel courses were available for participation, which resulted in 16 courses being offered on campus. The seven travel courses and the four practicum courses were not invited to participate because students enrolled in those courses were not on campus. The 16 remaining courses that were included as an option for the January 2012 interterm session for all degree seeking students were solicited for participation in the study by requesting permission of the instructors to administer the survey during one of their class sessions.

Thirteen of the 16 professors agreed to allow the survey to be conducted within a class period, which resulted in 157 female surveys and 189 male surveys for a total of 346 participants of undergraduate students enrolled at this small, private, Midwestern, university as a sample. The vast majority of the students were Caucasian students, all over the age of 18, enrolled full-time, which indicated an accurate representation of the entire student population.

Procedures

Because the study presented no risks to participants, no written consent was obtained; instead students were given the information statement approved by the University of Kansas Human Subjects Committee. The information statement also included appropriate resources for assistance in dealing with unwanted sexual experiences. The Internal Review Board at the campus to be studied also approved the proposed study. The confidential and voluntary nature of the study was stressed before students were instructed to come forward and pick up the appropriate survey according to their gender if they wished to participate in the study. Writing utensils were provided, as some of the classes were experiential in nature and students did not have or need writing utensils for all class sessions. Male participants were asked to complete the blue surveys, and female students were instructed to complete the pink surveys. The university's full-time undergraduate students are equally split among females (50.1%) and males (49.9). The sample representations for gender were 45% female and 55% male, indicating a slightly lower representation of females and slightly higher population of males than the full-time enrollment student population.

Participants were asked to spread out in the provided space as much as possible to provide privacy during the completion of the survey. Completed surveys were placed face down in large tubs to ensure anonymity and privacy of answers. The four page survey took approximately 10-15 minutes to complete, and students were reminded not to identify themselves in any way on the survey form. The

Principal Investigator remained in all classes during the completion of the surveys to guarantee privacy and confidentiality to participants, and left with all materials when all students had completed the survey.

Measures

Data for this study were collected through informed consent and completion of a survey that measured self-reported sexual experiences, beliefs about rape, and demographic information. The surveys were anonymous and confidential, with no personal identification information collected, in order to promote honest answers by the participants. The sexual experience information collected was focused on male violence against women, as that was the focus of this study.

Sexual Experience Survey

The *Sexual Experiences Survey* (SES) was utilized to measure the victimization and perpetration of unwanted sexual acts (Koss, 1985). The SES scales were revised in 2007, and were closely modeled to the original SES (Koss et al, 2007). The revised short forms were used because of their similarity in design and function to the original SES, which measured sexual violence by utilizing very specific language about unwanted sexual encounters.

Victimization of females by males was the focus of this study, so female students completed the Sexual Experiences Survey Short Form Victimization (SES-SFV), which included five questions about unwanted sexual experiences (ranging

from sexual contact to rape) that female students had encountered since attending this campus as full time students. Each of the five questions contained five subsets that solicited respondents to indicate how many times the experience occurred and what tactic was used to accomplish the unwanted sexual experience (See Chart 1).

Respondents indicated how many times this act had happened since they have been enrolled full time on this campus by checking boxes to indicate 0, 1, 2, or 3+. The subsets for each question were computed as a variable to determine the frequency of each type of tactic used to perform the unwanted sexual act, which resulted in 25 variables. The 25 variables were grouped into three categories of sexual violence: sexual battery, sexual coercion and rape.

Chart 1

Victim Survey Question Subsets Indicating Tactics Used

a. Telling lies, threatening to end the relationship, threatening to spread rumors about me, making promises I knew were untrue, or continually verbally pressuring me after I said I didn't want to.
b. Showing displeasure, criticizing my sexuality or attractiveness, getting angry but not using physical force, after I said I didn't want to.
c. Taking advantage of me when I was too drunk or out of it to stop what was happening.
d. Threatening to physically harm me or someone close to me.
e. Using force, for example holding me down with their body weight, pinning my arms, or having a weapon.

The tactics or strategies used are important and appropriate in examining risk factors to inform the development of prevention and educational programs dealing with sexual violence (Koss, et al, 2007). Alcohol-related tactics are used most frequently on college campuses and many times alcohol tactics are combined with

other coercive tactics for the majority of sexually violent incidents (Mohler-Kuo et al, 2004).

The SES measured the category of sexual contact by including five variables under question 1: *Someone fondled, kissed, or rubbed up against the private areas of my body or removed some of my clothes without my consent.* The five variables were combined into a new variable labeled sexual contact. Any respondent indicating any number other than 0 on the five tactics (variables) below question 1 were calculated as having experienced sexual contact.

Questions 2 and 3 on the SES were considered by Koss to be sexual coercion and those variables were combined to indicate the number of female students reporting they experienced sexual coercion. Including variables that are considered sexual coercion within the study was important, even though they were not considered crimes. Coercive acts are emotionally distressing and have shown to have negative consequences for women, especially if the perpetrator was someone they trusted as a friend or boyfriend (Abbey, Beshears, Clinton-Sherrod, & McAuslan, 2004). The category of sexual coercion included five variables pertaining to coercion for oral sex and five variables pertaining to coercion for vaginal sex. Question 2: *Even though it didn't happen, a man TRIED to have oral sex with me or make me have oral sex with him without my consent,* had five subsets for respondents to indicate how many times the experience occurred and what tactic was used to accomplish the unwanted sexual experience. Respondents indicated how many times

this act had happened since they had been enrolled full time on this campus by checking boxes to indicate 0, 1, 2, or 3+ for each tactic (variable). Any respondent indicating any number other than 0 on the five variables below question two were calculated as having experienced oral sexual coercion. Question 3: *Even though it didn't happen, a man TRIED to put his penis into my vagina, or insert fingers or objects without my consent*, contained five subsets for respondents to indicate how many times the experience occurred and what tactic was used to accomplish the unwanted sexual experience. Respondents indicated how many times this act had happened since they had been enrolled full time on this campus by checking boxes to indicate 0, 1, 2, or 3+ for each tactic (variable). Any respondent indicating any number other than 0 on the five variables below question three were calculated as having experienced vaginal sexual coercion. The categories of oral sexual coercion and vaginal sexual coercion were combined to create the category of sexual coercion.

Questions 4 and 5 were considered by Koss to be rape, and variables for those questions were combined to create the category of rape. Question 4: *Someone had oral sex with me or made me have oral sex with them without my consent*, contained five subsets for respondents to indicate how many times the experience occurred and what tactic was used to accomplish the unwanted sexual experience. Respondents indicated how many times this act had happened since they had been enrolled full time on this campus by checking boxes to indicate 0, 1, 2, or 3+ for each tactic (variable). Any respondent indicating any number other than 0 on the five variables below question four were calculated as having experienced oral rape. Question 5: A

man put his penis into my vagina, or inserted fingers or objects without my consent, contained five subsets for respondents to indicate how many times the experience occurred and what tactic was used to accomplish the unwanted sexual experience. Respondents indicated how many times this act had happened since they had been enrolled full time on this campus by checking boxes to indicate 0, 1, 2, or 3+ for each tactic (variable). Any respondent indicating any number other than 0 on the five variables below question five were calculated as having experienced vaginal rape. The variables were combined to create the category of rape.

A sexual violence variable was created by including any victim that answered affirmatively to any of the 25 variables. This computed variable was used to indicate the number of women and men who experienced sexual violence as a victim or perpetrator. The sexual violence variable indicated the number of women on this campus who experienced sexual violence and answered the question: How likely are women on this campus to be victims of sexual violence from male perpetrators?

Male students completed the Sexual Experience Survey Short Form Perpetration (SES-SFP) which mirrored the five questions used in the SES-SFV as well as the subsets which indicated the tactics used, but the questions were worded from the aspect of committing the acts as a perpetrator (See Chart 2). The same categories of sexual violence and methods for determining them were used with perpetrators: sexual contact, sexual coercion, and rape; based upon the same variables used for the SES-SFV. The computed variable of sexual violence was also done for

male students to indicate the frequency of male students reporting sexual violence by perpetrating unwanted sexual acts toward women, which answered the question: How likely are men on this campus to be perpetrators of sexual violence toward women?

Chart 2

Perpetrator Survey Questions

1. I fondled, kissed, or rubbed up against the private areas of a woman’s body or removed some of her clothes without her consent
2. Even though it did not happen, I TRIED to have oral sex with a woman or make her perform oral sex on me without her consent
3. Even though it did not happen, I TRIED to put my penis or my fingers or objects into a woman’s vagina without her consent
4. I had oral sex with a woman or made her have oral sex with me without her consent
5. I put my penis or my fingers or objects into a woman’s vagina without her consent

Koss et al, (1987) reported internal consistency reliabilities of .74 for women and .89 for men using the SES, and the test-retest agreement rate between administrations one week apart were 93% (Koss et al, 1987). Koss (et al, 2007) supported the validity of using self-reported sexual behavior using a Pearson correlation between a woman’s level of victimization based on her self-report and her level of victimization based on responses to an interviewer several months later as .73 (p<.001). The Pearson correlation between a man’s level of aggression as described as self-reported and as given in the presence of an interviewer was .61 (p<.001). This test has been used in numerous studies to analyze the prevalence of sexual violence, especially the population of college students and is considered a reliable tool to measure variables of sexual violence. For this study, the 25 items of the SES

measuring sexual violence produced a Chronbach's alpha coefficient of .80, indicating that the questions provided a good measurement for the sexual violence variable. When the sexual violence variable was analyzed for reliability within male respondents, the coefficient maintained reliability with a Chronbach's alpha score of .79. The Chronbach's alpha score within the female respondents was .81.

