

## ABSTRACT

### Evaluating the Risk Factors of Dating Violence among Undergraduates Attending a Faith-Based University

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The aim of this study was to identify the risk factors of dating violence among undergraduates attending a private, faith-based university and to explore how the context of college dating relationships contribute to dating violence. Nine hundred and forty-six undergraduate students completed an online survey designed to analyze participant demographics, history of interparental violence, alcohol-use, rape myth acceptance, hooking-up behaviors, and history of physical, emotional, and sexual violence. Overall, students reported low-to-moderate rates of dating violence. Heavy alcohol-use and witnessing interparental abuse were found to be significant predictors for dating violence, however religious affiliation, Greek-life, and athletic team membership were not predictors. Overall, 56.2% ( $n=532$ ) of participants reported they had engaged in a hookup relationship. The risk of experiencing dating violence increased as the hookup relationship became more intimate. Future research should identify campus culture and risk factors of dating violence, as well as explore campus variations across the United States.

Evaluating the Risk Factors of Dating Violence among Undergraduates Attending a  
Faith-Based University

by

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A Thesis

Approved by the Department of Health, Human Performance, and Recreation

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## DEDICATION

To my parents

who have supported me from over 1,000 miles away

Thank you for never doubting me

To the survivors

this one is for you

because violence should never be part of the college experience

## CHAPTER ONE

### Introduction

#### *Significance of the Problem*

Dating violence is an alarming public health concern in the United States affecting both men and women regardless of social, economic, religious, or cultural background (Franklin, 2010; Mason & Smithey, 2012). Dating violence is defined as any physical violence, psychological (emotional and/or verbal) violence, sexual violence (sexual assault, unwanted sexual attention, rape), stalking, or a combination of one or more, within a current or former intimate relationship (Mason & Smithey, 2012; Shorey, Stuart, McNulty, & Moore, 2013). According to the Centers for Disease Control and Prevention (2016), more than one in three women and more than one in four men have experienced some form of dating violence in their lifetime. Recent prevalence rates of dating violence victimization among college students range from 5%-66% (Roudsari, Leahy, & Walters, 2009). Additionally, 20%-90% of college students have admitted to committing some form of dating violence, with psychological aggression ranking as the most common (Shorey, Stuart, McNulty, & Moore, 2013).

According to the U.S. Department of Justice, women aged 18-25 years are at greatest risk for sexual violence victimization (Sinozich & Langton, 2014). Further, according to a nationally representative sample of 23,000 undergraduate male and female students, the average prevalence rates for sexual assault since entering college were 7% and 21%, respectively (Krebs, Lindquist, Berzofsky, Shook-Sa, & Peterson, 2016). One in four or five women within this age range will experience some form of sexual

aggression, with a majority of these incidents perpetrated by an acquaintance, friend, or dating partner (Franklin, 2010; Loiselle & Fuqua, 2007; Sutton & Simons, 2014). For example, in a nationally representative sample of college-age females, victims of rape and sexual assault knew their offender in about 80% of cases (Sinozich & Langton, 2014). In the same study, only 22% of rape or sexual assault victimizations were committed by a stranger (Sinozich & Langton, 2014).

Dating violence can result in a number of consequences, including increased economic costs, acute and chronic health outcomes, and negative health behaviors (CDC, 2015). In 2003, the direct costs (emergency room visits, medical care, judicial systems) and indirect costs (lost wages, loss in productivity) of dating violence against women alone exceeded an estimated \$8.3 billion dollars (CDC, 2015). Victims can experience a number of acute health outcomes such as physical injury, death, bruises, and/or traumatic brain injury and chronic health outcomes namely: depression, gastrointestinal disorders, cardiovascular disease, all of which can persist and interfere with daily functioning (CDC, 2015; Kaura & Lohman, 2007). In addition, victims of abuse may engage in risky health behaviors including increased risky-sexual behaviors (engaging in unprotected sex, having multiple sex partners) and increased alcohol and drug use as a way to cope with the aftermath of violence (CDC, 2015; Shorey, Brasfield, Zapor, Febres, & Stuart, 2015). Female victims are more likely than male victims to engage in these risky coping mechanisms (CDC, 2016).

There are risk factors for both perpetration and victimization of dating violence. Research suggests the likelihood of being subjected to violence in a relationship increases for college students who have been exposed to family violence, (e.g. interparental

violence, child abuse, harsh parenting) (Gover, Kaukinen, & Fox 2008), have mental health issues (e.g. depression, low self-esteem) (CDC, 2016), believe violence against women is acceptable (Hayes, Lorenz, & Bell, 2013), abuse alcohol or drugs (Shorey et al., 2015; Shorey, Stuart, McNulty, & Moore, 2014), engage in risky sexual behaviors (e.g. having multiple sex partners, failing to use a condom) (CDC, 2016), watch pornography (Rothman & Adhia, 2015), and affiliate with the university's Greek-life system or National Collegiate Athletic Association (NCAA) athletic teams (Franklin, 2010).

The risk factors that contribute to the likelihood of dating violence perpetration are similar to the risk factors that contribute to dating violence victimization. Those most common include exposure to family violence (Zurbriggen, Gobin, & Freyd, 2010), alcohol and drug abuse (Shorey, Stuart, McNulty, & Moore, 2014), pornography use (Rothman & Adhia, 2015), Greek-life or NCAA athletic team membership (Franklin, 2010), and rape myth accepting attitudes (Reed, Silverman, Raj, Decker, & Miller, 2011).

Traditionally, dating violence has been identified and studied in the context of formal relationships, such as marriage and serious romantic relationships. It was not until recently that researchers suggested that dating violence is a significant problem among young, unmarried adults (Klipfel, Claxton, & van Dulmen, 2014). Researchers further agree that college campuses are high-risk communities (Kaukinen, 2014; Roudsari, Leahy, & Walters, 2009). College students are vulnerable to victimization and perpetration of dating violence because many are involved in their first intimate relationship during these developmental years (Kaukinen, 2014). Fielder and Carey (2010), surveyed 118 first-semester female college students and found that 36% of

female students reported experiencing intimate relations with the opposite sex during their first semester. This percentage increased to 60% by the end of their first semester (Fielder & Carey, 2010). Kaukinen (2014) suggests that because dating is a new experience for college students, they lack the skills needed to develop and maintain healthy relationships.

To further identify why college students are vulnerable to dating violence, the U.S. Department of Justice created and validated a campus climate survey to collect school-level data on sexual victimization of undergraduate students (Krebs, Lindquist, Berzofsky, Shook-Sa, & Peterson, 2016). The researchers discovered that student perceptions of sexual assault vary greatly from campus to campus, thus suggesting the need for schools to conduct surveys to understand the unique problems on their specific campuses (Krebs, Lindquist, Berzofsky, Shook-Sa, & Peterson, 2016). For example, a university's campus climate may be influenced by the type of institution (private, public, secular, non-secular). According to a state-wide needs assessment of Connecticut college and university policies related to dating violence, researchers identified that public schools were significantly more likely than private schools to have a written policy regarding dating violence (Connecticut Coalition Against Domestic Violence, 2014). Therefore, private schools may unknowingly relay the message that dating violence is not an issue on campus, thus influencing student perceptions of dating violence (Connecticut Coalition Against Domestic Violence, 2014). Students attending a non-secular school may have different perceptions of dating violence when compared to those attending a secular school. Religious affiliation is a powerful influence on culture, that guides many political, cultural, and social attitudes (Barnett, Sligar, & Wang, 2016). For example,

researchers suggest that a person's perception of dating violence victimization and perpetration may be negatively influenced by his or her religious affiliation because some religious texts include passages that support rape myths and patriarchal attitudes (Barnett, Sligar, & Wang, 2016). Therefore, it is important to identify why a risk factor of dating violence may apply to one college student population but not to another.

The evolution of dating on college campuses dates back to the early 1920s. During this time, dating was characterized by "courting" and "going steady" with a significant other (Garcia, Reiber, Massey, & Merriwether, 2012). Researchers cannot identify an exact time and place when traditional dating began to lose its prominence among college students, but evidence suggests the shift towards casual dating (i.e. intimacy between two people without the commitment of a formal relationship) started to emerge in the 1960s and 1970s (Garcia, Reiber, Massey, & Merriwether, 2012; Paul, McManus, & Hayes, 2000). The Sexual Revolution of 1960 and the introduction of birth control are identified as two influencing factors in favor of sexual liberation among young adults (Garcia, Reiber, Massey, & Merriwether, 2012). In addition, co-ed dorms were introduced during this time period bringing men and women in close and constant contact with each other (Heldman & Wade, 2010).

An emerging type of relationships is the "hookup" relationship. *Hooking-up* is defined as a casual sexual encounter with a stranger, acquaintance, friend, and/or former dating partner with no intention of future commitment (Bogle, 2007; England, Shafer, & Fogarty, 2007; Garcia, Reiber, Massey, & Merriwether, 2012; Paul, McManus, & Hayes, 2000). These brief sexual experiences tend to be spontaneous, last one-night, and occur after a night of 'hanging-out' at a party or local bar (Allison & Risman, 2013; Bogle,



2007; Paul, McManus, & Hayes, 2000). The term *hooking-up* is vague and could mean anything from kissing to sexual intercourse (Paul, McManus, & Hayes, 2000). Among college students, reported rates of hooking-up range from 60% to 80% (England, Shafer, & Fogarty, 2007; Eshbaugh & Gute, 2008; Littleton, Tabernik, Canales, & Backstrom, 2009; Paul, McManus, & Hayes, 2000). In a study of 109 U.S. college women, 68% reported experiencing at least one hookup experience over the course of their life (Littleton, Tabernik, Canales, & Backstrom, 2009). Additionally, among participants who had hooked-up reported doing so between 1 and 40 times, with an average number of 6 hookups (Littleton, Tabernik, Canales, & Backstrom, 2009). Similarly, in a sample of 187 college students, 70% of them reported hooking-up during their college experience and reported doing so between 1 and 70 times, with an average number of 10.28 hookups (Paul and Hayes, 2002).

The evolution of traditional dating to hooking up between college students has influenced campus culture. The *hookup culture* is defined as a culture that is dominated by attitudes and beliefs that ultimately prescribe casual sexual encounters with friends or acquaintances (Bogle, 2007; Glenn, 2001; Heldman & Wade, 2010). Scholars assume that these behaviors have always been a part of the American college experience, but recent students show that there have been significant changes on today's college campuses compared to previous generations due to an increased attendance of fraternity parties and participation in binge-drinking (i.e. excessive alcohol consumption in a short period of time) (Glenn, 2001; Wechsler, Lee, Kuo, & Lee, 200; Willoughby & Carroll, 2009). According to a study conducted by Paul, McManus, and Hayes (2000), of those who reported hooking-up, 44% of these hookups occurred at Greek-affiliated parties or

events. Additionally, respondents who engaged in vaginal intercourse during a hookup were more likely to report the consumption of alcohol prior to the sexual encounter (Paul, McManus, & Hayes, 2000). Internet access to pornography in the mid-1990s is also considered a factor in the emergence of the hookup culture on college campuses. Pornography challenges the idea that sex occurs within committed relationships, thus negatively influencing a person's attitude toward intimacy (Heldman & Wade, 2010; Kraus & Russel, 2008). The increased access and consumption of pornography may correlate with participation in and endorsement of the hookup culture.

The hookup culture has created a new environment in which physical, psychological, and sexual violence can occur (Klipfel, Claxton, & van Dulmen, 2014; Sutton & Simons, 2014). Hookup experiences may begin as consensual, but they do not always end that way. Researchers suggest that males expect to engage in more intimate sexual behaviors (e.g. oral or vaginal sex) when participating in a hookup, thus increasing the likelihood for unwanted sexual experiences (Lambert, Kahn, & Apple, 2003).

Social Norms Theory (SNT) has been applied to dating violence research to understand why hooking-up has become the norm on college campuses. SNT was first identified by Berkowitz and Perkins (1986) and posits that individuals incorrectly perceive the beliefs and attitudes of members of a social group. Researchers have discovered that misperceptions of peer behaviors can lead to overestimations of unhealthy behaviors and underestimations of healthy behaviors (Dardis, Murphy, Bill, & Gidycz, 2015; Lambert, Kahn, & Apple, 2003). Pluralistic ignorance, a construct of SNT, is the most popular explanation for the ever-present hookup culture on college campuses. Pluralistic ignorance exists when people secretly disapprove but publicly accept a norm

or belief (Lambert, Kahn, & Apple, 2003). As reported previously, reported rates of hooking up average 60%; however, Paul and Hayes (2002) found that students estimate about 85% of other students have hooked-up. In a similar study, students overestimated other student's comfort levels with hooking-up (Lambert, Kahn, & Apple, 2003).