Illinois Rape Myth Acceptance-Short Form Scale

Beliefs and attitudes about sexual violence were measured by the *Illinois Rape Myth Acceptance-Short Form Scale* (IRMA-SF), which was developed to gauge complex cultural beliefs that serve to perpetrate sexual violence (Payne, Lonsway, & Fitzgerald, 1999). The 20 items of the IRMA-SF were actual items taken from the 45-item full scale *Illinois Rape Myth Acceptance Scale* (IRMA) that included items based on a clear and concise definition of rape myths. The definition used for rape myth acceptance “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” focused on male violence against women (Payne et al, 1999, p.29). The IRMA-SF was created to address the issue of time constraints while also attempting to provide an accurate measurement of general rape myth acceptance. Twenty items were selected from the 45 items to optimize statistical and content-related properties to create the IRMA-SF with a Cronbach's coefficient alpha reliability of .87. This study used the IRMA-SF to measure rape myth acceptance and utilized Chronbach's alpha coefficients to determine consistency and reliability of the items and

determined an overall coefficient of .89 for all participants, .88 within the male respondents, and .87 within female respondents.

The IRMA-SF was used to compute a total score for each student, with a possible overall score range of 20-100. The survey responses for each item were on a 5-point Likert scale (1=strongly disagree to 5=strongly agree). A higher score indicated a higher level of rape myth acceptance. The total rape myth acceptance variable was computed and used to analyze the difference between male and female students to answer research question three: *What are the beliefs and attitudes about sexual violence, particularly rape, that are held by male and female students at this university?* The total rape myth acceptance variable was also used to analyze the mean scores between male and female students. The mean scores for each of the twenty items were also used to compare average means scores between male and females students to provide additional information about the beliefs and attitudes held by students to gauge the prevalence of beliefs that support or justify sexual violence toward women that is perpetrated by men. The 20 items included in the IRMA-SF are:

1. A woman who is raped while she is drunk is at least somewhat responsible.
2. Although most women wouldn't admit it, they generally like being physically forced to have sex.
3. If a woman is willing to "make out" with a guy, then it's no big deal if he goes a little further and has sex with her.
4. When a man is very sexually aroused, he may not even realize that the woman is resisting.
5. If a woman doesn't physically fight back, you can't really say that it was rape.
6. Men from nice middle-class homes almost never rape.
7. Rape accusations are often used as a way of getting back at men.

8. A woman who goes to the home or apartment of a man on the first date is implying that she wants to have sex.
9. If the rapist doesn't have a weapon, you really can't call it a rape.
10. Rape is unlikely to happen in a woman's own neighborhood.
11. Women tend to exaggerate how much rape affects them.
12. A lot of women lead a man on and then they cry rape.
13. When a woman is a sexual tease, eventually she is going to get into trouble.
14. When women are raped, it's often because the way they said "no" was unclear.
15. Men don't usually intend to force sex on a woman, but sometimes they get too sexually carried away.
16. A woman who dresses in skimpy clothes should not be surprised if a man tries to force her to have sex.
17. Rape happens when a man's sex drive gets out of control.
18. Most rape and sexual assaults are committed by strangers.
19. Many so-called rape victims are actually women who had sex and "changed their minds" afterward.
20. In reality, women are almost never raped by their boyfriends.

Problem Drinking

High-risk drinking has been defined by the National Institute on Alcohol Abuse and Alcoholism (2002) in their reports and publications as consuming five drinks or more in a row for men and four drinks or more in a row for women, and is often referred to in the literature as "binge drinking", which is utilized for consistency purposes among studies of drinking. However, recent studies criticized this definition of high-risk drinking because it did not differentiate between social and problematic drinking behaviors of college students (Presley, & Pimental, 2006). According to Presley et al (2006) consuming five or more drinks in one setting would not constitute problematic behavior if this occurred over a five hour period. Presley et al, (2006) found that the number of negative consequences experienced as a result of drinking was significantly different between students who drink three times a week and those who drink once a week or less frequently, but found no significant differences between those who drink three times a week and those who drink more frequently

than three times a week. Hence, they used the cutoff point of three times a week to indicate a frequent drinker, and used the traditional definition of a binge drinker (4-5 drinks in one occasion) to classify a “heavy” drinker. Their work stressed the need to examine the role of frequency as well as quantity of alcohol consumed to define problem drinking for college students.

This study included two items within the demographic section to measure drinking behavior of students on this campus. The survey defined a drink as a bottle of beer, a glass of wine, a wine cooler, a shot glass of liquor, or a mixed drink. Frequent drinkers were identified as drinking on three or more occasions per week, which is consistent with recent National Advisory Council on Alcohol Abuse and Alcoholism guidelines for clinicians (Presley, et al, 2005). The following question measured the frequency of drinking:

<ul style="list-style-type: none"> In a typical week, how many days/nights do you drink? 	0	1	2	3	4 or more
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Heavy drinking for this study was defined as the consumption of five or more drinks on one occasion for men and four or more drinks on one occasion for women, which is consistent with the National Institute on Alcohol Abuse and Alcoholism (2002). The following question measured the intensity of drinking:

<ul style="list-style-type: none"> On a typical day/night of drinking, how many drinks do you have? 	0	1-2	3-4	5-6	7 or more
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For this study, students that met the definition of heavy or frequent drinkers were analyzed to determine if any relationships existed between their drinking behavior and their rape myth acceptance score and other demographic information such as race/ethnicity, full time semesters, Greek affiliation, and athletic participation.

The demographic information requested on the survey included: the number of semesters attended on this campus as a full-time student, current housing arrangements, Greek membership, athletic participation, race and GPA. This information was used to ensure that the sample represented the student population on this campus.

Pilot Test

A pilot survey was administered in the fall 2010 semester at a neighboring college during a human sexuality course. The survey consisted of the SES-SFV, the short form for victimization, and demographic information that included Greek membership, number of semesters enrolled on the campus, housing arrangements and two questions that pertained to drug and alcohol use. Sixty nine students volunteered to complete the survey, which included 23 male respondents and 46 female respondents. Of the male respondents, only one indicated sexual victimization that met the sexual coercion category. Of the female respondents, 25 of the 46 (54.3%) reported some form of victimization, which is similar to the rate (53.7%) reported in the study done by Koss (et al, 1987) using the original SES form. Ten (21.7%) of the female respondents reported behavior that legally met the definition of rape in

Kansas, which indicated a higher number than completed rapes in the Koss (et al, 1987) study, which reported 15.4 % of the women experienced completed rape.

The pilot study did not provide enough information to indicate a correlation between sorority membership and sexual victimization. Only seven of the 46 women reported being members of Greek organizations, so the numbers were difficult to determine a legitimate sample or generalization for this variable. Three of the sorority members experienced some form of victimization, which is 42.8%. Based on the information from the pilot study, the decision was made to add an instrument to the study that would measure rape myth acceptance to determine if a rape supportive attitude was evident in the specific populations. The inclusion of drug use provided little information as very few reported this information on the pilot survey, so the focus of the survey turned to more specific information regarding drinking behavior of students. An item was added to measure the frequency of drinking alcohol in additions to the item that measured the intensity of drinking, and the drug use item was eliminated.

Statistics Used for Analysis to Answer Research Questions

Descriptive statistics were run to determine the frequencies of respondents for each of the student groups of: gender, ethnicity, Greek membership, athletic participation, and number of semesters enrolled full-time. Descriptive statistics were also used to determine the frequencies of gender, drinking behavior, housing, and class rank of the participants of the study.

Research questions one and two were answered by computing frequencies for each of the three categories of sexual violence: sexual contact, sexual coercion, and rape for female students as victims and for male students as perpetrators. A new categorical variable (sexual violence people) was computed, which indicated the participants who reported any type of sexual violence in any of the categories to determine the number of students reporting an unwanted sexual experience. Continuous variables for sexual violence were computed for each of the three categories of sexual violence by tabulating the number of sexually violent incidents reported by students for each category. Frequencies were tabulated for sexual violence in all of the categories for female and male students.

Research questions three and four were answered by using descriptive statistics to calculate a total score from the twenty variables from scores on the IRMA questions to compute a new variable (RMA total) for respondents to indicate their level of rape myth acceptance. Mean and range scores for rape myth acceptance scores were tabulated for student groups of males and females. Mean scores were compared between male and female students for the total rape myth acceptance score, and also for each of the twenty variables used to measure rape myth acceptance

Results for research questions four and five were determined by using regressions to examine the relationship between two different dependent variables of rape myth acceptance scores and sexual violence and the demographic variables of race/ethnicity (white and non-white categories), semesters enrolled full time, Greek

membership, participation in athletics, and drinking behavior. Linear regressions were run for the outcome variable rape myth acceptance and the demographic indicators mentioned above for both male students and female students. Logistic regressions were run to analyze sexual violence as the dependent variable and all of the demographic variables of: frequent drinking, heavy drinking, number of full-time semesters, Greek membership, athlete, as well as rape myth acceptance, as predictor variables. The logistic regressions were run for both male and female students to examine contributors for sexual violence.

Research questions six and seven were answered by running bivariate correlations to analyze relationships between variables of rape myth acceptance scores and sexual violence for male and female students.

Numerous relationships and comparisons were analyzed from the information collected on the surveys. Frequencies were computed to determine how many students on this campus were experiencing sexual violence as a victim or perpetrator, and which demographic variables were possible predictors for the outcome variables of rape myth acceptance and sexual violence. Determining the prevalence of sexual violence on this campus provided critical numerical evidence for examining current and future practices of developing education programs and prevention policies designed specifically for this particular campus.

Limitations

The study was limited in scope to examine sexual violence within the context of women as victims and men as perpetrators. Sexually violent behavior was only measured from the heterosexual perspective and did not address sexual violence within homosexual situations. The results of this study are limited to the students and environment of the specific campus, and do not generalize to other colleges. An additional limitation to the study was the quantitative nature of the research did not allow for further investigation, which might have allowed for more specific details about the incidents of sexual violence that were reported.

CHAPTER IV-RESULTS

Data collected from 346 students include self-reported behaviors and demographic information including: beliefs on rape myth acceptance, sexually violent experiences, race/ethnicity, number of semesters enrolled full time, Greek membership, participation in athletics, frequency/heaviness of drinking, and housing arrangement.

Descriptive Numbers for the Sample Population

Descriptive statistics were calculated for all student groups within the sample population, which was taken from the total population of over 800 full-time equivalent students; the demographic data are provided in Table 1. The sample consisted of 54.6% males and 45.4% females, which was a close representation of the actual gender percentages of the total student population of the campus, which consists of 49.9 % males and 50.1% females. Freshmen represented the largest group of academic classification with 42.5% of the sample, while seniors represented the smallest group of 8.1%. A majority of the respondents, 61.8%, live in university housing, with only 11.6% living off campus. Greek members represented 45.4% of the respondents, while non-affiliated students composed 51.7% of the sample (2.9% missing). Athletes represented 59.2% of the respondents, and 37.6% reported they were not members of athletic teams (3.2% missing). The ethnic representation is indicative of the overall population of over 800 students on the campus studied with 79.5% of the students categorized as White, with the remaining students representing other ethnicities.

Frequent drinking is defined as drinking 3 or more times per week, and respondents indicated that 19% of the males and 4.5% of the females reported consuming alcohol on this level of frequency. Female students reporting drinking behaviors categorized as infrequent were: 39.5% do not drink on any day of the week, and 54.1 % drink one or two days per week. Male students reporting drinking behaviors categorized as infrequent were: 20.1% do not drink on any day of the week, and 57.7% drink one or two days per week. Heavy drinkers were represented more equally among the gender groups. Female students reporting drinking 4 or more drinks per night were 45.2%, with 52.9% reporting non-heavy drinking (28.7 % reporting 0 drinks per night and 24.2 % drinking one to two drinks per night). Male students reported 43.4% drinking 5 or more drinks per night, with 52.4% reporting non-heavy drinking (17.5% reporting 0 drinks per night, 13.2% reporting one to two drinks per night, and 21.7% reporting drinking three to four drinks per night).

Table 1

Descriptive statistics for the sample population

Variable	n	%	missing*
Gender			0
Male	189	54.6%	
Female	157	45.4%	
Greek			2.9%
Affiliated	157	45.4%	
Non-affiliated	179	51.7%	

Variable	n	%	missing*
Classification			.6%
Freshman	147	42.5%	
Sophomore	85	24.5%	
Junior	79	22.9%	
Senior	28	8.1%	
Athlete			3.2%
Team member	205	59.2%	
Non-team member	130	37.67%	
Race			3.2%
White	275	79.5%	
Black	23	6.6%	
Hispanic	15	4.3%	
American Indian	8	2.3%	
Asian	7	2%	
Other	7	2%	
Housing			2.3%
University housing	214	61.8%	
Greek housing	84	24.3%	
Off campus	40	11.6%	
Frequent drinkers (Consume alcohol 3 days or more/week)			
Males	36	19.0%	3.2%
Females	7	4.5%	1.9%
Less Frequent drinkers			
Males	147	77.8%	3.2%
Females	147	93.6%	1.9%
Heavy drinkers			
Males=5 or+ drinks/day	82	43.4%	4.2%
Females=4 or+ drinks/day	71	45.2%	1.9%
Non Heavy drinkers			
Males	99	52.4%	4.2%
Females	83	52.9%	1.9%

*The % of surveys that excluded this information

Sexual Violence for Female Students

Research Question One: How likely are women on this campus to be victims of sexual violence from male perpetrators, and what tactics are used?

To indicate the number of women on this campus who reported experiencing some type of sexual violence, a new variable was computed from the combined 25 variables that represented the 25 items on the SES. This variable, labeled *Sexual Violence Total* measured the total number of incidents that were reported from the respondents, which when analyzing only the female students indicated 229 incidents of sexual violence had been perpetrated against them since attending as a full-time student on this campus. This variable was then recoded into a new additional variable labeled *Sexual Violence People*, which included any student who reported experiencing at least one sexually violent incident. The frequency analysis for this variable indicated 57 (36.3%) of the 157 female respondents experienced some form of sexual violence since attending as full-time students on this campus. The 229 incidents of sexual violence when combined into the three common categories for sexual violence are: sexual contact-103 incidents, 45.0% of the 229 incidents; sexual coercion-77 incidents, 33.6% of the 229 incidents; and rape-49 incidents, 21.4% of the 229 incidents; which are summarized in Table 2. Sexual contact is defined as unwanted touching and was specifically communicated in the survey with this language: “someone fondled, kissed, or rubbed up against the private areas of my body (lips, breast/chest, crotch, or butt) or removed some of my clothes without my consent (but did not attempt sexual penetration)”. Sexual coercion describes any

situation in which someone uses verbal or physical means in an attempt to obtain sexual intercourse, and was specifically communicated in the survey with this language: “Even though it didn’t happen, a man tried to have oral sex with me or make me have oral sex with him without my consent” or “Even though it didn’t happen, a man tried to put his penis into my vagina, or insert fingers or objects without my consent”. Rape is defined as sexual intercourse with a person who does not consent to the sexual intercourse, and was specifically communicated in the survey with this language: “A man had oral sex with me or made me have oral sex with him without my consent” or “A man put his penis into my vagina, or inserted fingers or objects without my consent”.

Table 2

Categories of sexually violent incidents reported by female students

Sexual violence categories	n
Sexual contact incidents	103
Sexual coercion for Oral Sex	34
Sexual coercion for Vaginal Sex	43
Oral Rape	19
Vaginal Rape	30
TOTAL	229

Female students reported the prevalence of approaches used to perpetrate sexual violence against them were: *taking advantage of me when I was too drunk* used in 41.5% of experiences (95 of the 229 incidents); *telling lies, threatening to end the relationship, or continual verbal pressuring*, used in 24.8% of experiences (57 of the 229 incidents); *showing displeasure, getting angry* used in 19.7% of experiences (45 of the 229 incidents); *force* used in 11.8 of experiences (27 of the 229 incidents);

threatening physical harm, used in 2.2% of experiences (5 of the 229 incidents). The prevalence of approaches used as reported by female students is summarized in Table 3.

Table 3

Approaches used for perpetrating 229 sexually violent incidents reported by female students

Approaches %	n
Taking advantage of me when I was too drunk 41.5%	95
Telling lies, threatening to end the relationship, verbal pressuring 24.8%	57
Showing displeasure, getting angry 19.7%	45
Using force, holding me down 11.8%	27
Threatening physical harm 2.2%	5

Note: Total n=229

Forty-eight (30.6%) of the 157 female respondents reported experiencing a total of 103 incidents of unwanted sexual contact. The approach most often used to perpetrate the 103 incidents of unwanted sexual contact was *taking advantage of me when I was too drunk*, which was used by the perpetrator in 49 (47.6%) of the 103 reported incidents of unwanted sexual contact. The next highest perpetrator approach used was *telling lies, threatening to end the relationship, or continual verbal pressuring*, which was the approach used in 21 (20.4%) of the 103 reported incidents of unwanted sexual contact.

Eighteen (11.5%) of the 157 female respondents reported being coerced to participate in 34 incidents of coercive approaches for oral sex, indicating that they were taken advantage of *when they were too drunk* as the approach in 13 (38.2%) of the reported incidents. *Telling lies, threatening to end the relationship, or continual verbal pressuring* was again the second most common coercive strategy, which was reported in 10 (29.4%) of the 34 reported incidents.

Twenty (12.7%) of the 157 female respondents reported 43 incidents of coercive attempts to perpetrate vaginal sex, with *taking advantage of me when I was too drunk* as the approach utilized in 19 (44.2%) of 43 total reported incidents. *Showing displeasure, getting angry* was the next most utilized strategy in 13 (30.2%) of the reported incidents.

Eleven (7.0%) of the 157 female respondents reported experiencing 19 incidents of unwanted oral sex by perpetrators using the approaches of *telling lies, threatening to end the relationship, or continual verbal pressuring* in 8 (42.1%) of the 19 reported incidents. *Taking advantage of me when I was too drunk*, was the next most common approach, used in 6 (31.6%) of the 19 reported incidents of unwanted oral sex.

Fifteen (9.6%) of the women on this campus reported having unwanted vaginal sex by perpetrators who used *telling lies, threatening to end the relationship, or continual verbal pressuring* in 12 (5.1%) of the 30 reported incidents. *Taking advantage of me when I was too drunk* was the approach used in 8 (4.5%) of the 30 reported incidents to obtain vaginal penetration without consent. Table 4 summarizes

the frequencies of the sexually violent incidents reported by the sample of female students on this campus.

Table 4

Sexually Violent Experiences and Approaches Used Toward Female Students

Sexual Violence Categories and Approaches	n
<u>Sexual Contact</u>	
Number of Female Students reporting Sexual Contact 30.6%	48
Number of Sexual Contact Incidents reported by Females	103
a. telling lies, threatening to end relationship, pressure 20.4%	21
b. showing displeasure, getting angry 18.4%	19
c. taking advantage when too drunk to stop it 47.6%	49
d. threatening to physically harm 4.9%	5
e. using force or having a weapon 8.7%	9
<u>Coercion for Oral Sex</u>	
Number of Female Students reporting Coercive Attempts for Oral Sex 11.5%	18
Number of Coercive Attempts for Oral Sex reported by Females	34
a. telling lies, threatening to end relationship, pressure 29.4%	10
b. showing displeasure, getting angry 17.6%	6
c. taking advantage when too drunk to stop it 38.2%	13
d. threatening to physically harm 0%	0
e. using force or having a weapon 14.8%	5
<u>Coercion for Vaginal Sex</u>	
Number of Female Students reporting Coercive Attempts for Vaginal Sex 12.7%	20
Number of Coercive Attempts for Vaginal Sex reported by Females	43
a. telling lies, threatening to end relationship, pressure 14.0%	6

Sexual Violence Categories and Approaches	n
b. showing displeasure, getting angry 30.2%	13
c. taking advantage when too drunk to stop it 44.2%	19
d. threatening to physically harm 0%	0
e. using force or having a weapon 11.6%	5
<u>Oral Rape</u>	
Number of Female Students reporting Oral Rape 7.0%	11
Number of Oral Rape Incidents reported by Females	19
a. telling lies, threatening to end relationship, pressure 42.1%	8
b. showing displeasure, getting angry 10.5%	2
c. taking advantage when too drunk to stop it 31.6%	6
d. threatening to physically harm 0%	0
e. using force or having a weapon 15.8%	3
<u>Vaginal Rape</u>	
Number of Female Students reporting Vaginal Rape 9.6%	15
Number of Vaginal Rape Incidents reported by Females	30
a. telling lies, threatening to end relationship, pressure 40%	12
b. showing displeasure, getting angry 16.7%	5
c. taking advantage when too drunk to stop it 26.6%	8
d. threatening to physically harm 0%	0
e. using force or having a weapon 0%	0

Note: The above numbers indicate the prevalence of each category of sexual violence experienced by the sample of 157 female students and the 229 sexual violence incidents they reported.