Male Peer Support (MPS) Theory, first coined by Walter S. DeKeseredy in 1988, suggests that certain all-male peer groups encourage, justify, and support the abuse of women. Male peer groups, such as fraternities or NCAA athletic teams, can provide emotional support, guidance, shared interests and goals, and a social network (Schwartz & Nogrady, 1996). One of the major values of male peer support groups is that they often provide techniques for coping with stress (Baqutayan, 2011), specifically advice on how to interact with women (Franklin, Bouffard, & Pratt, 2012). These groups may legitimize and encourage the use of emotional, physical, and sexual abuse against dating partners as a way to cope with stress (Franklin, Bouffard, & Pratt, 2012). Men benefit from hookup culture more than women because men are more likely to experience physical pleasure and socially benefit from active participation (Franklin, Bouffard, & Pratt, 2012; Godenzi, Schwartz, & Dekeseredy, 2001). For example, a fraternity member may be praised by his fraternity brothers for hooking up with a female at a party with or without her consent (Godenzi, Schwartz, & Dekeseredy, 2001). According to MPS Theory, he may be provided excuses for his actions, such as "everyone does it," "drunken women are asking for it," and "you were just having fun" (Corprew & Mitchell, 2014). This vocabulary creates a false idea that sexual assault is common and justified, therefore perpetuating a culture that promotes violence against women (Corprew & Mitchell, 2014;

Godenzi, Schwartz, & Dekeseredy, 2001; Franklin, Bouffard, & Pratt, 2012; Schwartz & Nogrady, 1996).

### *Purpose of the Study*

The specific aims of this study were: (a) to identify the risk factors of dating violence among undergraduate students attending a Southern, private faith-based university in the United States, (b) to explore how the context of college dating relationships (i.e. relationship type) contribute to perceptions of dating violence among undergraduate students, (c) to contribute to the current literature on dating violence and (d) to help public health professionals develop appropriate prevention programs for college students.

### *Justification*

Dating violence is a public health issue plaguing college campuses across the United States. Since the establishment of Title IX in 1972 by the U.S. Department of Education, U.S. college and university administrators have been tasked to lower the rates of dating violence (“Title IX and Sex Discrimination,” 2015). For example, the *Crime Awareness and Campus Security Act of 1990* was signed into law in an attempt to create transparency about the prevalence of interpersonal violence on college campuses and was later strengthened by the implementation of the Campus Sexual Violence Elimination (SaVE) Act (“Title IX and Sex Discrimination,” 2015). In 2014, President Barack Obama and Vice President Joe Biden launched *It’s On Us*, a national awareness campaign to help put an end to sexual assault on college campuses (“Title IX and Sex Discrimination,”

2015). To further this progress, researchers are focusing their attention on the etiology and prevention of dating violence.

Research exists about the risk factors of dating violence among college students, but it is important to understand how these risk factors vary among universities and colleges. Research findings regarding dating violence may not be generalizable to other colleges and universities. Typically, people attending the same college are surrounded by people like themselves in a close-knit living situation, therefore they can be strongly influenced by their peers and adopt the same beliefs and values (Reed, Silverman, Raj, Decker, & Miller, 2011). Campus climate surveys should be tailored with questions specific to each campus so that the data collection is meaningful for that institution.

In some respect, each college climate is unique and may be defined by the type of university (secular versus non-secular). The idea of “moral communities” was first identified by Stark (1996) and later refined by Regnerus (2003) and states that religion should be understood at the community-level, rather than intrapersonal-level. Faith-based colleges and universities may reinforce religious and spiritual education of students in ways that secular colleges and universities do not (Burdette, Ellison, Hill, & Glenn, 2009). For example, students at religious institutions may be required to take additional religion-specific coursework or engage in spiritually-based extracurricular activities (Burdette, Ellison, Hill, & Glenn, 2009). They may also have strict student conduct codes to regulate risky behaviors such as alcohol consumption and premarital sex. Therefore, increased research identifying the risk factors of dating violence on religious campuses is essential.

A campus climate may also be defined by the type of relationships that exist between students attending the university. There has been a shift from traditional dating to casual dating on college campuses, thus research should focus on the hookup culture and its role as a risk factor of dating violence, specifically sexual assault (Littleton, Tabernik, Canales, & Backstrom, 2009). Understanding the type of relationship in which dating violence occurs is important because relationship type has been associated with factors that contribute to rape culture, specifically victim blaming and rape myth acceptance. For example, the closer the relationship between the victim and perpetrator, the less likely people will view the incident of dating violence as serious. Angelone, Mitchell and Lucente (2012) found higher rates of victim blaming in situations where the victim and perpetrator were in a relationship when compared to situations where the victim and perpetrator were strangers. During incidents in which violence occurred between strangers, the perpetrator was more likely than the victim to be blamed (Angelone, Mitchell, & Lucente, 2012).

Lastly, there is limited research about how the hookup culture varies from campus to campus, specifically at private, faith-based institutions. Existing research on the relationship between religious identity and hooking-up has yielded inconsistent results (Burdette, Ellison, Hill, & Glenn, 2009; Todhunter & Deaton, 2010). Using secondary data from the National Longitudinal Surveys of Youth (NLSY), Beck, Cole, and Hammond (1991) found students who held more conservative views were more likely to abstain from hooking-up. In contrast, Burdette, Ellison, Hill, and Glenn (2009) found that Catholic college women were more likely to have hooked-up while at school than college

women with no religious affiliation. Because of this inconsistency, it is important to know how different campus cultures influence the presence of hookup culture.

The aim of this study was to investigate the dating violence risk factors among undergraduate students attending a faith-based university and to explore the relationship between dating violence and hookup culture, thus addressing the gaps in the existing literature regarding dating violence among college students.

#### *Assumptions*

There is an assumption that participants will answer honestly because confidentiality will be preserved. Additionally, participants are volunteers and are allowed to withdrawal from the study at any time and with no ramifications. In quantitative studies, it can be assumed that the study can be replicated, but not generalized to other Southern, private, faith-based universities in the United States.

#### *Limitations*

A potential limitation of this study is that it is based on self-report data which increases the possibility of prevarication bias, or lying. Participants may have ulterior motives for answering a question and thus may underestimate or overestimate an exposure. This could affect the measures of effect (i.e. risk ratio, incidence rate ratio, odds ratio) of the risk factors. There is difficulty in assessing the magnitude of the problem because of the sensitive and private nature of dating violence. This means the problem cannot be directly observed, therefore participants may intentionally lie about their experiences due to humiliation, regret, embarrassment, or the fear of being incriminated.

A second limitation is the possibility of selection bias. The methodology used in this study may result in selection bias because data are collected from a convenience sample. Participants who chose to enroll in the study may be unrepresentative of the priority population. This type of bias occurs when the selection of participants is not sufficiently random. Due to the nature of the study, those who participate may be more inclined to participate in this study because of their interest in the subject matter. For example, someone who is aware of dating violence may be more likely to participate than someone who has not been exposed to dating violence. The opposite may be true too. Someone who has personally experienced dating violence, may be less likely to participate because he/she may be embarrassed or fearful of disclosing that information. Additionally, perpetrators may be less likely than non-perpetrators to participate in the study due to the fear of being incriminated, which could result in an underestimation of dating violence perpetration.

### *Delimitations*

There are several delimitations for this study. The selected methodology and variables in the study set a boundary on conclusions derived from the findings. For example, the study is being conducted in the state of Texas at a private, faith-based university, as opposed to a public, secular university. The results of the study may not be a true representative of the undergraduate population throughout the nation. By focusing on only undergraduate students attending a private, faith-based university, it is hoped that there will be relevant findings that may impact this specific population. In fact, it has been shown that the occurrence of dating violence is highest among those aged 18-25



years. Focusing on one school may hinder generalizability, but there is a need for research on this topic at private, religious schools.

Another delimitation for this study is the university's policies and code of conduct. Unlike other private universities, the university chosen for this study does not offer co-ed dormitory living quarters. Therefore, men and women are not in close proximity in the dorms when compared to other private universities that permit co-ed on-campus living. Additionally, it is a violation of University policy for anyone to possess, use, or be under the influence of an alcoholic beverage on the campus or at a University-related activity off campus. Because the university chosen for this study is a "dry campus" (i.e. a college that prohibits the use and possession of alcohol on campus), the results cannot be generalized to universities that permit alcohol use on campus.

Another delimitation is the pool of potential participants. The courses, through which students were chosen, were limiting because not all students attending the university were enrolled in these courses at the same time. Therefore, not every student had an equal opportunity for participating in the study. However, the courses that were selected, included all grade levels (freshmen, sophomores, juniors, seniors) and all majors. Snowball sampling was used to increase the number of potential participants. Students were encouraged to tell their peers and friends about the survey in hopes of collecting data from a larger representative sample thus decreasing selection bias.

A final delimitation of this study is the option to complete the survey for extra credit. The participants who were offered extra credit were only those who were enrolled in Health and Human Behavior or Human Sexuality. This limited the number of participants not incentivized to complete the survey. Inclusion criteria were limited the

participants to only undergraduate students. Because dating violence is highest among ages 18-25, undergraduates are only included in the study because graduate students tend to fall outside of this age range.

### *Research Questions*

Research Question 1: What percentage of participants have experienced some form of dating violence?

1a. What is the frequency of sexual assault victimization and perpetration among Greek-life members?

Research Question 2: What are the risk factors for dating violence among college students attending a private, faith-based university?

2a: Which demographic characteristics (i.e. gender, race/ethnicity, hometown, classification, religious affiliation, etc.) are positively related to dating violence?  
Negatively related to dating violence?

2b: Is witnessing interparental violence positively related to dating violence?

Research Question 3: Is rape myth acceptance positively related to dating violence?

3a: Is there a positive or negative relationship between religious beliefs and rape myth acceptance?

Research Question 4: How does the context of college dating relationships (i.e., relationship type) contribute to perceptions of dating violence?

4a: What is the occurrence and frequency of risky sexual behaviors among college students?

4b: Is the hookup culture related to dating violence?

4c: Is the hookup culture related to victim blaming?

## CHAPTER TWO

### Review of the Literature

#### *Overview of Dating Violence Among College Students*

Dating violence is a form of intimate partner violence (IPV) defined as any physical violence, psychological (emotional and/or verbal) violence, sexual violence (sexual assault, unwanted sexual attention, rape), stalking (unwanted attention that causes fear or concern for one's safety), or combination of one or more, within a current or former intimate relationship (Mason & Smithey, 2012; Shorey, Stuart, McNulty, & Moore, 2014). Examples of physical violence include, but not limited to, pushing; shoving; throwing; grabbing; use of weapon; use of strength against another person; and coercing other people to do any of these acts (CDC, 2016). Psychological violence includes verbal and non-verbal communication with the determination to harm a dating partner emotionally (CDC, 2016). Sexual violence is any sexual aggression that occurs without a victim's freely given consent, including sexual coercion, unwanted sexual attention or contact, sexual assault, attempted rape, and completed rape (CDC, 2016).

Traditionally, dating violence has been identified and studied in the context of formal relationships, such as marriage and serious romantic relationships. It was not until recently that researchers suggested that dating violence is a significant problem among young, unmarried adults (Jozkowski, Henry, & Sturm, 2015; Klipfel, Claxton, & van Dulmen, 2014). They further agree that across the U.S., college campuses are considered at-risk environments for different types of dating violence, especially sexual violence

including completed rape, attempted rape, unwanted sexual contact, and sexual coercion (Jozkowski, Henry, & Sturm, 2015; Kingree & Thompson, 2013; McMahon, 2010; Moynihan et al., 2015; Paul & Gray, 2011). In a nationally representative sample of 508 college students (330 females, 178 males), 29% of female students and 17% of male students said they have been in an abusive dating relationship at some point in their life, with a majority (57%) reporting that the abuse occurred during college (Fifth & Pacific Companies, Inc., 2010).

It is estimated that 20-25% of college women will experience attempted rape or completed rape during their time in college (Fisher, Cullen, & Turner, 2000; Koss, Gidycz, & Wisniewski, 1987; Moynihan, Banyard, Arnold, Eckstein, & Stapleton, 2011; Senn & Forrest, 2015). This estimate is widely accepted, but rates of victimization vary from campus to campus. For example, among 914 female undergraduates attending Massachusetts Institute of Technology (MIT), only 10% reported being sexually assaulted since starting at MIT (Massachusetts Institute of Technology [MIT], 2014). In a similar study conducted at Stanford University, of 2,152 undergraduate women, only 4.7% reported experiencing sexual assault since starting college (Stanford University, 2015). These rates may vary from campus to campus because of the campus climate, location, and demographics of the student population.

College students are a vulnerable population for dating violence because of the social environment in which they live. Incidences of dating violence often occur in residence halls and at social events and parties, such as those hosted by fraternities (Brown, Banyard, & Moynihan, 2014; Exner & Cummings, 2011). For example, in a nationally representative study of 4,446 college women, researchers found the frequency

with which women attended fraternity parties was positively associated with being a victim of sexual assault (Krebs, Lindquist, Warner, Fisher & Martin, 2007). In addition, college students are more likely to consume large amounts of alcohol which contributes to an environment highly conducive for the encouragement of non-consensual sexual activity (Cowley, 2014). According to Kingree & Thompson (2014), 75% of sexual assault perpetrators self-reported that they had used alcohol prior to their most recent perpetration.