Sexual Violence for Male Students

Research Question Two: How likely are men on this campus to be perpetrators of sexual violence toward women, and what tactics do they use?

To indicate the number of male students on this campus reporting some type of sexual violence, a variable was computed from the combined 25 variables that represented the 25 items on the SES. This variable, labeled *Sexual Violence Total* measured the total number of incidents that were reported from the respondents, which when analyzing only the male students, indicated 129 incidents of sexual violence perpetrated against females since attending as a full-time student on this campus. This variable was then recoded into a new variable labeled *Sexual Violence People*, which indicated any student who reported perpetrating at least one sexually violent incident. The frequency analysis for this variable indicated 29 (22.5%) of the 189 male respondents committed 129 incidents of sexual violence toward a female since attending as full-time students on this campus as summarized in Table 5.

Table 5

Categories of sexually violent incidents reported by male students perpetrated toward females

Sexual violence categories	n
Sexual contact incidents	40
Sexual coercion for Oral Sex	26
Sexual coercion for Vaginal Sex	24
Oral Rape	23
Vaginal Rape	16
TOTAL	129

Male students reported the prevalence of approaches they used to perpetrate sexual violence against females as: *telling lies, threatening to end the relationship, or continual verbal pressuring*, used in 38.7% of experiences (50 of the 129 incidents); *taking advantage when the women were too drunk* used in 36.4% of experiences (47 of the 129 incidents); *showing displeasure, getting angry* used in 23.3% of experiences (30 of the 129 incidents); *force* used in .8% of experiences (1 of the 129 incidents); *threatening physical harm*, used in .8% of experiences (1 of the 129 incidents). The prevalence of approaches used as reported by male students is summarized in Table 6.

Table 6

Approaches used for perpetrating 129 sexually violent incidents reported by male students

Approaches %	n
Telling lies, threatening to end the relationship, verbal pressuring 38.7%	50
Taking advantage of me when I was too drunk 36.4%	47
Showing displeasure, getting angry 23.3%	30
Using force, holding me down .8%	1
Threatening physical harm .8%	1

Note: Total n=129

Twenty-five (13.2%) of the 189 male respondents participating in the survey reported perpetrating a total of 40 incidents of unwanted *sexual contact* to a female without her consent. The approaches used most often by male students in this study

to perpetrate sexual contact were *telling lies, threatening to end the relationship, or continual verbal pressure*, used in 18 (45.0 %) of the 40 reported incidents and *taking advantage of them when they were too drunk*, used in 15 (37.5%) of 40 reported incidents.

Twelve (6.3%) of the 189 male respondents reported 26 incidents of *coercing* females to have oral sex using *showing displeasure and getting angry* as the approach in 9 (3.7%) of the 26 reported incidents to coerce females to participate in oral sex without their consent, even though it didn't happen. The next most commonly used approach for coercing females to participate in oral sex was *taking advantage of them when they were too drunk*, used in 8 (3.1%) of the 26 incidents.

Thirteen (6.9%) of the 189 male respondents reported 24 total incidents of *coercing* women to participate in vaginal sex, even though it didn't happen, by *taking advantage of them when they were too drunk* in 9 (3.1%) of the 24 incidents, and *showing displeasure and getting angry* in 8 (3.7%) of the 24 incidents.

Eleven (5.8%) of the 189 male respondents reported a total of 23 incidents of having oral sex with women without their consent by *telling lies, threatening to end the relationship, or continual verbal pressure* in 11 (47.8%) of the 23 incidents, and used the approach of *taking advantage of them when they were too drunk* for 8 (34.8%) of the 23 incidents.

Eight (4.7%) of the 189 male respondents reported 16 total incidents of having vaginal sex with women without their consent by *taking advantage of them when they were too drunk* in 7 (43.8%) of the 16 incidents, *telling lies, threatening to end the*

relationship, or continual verbal pressure in 7 (43.8%) of the 16 incidents, and *showing displeasure and getting angry* in 2 (12.5%) of the 16 incidents. Table 7 summarizes the nonconsensual sexual experiences that were reported by male students committed on females since attending this campus as full-time students.

Table 7

Nonconsensual Sexual Experiences perpetrated by Male Students toward Females

Sexual Violence Categories and Approaches Used %	n
<u>Nonconsensual Sexual Contact</u>	
Number of Male Students reporting Nonconsensual Sexual Contact 13.2	25
Number of Nonconsensual Sexual Contacts Incidents reported by Males	40
a. telling lies, threatening to end relationship, pressure 45.0%	18
b. showing displeasure, getting angry 17.5%	7
c. taking advantage when too drunk to stop it 37.5%	15
d. threatening to physically harm 0%	0
e. using force or having a weapon 0%	0
<u>Coercive Behavior for Oral Sex</u>	
Number of Male Students reporting Coercive Attempts for Oral Sex 6.3%	12
Number of Coercive Attempts for Oral Sex reported by Males	26
a. telling lies, threatening to end relationship, pressure 27.0%	7
b. showing displeasure, getting angry 34.6%	9
c. taking advantage when too drunk to stop it 30.8%	8
d. threatening to physically harm 3.8%	1
e. using force or having a weapon 3.8%	1

Sexual Violence Categories and Approaches Used	n
%	
<u>Coercive Behavior for Vaginal Sex</u>	
Number of Male Students reporting Coercive Attempts for Vaginal Sex	13
6.9%	
Number of Coercive Attempts for Vaginal Sex reported by Males	24
a. telling lies, threatening to end relationship, pressure	7
29.2%	
b. showing displeasure, getting angry	8
33.3%	
c. taking advantage when too drunk to stop it	9
37.5%	
d. threatening to physically harm	0
0%	
e. using force or having a weapon	0
0%	
<u>Nonconsensual Oral Sex</u>	
Number of Male Students reporting Nonconsensual Oral Sex	11
5.8%	
Number of Nonconsensual Oral Sex Incidents reported by Males	23
a. telling lies, threatening to end relationship, pressure	11
47.8%	
b. showing displeasure, getting angry	4
17.4%	
c. taking advantage when too drunk to stop it	8
34.8%	
d. threatening to physically harm	0
0%	
e. using force or having a weapon	0
0%	
<u>Nonconsensual Vaginal Sex</u>	
Number of Male Students reporting Nonconsensual Vaginal Sex	8
4.2%	
Number of Nonconsensual Vaginal Sex Incidents reported by Males	16
a. telling lies, threatening to end relationship, pressure	7
43.8%	
b. showing displeasure, getting angry	2
12.5%	
c. taking advantage when too drunk to stop it	7
43.8%	
d. threatening to physically harm	0
0%	
e. using force or having a weapon	0
0%	

Note: The above numbers indicate the prevalence of each category of sexual violence perpetrated by the 189 male students and the 129 incidents of reported sexual violence.

Rape Myth Acceptance Beliefs of Students on This Campus

Research Question Three: What are the beliefs and attitudes about sexual violence, particularly rape myth acceptance, that are held by male and female students at this university?

A variable that measured the Rape Myth Acceptance (RMA) was computed as a total score by combining each of the 20 items on the *Illinois Rape Myth Acceptance-Short Form (IRMA-SF)* into one score. The range of possible total scores was 20-100, with higher scores indicating a higher level of acceptance of rape myths. The RMA total mean score for male students was 43.60 (SD=10.54) and for female students was 38.01 (SD=10.11). Mean scores were also tabulated for each of the 20 items included in the IRMA-SF, which respondents gave a score from one (strongly disagree) to five (strongly agree) for each item, in which an overall item mean score was tabulated, which resulted in male students scoring 2.19 (SD=.53) and female students scoring 1.90 (SD=.51). Male students scored higher on both measures, indicating a higher level of acceptance of rape myths, which are attitudes and beliefs that support sexual aggression against women. A *t* test for independent means was used to statistically compare the mean scores of male and female students. For the total RMA scores, an obtained *t* value of -4.942 exceeded the critical *t* value of 1.960, $p < .05$, inferring the difference was significant, and for the RMA average item scores an obtained *t* value of 5.039, also exceeded the critical value of 1.960, $p < .05$, indicating a significant difference for those mean scores as well. See Table 8.

Table 8*Total Rape Myth Acceptance Means*

Group	Mean	St. Deviation	N
Males	43.60	10.53	187
Females	38.01	10.11	157

Obtained $t=-4.042$, critical $t= 1.960$, $p<.05$

Item Rape Myth Acceptance Means

Group	Mean	St. Deviation	N
Males	2.19	.53	189
Females	1.90	.51	157

Obtained $t=5.039$, critical $t= 1.960$, $p<.05$

A descriptive analysis was run for all of the variables for rape myth acceptance to calculate the mean scores for each variable. They were then sorted by descending order to determine which rape myths were the most accepted among the sample population of this campus. The results for the rank order of the myths are in parenthesis after the mean score for males and females on each variable. Thirteen of the 20 accepted myths were significantly different in the t test previously used to determine differences among mean scores between males and females for rape myth acceptance, and those are included in the summarized information in Table 9.

Five of the rape myths had a mean score difference equal to or above .45, which indicated the greatest differences between the males and females. All five of those rape myths were also found to be significantly different when the t test was used to compare the mean scores. The five myths indicating the largest difference between beliefs about rape between male and female students in this study were: *If a woman is willing to “make out” with a guy, then it’s not a big deal if he goes a little*

further and has sex (.51), Many so-called rape victims are actually women who had sex and “changed their mind” afterward (.50), Men don’t usually intend to force sex on a woman, but sometimes they get too sexually carried away (.48), A woman who goes to the home or apartment of a man on the first date is implying that she wants to have sex (.48), Rape accusations are often used as a way of getting back at men (.45).