*Rape culture*, a term coined by feminists in the 1970s, is defined as a complex set of beliefs and attitudes that normalize and tolerate sexual aggression and violence against women (Women against Violence against Women [WAVAW], 2014). It is a culture in which sexual assault and rape are encouraged and seen as the social norm (WAVAW, 2014). The habitual acceptance of rape myths perpetuates the presence of rape culture on college campuses (Cowley, 2014; Lonsway & Fitzgerald, 1994). *Rape myths* are untrue, clichéd, and biased beliefs about sexual assaults, rape victims, and rape perpetrators (Hayes, Lorenz, & Bell, 2013). They originate from cultural stereotypes, such as traditional gender norms, acceptance of violence against women, and misunderstanding the nature of sexual assault (Hayes, Lorenz, & Bell, 2013). An example of a rape myth is believing rape only involves an attack by a stranger in the dark, when in reality 9 out of 10 rape victims on college campuses claim to know their assailants (Fisher, Cullen & Turner, 2000). Perpetrators are often people who the victim trusts, including classmates, friends, boyfriends, or sexual partners (Flack, Hansen, Hopper, Bryant, Lang, Massa, & Whalen, 2015).

Typically, men are more likely than women to accept rape myths, but researchers have found that women too contribute to the problem. For example, in an ethnographic study conducted at a large Midwestern university, researchers interviewed students about the party scene and found that female students will victim blame (i.e. holding a victim of a crime to be partially or entirely responsible for the crime) other female students by claiming that if a friend acts like “a whore” she will be treated like “a whore” and therefore does not deserve to be treated with sexual respect (Armstrong, Hamilton & Sweeney, 2006). The cultural attitudes toward rape significantly affect a victim’s success at recovery (Fanflick, 2007; Lonsway & Fitzgerald, 1994). Unchallenged rape myths extend feelings of blame, embarrassment, and self-blaming tendencies for victims (Fanflick, 2007; Lonsway & Fitzgerald, 1994).

### *Literature Review*

While research on dating violence exists, there is a still a need to better understand why dating violence is a growing issue among college students. A review of the literature was conducted to explore dating violence with special focus on methodological factors and gaps in the literature. Four major themes were identified from the extensive literature search. The first theme was the methodology of the existing literature, including existing research designs, participant recruitment, study duration, and research location. The second theme was the inconsistency in reported rates of dating violence perpetration and victimization. Next, we identified the risk factors for dating violence across college campuses. Lastly, we identified that the type and longevity of a relationship may influence the severity and occurrence of dating violence. The methods

used to complete the literature review are presented first, followed by the aforementioned themes.

### *Literature Review Methods*

An extensive systematic review of the literature was conducted using the preferred reporting items for systematic reviews and meta-analyses (PRISMA) guidelines (Liberati et al. 2009; Moher et al, 2009). Combinations of the following search terms were used: college, dating violence, risk factors, college students, rape, hookup, beliefs, undergraduates, sexual assault, culture. The following search engines were used: EBSCO, PubMed, Scopus, Google Scholar. To focus on dating violence risk factors with the greatest significance to college students in the United States, the following were applied as inclusionary criteria: U.S.-studies only, published within the last ten years, private and public 4-year colleges or universities, outcome of concern was dating violence perpetration and victimization, and college students aged 18-25. The literature search was refined by only including scholarly and peer-reviewed journals. Studies including high school students, graduate students, or post-doctoral students were not included. Research about dating violence prevention programs were also excluded. In addition, socioeconomic status was not considered an exclusionary factor due to diverse populations of college campuses. Refer to Figure 1 for a flowchart of the study selection process.

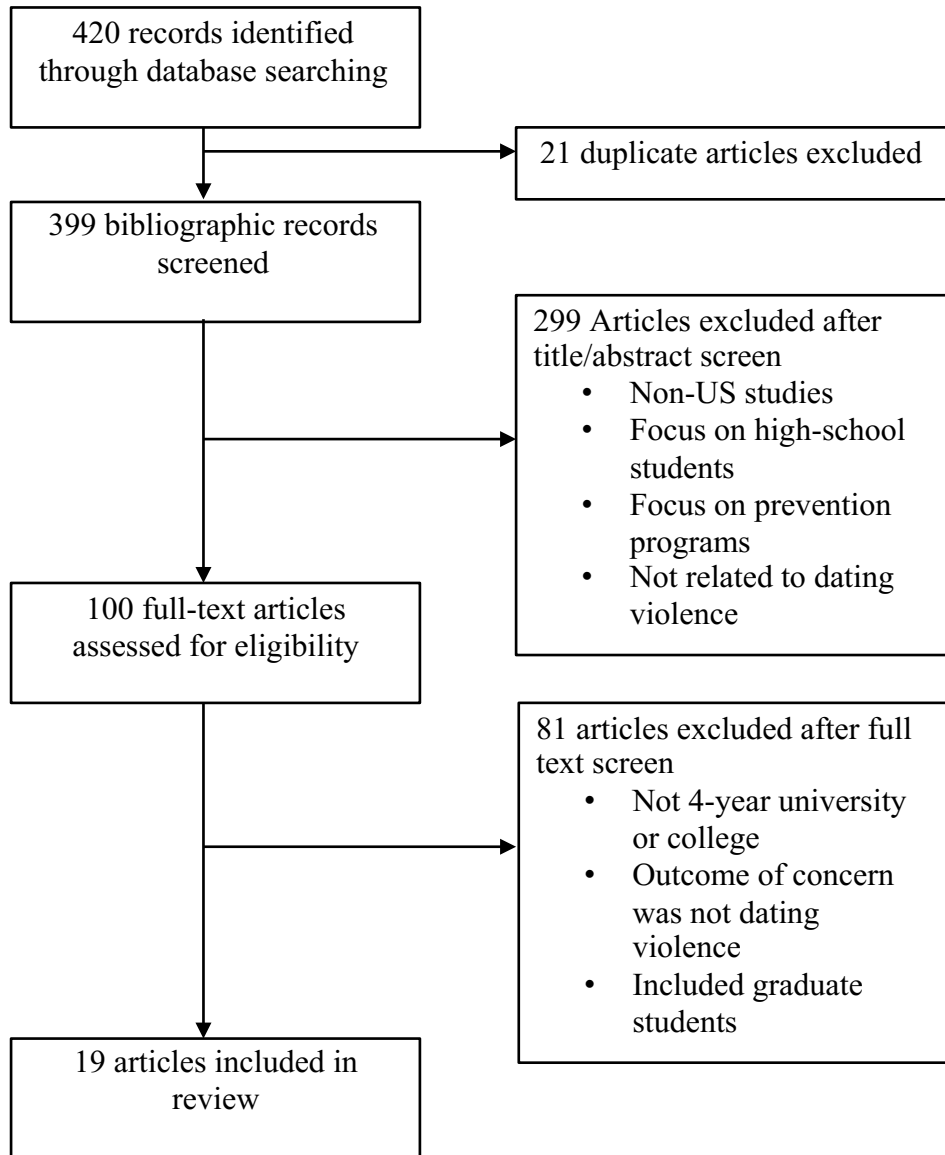


Figure 1. Flow chart of study selection process.



### *Literature Review Results*

Nineteen ( $n=19$ ) studies were identified that met inclusion criteria. Results of the review are presented in Appendix A and include study reference and title, study purpose/research, sample characteristics, U.S. geographical location, public or private institution, methodology of study, the risk factors assessed, if perpetration, victimization, or both were assessed, and whether or not hookup culture was assessed. All 19 studies provided demographic data describing the study population, though some omitted the classification of school (i.e. public or private). Of the nineteen, nine were public universities, three were private universities, and seven were unknown. The religious affiliations of the three private schools were not disclosed (Bouffard, 2010; Corprew & Mitchell, 2014; Roudsari, Leahy, & Walters, 2009).

#### *Methodology of Current Literature*

The methodology of the reviewed literature includes quantitative methods ( $n=17$ ), mixed methods ( $n=1$ ), and experimental designs ( $n=1$ ). Data from the quantitative studies were collected using self-report surveys from convenience samples of predominately Caucasian participants. The study populations were recruited from a variety of undergraduate courses ( $n=1$ ; Mason & Smithey, 2012), including psychology ( $n=5$ ; Angelone, Mitchell, & Lucente, 2012; Corprew & Mitchell, 2014; Klipfel, Claxton, & M. van Dulmen, 2014; Maldonado, Watkins & DiLillo, 2014; Roudsari, Leahy, & Walters, 2009), social science ( $n=1$ ; Sutton & Simons, 2014) and health ( $n=1$ ; Roudsari, Leahy, & Walters, 2009). Some researchers collected longitudinal data ( $n=4$ ) about the progression of dating violence throughout an individual's college career, thus adding variety to the current literature. Research was conducted in different geographical regions of the U.S.

including the Northwest ( $n=1$ ), Northeast ( $n=3$ ), Midwest ( $n=5$ ), West ( $n=1$ ), South ( $n=3$ ), and Southeast ( $n=6$ ).

### *Different Types of Dating Violence*

The incidence rates of dating violence perpetration and victimization vary in the reviewed literature. Researchers have acknowledged that these rates may differ due to the type and severity of dating violence and the use of an inconsistent definition of dating violence. In addition, multiple terms were used interchangeably for dating violence, thus creating even more uncertainty about what constitutes as dating violence.

*Type and severity of dating violence.* Studies show that there are differences in perpetration and victimization rates depending on gender, severity, and type of dating violence. In a cross-sectional survey of 9,868 college students, Whitaker (2013) found that females were more likely than men to report perpetrating physical violence and psychological aggression. Controlling for severity of violence, Whitaker (2013) found that males in the same sample were 2.5 times more likely than females to report severe forms of physical assault perpetration, including assault with a deadly weapon. The results of a Texas Tech University study revealed psychological aggression as the most common form of dating violence (Mason & Smithey, 2012), yet a different study, conducted by Sutton and Simons (2014) revealed sexual aggression as the most common form of dating violence.

Though perpetration rates of physical and psychological aggression vary between males and females, victimization rates of sexual aggression do not. According to the current literature, women experience higher rates of sexual violence victimization than

men. This trend seems to be consistent throughout the current literature. For example, Sutton and Simons (2014) surveyed 624 undergraduate students and found that 43.3% of men claimed to perpetrate some form of sexual assault and 50.4% of women reported being a victim of some form of sexual assault. In the same study, the researchers found between 1/3 and 1/2 of college men admit to perpetrating some form of sexual aggression against women (Sutton & Simons, 2014). Sutton and Simons (2014) suggest that reported rates of sexual violence are underestimated due to the expansive set of behaviors that would constitute as sexual violence. For example, sexual coercion is considered a form of sexual violence but is oftentimes underreported because it is not perceived as a form of sexual violence.

#### *Dating Violence Definition Inconsistency*

The definition of dating violence was inconsistent and therefore incidence and prevalence data varied among the reviewed literature. The severity of dating violence was found to vary from person to person due to personal beliefs and attitudes. Hitting an intimate partner may be seen as moderate physical assault to one person but severe physical assault to a different person. For example, Mason and Smithey (2012) found a low rate of dating violence among a population of 142 college students attending Texas Tech University, yet Zurbriggen, Gobin and Freyd (2010) found that 54% of surveyed college students reported perpetrating some form of psychological abuse during the past 12 months. Sutton and Simons (2014) suggest that reported rates of sexual violence are underestimated due to the expansive set of behaviors that would constitute as sexual violence. For example, sexual coercion is considered a form of sexual violence and involves actions such as the perpetrator “getting a date drunk or stoned” and “trying to

turn a date on by touching” but is often underreported because it may not be viewed as violent to the victim (Sutton & Simons, 2014).

### *Risk Factors of Dating Violence*

The cause of dating violence is dynamic and complex. A large body of literature exists about the potential risk factors of dating violence perpetration and victimization among college students. Results of this review suggest the following are the most important risk factors: intergenerational violence ( $n=5$ ; Gover, Kaukinen & Fox, 2008; Maldonado, Watkins, & DiLillo, 2014; Sutton & Simons, 2014; Zinzow & Thompson, 2012; Zurbriggen, Gobin & Freyd, 2010), engaging in risky behaviors (e.g. binge drinking, drug-use, sexual encounters with multiple partners) ( $n=6$ ; Franklin, 2010; Gover, Kaukinen, & Fox, 2008; Loiselle & Fuqua, 2007; Mouilso, Fischer, & Calhoun, 2012; Roudsari, Leahy, & Walters, 2009; Shorey, Stuart, McNulty & Moore, 2014; Whitaker, 2013; Zinzow & Thompson, 2012), length and type of relationship to the perpetrator or victim ( $n=4$ ; Angelone, Mitchell, & Lucente, 2012; Flack et al., 2015; Klipfel, Claxton, & van Dulmen, 2014; Mason & Smithey, 2012), and Greek-life and/or athletic team membership ( $n=3$ ; Corprew & Mitchell, 2014; Gidycz, Warkentin, & Orchowski, 2007; Roudsari, Leahy & Walters, 2009).