Table 9

Accepted rape myths in order of highest to lowest

Rape myth	Mean	Females	Males	Mean Diff	Significant
women who tease will get into trouble	3.01	2.81 (1)	3.17 (1)	.36	yes
men get carried away, don't intend to force it	2.62	2.36 (3)	2.84 (2)	.48	yes
rape claims are used to get back at men	2.54	2.29 (5)	2.74 (3)	.45	yes
rape happens if man's sex drive gets out of control	2.44	2.28 (6)	2.58 (4)	.30	yes
women in skimpy clothes should expect rape	2.39	2.38 (2)	2.41 (7)	.03	no
aroused men unaware of resistance	2.35	2.32 (4)	2.38 (8)	.06	no
rape victims actually just changed mind after sex	2.32	2.05 (9)	2.55 (5)	.50	yes
women lead men on, then cry rape	2.29	2.28 (7)	2.46 (6)	.18	yes
drunk woman is partly responsible for rape	2.18	2.08 (8)	2.26 (10)	.18	no
going home implies intent to have sex	2.10	1.84 (12)	2.32 (9)	.48	yes
saying no unclearly causes rape	2.06	1.87 (11)	2.22 (11)	.35	yes
most rape is committed by strangers	2.06	2.02 (10)	2.09 (12)	.07	no

women are not raped by boyfriends	1.92	1.78 (13)	2.03 (13)	.25	yes
most women like being forced to have sex	1.77	1.66 (14)	1.86 (14)	.20	yes
women exaggerate effects of rape	1.66	1.43 (17)	1.85 (15)	.42	yes
middleclass men don't rape	1.61	1.53 (15)	1.68 (18)	.15	no
no fight back=not rape	1.61	1.52 (16)	1.69 (17)	.17	no
making out=ok for more	1.60	1.32 (19)	1.83 (16)	.51	yes
rape doesn't happen at home	1.40	1.33 (17)	1.47 (19)	.14	no
no weapon=not rape	1.20	1.11 (20)	1.26 (20)	.15	yes

N=346, 189 males, 157 females, ratings on a 5-point scale (1=strongly disagree, 5=strongly agree)

Indicator Variables for RMA and Sexual Violence for Female Students

Research Question Four: For women on this campus, what is the relationship between a student's race/ethnicity, semesters enrolled full-time, Greek membership, participation in athletics, drinking behavior, their rape myth acceptance score and whether they are a victim of sexual violence?

All demographic variables were entered as predictors and a forced entry regression was run to determine which variables contributed substantially to the model of rape myth acceptance. The two variables with statistical significance to predict rape myth acceptance, as measured by total scores on the IRMA-SF, were: the number of full-time semesters attended on this campus and participation in athletics. The variable of full-time semesters was negatively related to the RMA scores, indicating students that have been enrolled for more semesters have lower rape myth

acceptance scores than students enrolled in fewer semesters. The variable of membership on an athletic team is positively related to RMA scores, indicating female student athletes have higher rape myth acceptance scores than female students not participating in athletics. The R Square score indicated that the variables included in this model contribute to 11.8% of the variance in the total rape myth acceptance scores. The Durbin Watson statistic for this model was 1.88, which indicated the assumption was supported that the variables were independent, as indicated with other information in Table 10.

Table 10
Regression Analysis Predicting Rape Myth Acceptance for Females (N=148)

Variable	B	SE B	Beta	t	Sig
Drinking frequency	2.051	1.188	.188	1.726	.086
Drinking heaviness	-.860	.896	-.101	-.960	.339
Full-time semesters	-1.149	.408	-.237	-2.818	.006
Sorority member	-.234	1.654	-.012	-.141	.888
Athlete	4.077	1.644	.205	2.480	.014
Race (white/non)	2.060	2.119	.079	.972	.333

Dependent Variable: RMA Total Score, R squared=.118, Durbin-Watson=1.878, $p < .05$

To determine which variables contributed to the outcome variable of sexual violence, all demographic variables were entered as predictors as well as the rape myth acceptance variable into a logistic regression to determine which variables contributed substantially to the model of sexual violence. The single variable that was statistically significant as an indicator for sexual violence for female students on this campus was athletic participation. Female athletes on this campus are more than three times likely to experience sexual violence than female students that do not participate in athletics. The odds ratio of 3.33 for female athletes and the Wald

statistic score of 8.24 for this model indicated participation in athletics for female students as a significant predictor of the outcome of sexual violence, which is summarized in Table 11. Although not fully statistically significant, rape myth acceptance scores approach significance, suggesting that higher levels of rape myth acceptance may indicate an increased likelihood of being a victim of sexual violence.

Table 11

Logistic Regression Analysis Predicting Sexual Violence for Females (N=150)

Variable	B	SE B	Wald	Exp(B)	Sig
Drinking frequency	.532	.288	3.422	1.702	.064
Drinking heaviness	.005	.218	.001	1.005	.981
Full-time semesters	.023	.100	.054	1.024	.816
Sorority member	-.592	.392	2.279	.553	.131
Athlete	1.202	.419	8.243	3.328	.004
Race (white/non)	-.462	.021	.664	1.040	.415
Rape Myth Accept	.039	.021	3.599	1.040	.058

Dependent Variable: Sexual Violence, $p < .05$

Indicator Variables for RMA and Sexual Violence for Male Students

Research Question Five: For men on this campus, what is the relationship between a student's race/ethnicity, semesters enrolled full-time, Greek membership, participation in athletics, drinking behavior, their rape myth acceptance score, and whether they are a perpetrator of sexual violence?

A forced entry regression was run for all variables to determine variables that significantly contribute to the rape myth acceptance scores for male students on this campus. The Durbin Watson statistic for this model was 2.10, which indicated the assumption was supported that the variables were independent. Two variables were found to be significant as predictors for RMA scores for male students: fraternity

membership and total number of semesters. Both variables were negatively related to RMA scores, indicating that fraternity members have a lower rape myth acceptance score than male students not belonging to a fraternity, and students enrolled in more semesters on this campus also have a lower score for rape myth acceptance than students enrolled in fewer semesters. The variables in this model contributed to 9.9% of the variance found in the total rape myth acceptance scores, as summarized in Table 12.

Table 12

Regression Analysis Predicting Rape Myth Acceptance for Males (N=165)

Variable	B	SE B	Beta	t	Sig
Drinking frequency	.734	.875	.080	.839	.403
Drinking heaviness	.094	.707	-.013	-.133	.895
Full-time semesters	-1.074	.414	-.206	-2.592	.010
Fraternity member	-4.038	1.730	-.184	-2.334	.021
Athlete	.915	1.982	.037	.462	.645
Race (white/non)	-3.502	2.291	-.121	-1.528	.128

Dependent Variable: RMA Total Score, R squared=.099, Durbin-Watson=2.102, $p < .05$

To determine which variables contributed to the outcome variable of sexual violence for male students, all demographic variables were entered as predictors as well as the rape myth acceptance variable into a logistic regression to determine which variables contributed substantially to the model of sexual violence. Two variables were found to statistically contribute to the outcome of sexual violence, number of full time semesters and rape myth acceptance. Specifically the longer a male student is enrolled at the college the more likely he is to have engaged in sexual violence (about 40% more likely per semester enrolled). Further, the higher a male student's rape myth acceptance score the more likely he is to engage in sexual

violence (about 7% more likely per increase in rape myth acceptance score). The information for contributing variables for sexual violence of male students is summarized in Table 13.

Table 13

Logistic Regression Analysis Predicting Sexual Violence for Males (N=173)

Variable	B	SE B	Wald	Exp(B)	Sig
Drinking frequency	.279	.229	1.476	1.321	.224
Drinking heaviness	.281	.201	1.953	1.324	.162
Full-time semesters	.334	.123	7.376	1.397	.007
Fraternity member	-.248	.510	.237	.780	.626
Athlete	-.369	.618	.357	.692	.550
Race (white/non)	.852	.545	2.444	2.344	.118
Rape Myth Accept.	.069	.024	6.435	1.072	.004

Dependent Variable: Sexual Violence Total, $p < .05$

Correlations for RMA and Sexual Violence

Research Question Six: For female students on this campus, what is the relationship between beliefs about sexual violence, as measured by rape myth acceptance scores, and being a victim of sexual violence from male student perpetrators?

A bivariate correlation was run to determine if a relationship existed between female students' attitudes and beliefs about rape myths (measured by the average item score on the IRMA-SF) and being a victim of sexual violence (measured by SES-SFV). A Pearson correlation coefficient was computed using a one-tailed test of significance, resulting in $r = .12$, p (one-tailed) $< .05$, but the relationship was not statistically significant ($p = .06$), which is considered only approaching significance.

Research Question Seven: For male students on this campus, what is the relationship between beliefs about sexual violence, as measured by rape myth acceptance scores, and being a perpetrator of sexual violence toward female students?

A bivariate correlation was run to determine if a relationship existed between male students' attitudes and beliefs about rape myths (measured by scores on the IRMA-SF) and being a perpetrator of sexual violence (measured by SES-SFP). There was a significant relationship between the average score for items on the IRMA and male students who had perpetrated a sexually violent act toward a female, $r = .184$, p (one-tailed) $< .01$. The small effect size of the relationship between rape myth acceptance scores and perpetrating sexual violence indicates a positive relationship between these variables for male students participating in this study. When the coefficient of determination was computed by squaring the correlation coefficient (.184), it indicated that the variability in rape myth acceptance accounts for 3.4% of the variability in male students perpetrating sexual violence.

Conclusion

Results of this study found that of the 157 female students surveyed on this campus, 57 had experienced 229 incidents of sexual violence. Female students reported the two most common approaches utilized by males for these violent acts were taking advantage of them when they were drunk and telling lies. Twenty-nine male students reported perpetrating 129 incidents of sexual violence toward females, and admitted telling lies and taking advantage of females when they were too drunk as the two most common approaches to accomplish sexual experiences.

Male students were found to have higher rates of rape myth acceptance beliefs than female students. Rape myth acceptance scores are best predicted by athletic participation for female students; fraternity membership and full-time semesters were found to have a negative relationship with rape myth acceptance scores for male students.

A contributor for being victimized by sexual violence for females was athletic participation, and contributors for perpetrating sexual violence for male students were rape myth acceptance beliefs and number of full time semesters.

There was not a significant relationship between rape myth acceptance scores and sexually violent experiences for female students. However, there was a significant relationship for these two variables within the male student sample population on this campus.

CHAPTER V-DISCUSSION

Summary

The purpose of this study was to examine the issues of sexual violence and rape myths, and measure the prevalence of victims and perpetrators on a particular college campus, as well as to determine the types of sexual violence occurring among the student population. Results of the female surveys used to measure sexual violence committed toward female students on the studied campus indicated 229 incidents of sexual violence were perpetrated on 57 female students, since they began attending as full time students on this campus. Twenty-nine of the male students participating in this study reported perpetrating 129 incidents of sexual violence toward a female since attending as full-time students on this campus. These numbers are disturbing, and indicate that sexual violence toward women is a cause for concern on this campus. According to the most recent crime report submitted by the Office of Student Affairs for the campus in this study, for the year 2010, there was one reported incident of forcible sex offenses, and for the years 2007, 2008 and 2009, there were no reported incidents of forcible sex offenses. A major discrepancy (one vs. 229) existed between the numbers of sex offenses reported in the mandated *Jeanne Cleary Disclosure of Campus Security and Policy and Campus Crime Statistics Act*, and the results of this study.

Koss (et al, 1982) anticipated the same type of discrepancy in her early research on sexual violence, in which she aimed to refute figures of official crime statistics of the Bureau of Justice Statistics in 1984 reporting that rape was infrequent

and rare in the United States. Koss (et al, 1982) predicted that many women did not report sexually violent experiences to authorities; nor did most women recognize or label their experiences as sexual assault or rape, even though the experiences clearly would be categorized as such in legal arenas. According to Koss (et al, 1987) specific language describing sexual encounters was necessary to facilitate accurate recall and measurement of unwanted sexual behavior, which prompted the creation of the Sexual Experience Survey, which includes such specific language. These landmark studies by Koss (et al, 1982, 1987) provided an instrument and springboard for many future studies that reinforced and supported the claim that sexual violence is an underreported crime for women, especially on college campuses.

Discussion

The major focus of the current study was to determine the prevalence of sexual violence on a particular campus, as well as examine known risk factors that contribute to the problem of sexual violence. The acceptance of rape myths is a predictor of sexual violence, so measuring the rape myth acceptance of the student population was also an important objective of this study. Social factors influence sexual violence, which prompted the need to examine the social identities of students and the effects of belonging to cultures on the behavior and beliefs of students.

Research Question One: How likely are women on this campus to be victims of sexual violence from male perpetrators, and what tactics are used?

The results indicated that 36.3% of the women surveyed on this campus reported experiencing some type of sexual violence since attending as a full-time student. Although this number is below the number of 53.7% of college women experiencing some type of sexual violence that is reported in other studies (Paul et al, 2011, Karjane et al, 2005, Koss et al, 1987), it is still an alarming number and indicated that sexual violence toward women is an issue that deserves attention from campus officials. The problem of sexual violence has been defined in terms of numbers and prevalence, and the next steps are to identify what is being done to prevent sexual violence, as well as what services are being provided to victims of sexual violence. Campus resources are limited, but the results of this study provide evidence to support the necessity of an in-depth analysis of services to determine if increased efforts toward this issue are warranted. The Centers for Disease Control and Prevention (2004) advocates a four step approach for the prevention of sexual violence: 1. Define the Problem, 2. Identify Risk and Protective Factors, 3. Develop and Test Prevention Strategies, 4. Ensure Widespread Adoption. The results of this study provided initial evidence to the problem of sexual violence for campus officials to use in their approach to deal with the issue.

Female students reported the most common approach for perpetrating sexual violence toward them by male students was *taking advantage of me when I was too drunk*, which was reportedly used in 41.5% of the incidents of sexual violence. Alcohol has been labeled as the most common factor within the culture of college campuses that contributes to sexual violence, and most studies suggest that it is very

difficult to separate the issues, (Abbey, 2002; Krebs, et al, 2009; Palmer, et al, 2009).

The campus involved in this study has implemented alcohol education into the freshmen orientation process as well as the curriculum for courses required for first year students. However, the inclusion of sexual violence education should be considered as a more focused aspect of the education and prevention programs for first year students as well as other members of the campus.

Research Question Two: How likely are men on this campus to be perpetrators of sexual violence toward women, and what tactics do they use?

Results indicated 22.5% of the male students reported perpetrating some form of sexual violence toward a female since attending full-time on this campus. The most common tactic reported by male students was *telling lies, threatening to end the relationship, or continual verbal pressuring*. Male students also reported a high use of *taking advantage when the women were too drunk*, used in 36.4% of the incidents. These numbers are alarming as well, but there are many troubling aspects surrounding the fact that 29 male students admitted to committing 129 sexually violent acts toward females. After serving on judicial boards for male students that have been accused of sexual violence, the concept that concerned me the most during the process, was the lack of education of legal ramifications for behavior that has been portrayed as acceptable in the media or society. The male students felt they were being questioned, punished or reprimanded for behaving in a manner that was prominent and accepted within their society. Educating male students on what is legally acceptable in procuring sexual activity needs to be included in the first few

days on campus, and in additional programs periodically throughout the timeline of their education. The problem is complicated in the sense that the education must reverse the message that has been sent numerous times in media that preying upon women under the influence of alcohol is an easy way to obtain sexual experiences. According to Kansas Statutes (2009), touching a woman without her consent with the intent to arouse or satisfy sexual desires is a misdemeanor, but if the woman is incapable of giving consent because of the effect of any alcoholic liquor, it is a felony. This distinction appears to be unknown to many students and officials, and this is an important piece for the education of the campus community of this study, as well as all colleges located within the state.

Research Question Three: What are the beliefs and attitudes about sexual violence, particularly rape myth acceptance, that are held by male and female students at this university?

Male students represented in the study had a higher rape myth acceptance score than female students represented in this study as indicated by mean scores for the total scores and also mean scores for items within the instrument (males=43.60, 2.19; females=38.01, 1.90), which is consistent with other studies (Aosved, et al, 2006; Banyard, et al, 2009; Flood, et al, 2009; McMahon, 2008). The entire student population was also measured and as a group the mean for the total score of rape myth acceptance was 41.03, which was higher than results of 37.98 for the entire sample within a study done at a large Midwestern university with similar demographics (Kopper, 1996). The mean score for items measuring rape myth

acceptance for the entire campus was 2.05, which was also higher than the mean score of 1.81 calculated for a study using the same instrument at a medium-sized Midwestern Catholic university (Chapleau, et al, 2007). With this limited comparison to two other colleges located in the same geographical location, it appears that the studied campus has a student population that accepts beliefs that support sexual violence more than the compared campuses, which indicates a need for education to change the attitudes that justify sexual violence toward women. The attitudes of the student population contribute to the perpetration of violence, as well as how members of this campus react and respond to violence against women (Flood, et al, 2009). The education of the student population regarding the facts and realities of sexual violence toward women is an apparent need for the prevention of sexual violence on this campus.

Gender is the strongest predictor for attitudes that endorse rape, blame the victim, and justify the behavior of perpetrators, and males consistently score higher than females when these attitudes are measured due to the gender orientation that has transpired for males (Flood, et al, 2009). The best opportunities to educate male students on this campus would be within the all-male groups such as athletic teams and fraternities. It appears the fraternities on this campus are educating their members more than what the male students who are not members of a fraternity are receiving, based on the lower rape myths scores of fraternity members. Male coaches could provide a meaningful dialogue to athletes, but it is important for the coaches to be trained to promote a consistent and accurate program for raising the awareness and

realities of sexual violence. The freshmen residence halls are also divided by gender and the resident assistants could provide valuable training in the first year to male students. Again the importance of training staff and all campus officials must be stressed to ensure the most effective approach for the prevention and intervention of sexual violence.

Research Question Four: For women on this campus, what is the relationship between a student's race/ethnicity, semesters enrolled full-time, Greek membership, participation in athletics, drinking behavior, their rape myth acceptance score, and whether they are a victim of sexual violence?

Two variables significantly predicted rape myth acceptance beliefs for female students: participation in athletics and the number of full-time semesters enrolled. Participation in athletics for females in this study had a positive relationship with rape myth acceptance attitudes, as measured by the total score on the rape myth acceptance instrument. Female athletes had a higher mean score (40.2) on the rape myth acceptance scale than female students who do not participate in athletics (36.0), indicating that female athletes on this campus participating in this survey adhere more than non-athletes to the beliefs that deny and justify male sexual aggression against women. Research indicates that athletes hold a higher level of rape myth acceptance, so this is consistent with other studies (Boeringer, 1999; Carr, et al, 2004). Female athletes indicated a possible target group on this campus for educational programs focusing on facts surrounding the issue of sexual violence. Female athletes on this campus have been identified as having a higher level of acceptance for rape myths

and their interactions with victims could be harmful and add to the trauma experienced by victims of sexual violence. Re-victimization by others is common on small campuses, so extra precaution must be taken to protect victims from members of the campus community that may unknowingly contribute to the situation by their attitudes and beliefs that do not support victims of sexual violence (Carmody, et al, 2009). Less than 5 percent of victims of sexual violence report the incident to police, but around two-thirds tell a friend or roommate (Sampson, 2002). Approximately 40% of the female students on this campus participate in athletics, which makes it likely that they will interact at some point in time with a victim of sexual violence. Having female athletes trained and educated to deal with victims of sexual violence could add to the support and services available to all students.