*Intergenerational violence.* Intergenerational violence was the first risk factor of dating violence identified in the literature. Experiencing (e.g. child abuse) or witnessing (e.g. interparental violence) any form of violence during the developmental years have been associated with dating violence perpetration and victimization among college students (Maldonado, Watkins & DiLillo, 2014). For example, the authors of a study

targeting college sophomores reveal that adolescent childhood abuse is positively associated with late adolescent sexual aggression victimization and perpetration for both males and females (Zurbriggen, Gobin & Freyd, 2010). Similarly, in a survey conducted at a large, public university, both male and female participants who experienced violence as a child were more likely to experience and/or perpetrate some form of dating violence in late adolescence (Gover, Kaukinen, & Fox, 2008). Sutton and Simons (2014) found that there was a significant indirect effect from harsh parenting to sexual assault perpetration among male participants. Though this trend is relatively consistent throughout the literature, there are inconsistencies when looking at the association between intergenerational violence and sexual violence, specifically. While researchers of one study found no direct relationship between intergenerational violence and sexual assault for either men or women (Sutton & Simons, 2014), others found that a history of intergenerational violence (interparental conflict and child sexual abuse) was associated with sexual assault offenders in comparison to non-offenders (Zinzow & Thompson, 2012).

*Risky behaviors and dating violence.* Risky behaviors are the second major risk factor for dating violence reported in the literature. Risky behaviors include heavy alcohol consumption (e.g. binge drinking), increase drug use, and risky sexual practices (e.g. increase number of sexual partners, failing to use a condom). Of the risky behaviors mentioned in the current literature, binge drinking ( $n=6$ ) and an increased number of sexual partners ( $n=2$ ) were the two most common.

Alcohol consumption, specifically the number of binge drinking episodes (five or more for men, four or more for women in a single occasion), was a common risk factor identified in the literature. Researchers support binge drinking as a risk factor for dating violence perpetration and victimization (Loiselle & Fuqua, 2007; Mouilso, Fischer, & Calhoun, 2012; Roudsari, Leahy, & Walters, 2009; Shorey, Stuart, McNulty & Moore, 2014; Sutton & Simons, 2014). Heavy alcohol consumption was assessed as a risk factor for either dating violence perpetration or victimization, or both. In a study conducted by Roudsari, Leahy, and Walters (2009), 280 participants reported experiencing physical abuse, where 100% of the incidences occurred between a perpetrator and victim whom were under the influence of alcohol. In the same study, peak blood alcohol level was significantly associated with higher scores of victims' verbal-emotional abuse scores and perpetrators' verbal-emotional and threatening abuse scores (Roudsari, Leahy, & Walters, 2009). Mouilso, Fischer and Calhoun (2012) found similar findings from their survey of 319 first-year college women at a large southeastern university. They found that both frequent binge drinking and frequent drinking were significant risk factors for experiencing sexual assault (Mouilso, Fischer, & Calhoun, 2012). In another study conducted by Shorey, Stuart, McNulty, and Moore (2014), alcohol use was associated with an increased risk of physical and sexual aggression perpetration.

Although there exists consistent evidence that heavy alcohol consumption is a risk factor of dating violence among college students, two studies suggest otherwise (Crane & Eckhardt, 2013; Whitaker, 2013). Whitaker (2013) found that alcohol intoxication was not a significant predictor of physical or psychological dating violence and Crane and

Eckhardt (2013) found that alcohol consumption was not a predictor of female-to-male dating violence.

The increased number of sexual partners has been identified as an additional risk factor of dating violence (Franklin, 2010; Zinzow & Thompson, 2012). Franklin (2010) surveyed 185 college women enrolled at a large northwestern university to identify the risk factors related to three different forms of sexual violence (unwanted sex resulting from verbal coercion, alcohol-induced sexual assault, completed rape at a result of threats or force). Franklin (2010) found women who reported experiencing verbal coercion that resulted in unwanted sex were significantly more likely to indicate an increased number of sex partners when compared to non-victimized women. In the same study, women who experienced alcohol induced sexual victimization also reported an increased number of sexual partners (Franklin, 2010). In a survey of 795 college men over four years of college, Zinzow and Thompson (2012) found that compared to non-offenders, single and repeat offenders of sexual aggression reported having more sexual partners and sexually aggressive beliefs and attitudes.

*Greek-life and athletic team membership.* An emerging theme in the current literature is the association between fraternity or sorority membership and dating violence (Corprew & Mitchell, 2014; Gidycz, Warkentin, & Orchowski, 2007; Roudsari, Leahy & Walters, 2009). Results from a survey conducted at a northwestern university revealed that women belonging to the Greek system were 5.74 times more likely to experience completed rape than women not belonging to the Greek system (Franklin, 2010). The relationship between sorority membership (Franklin, 2010), binge drinking (Loiselle & Fuqua, 2007; Roudsari, Leahy, & Walters, 2009), and dating violence victimization is

consistent across the literature. However, the relationship between fraternity membership and dating violence perpetration is inconsistent. Corprew and Mitchell (2014) found that fraternity membership was associated with higher rates of sexual violence perpetration, while Gidycz, Warkentin, and Orchowski (2007) found no relationship.

Although researchers suggest a correlation between college men and dating violence perpetration, evidence to support the relationship between athletic team membership and dating violence perpetration is mixed (Gidycz, Warkentin & Orchowski, 2007). Roudsari, Leahy, and Walters (2007) found no significant association between athletic team membership and the incidence of dating violence. Similarly, in a prospective study conducted at a NCAA Division I school, Gidycz, Warkentin and Orchowski (2007) did not find athletic team membership as a predictor for dating violence perpetration.

*Type and length of relationship to victim and/or perpetrator.* The nature and extent of dating violence might be different among and within relationships. Researchers have examined how the type of relationship (committed relationships and uncommitted relationships) and the length of the relationship (long-term, friends, acquaintances, strangers) influence the nature and severity of dating violence. In one study, Klipfel, Claxton, and van Dulmen (2014) found that emotional, physical, and sexual aggression victimization were present in committed relationships, casual dating relationships, friends-with-benefits, booty-calls, and one-night stands. The researchers also note that emotional aggression was higher than physical aggression within committed relationships, casual relationships, and friends-with-benefits. Furthermore, physical



aggression was the least common form of aggression seen across relationships (Klipfel, Claxton, & van Dulmen, 2014).

The type of relationship was found to be both a risk factor and a protective factor of dating violence. Franklin (2010) found the exclusivity of a relationship to be a protective factor of dating violence, while Mason and Smithey (2012) found it to be a risk factor. According to Franklin (2010), those who claimed to be in an exclusive relationship were significantly less likely to be the victim of alcohol-induced sexual assault than those who were not in an exclusive relationship (Franklin, 2010). In contrast, Mason and Smithey (2012) found that the longer, more committed the relationship the greater the risk of dating violence victimization and perpetration. Additionally, the length of the relationship was associated with an increased likelihood of sexual coercion (Mason & Smithey, 2012).

Flack et al. (2015) found major differences in experiences of sexual assault amongst those who participate in hookup culture and those who do not. One fourth of students who reported hooking-up also reported being raped. There were no reported rapes among the 55 students who had never hooked-up. Overall 78% of coerced vaginal, anal, and oral sex occurred while hooking-up. Furthermore, Flack et al., (2015) found that 128 out of 165 reported assaults took place during hookup situations, or those experienced between uncommitted partners. The type of relationship in which these sexual assaults occurred most often were between acquaintances and former romantic partners (Flack et al., 2015).

### *Conclusion and Recommendations*

A consistent definition of dating violence is critical for researchers to collect accurate epidemiological data. The new hookup culture on college campuses has created difficulty in establishing what researchers consider to be a dating relationship. Broader definitions of dating violence and dating relationships should be created for the purpose of future research. For example, there should be guidelines to determine the difference between a committed relationship and a casual dating relationship.

The risk factors identified are often interconnected making it difficult to isolate a single risk factor of dating violence. Dating violence risk factors vary consistently across universities in the United States. Therefore, risk factors should be explored further based on a university's demographics, such as location, population size, and religious affiliation. For example, religious and private school students tend to have more conservative, patriarchal attitudes, and beliefs in comparison to non-religious, public school students (Corprew & Mitchell, 2014). This warrants conducting more qualitative research at private, religious schools to expose any additional risk factors that may or may not exist at public, secular universities. Research findings could then be used to design prevention programs targeted at specific populations of college students.

Individuals are participating in casual sex, thus research should focus on the hookup culture and how it is conducive to the increased occurrence of dating violence, specifically sexual assault. The hookup culture promotes more sexual partners and unsafe sex practices. Casual sex is seen as a social norm and part of the "college experience" and therefore college students may be more likely to engage in these casual sexual experiences than their peers who are not in college (Flack et al., 2015). The increased

exposure to sexually intimate situations also increases the chance of sexual assault, especially when alcohol is involved (Loiselle & Fuqua, 2007). The social environment of Greek-life encourages both alcohol consumption and casual sex, thus creating salient social norms for risky behaviors and increasing the opportunity for sexual violence. Research should focus on exploring how hookup culture influences personal beliefs and attitudes among Greek-life and the relationship between these beliefs influence dating violence victimization and perpetration.

This review of the literature supports the need to examine which risk factors, specifically the context of the perpetrator and victim relationship, alcohol use, intergenerational violence, Greek-life affiliation, and athletic team membership, contribute to the prevalence of dating violence among undergraduates attending a southern, faith-based university in the United States.

## CHAPTER THREE

### Methods

The following sections describe the methods used to address each research question proposed in this study. Included in this chapter are: participants and recruitment procedures implemented to address the research questions, the measurements and materials used to collect the data, actions to protect human subjects, and a description of the data analysis procedures. This research was conducted in accordance with federal and state guidelines for the use of humans in research, and was approved by the university's Institutional Review Board (IRB).

#### *Participants and Recruitment*

The proposed sample size was based upon several power analyses. The power analyses aimed for a power of 0.80, accounting for an alpha of 0.05, an effect size of 0.15, and 12 predictor variables. We chose an effect size of 0.15 because 0.15 was the smallest effect size reported in the existing literature about dating violence. Results of the power analyses suggested a minimum sample size of 123 participants was needed for this study. To account for attrition, missing data, and response rates, this study originally aimed to recruit 500 participants in order to achieve the desired sample size. After receiving feedback from university administration, the proposed sample size was increased to 1,500 participants. Administrators asked to increase the sample size because of the importance of the research and their desire to generalize the findings to the university's total population.

Several recruitment methods were used to recruit undergraduate participants who were between the ages of 18 and 25 years old. First, participants were recruited from Health and Human Behavior (HED 1145) and Human Sexuality (HED 4321) courses during the Fall 2016 semester. Combined, these courses offer a convenience sample of approximately 800 undergraduate students. HED 1145 and HED 4321 both serve as a good source to recruit participants because there are a variety of students enrolled in each course. HED 1145 is a required course for most undergraduates attending the university and HED 4321 is an upper level elective open to all majors.

Additional participants were recruited through word-of-mouth (e.g. snowball sampling), other university courses (e.g. Lifetime Fitness, psychology), and direct communication with sorority and fraternity organizations. HED 1145 and HED 4321 students were encouraged to notify their peers about the study and provide them with the hyperlink to the survey. The principal investigator contacted sorority and fraternity presidents to recruit their chapter members to participate in the research. An email was sent to each president, with information about the research, data collection, and a hyperlink to the survey. They were encouraged to share this information with their chapter members.

Participants had to be between the ages of 18 and 25, enrolled in 12 or more than 12 hours, and classified as freshmen, sophomore, junior, or senior to be eligible to participate in the study. Those enrolled in less than 12 hours and those under the age of 18 were excluded. In addition, graduate students, doctoral students, faculty, staff, and administration were not included in the final data analysis. These exclusions are

permitted because those under the age of 18 require parental consent and those over the age of 25 are more likely to be graduate or doctoral students.

A member of the research team visited each section of the HED 1145 and HED 4321 courses to describe the purpose and general data collection procedures of the study. The participants received an email from the principal investigator containing information about the study and a hyperlink to the online survey (See Appendix B). Participants voluntarily clicked the hyperlink and were asked to provide consent before beginning the survey. Upon consent, participants were redirected to a *Qualtrics* one-time, online survey measuring several variables including demographics, alcohol use, personal attitudes and beliefs, and dating and sexual experiences. Participants could access the online survey from any computer or mobile device. Participants were allotted one month to complete the survey. Some participants were offered course extra credit at the discretion of their professor for completing the survey. If the professor chose to provide extra credit, he/she was also required to provide an alternative extra credit assignment worth the same amount of points for students who chose not to participate. This alternative assignment was necessary to decrease the risk of coercion.

#### *Data Collection Procedure*

Data were collected using a self-report survey, through the online survey software, *Qualtrics*. The hyperlink was shared via email from the principal investigator to course instructors and they were asked to forward the hyperlink to their students. Participants could access the link from any computer or mobile device. Upon opening the hyperlink, participants were asked to review the informed consent form prior to answering any questions (Refer to Appendix C). They were then asked to acknowledge

that they read the information in the consent form, including possible risks and benefits. They did so by clicking either “I Agree” or “I Do Not Agree.” If they did not agree, they were directed to a page that informed them that they have chosen not to participate and were thanked for their time. If they did agree to participate, then they were redirected to the beginning of the survey.

Before providing any answers, the participants were reminded about the purpose of the study, informed about what to expect while completing the survey, encouraged to answer as honestly as possible, and reminded that all of the information they provided would remain anonymous. Each participant then completed the four sections of the survey on the *Qualtrics* system: Background Information, Alcohol Use, Attitudes, and Dating and Sexual Experiences. Upon completion of the survey, students were thanked for their participation. If participants were offered extra credit as an incentive to participate, they voluntarily provided their full name, the class in which they wished to receive extra credit (HED 1145 or HED 4321), and the name of their instructor or professor who was offering the extra credit. To ensure that no identifying information was linked to their survey answers, the information for extra credit was collected on a separate survey that was hyperlinked from the final webpage of the original survey. After one month, the survey was closed and responses were downloaded for analysis.

### *Measures and Materials*

The survey was comprised of four parts: background information, alcohol use, attitudes, and dating and sexual experiences. Three valid and reliable survey instruments were used to measure alcohol behavior, rape myth beliefs and attitudes, and casual sexual encounters. Demographic questions were used to assess participants’ background

information and dating violence history. Measurements were chosen based on a systematic review of the current literature on dating violence among college students. Each part of the online survey is described in the sections below. See Appendix D for a copy of the online survey.

### *Part I: Background Information*

Background information about participants was collected from a compilation of 15 questions used in similar studies to collect demographic data. Participants provided their age, gender, classification, race/ethnicity, family household income, extracurricular group memberships (Greek-life, NCAA athlete), hometown, parent relationship status (married, separated, divorced), history of interparental violence (father-to-spouse abuse, mother-to-spouse abuse), and religious affiliation.

### *Part II: Alcohol Use*

*Alcohol use disorders identification test (AUDIT).* AUDIT (Saunders, Aasland, Babor, de la Fuente, & Grant's, 1993) is a 10-item questionnaire used to measure alcohol consumption, drinking behaviors, and alcohol-related problems. Participants were asked to report their frequency and intensity of alcohol use, negative consequences of alcohol use, and symptoms of alcohol dependence. Participants were provided with a written and visual representation of an alcoholic drink serving size to ensure accurate reporting of the amount of alcohol consumed. Participants were encouraged to use this as a reference when reporting their answers to ensure a consistent definition of "one alcoholic beverage."



The AUDIT was scored using a Likert-scale. Scores for each question range from 0 to 4, with the first response for each question scoring 0, the second scoring 1, the third scoring 2, the fourth scoring 3, and the last scoring 4. Question 9 and 10, which only have three responses, were assigned a score of 0, 2, 4 (from top to bottom). The possible sum score range for the AUDIT was 0 to 40, with higher scores representing greater alcohol use and/or problems. A score of 8 or more is associated with risky or dangerous drinking. In addition, a score of 13 or more for women and a score of 15 or more for men is likely to indicate alcohol dependence. The AUDIT has been tested for reliability and validity and proves to perform well in screening for alcohol use disorders and risky drinking (Dawson, Grant, Stinson, & Zhou, 2005). The internal reliability of the test is acceptable (Cronbach's  $\alpha=0.86$ ) and the test-retest correlation coefficient is 0.90 (Rubio Valladolid, Bermejo Vicedo, Caballero Sánchez-Serrano, & Santo-Domingo Carrasco, 1998).

### *Part III: Attitudes*

*Updated Illinois Rape Myth Acceptance Scale (IRMA).* The Updated Illinois Rape Myth Acceptance Scale (IRMA) (McMahon & Farmer, 2011) is a 22-item self-report measure used to assess a participant's level of victim blaming and rape myth acceptance. The measure, Rape Myth Acceptance Scale (RMA) (Payne, Lonsway, & Fitzgerald, 1999) was updated to the IRMA in order to include identify subtle rape myths. IRMA items are distributed among four subscales: (1) She asked for it, (2) He didn't mean to, (3) It wasn't really rape, and (4) She lied. Examples of items include "When girls go to parties wearing slutty clothes, they are asking for trouble," "If a girl initiates

kissing or hooking up, she should not be surprised if a guy assumes she wants to have sex,” and “A lot of times, girls who say they were raped often led the guy on and then had regrets.” Refer to Appendix D for all 22-items.

Participants responded to the items using a five-point Likert-type scale (ranging from 1=strongly agree to 5=strongly disagree). Scores were totaled for a cumulative score, for a possible score range of 22 to 110. Higher sum scores indicate greater rejection of rape myths while lower sum scores indicate greater acceptance of rape myths. The IRMA has been used in several studies and is proven effective in measuring rape myth acceptance levels in comparison to the RMA (Hayes, Lorenz, & Bell, 2013; McMahon & Farmer, 2011). McMahon and Farmer (2011) found the overall Cronbach’s alpha of the updated IRMA scale to be 0.87. Hayes, Lorenz, and Bell (2013) found a higher Cronbach’s alpha of 0.94.

#### *Part IV: Dating and Sexual Experiences*

Part IV was created to identify participant dating and sexual experiences. Included in this portion of the survey is the Hook-Up Questionnaire (HUQ), one theoretically-driven question, and additional questions about dating violence victimization and perpetration. Part IV in its entirety is included in the Appendix D.

*Hook-Up Questionnaire (HUQ).* The Hook-Up Questionnaire (HUQ) was used to collect data about sexual experiences and the prevalence of dating violence and sexual assault (Flack & Brian, 2007). The HUQ is a 5-item self-report questionnaire used to measure casual sexual encounters between different hookup partners. A hookup was defined as a “mutually entered sexual encounter between two people that can range from

kissing to sexual intercourse with or without the potential for future commitment” (Flack & Brian, 2007). Participants were asked to respond to the five different hookup scenarios (“I have engaged in a hookup with someone whom I had not met before,” “I have engaged in a hook-up with a person I consider an acquaintance, but not a friend,” “I have engaged in a one-time hookup with a friend,” “I have engaged in a hook-up with a friend with whom I have hooked-up more than once,” and “I have engaged in a hookup with someone with whom I was previously in a romantic relationship”) using a four-item Likert scale (0=Never, 1=Less than monthly, 2=Monthly, and 3=Weekly). The total possible score range for hookup experienced was 0-15, with higher scores indicating high levels of self-reported hookup experiences. The HUQ has an internal validity of .82, which was acceptable for this study (Flack & Brian, 2007).

*Theoretically-relevant variables.* Part IV of the survey also consisted of one theoretically-driven question about the prevalence of hooking-up taking place on the participant’s campus. According to the Social Norms Theory (SNT), individuals are influenced by incorrect perceptions of how other members of their social groups think and act (Berkowitz, 2004). Individuals frequently overestimate the permissiveness of peer attitudes or behavior with respect to risky behaviors, such as alcohol use and sexual encounters. In attempts to identify whether or not constructs from SNT can be used to explain data results, participants were asked to estimate the percentage of students they believe hookup at their respective university. It was an open-ended question with the possible responses ranging from 0% to 100%.

*Measuring dating violence prevalence and awareness.* In attempt to identify the prevalence of dating violence victimization and perpetration, participants were asked to report any history of physical abuse victimization, physical abuse perpetration, emotional/verbal abuse victimization, and emotional/verbal abuse perpetration. In addition, participants were asked to report any history of sexual assault, attempted rape, or completed rape victimization or perpetration since the age of 18. If participants reported being a victim or perpetrator of sexual violence, they were asked to identify their relationship to the perpetrator and/or victim. They were given a variety of options to choose from and had the opportunity to specify “other” if none of the provided answers were applicable. The final item of Part IV asked participants about their participation in the University’s Title IX prevention and awareness training program.

#### *Protecting Participants*

Participants were given a hyperlink to the anonymous online survey. The participant’s name, school ID number, address, phone number, or the IP address were not collected. The collected data were stored in a secure location within the Health, Human Performance, and Recreation Department and will be shredded and/or deleted after three years. More information about maintaining records is stated in the informed consent (See Appendix C).

There were minimal risks for participants in this study. The questions that were asked were considered sensitive and personal in nature and may indicate criminal activity and/or activity that would violate the university’s student conduct code. There was no risk of arrest, prosecution or expulsion because the survey was anonymous. Therefore, the only potential risks were psychological discomfort or stress. As in all research

studies, all participants were afforded the opportunity to withdraw from the study at any point in the process. They were required to provide consent prior to starting the survey and reminded they could withdraw at any time. To limit psychological risks, the principal investigator included a statement in the consent form and at the conclusion of the survey about the counseling (university counseling center) and professional services (Title IX services) that were available to participants. Appropriate contact information was also included in this statement. These resources were provided for those who needed them or who wanted to learn more about them.

### *Data Analytic Strategy*

Data analysis included the following steps: data cleaning, developing a data analysis plan, addressing missing data, assessing the measurements, and addressing potential items or unclear responses. All data were downloaded as an SPSS sav data file and stored in password-protected computers used by the researcher team members. After cleaning the data, responses were analyzed using SPSS version 21.0. The level of significance set for all analyses in this study was  $\alpha=0.05$ .

Data were available immediately after the survey was closed, but all files required cleaning and preparation before analysis began. Responses to demographic questions about age and grade classification were used to eliminate responses from participants who were under the age of 18, over the age of 25, and those who were not classified as an undergraduate student (e.g. graduate student, law student). Participants had the ability to withdraw from the study at any point. If a participant decided to withdraw before responding to at least 50% of the questions, the participant's data were not used in the final data analysis. If a participant chose not to complete the survey, but responded to

more than 50% of the questions, then the unanswered questions were treated as missing data and all data were included in the final analysis. In addition, if participants answered less than 50% of items on any specific scale, they were removed to prevent false conclusions. By accounting for a sample size large enough for attrition, we were able to account for withdraws.

Once the data were cleaned, the data set was first analyzed by considering the descriptive statistics for each of the demographic questions in the survey. The survey results were compared to the demographic data of the university's population as listed in the "Profile of Undergraduate Students Fall 2015 and Fall 2016" (Office of Institutional Research and Testing, 2016). The purpose of this analysis was to determine if the survey participants had similar demographic characteristics as the undergraduate student body, which would provide information about any limitations in the sample of the study. The results of descriptive statistics are explained further in Chapter Four.

Descriptive statistics were also used to establish frequencies and percentages of dating violence victimization and perpetration among the sample. We calculated central tendency measures on variables such as age, gender, ethnicity, religious affiliation, organizational memberships, grade classification. Group means and standard deviations for sums scores on all scales were computed.

These data were then collapsed to include only those who reported their history of dating violence with "yes" or "no." The sample size was reduced from 946 to 798. The new data set was used to perform bivariate analyses between dating violence victimization and perpetration against demographic data. The statistically significant

relationships were then combined and used to run logistic regression analyses to predict dating violence victimization and perpetration.

## CHAPTER FOUR

### Results

The purpose of this study was to estimate the magnitude of dating violence among college students attending a private, faith-based university; identify the risk factors associated with dating violence; and explore how the context of relationships (e.g. hooking up) relates to dating violence victimization and perpetration. This chapter contains a description of the results from the survey. With respect to the research questions, data analysis is presented in the following sequence: a) descriptive statistics of variables b) results of bivariate correlations, and c) logistic regression models. The research questions are not addressed in numerical order, but all four research questions and sub-questions are addressed where appropriate throughout the results. Tables 1-24 are provided for reference.

#### *Descriptive Statistics*

##### *Sample Characteristics*

One thousand and twenty-five students accessed the hyperlink and completed the survey. Twenty-two graduate students were eliminated from the data set because they did not meet inclusion criteria. Eleven undergraduate participants were also eliminated because they were not within the appropriate age range (18 - 25 years). Participants who did not complete at least 50% of the survey ( $n=46$ ) were also excluded. The final sample



size was 946 undergraduate students. The average age of participants was 20.26 ( $SD = 1.19083$ ). See Table 1 for more information about sample age.

Table 1. Descriptive Statistics of Participant Age

Measure	<i>N</i>	Min.	Max.	<i>M</i>	<i>SD</i>
Age	946	18.00	25.00	20.26	1.19083

Note. *N* = total number of participants. *M* = mean. *SD* = standard deviation.

A majority of total participants identified as female (69.2%). Three participants indicated ‘Other’ and had the opportunity to explain their gender further. Of the three, one identified as ‘gender fluid’ and the remaining two participants did not indicate their gender. These participants, in addition to those who preferred not to answer, were excluded from subsequent analyses.