The number of full-time semesters was negatively related to the rape myth acceptance scores of female students participating in this study, indicating that students enrolled for more semesters do not adhere to the myths and beliefs that support sexual violence toward women as much as students who have been enrolled for fewer semesters. This is an indicator that students are getting some form of education regarding the facts of sexual violence, particularly in the category of rape. Female students enrolled for their first semester had an average total rape myth acceptance score of 39.1, while students enrolled in their seventh semester had an average total rape myth acceptance score of 27.9. Freshmen students are another target group for education regarding rape myth acceptance.

Athletic participation was found to be the only significant variable contributing to the sexually violent experiences of female students on this campus. The female athletes on this campus appear to be a high risk group for sexual violence, which warrants prevention and intervention strategies directed at this particular group. It is important to more closely examine the behaviors and the culture of this group to provide education and services to the female athletes, as well as faculty and staff that have a closing working relationship with these students.

Research Question Five: For men on this campus, what is the relationship between a student's race/ethnicity, semesters enrolled full-time, Greek membership, participation in athletics, drinking behavior, their rape myth acceptance score, and whether they are a perpetrator of sexual violence?

Fraternity members participating in this study had a negative relationship with the total rape myth acceptance score, which does not match the research of Murnen (2007), reporting fraternity members had higher rape myth acceptance scores than male students that do not belong to a fraternity. Fraternity members participating in this survey had a mean total rape myth acceptance score of 41.0 and male students not belonging to a fraternity had a mean total rape myth acceptance score of 45.3. Obviously the fraternities are providing some form of education to their members that non-fraternity male students are not receiving. This could be an informal or formal process, but the good news is that fraternity members have lower scores on rape myth acceptance than non-members, which speaks well of the Greek men on this campus on this particular issue.

The number of full-time semesters also had a negative relationship with the rape myth acceptance total scores of male students participating in this study, indicating the longer students were enrolled, the lower their total rape myth acceptance scores. Male students enrolled in their first semester on this campus had a mean total rape myth acceptance score of 45.6, and students enrolled in their seventh semester had a mean total score on the rape myth acceptance of 38.4. As stated previously, freshmen students should be targeted for education on the realities of sexual violence, particularly the category of rape.

The two variables that significantly contributed to the number of sexually violent incidents perpetrated by male students on this campus were number of semesters and rape myth acceptance. The rape myth acceptance variable has been substantiated in other studies as a major contributor to sexual violence, so this matches similar research in this area. The other contributing variable, number of full time semesters, has not been studied as widely, and the variable has perplexing effects within this study. Full time semesters contributed to lower levels in the beliefs of rape myth acceptance, but contributed to the likelihood of perpetrating sexual violence for male students. The increased likelihood to perpetrate sexual violence the longer you are enrolled on this campus could mean that you are here longer and have had more opportunities to participate in this type of behavior, or it could possibly be attributed to the age and maturity of male students and their confidence in committing such acts. One would hope it has not been a developed behavior as a result of being

on this campus for a longer period of time, but that information is not provided within this study.

An important consideration to remember is that only 29 of the participants reported perpetrating sexual violence against female students, but the disturbing fact is they reported committing 129 acts of sexual violence. This indicates that a relatively low number of men are perpetrating a high number of acts that are legally defined as sexual violence, which would imply that the few men responsible for the violence would greatly benefit from education and also need to be held accountable for their behavior. The accountability factor is the aspect that requires all members of the campus to participate as bystanders to intervene and take action when witnessing the few men who are behaving in an inappropriate manner. Students are more likely to see this behavior than staff, so it is important to educate all students as soon as they arrive on the campus to be prepared to watch, intervene, and report students that are exhibiting attitudes and behavior that promote violence of any sort, but specifically sexual violence toward women.

Research Question Six: For female students on this campus, what is the relationship between beliefs about sexual violence, as measured by rape myth acceptance scores, and being a victim of sexual violence from male student perpetrators?

There was no significant relationship between rape myth acceptance scores and sexual violence for female students on this campus. Regressions done to examine variables that contribute to sexual violence indicated that female athletes had higher rape myth acceptance scores than female students not participating in athletics,

so even though the statistical test to run for the correlation between rape myth acceptance and sexual violence did not reveal a relationship, other information suggests that female athletes are an at-risk group for sexual violence. Female athletes are a population on this campus that warrants special attention to determine behaviors and attitudes within this identity group that could be putting them at risk for sexual violence. Athletes are known to drink more than non-athletes, so drinking behaviors could be an initial area for closer examination within this specific population on this campus.

Research Question Seven: For male students on this campus, what is the relationship between beliefs about sexual violence, as measured by rape myth acceptance scores, and being a perpetrator of sexual violence toward female students?

The small number (3.4%) that was calculated as the variance of rape myth acceptance on predicting sexual violence indicates there are other variables contributing to sexual violence, but the adherence to rape myths does have a significant relationship with perpetrating sexual violence in male students. Rape myth acceptance has been directly linked to sexual violence, and the link has been documented on the campus of this study. Education and awareness of the presence of these attitudes would appear to be the first step toward diminishing the acceptance of beliefs that promote sexual violence toward women.

Conclusions

The most important contribution of this study was to bring awareness of an existing problem on this campus that many are unaware of due to the unreported

incidents of sexual violence. According to the results of this study, sexual violence is prevalent on this campus, and the first step in the prevention of sexual violence, which is defining the problem, must be shared with the appropriate campus officials to begin the process of identifying appropriate prevention and intervention strategies. The office of Counseling Services on this campus has been a resource for collaboration and insight on the topic of sexual violence while preparing for this study, and the results of the study were shared with the campus counselor. The campus counselor is the single staff member who is responsible for providing mental health services to students and outreach education to promote the well-being of the entire campus community, which includes the prevention and intervention of sexual violence. Senn (2010) asserted that education on sexual assault could not reasonably be expected to be done by mainstream mental and physical health centers when it is in addition to all of the other duties they provide. Large campuses are likely to have a sexual assault crises center designed to assist victims as well as educate the college community, which benefit victims by providing support through the post-assault phase, and also create an environment where numerous campus officials have been properly trained to handle the intricate situation of sexual violence (Carmody, et al, 2009). However, because of the small size of this campus, the campus counselor is responsible for counseling all students that request services, as well as providing outreach and education to the entire campus community on lifestyle wellness, stress management, depression, suicide awareness, acquaintance rape, gay and lesbian issues, leadership training, eating disorders and other issues.

The current campus counselor was shocked at the number of incidents of sexual violence that were reported in this study, and had no idea that the prevalence of sexual violence toward women was near the problem as indicated in the results of this study. Because of the sensitivity of the information, the campus counselor is the only individual who has seen the official results of this study, but his suggestion for sharing the results with the office of Student Affairs will be done at a later time. The Office of Student Affairs on this campus is responsible for providing these services to students: Career Services, Counseling Services, Dining Services, Fraternity and Sorority Life, Health Services, Multicultural Affairs, Residence Life and Housing, and Student Activities and Organizations. Many of the services provided by the Office of Student Affairs are directly connected to the issue of sexual violence, so they are obviously an important group of officials that could utilize the information to improve services to students that are affected by sexual violence.

Do the officials from the Office of Student Affairs on the studied campus, the office that reported the mandated numbers to the Uniform Campus Crime Report as one forcible sex offense in the last four years, have any idea that 57 women on this campus reported 229 incidents of sexual violence perpetrated against them since attending as a full time student on this campus? Based on the reaction of the campus counselor, the prediction is that they will be shocked at the results as well. The underreporting of sexual violence to authorities is a major problem in and of itself that warrants special research and resources, especially for college campuses. Underreporting misleads campus officials to the extent of the problem, as well as

allowing offenders to remain unaccountable for their behavior, which is likely to lead to more severe sexually aggressive acts (Adams-Curtis, et al, 2004; DeGue, et al, 2010). According to DeGue (2010), if campus officials are unaware of the extent of the problem of sexual violence, the prevention, intervention, educational programs, and policies may lack the necessary luster to adequately deal with the situation.

An area of concern for the campus counselor, when discussing the results of this study, was where the incidents of sexual violence occurred, and unfortunately, that information was not requested in this study, but would be a good item to consider for future research. An additional concern that the counselor mentioned was that there were no female counselors available for female students during the 2011-12 school year, which for sexual violence victims could be especially problematic. Attempts were made to obtain a female intern counselor, but it was not an option for this year. An important question to consider is if the 57 victims of sexual violence on this campus are not being seen by the campus counselor (only a few are), are they getting the services necessary to assist them in recovering from this devastating experience from outside mental health agencies, or are they getting help? Is the current staffing at The Counseling Center adequate to address the female students on this campus that have experienced sexual violence? The Counseling Center is fortunate to have one or two interns from a neighboring university each year, and a female intern is scheduled for the next school year, but these decisions are not based on the needs of the students, they are based on the availability of the resources that other institutions are able to provide as their programs allow. Because of the results

of this study, the campus counselor will be able to make future decisions based on the information provided in this study to attempt to meet the needs of victimized women of sexual violence and is committed to providing effective services and educational programs that target the particular problem of sexual violence, but without utilizing additional financial resources, this may be a very difficult task.

The Center for Disease Control and Prevention (2004) promotes using the “public health approach” for the prevention of sexual violence, which includes four principles: health of the public, data-informed approaches, cultural competency, and prevention. The second principle of this model, data-informed approaches, provides an important aspect of the prevention of sexual violence that was missing on the campus of this study. The data being used to define the problem of sexual violence on this campus was the information that is available, which for the campus counselor, was the mandated reported numbers, which are published on the website and the anecdotal numbers of the students being served by his office for victimization of sexual violence, which was information that only the Counseling Center had knowledge of. This study has provided information that more accurately describes the problem, which can be used to focus the delivery of prevention programs, as well as guide decision making for services provided to victims. The importance of data-informed approaches in the prevention process became most apparent during the discussion with the campus counselor, when he asked if there were ideas or suggestions for him based on the study. The suggestion was made to add printed resources pertaining to sexual violence to the current website that includes resources

for other issues such as: depression, anxiety, alcohol, bipolar, PTSD, eating disorders, and other mental health topics. His reaction was a humble response indicating that obviously there should be more information pertaining to sexual violence included in those resources, and how could such an important topic have been excluded. However, it was pointed out that those topics are based on apparent needs of the student population and if only one student in the last four years on this campus had experienced sexual violence, than the need to include this information was not obvious. The results of this study provided information to begin a new cycle of sexual violence prevention that is based on evidence from this particular campus and was provided directly by the students, which are directly involved in the problem of concern. The study could also be used as base-line data to evaluate the effectiveness of programs over time to determine if efforts are successful at decreasing the number of sexually violent incidents perpetrated against female students on this campus.