A majority of the sample identified as White Non-Hispanic (70.0%), followed by Hispanic or Latino (9.9%), Asian (8.9%), Black Non-Hispanic (6.3%), and Biracial or Multiracial (3%). The remainder of participants identified as Native American (<1%), other (<1%), or they preferred not to answer (<1%). In comparison to the ethnic profile of the university student population, all reported races and ethnicities, with the exception of White Non-Hispanic and Native American, were underrepresented in the sample population.

More than half of the sample indicated a household income of at least \$100,000 ( $n=532$ ). The sample comprised of 77 freshmen, 196 sophomores, 308 juniors, and 365 seniors. Of those who provided information about their parent’s relationship, 76.5% indicated their parents were married, 17% were divorced, and 2% were separated. Ten participants indicated ‘Other’ and further explained their parent’s relationship, with the

most common explanation being that one or more parent is deceased. To further understand the sample, participants were asked: “When you are not in school, where is home?” A majority (67.2%) of students were from Texas, which is similar to the university’s profile of undergraduate students (69.0%). Those who were not from Texas were combined into one group, ‘Other,’ for subsequent analyses. See Table 2 for an overview of sample characteristics.

Descriptive statistics were used to identify those participants involved in Greek-life and NCAA athletics. A little under half (44.3%) of the sample identified as being in a fraternity ( $n=82$ ) or sorority ( $n=336$ ). Twenty-one participants (2.2%) indicated that they were members of a fraternity or sorority at one time, but are no longer affiliated. NCAA athletes (males,  $n=27$ ; females,  $n=41$ ) represented a small percentage of the sample (7.2%). Participants who identified as an NCAA athlete were asked to report the sport they played. Of the 68 athletes, 62 provided their team affiliation. The sports represented were acrobatics and tumbling ( $n=6$ ), baseball ( $n=5$ ), basketball ( $n=3$ ), football ( $n=8$ ), softball ( $n=3$ ), soccer ( $n=9$ ), equestrian ( $n=4$ ), track and field/cross-country ( $n=17$ ), golf ( $n=3$ ), and tennis ( $n=4$ ). See Table 3 for frequencies and percentages associated with these extracurricular memberships.

The importance of religion among participants and the frequency in which participants witnessed interparental violence are presented in Table 4. To analyze the prevalence of interparental violence among the sample, students were asked to disclose if they had ever seen their father or mother physically abuse their spouse. More students indicated seeing their father abuse his spouse (5.0%) than seeing their mother abuse her spouse (2.2%). Participants also were asked if religion was an important part of their up-

Table 2. Demographics of Study Participants

Variable	Frequency (N=946)	Percentage (%)
<b>Gender</b>		
Male	284	30.0
Female	655	69.2
Other	3	.3
I would prefer not to answer	4	.4
<b>Race/Ethnicity</b>		
White Non-Hispanic	662	70.0
Black Non-Hispanic	60	6.3
Hispanic or Latino	94	9.9
Asian or Pacific Islander	84	8.9
Native American or Alaskan Native or Native Hawaiian	5	.5
Biracial or Multiracial	31	3.3
Other	7	.7
I would prefer not to answer	3	.3
<b>Household Income</b>		
Less than \$10,000	10	1.1
\$10,000 - \$19,999	15	1.6
\$20,000 - \$29,999	23	2.4
\$30,000 - \$39,999	30	3.2
\$40,000 - \$49,999	38	4.0
\$50,000 - \$59,999	62	6.6
\$60,000 - \$69,999	48	5.1
\$70,000 - \$79,999	54	5.7
\$80,000 - \$89,999	59	6.2
\$90,000 - \$99,999	69	7.3
\$100,000 - \$149,999	193	20.4
\$150,000 or more	339	35.8
Missing	6	.6
<b>Classification</b>		
Freshmen	77	8.1
Sophomore	196	20.7
Junior	308	32.6
Senior	365	38.6
<b>Parent's Relationship Status</b>		
Married	716	75.7
Separated	15	1.6
Divorced	154	16.3
Other	10	1.1
I would prefer not to answer	51	5.4
<b>Home State</b>		
Texas	636	67.2
Other	310	32.8

Table 3. Extracurricular Membership Among Participants

Variable	Frequency ( <i>N</i> =946)	Percentage (%)
Are you a member of a fraternity or sorority?		
No	506	53.5
Yes	419	44.3
No longer affiliated	21	2.2
Are you a NCAA student-athlete?		
No	878	92.8
Yes	68	7.2

bringing, with approximately 81.3% agreeing that it was. They were then asked to indicate how important religion is in their life today. About half (48.6%) of the sample indicated that religion was very important, with the remainder of the sample indicating that religion was fairly important (35.5%) and not very important (15.1%).

In addition to importance of religion, participants were asked to disclose their religious affiliation. Of the participants who responded (*n*=929), 92.4% students identified as being Christian. Of those who identified as being Christian, 24.2% reported being Baptist (*n*=225), and 15.6% reported being Catholic (*n*=145). The remainder of those who identified as being Christian (52.5%, *n*=488) were combined into one group for subsequent analyses. Seventy-seven students (7.6%) did not identify as being Christian. These frequencies were compared to the university's profile of undergraduate students for comparison. Baptists (24.2% vs. 28.2%) and Catholics (15.6% vs. 16.5%) were only slightly underrepresented.

Table 4. Importance of Religion and Frequency of Interparental Violence Among Participants

Variable	Frequency (N=946)	Percentage (%)
Was religion an important part of your upbringing?		
No	170	18.0
Yes	769	81.3
Missing	7	.7
How important is religion in your life today?		
Very important	460	48.6
Fairly important	336	35.5
Not very important	143	15.1
Missing	7	.7
Have you ever witnessed your father physically abuse his spouse?		
No	872	92.2
Yes	47	5.0
I don't know	12	1.3
I would prefer not to answer	8	.8
Missing	7	.7
Have you ever witnessed your mother physically abuse her spouse?		
No	907	95.9
Yes	21	2.2
I don't know	5	.5
I would prefer not to answer	6	.6
Missing	7	.7

To identify what proportion of the sample had received previous education on sexual assault and rape culture, participants were asked if they had ever participated in Title IX It's on Us BU Prevention & Awareness Training. At the time of the survey, more than half (60.1%) indicated that they had not participated.

#### *Risky Behaviors and Attitudes*

Three measurement scales were used to identify risky behaviors and attitudes within the sample. The mean sum score of the AUDIT was 5.31 ( $SD = 4.826$ ). Item 1

(*How often do you have a drink containing alcohol?*) had the largest individual mean score ( $M = 1.53$ ,  $SD = 1.14$ ), while Item 6 (*How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?*) had the smallest individual mean score ( $M = .04$ ,  $SD = .247$ ). Refer to Table 5 for descriptive statistics for each AUDIT item. The participants with an AUDIT sum score of 8 or more were combined to screen for risky drinking behaviors (Table 6). Of those who completed all 10 items, 213 students had a sum score of 8 or more, therefore indicating that 22.5% of the sample screened positive for risky drinking behaviors.

Attitudes and beliefs about rape were identified through the Updated Illinois Rape Myth Acceptance (IRMA) Scale. The minimum summary score was 41.00 and the maximum summary score was 110.00. The mean summary score was 85.37 ( $SD = 14.70142$ ). Overall, participants were more likely to reject than accept rape myths. Overall, a majority of participants strongly disagreed with Item 16 (*If the accused "rapist" doesn't have a weapon, you really can't call it rape*;  $M = 4.90$ ,  $SD = .374$ ). Item 7 (*When guys rape, it is usually because of their strong desire for sex*) had the highest acceptance rate ( $M = 3.09$ ;  $SD = 1.321$ ). Refer to Table 7 for descriptive statistics for all 22 items.

The occurrence and frequency of hookup relationships were identified through the Hook-Up Questionnaire (HUQ). The mean summary score was 2.2033 ( $SD = 2.52347$ ) with a minimum summary score of .00 and a maximum summary score of 15.00. Participants with a HUQ summary score of 1 or more were grouped together to identify the percentage of students who have engaged in a hookup at least once. Overall, more

than half of participants ( $n=532$ ; 56.2%) have engaged in a hookup relationship. Table 8 provides an overview of the frequency and prevalence of each type of hookup indicated by participants. The majority of students reported never hooking up with a stranger ( $n=666$ ; 70.4%), an acquaintance ( $n=591$ ; 62.5%), or friend one time ( $n=569$ ; 60.1%).

Table 5. Descriptive Statistics of AUDIT Items

AUDIT Item	<i>N</i>	Min.	Max.	<i>M</i>	<i>SD</i>
Item 1	930	0	4	1.53	1.149
Item 2	824	0	4	.76	.936
Item 3	927	0	4	.85	.997
Item 4	926	0	4	.15	.511
Item 5	926	0	4	.24	.529
Item 6	926	0	3	.04	.247
Item 7	926	0	4	.39	.661
Item 8	926	0	3	.38	.649
Item 9	926	0	4	.35	1.011
Item 10	926	0	4	.12	.649

Note. AUDIT = Alcohol Use Disorders Identification Test; 1 = How often do you have a drink containing alcohol?; 2 = How many drinks containing alcohol do you have on a typical day when you are drinking?; 3 = How often do you have 5 or more drinks on one occasion?; 4 = How often during the last year have you found that you were not able to stop drinking once you had started?; 5 = How often during the last year have you failed to do what was normally expected of you because of drinking?; 6 = How often during the last year have you needed a drink first thing in the morning to get yourself going after a heavy drinking session?; 7 = How often during the last year have you had a feeling of guilt or remorse after drinking?; 8 = How often during the last year have you been unable to remember what happened the night before because of your drinking?; 9 = Have you or someone else been injured because of your drinking?; 10 = Has a relative, friend, doctor, or other health care worker been concerned about your drinking or suggested you cut down

Table 6. Frequency and Percentage of Risky Drinking Among Sample

AUDIT Sum Score	Frequency ( <i>N</i> )	Percent (%)
<8	611	64.6
8-40	213	22.5
Missing	122	12.9

Note. AUDIT = Alcohol Use Disorders Identification Test; <8 = no risky alcohol behavior; 8-40 = risky alcohol behavior.

Table 7. Descriptive Statistics of IRMA Items

IRMA Item	<i>N</i>	<i>Min.</i>	<i>Max.</i>	<i>M</i>	<i>SD</i>
1	911	1	5	3.89	1.319
2	911	1	5	3.88	1.261
3	911	1	5	4.39	.948
4	911	1	5	3.25	1.326
5	911	1	5	4.33	.996
6	911	1	5	3.38	1.374
7	908	1	5	3.09	1.321
8	908	1	5	3.39	1.212
9	909	1	5	3.65	1.271
10	910	1	5	3.61	1.264
11	910	1	5	4.51	.837
12	910	1	5	4.11	1.149
13	910	1	5	4.58	.837
14	909	1	5	4.71	.690
15	909	1	5	4.82	.539
16	908	2	5	4.90	.374
17	909	1	5	3.73	1.316
18	910	1	5	3.23	1.234
19	910	1	5	3.47	1.210
20	910	1	5	3.50	1.227
21	909	1	5	3.55	1.270
22	909	1	5	3.35	1.211

Note. IRMA = Updated Illinois Rape Myth Acceptance Scale. *M* = Mean. *SD* = Standard Deviation. Possible range of scores 1-5.



More than half reported never hooking up with a friend more than one time ( $n=559$ ; 59.1%) or a previous romantic partner ( $n=552$ ; 58.4%). The percentage of students reporting hooking-up increased as the context of the relationship became more intimate. In other words, students who hooked-up were more likely to hookup with people they knew well. They were also more likely to report hooking-up less than monthly, when compared to hooking-up monthly or weekly.

Table 8. Descriptive Statistics of Hookup Scenarios Among Participants

Hookup Scenario	Frequency ( $N=946$ )	Percentage (%)
<b>Stranger</b>		
Never	666	70.4
Less than monthly	217	22.9
Monthly	19	2.0
Weekly	4	.4
Missing	40	4.2
<b>Acquaintance</b>		
Never	591	62.5
Less than monthly	280	29.6
Monthly	31	3.3
Weekly	4	.4
Missing	40	4.2
<b>Friend (1 time)</b>		
Never	569	60.1
Less than monthly	313	33.1
Monthly	19	2.0
Weekly	4	.4
Missing	41	4.3
<b>Friend (&gt;1 time)</b>		
Never	559	59.1
Less than monthly	233	24.6
Monthly	78	8.2
Weekly	35	3.7
Missing	41	4.3
<b>Previous romantic partner</b>		
Never	552	58.4
Less than monthly	232	24.5
Monthly	78	8.2
Weekly	43	4.5
Missing	41	4.3

To further understand the hookup culture on campus, students were asked to approximate what percentage of students hookup at their university. The reported estimates ranged from 0% to 100% with a standard deviation of 20.709. Students estimated that an average of 56.46% people hookup at their university. This estimation was very similar to the proportion of survey respondents who reported hooking up (56.2%). To further analyze risky sexual behaviors, a cross-tabulation between students who have hooked up and those with risky drinking behaviors was conducted. As presented in Table 9, 181 students who have engaged in the hookup culture also screened positive for risky drinking behavior (AUDIT score > 8).

Table 9. Risky Alcohol Behavior \* Reported Hookup Crosstabulation

Variable		HOOKUP		Total
		No	Yes	
ALCOHOL	No	265	330	595
	Yes	27	181	208
Total		292	511	803

Note. ALCOHOL = Alcohol Use Disorders Identification Test sum score of 8 or greater (Risky alcohol behavior); HOOKUP = Hook-up Questionnaire sum score of 1 or greater

### *Dating Violence History*

Participants were asked six quantitative questions to assess their history of dating violence victimization and perpetration. Research Question 1 (*What percentage of participants have experienced some form of dating violence?*) was addressed using descriptive statistics to identify frequencies and percentages for six types of dating violence. Overall, participants reported more cases of dating violence victimization than perpetration. In terms of dating violence victimization, approximately 7% of participants reported experiencing physical abuse, 23% had experienced emotional or verbal abuse,

and 9% had experienced sexual assault, attempted rape, or completed rape since the age of 18. Perpetration frequencies were lower, with <1% of participants perpetrating physical abuse and 5% perpetrating emotional or verbal abuse. Sexual assault perpetration was reported by only one student. Due to the personal nature of these questions, participants were allotted the opportunity to answer the question with 'I don't know' or 'I would prefer to answer.' Respondents were more likely to answer 'I don't know' to the emotional or verbal abuse questions, when compared to physical abuse questions and sexual assault questions. See Table 10 for the overall percentages of respondents reporting dating violence.

To further analyze the data, dating violence frequencies and percentages were classified by gender. When compared to males, female respondents were more likely to report experiencing all forms of dating violence. Of the females who answered 'yes' or 'no' the dating violence questions, approximately 1 in 11 ( $n=57$ ) reported being a victim of physical abuse, 1 in 3 ( $n=187$ ) reported being a victim of emotional or verbal abuse, and 1 in 8 ( $n=73$ ) reported being a victim of sexual violence since the age of 18. In terms of dating violence perpetration, females were also more likely to report perpetrating all forms of dating violence. For example, 36 females reported emotional abuse perpetration, while only 8 males reported emotional abuse perpetration. Furthermore, a female was responsible for the one reported sexual assault perpetration. See Table 11 for the overall percentages of respondents reporting dating violence by gender.

Table 10. Descriptive Statistics of Dating Violence Victimization and Perpetration among Students

Dating Violence Scenario	Frequency (N=946)	Percentage (%)
<b>Physical Abuse Victim</b>		
No	827	87.4
Yes	64	6.8
I don't know	12	1.3
I would prefer not to answer	3	.3
Missing	40	4.2
<b>Physical Abuse Perpetrator</b>		
No	894	94.5
Yes	7	.7
I don't know	5	.5
I would prefer not to answer	3	.3
Missing	40	4.2
<b>Emotional/Verbal Abuse Victim</b>		
No	650	68.7
Yes	217	22.9
I don't know	36	3.8
I would prefer not to answer	3	.3
Missing	40	4.2
<b>Emotional/Verbal Abuse Perpetrator</b>		
No	817	86.4
Yes	45	4.8
I don't know	44	4.7
I would prefer not to answer	-	-
Missing	40	4.2
<b>Sexual Assault Victim</b>		
No	797	84.2
Yes	83	8.8
I don't know	19	2.0
I would prefer not to answer	7	.7
Missing	40	4.2
<b>Sexual Assault Perpetrator</b>		
No	899	95.0
Yes	1	.1
I don't know	2	.2
I would prefer not to answer	3	.3
Missing	41	4.3

Table 11. Descriptive Statistics of Dating Violence Victimization and Perpetration Among Males and Females

Dating Violence Scenario	Males (N=284)		Females (N=655)	
	N	%	N	%
<b>Physical Abuse Victim</b>				
No	262	92.3	560	85.5
Yes	6	2.1	57	8.7
I don't know	2	.7	10	1.5
I would prefer not to answer	-	-	2	.3
Missing	14	4.9	26	4.0
<b>Physical Abuse Perpetrator</b>				
No	268	94.4	619	94.5
Yes	1	.4	6	.9
I don't know	1	.4	4	.6
I would prefer not to answer	-	-	-	-
Missing	14	4.9	26	4.0
<b>Emotional/Verbal Abuse Victim</b>				
No	230	81.0	414	63.2
Yes	30	10.6	187	28.5
I don't know	9	3.2	27	4.1
I would prefer not to answer	1	.4	1	.2
Missing	14	4.9	26	4.0
<b>Emotional/Verbal Abuse Perpetrator</b>				
No	245	86.3	566	86.4
Yes	9	3.2	36	5.5
I don't know	16	5.6	27	4.1
I would prefer not to answer	-	-	-	-
Missing	14	4.9	26	4.0
<b>Sexual Assault Victim</b>				
No	261	91.9	532	81.2
Yes	8	2.8	73	11.1
I don't know	1	.4	18	2.7
I would prefer not to answer	-	-	6	.9
Missing	14	4.9	26	4.0
<b>Sexual Assault Perpetrator</b>				
No	268	94.4	624	95.3
Yes	-	-	1	.2
I don't know	-	-	2	.3
I would prefer not to answer	2	.7	1	.2
Missing	14	4.9	27	4.1

Research Question 1a (*What is the frequency of sexual assault victimization and perpetration among Greek-life members?*) was also addressed using descriptive statistics. Of those who identified as a member of Greek-life, 11.0% ( $n=46$ ) reported being a victim of sexual assault since the age of 18. To further explore sexual assault victimization rates among extracurricular organizations, frequencies were identified among NCAA athletes. Six athletes (8.8%) reported sexual assault victimization. Sexual assault perpetration was not reported by either group.

#### *Bivariate Correlations*

Bivariate correlations were conducted following descriptive analysis. The participants who indicated they were unsure whether or not abuse had occurred or did not feel comfortable answering the questions were eliminated from the bivariate correlation analysis because the presence or absence of abuse could not be determined. The new sample size ( $N= 798$ ) was used to compute bivariate correlations for five of the six forms of dating violence victimization and perpetration. Sexual assault perpetration correlations were not analyzed because only one participant reported being a perpetrator of sexual assault, thus making the sample size too small to identify significant relationships.

To answer Research Question 2 (*What are the risk factors for dating violence among college students attending a private, faith-based university?*), Research Question 2a (*Which demographic characteristics are positively related to dating violence? Negatively related to dating violence?*), and Research Question 2b (*Is witnessing inter-parental violence positively related to dating violence?*), bivariate correlations were conducted between demographic variables (gender, race/ethnicity, grade classification, Texas residency, religious affiliation, extracurricular affiliations, and parent relationship)

and dating violence variables (physical abuse victimization, physical abuse perpetration, emotional/verbal abuse victimization, emotional/verbal abuse perpetration, and sexual assault victimization).

Additional bivariate correlations were computed to identify the individual relationships between survey measurements (AUDIT, IRMA, and HUQ item sum scores and total sum scores) and dating violence variables (physical abuse victimization, physical abuse perpetration, emotional/verbal abuse victimization, emotional/verbal abuse perpetration, and sexual assault victimization). These correlations were used to answer Research Question 4 (*How does the context of college dating relationships (i.e., relationship type) contribute to perceptions of dating violence?*), Research Question 4b (*Is the hook-up culture related to dating violence?*), and Research Question 4c (*Is the hook-up culture related to victim blaming?*). Individual risk factors for each type of dating violence were identified through the data analysis. The findings are presented in the next section.

#### *Sample Characteristics as Risk Factors*

*Demographics.* To identify the risk factors of dating violence, Pearson-product moment correlations were first used to determine if significant relationships existed between sample demographics and all five forms of dating violence. Being female was significantly related to physical abuse victimization ( $r = .132, p < .0001$ ), emotional abuse victimization ( $r = .195, p < .0001$ ), and sexual assault victimization ( $r = .137, p < .0001$ ). In terms of grade classification, being a victim of sexual assault was positively related to being a senior ( $r = .095, p < .007$ ). Being in a sorority or fraternity was significantly

related to both physical abuse victimization ( $r = .070, p < .049$ ) and emotional abuse victimization ( $r = .151, p < .0001$ ). NCAA athletes ( $r = -.077, p < .029$ ) were significantly less likely to experience emotional abuse than non-athletes. No other significant relationships were found. Refer to Table 12 for correlations for aforementioned variables.

Table 12. Bivariate Correlation Matrix among Participant Demographics and PAV, PAP, EAV, EAP, and SAV

DV Type	Gender	Freshman	Sophomore	Junior	Senior	Greek	Athlete	Texas	
PAV	<i>r</i>	.132**	-.004	-.003	-.039	.042	.070*	-.021	.063
	<i>p</i>	.000	.902	.942	.267	.232	.049	.557	.077
	<i>N</i>	792	798	798	798	798	798	798	797
PAP	<i>r</i>	.019	-.024	-.003	.048	-.030	-.004	-.023	-.013
	<i>p</i>	.592	.505	.933	.178	.398	.902	.512	.710
	<i>N</i>	792	798	798	798	798	798	798	797
EAV	<i>r</i>	.195**	-.059	.052	.037	-.047	.151**	-.077*	.057
	<i>p</i>	.000	.096	.143	.292	.189	.000	.029	.110
	<i>N</i>	792	798	798	798	798	798	798	797
EAP	<i>r</i>	.043	-.047	.033	.015	-.016	.057	-.046	.036
	<i>p</i>	.230	.181	.349	.672	.656	.108	.195	.315
	<i>N</i>	792	798	798	798	798	798	798	797
SAV	<i>r</i>	.137**	-.005	-.034	-.067	.095**	.067	-.002	.000
	<i>p</i>	.000	.889	.344	.060	.007	.059	.950	.991
	<i>N</i>	792	798	798	798	798	798	798	797

Note. DV Type = Dating Violence Type; PAV = Physical Abuse Victim; PAP = Physical Abuse Perpetrator; EAV = Emotional Abuse Victim; EAP = Emotional Abuse Perpetrator; SAV = Sexual Assault Victim; Importance = those who reported that religion was important during their childhood. *r* = Pearson's R-correlation. *N* = valid sample. \* $p < 0.05$ . \*\* $p < 0.01$ .

*Race and ethnicity.* Race and ethnicity were identified as a being both a risk factor and protective factor. Emotional abuse victimization was positively related to being White, non-Hispanic ( $r = .091, p < .010$ ), but negatively related to being Asian ( $r = -.094, p < .008$ ). White, non-Hispanic ( $r = .091, p < .010$ ), but negatively related to being Asian



( $r = -.094, p < .008$ ). Referring to Table 13, being a perpetrator of emotional abuse was significantly related to being Hispanic or Latino ( $r = .111, p < .002$ ). No significant relationships were identified between ethnicity/race and physical abuse victimization, physical abuse perpetration, or sexual assault victimization.

Table 13. Bivariate Correlations among Race/Ethnicity and PAV, PAP, EAV, EAP, and SAV

Race/Ethnicity		PAV	PAP	EAV	EAP	SAV
White, non-Hispanic	<i>r</i>	.051	-.052	.091**	-.050	.005
	<i>p</i>	.149	.143	.010	.158	.884
	<i>N</i>	796	796	796	796	796
Black, non-Hispanic	<i>r</i>	-.009	.043	-.033	-.038	.012
	<i>p</i>	.791	.230	.352	.280	.728
	<i>N</i>	796	796	796	796	796
Hispanic or Latino	<i>r</i>	-.023	.025	.029	.111**	.050
	<i>p</i>	.523	.475	.421	.002	.160
	<i>N</i>	796	796	796	796	796
Asian	<i>r</i>	-.043	.034	-.094**	.035	-.056
	<i>p</i>	.230	.341	.008	.323	.112
	<i>N</i>	796	796	796	796	796
Native American	<i>r</i>	-.021	-.006	-.004	-.018	-.024
	<i>p</i>	.554	.859	.909	.606	.504
	<i>N</i>	796	796	796	796	796
Biracial or Multiracial	<i>r</i>	.007	-.015	-.066	-.043	-.031
	<i>p</i>	.852	.675	.061	.224	.390
	<i>N</i>	796	796	796	796	796
Other race	<i>r</i>	-.023	-.007	-.046	-.020	.027
	<i>p</i>	.516	.845	.191	.572	.446
	<i>N</i>	796	796	796	796	796

Note. PAV = Physical Abuse Victim; PAP = Physical Abuse Perpetrator; EAV = Emotional Abuse Victim; EAP = Emotional Abuse Perpetrator; SAV = Sexual Assault Victim;  $r$  = Pearson's R-correlation.  $N$  = valid sample. \* $p < 0.05$ . \*\* $p < 0.01$ .