Implications for Prevention and Intervention of Sexual Violence

The results of this study will be shared with the Office of Student Affairs, and upon given this information, the expectation would be that campus officials would make decisions to increase services provided to victims, map out educational programs for the entire campus, most importantly the student population, and to ensure that all staff working in offices that deal with these issues are properly trained. Important evidence from this study suggested there is a campus safety concern, which

would warrant resources and actions to remedy the identified problem of sexual violence toward women. The process of developing prevention and intervention strategies will be under the scope of the Office of Student Affairs, but with the results of this study, they have the initial evidence that defines the prevalence of sexual violence on this campus.

The Office of Student Affairs could examine the model promoted by the Center for Disease Control and Prevention (2004) titled “Sexual Violence Prevention: Beginning the Dialogue”, and consider using the “public health approach” for the prevention of sexual violence, which includes the four principles: health of the public, data-informed approaches, cultural competency, and prevention. The first principle, health of the public, addresses the health of an entire population and advocates a community-oriented approach that puts the onus on the entire community to take collective action to prevent sexual violence rather than only victims or victim advocates being responsible for prevention of the problem.

In addition to having all employees in the Office of Student Affairs trained to deal with assisting victims of sexual violence, the students must be the next group of focus. Many times campus officials are unaware of sexual violence, but around two-thirds of victims of sexual violence tell a friend or roommate (Sampson, 2002). This exemplifies the need to train students and the entire campus community on how to respond to victims who disclose this sensitive information. Recent work by McMahon (2010) promotes implementing a “bystander approach” to sexual violence

on college campuses, where students are trained and utilized as the first line of defense against this behavior, because they are more likely to be present at the social events that involve alcohol and physical environments that lead to sexual violence. As stated previously, students are also more likely to be informed of such experiences, and must be provided the knowledge and skills to appropriately respond and support victims.

Currently the freshmen students on the studied campus are required to enroll in a year-long sequence of courses that includes seminar courses that focus on self-discovery, critical thinking, and decision making skills within an inter-disciplinary environment. Common concerns of college students is one of the exploration topics covered in the seminar courses, and including the topic of sexual violence in all freshmen seminar courses would be one strategy to bring awareness to the first year students, which indicated a higher rate of acceptance of rape myths than students that had been enrolled for longer amounts of time on this campus. All instructors of the first year seminars would also need to be trained and educated on the topic of sexual violence.

Eventually all faculty should be provided training on sexual violence prevention because they are sometimes informed by students of this experience. The training needs to be ongoing and inclusive of all campus officials that interact with students. Training and programs are provided free of charge from agencies in the same county as the campus in this study, so the cost factor which might be inhibitive

for small campuses, would not be a factor for this type of training. It would however, require a commitment and focus on the part of administrative officials that provide leadership and direction for the Office of Student Affairs. For this reason, it might be necessary to provide the results of this study to other administrative offices, but the Office of Student Affairs is the most appropriate place to start.

Future Research

The findings of this study support the claim that the prevalence of sexual violence is much greater than what is reported in official reports of required crime statistics, but a new complication occurred when analyzing the results, which was women were victimized more than once. Fifty seven women were the victims of 229 incidents of sexual violence. Results supported the findings of Daigle (et al, 2008) that repeat victimization is a common experience for college women. Repeat victimization is further explained by Daigle (et al, 2008) as when a relatively small proportion of women account for a disproportionate amount of the sexual and violent incidents and this troubling aspect of sexual violence is not systematically addressed by prevention programs. The troubling concept of repeat victimization could possibly be a focus of future research on this campus to provide more specific characteristics of repeat victims to determine behaviors and risk factors for these victims that have experienced repeated sexual violence.

The four steps of the public health approach to the prevention of sexual violence include: define the problem, identify risk and protective factors, develop

and test prevention strategies, and ensure widespread adoption (Centers for Disease Control and Prevention, 2004). Defining the problem is explained as data that can provide answers to questions of how much sexual violence is happening, where it is happening, and who are the victims and perpetrators. Results from this study provide the answer to the first part of defining the problem by answering how much sexual violence is happening. Now the remaining questions must be answered in future research on this campus: where is it happening, and who are the victims and perpetrators. The campus counselor was interested in where the incidents were taking place, so adding a question soliciting this important information in future research is imperative for the campus officials to make decisions based on evidence. There must also be a continued method to monitor the prevalence, so a long-range plan of how often the survey should be repeated should be considered by campus officials that are responsible for the prevention and intervention of sexual violence on this campus.

The second step in the public health approach to prevention of sexual violence is to identify risk and protective factors. What factors on this particular campus put students at risk for sexual violence? Alcohol is the most well known risk factor for sexual violence on college campuses, so the issue of alcohol must be studied very carefully in order to determine the role of alcohol on sexual violence for this particular campus. The most recent report of alcohol violations indicated there were 40 offenses in the year 2010, indicating that alcohol is a problem on this campus, which means there is also a problem of sexual violence. The research is very clear that these two problems are so interconnected that it is considered impossible to have

one problem without the other. Other known risk factors such as Greek membership and athletic participation provided conflicting results. Greek membership was not a risk factor for males or females, but athletic participation was found to be a risk factor for female students. Fraternity members on this campus had lower rape myth acceptance scores than male students not belonging to a fraternity, which indicates that the male Greek members on this campus are receiving some type of education about rape myths or at least they are aware of what should be accepted and not accepted regarding rape myths. It would be beneficial to determine actions the fraternities take to educate their members on sexual violence, and duplicate this to other groups.

The instrument used to measure sexual violence in this study did not inquire about the scenarios or situations surrounding the incident of sexual violence, so more specific questions pertaining to the relationship between the victim and perpetrator of the sexual violence could provide useful information. It might be helpful to determine if the violence occurred between casual acquaintances, first dates, or among a dating type relationship.

The protective factor is an area that could possibly be researched to determine what is being done to protect students from sexual violence. The extent of this future study needs to be widespread to all members of the campus: students, staff, faculty and administrators. There also needs to be an extensive review of established prevention programs that have been used on similar college campuses to prevent and

deal with sexual violence. Designing a prevention program specific to the students on this campus will increase the chances that the program is accepted and implemented successfully. Each campus must study the particular variables that contribute to the culture of that campus to determine the risk factors to provide key points for prevention and intervention of sexual violence. No two campuses have the exact set of contributing factors, so the needs assessment must be very specific to the unique environment of each campus.

The last step of the public health approach to sexual violence prevention is ensuring widespread adoption. This includes training, collaboration, and outcome evaluations to determine if the strategies and goals of the program are being effectively implemented. Training could possibly be a specific need for the campus of this study. Sexual violence is a problem that requires specialized skills that many campus officials on small colleges do not possess. Determining if anyone on the campus has specific training to deal with victims after experiencing sexual violence would be an initial step, but a skills inventory of all staff and faculty interacting with students would determine the professional development needs that would provide an environment supportive to victims of sexual violence. Additional information could be included in the next survey to inquire if students are aware of services provided to victims of sexual violence on this campus. Also students indicating they have experienced sexual violence could provide information about services they sought from campus officials, if they did not seek services on campus, an explanation as to

why they chose not to seek campus services to assist them in dealing with their trauma could be useful information.

Conclusion

Sexual violence is a problem on college campuses, and regardless of whether the accurate prevalence is reported or measured, programs and policies should be implemented to protect female students from sexual victimization. Accurate prevalence numbers would possibly prompt administrative officials to provide the financial and personnel resources as needed to the particular situation portrayed on each individual campus. The unreported numbers do not necessarily have to be disclosed to the public, but could provide the best information for administration to make decisions about the prevention and educational programs needed to deal with the situation as defined on that particular campus.

Incidents of sexual violence are not decreasing on college campuses, in spite of the federally mandated reporting and educational programs required by all institutions of higher education (Aosved, et al, 2006). The discrepancy between reported sexual violence and actual prevalence of sexual violence on college campuses has been contributed to numerous causes, and the complexities surrounding sexual experiences create a complicated situation. The concept of sexual experience is different for each person and is derived from individual differences that are consequences of a person's gender, morals, age, biological factors, beliefs, and other complex variables (Adams-Curtis, et al, 2004). These complexities are further

compounded by the college environment made up of a population that is still forming their identities, while among a culture of peer pressure, alcohol, new found freedoms, and numerous social events to encounter the differences within the student population. Each college campus must determine the problem of sexual violence on their campus in order to address the prevention of this issue, which includes: intervention, education, victim advocacy, and mental health services for victims. A new system of determining the prevalence of sexual violence on campuses should be created and required for all institutions to include incidents that meet the legal definitions of sexual crimes, not just the incidents that are reported to legal or campus officials.

Campus safety is a major concern, and laws have been enacted to require all postsecondary institutions who participate in financial assistance programs for students to disclose crime statistics and security information. However, the mandated reporting updates do not reveal the true magnitude of the problem, if less than 5 percent of the sexual violence is reported to the police (Sampson, 2002). The mandates need to be focused on requiring each college campus to define the problem using reported and unreported acts of sexual violence, because without knowing the true scope of the problem, it is impossible for campus officials to effectively address the problem. McMahon's (2008) work signifies that the prevalence of sexual violence is not decreasing, despite efforts made at national and state levels, and each institution of higher education has an obligation to carefully reflect and improve the effectiveness in combatting sexual crimes committed on their campuses. Female

college students do not report incidents of sexual violence to authorities for various reasons, so using those numbers to define the problem is not an accurate picture.

There is an ethical obligation to report accurate crime statistics to prospective students and parents, as well as the public at large, about the crimes being committed on all college campuses, but an even bigger obligation exists to prevent and effectively support the victims of these crimes.

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