*Religious affiliation.* Two statistically significant negative correlations were identified between dating violence and religious background (Table 14). Those who reported that religion was an important part of their up-bringing ( $r = -.074, p < .036$ ) were less likely than those who did not report that religion was an important part of their up-bringing to perpetrate emotional abuse. Similar to emotional abuse perpetration, those who reported that religion was an important part of their up-bringing ( $r = -.078, p < .027$ ) were less likely than those who did not to experience sexual assault. There were no significant relationships identified between religious affiliation and any form of dating violence.

Table 14. Bivariate Correlation Matrix among Importance of Religion during Childhood and Current Religious Affiliation and PAV, PAP, EAV, EAP, and SAV

Variables of Interest		PAV	PAP	EAV	EAP	SAV
Christian	<i>r</i>	-.022	.023	.002	-.044	-.020
	<i>p</i>	.543	.525	.963	.215	.573
	<i>N</i>	790	790	790	790	790
Catholic	<i>r</i>	-.057	.054	.015	.061	.063
	<i>p</i>	.110	.128	.667	.086	.076
	<i>N</i>	790	790	790	790	790
Baptist	<i>r</i>	.000	.032	.047	-.003	-.054
	<i>p</i>	.995	.367	.191	.934	.126
	<i>N</i>	790	790	790	790	790
Importance	<i>r</i>	-.064	-.005	-.047	-.074*	-.078*
	<i>p</i>	.071	.891	.187	.036	.027
	<i>N</i>	798	798	798	798	798

Note. PAV = Physical Abuse Victim; PAP = Physical Abuse Perpetrator; EAV = Emotional Abuse Victim; EAP = Emotional Abuse Perpetrator; SAV = Sexual Assault Victim; Importance = those who reported that religion was important during their childhood. *r* = Pearson's R-correlation. *N* = valid sample. \* $p < 0.05$ . \*\* $p < 0.01$ .

*Parent relationships and history of interparental violence.* Pearson-product moment correlations were used to determine if significant relationships existed between

parent relationships (e.g. relationship status, interpersonal violence) and dating violence history (Table 15). In terms of parent relationships, participants with married parents were less likely to be a victim of physical abuse ( $r = -.078, p < .027$ ), emotional abuse ( $r = -.142, p < .0001$ ), and sexual assault ( $r = -.113, p < .001$ ) than participants with divorced or separated parents. Participants with separated parents were more likely to be a victim of physical abuse ( $r = .099, p < .005$ ) than those with married or divorced parents. Similarly, participants with separated ( $r = .122, p < .001$ ) or divorced ( $r = .071, p < .046$ ) parents were more likely to report sexual assault victimization than those with married parents.

All forms of dating violence were significantly related to witnessing their father physically abuse his spouse, while only two forms of dating violence were related to witnessing their mother physically abuse her spouse. Being a victim of physical abuse was significantly related to witnessing father-to-spouse abuse ( $r = .211, p < .0001$ ) and witnessing mother-to-spouse abuse ( $r = .107, p < .003$ ). Physical abuse perpetration was also related to witnessing father-to-spouse abuse ( $r = .136, p < .0001$ ), but was not related to witnessing mother-to-spouse abuse ( $r = -.011, p < .748$ ). Similar to physical abuse victimization, being the victim of emotional abuse was related to witnessing father-to-spouse abuse ( $r = .131, p < .0001$ ) and witnessing mother-to-spouse abuse ( $r = .096, p < .007$ ). Emotional abuse perpetration was significantly related to witnessing father-to-spouse abuse ( $r = .116, p < .001$ ). Lastly, being a victim of sexual assault was significantly related to witnessing father-to-spouse abuse ( $r = .178, p < .0001$ ). No other relationships were identified.

Table 15. Bivariate Correlation Matrix among Parent Relationship and PAV, PAP, EAV, EAP, SAV

DV Type		Married	Separated	Divorced	Father-to-Spouse Abuse	Mother-to-Spouse Abuse
PAV	<i>r</i>	-.078*	.099**	.041	.211**	.107**
	<i>p</i>	.027	.005	.247	.000	.003
	<i>N</i>	790	790	790	791	793
PAP	<i>r</i>	-.030	-.009	.048	.136**	-.011
	<i>p</i>	.399	.790	.176	.000	.748
	<i>N</i>	790	790	790	791	793
EAV	<i>r</i>	-.142**	.040	.094**	.131**	.096**
	<i>p</i>	.000	.259	.008	.000	.007
	<i>N</i>	790	790	790	791	793
EAP	<i>r</i>	-.019	.022	.048	.116**	.049
	<i>p</i>	.587	.540	.181	.001	.169
	<i>N</i>	790	790	790	791	793
SAV	<i>r</i>	-.113**	.122**	.071*	.178**	-.010
	<i>p</i>	.001	.001	.046	.000	.775
	<i>N</i>	790	790	790	791	793

Note. DV Type = Dating Violence Type; PAV = Physical Abuse Victim; PAP = Physical Abuse Perpetrator; EAV = Emotional Abuse Victim; EAP = Emotional Abuse Perpetrator; SAV = Sexual Assault Victim; *r* = Pearson's R-correlation. *N* = valid sample. \**p* < 0.05. \*\**p* < 0.01.

*AUDIT, IRMA, and HUQ Sum Scores*

Bivariate correlations were conducted to identify the individual relationships between dating violence history and the sum scores of AUDIT, IRMA, and HUQ. In reference to Table 16, participant AUDIT sum scores ( $r = .070, p < .064$ ) were not related to physical abuse victimization, but positively related to physical abuse perpetration ( $r = .077, p < .040$ ), emotional abuse victimization ( $r = .152, p < .0001$ ), emotional abuse perpetration ( $r = .210, p < .0001$ ), and sexual assault victimization ( $r = .150, p < .0001$ ). Participant IRMA sum scores were related to physical abuse

victimization ( $r = .103, p < .004$ ) and sexual assault victimization ( $r = .090, p < .011$ ). HUQ sum scores were significantly related to physical abuse victimization ( $r = .139, p < .0001$ ), emotional abuse victimization ( $r = .209, p < .0001$ ), emotional abuse perpetration ( $r = .152, p < .0001$ ), and sexual assault victimization ( $r = .191, p < .0001$ ), but not related to physical abuse perpetration ( $r = .047, p < .186$ ). Additionally, there was a moderate relationship between HUQ sum scores and AUDIT sum scores ( $r = .527, p < .0001$ ).

*AUDIT items.* AUDIT Item #8 (*How often during the last year have you been unable to remember what happened the night before because of your drinking?*) was the only item to be significantly related to all five types of dating violence. Items 1 and 8 were the only two significantly related to physical abuse victimization. Items 2 and 4-8 were significantly related to physical abuse perpetration. Items 1-8 and 10 were significantly related to emotional abuse victimization and perpetration. Items 1-5 and 7-10 were significantly related to being a victim of sexual assault. The strongest correlations were between being a perpetrator of emotional abuse and Item 10 (*Has a relative, friend, doctor, or other health care worker been concerned about your drinking or suggested you cut down?*;  $r = .227, p < .0001$ ) and Item 5 (*How often during the last year have you failed to do what was normally expected of you because of drinking?*;  $r = .216, p < .0001$ ). See Table 17 for all Pearson correlation coefficients and  $p$ -values.

*IRMA items.* As mentioned previously, the sum score of the IRMA was significantly related only to being physically abused or sexually assaulted (Table 16). To answer Research Question 3 (*Is rape myth acceptance positively related to dating*

*violence?*), bivariate correlations were conducted between five forms of dating violence and all 22 items of the IRMA scale. Refer to Table 18 for the results for items 1-10 and Table 19 for items 11-22. Items 3, 5, 10, 12, 16, and 18-22 were not significantly related to any of the five types of dating violence. The strongest relationships were between being a victim of sexual assault and rejecting Item 2 (*When girls go to parties wearing slutty clothes, they are asking for trouble;  $r = .153, p < .0001$* ) and Item 4 (*If a girl acts like a slut, eventually she is going to get into trouble;  $r = .133, p < .0001$* ). Overall, participants were more likely to moderately or strongly disagree with rape myths, rather than moderately or strongly agree with them.

Correlational analyses were used to examine the relationship between a student's rape myth acceptance sum score and his or her religious affiliation, thus addressing Research Question 3a (*Is there a positive or negative relationship between religious beliefs and rape myth acceptance?*). Results indicated an inverse relationship between the sum scores on the IRMA scale and the religious affiliation for Catholics ( $r = -.025, n = 785, p = .476$ ) and Baptists ( $r = -.056, n = 785, p = .120$ ). There was no significant relationship between rape myth acceptance sum scores and religious beliefs for Christians ( $r = .021, n = 785, p = .562$ ). Overall, there were no significant relationships between a student's rape myth acceptance and his or her religious affiliation. Furthermore, a bivariate correlation was conducted between a student's rape myth acceptance sum score and whether or not religion was an important part of his or her up-bringing. There was a negative correlation between the two variables ( $r = -.012, n = 793, p = .736$ ).

*HUQ items.* Research Question 4 (*How does the context of college dating relationships (i.e. relationship type) contribute to perceptions of dating violence?*) and 4b

(*Is the hook-up culture related to dating violence?*) were addressed through bivariate correlations. HUQ items were analyzed for individual relationships between the five types of dating violence. Being physically abused was related to engaging in a one-time hookup with a friend ( $r = .109, p < .002$ ), hooking-up with a friend more than one time ( $r = .144, p < .0001$ ), and hooking up with a former romantic partner ( $r = .154, p < .0001$ ). Similarly, perpetrating emotional abuse was related to engaging in a one-time hookup with a friend ( $r = .078, p < .027$ ), hooking-up with a friend more than one time ( $r = .157, p < .0001$ ), and hooking-up with a former romantic partner ( $r = .192, p < .0001$ ). The strongest relationship was between being a victim of emotional abuse and hooking-up with a former romantic partner ( $r = .224, p < .0001$ ). Being a victim of emotional abuse was also related to hooking-up with an acquaintance ( $r = .136, p < .0001$ ), engaging in a one-time hookup with a friend ( $r = .153, p < .0001$ ), and hooking-up with a friend more than once ( $r = .182, p < .0001$ ). Sexual assault victimization was related to all five HUQ items, including hooking-up with a stranger ( $r = .117, p < .001$ ), hooking up with an acquaintance ( $r = .165, p < .0001$ ), engaging in a one-time hookup with a friend ( $r = .140, p < .0001$ ), hooking-up with a friend more than once ( $r = .184, p < .0001$ ), and hooking-up with a former romantic partner ( $r = .121, p < .001$ ). There were no relationships identified between any hookup scenario and physical abuse perpetration.

In order to answer Research Question 4c (*Is the hookup culture related to victim blaming?*), HUQ scores were compared to IRMA scores. In reference to Table 16, HUQ sum scores and IRMA sum scores were negatively related, but not significant ( $r = .041, p < .278$ ). In other words, those who hooked-up more frequently, were more likely to reject rape myths.

Table 16. Bivariate Correlation Matrix among AUDIT, IRMA, and HUQ sums and PAV, PAP, EAV, EAP, and SAV

Variables		1	2	3	4	5	6	7	8
1. PAV	<i>r</i>	1							
	<i>p</i>								
	<i>N</i>	798							
2. PAP	<i>r</i>	.043	1						
	<i>p</i>	.221							
	<i>N</i>	798	798						
3. EAV	<i>r</i>	.411**	.149**	1					
	<i>p</i>	.000	.000						
	<i>N</i>	798	798	798					
4. EAP	<i>r</i>	.219**	.346**	.390**	1				
	<i>p</i>	.000	.000	.000					
	<i>N</i>	798	798	798	798				
5. SAV	<i>r</i>	.478**	.092**	.361**	.226**	1			
	<i>p</i>	.000	.009	.000	.000				
	<i>N</i>	798	798	798	798	798			
6. AUDIT SUM	<i>r</i>	.070	.077*	.152**	.210**	.150**	1		
	<i>p</i>	.064	.040	.000	.000	.000			
	<i>N</i>	704	704	704	704	704	704		
7. IRMA SUM	<i>r</i>	.103**	-.005	.067	.023	.090*	-.041	1	
	<i>p</i>	.004	.899	.061	.524	.011	.278		
	<i>N</i>	793	793	793	793	793	700	793	
8. HUQ SUM	<i>r</i>	.139**	.047	.209**	.152**	.191**	.527**	-.075*	1
	<i>p</i>	.000	.186	.000	.000	.000	.000	.034	
	<i>N</i>	797	797	797	797	797	703	793	797

Note. PAV = Physical Abuse Victim; PAP = Physical Abuse Perpetrator; EAV = Emotional Abuse Victim; EAP = Emotional Abuse Perpetrator; SAV = Sexual Assault Victim; *r* = Pearson's R-correlation. *N* = valid sample. \**p* < 0.05. \*\**p* < 0.01.



Table 17. Bivariate Correlations among AUDIT Items and PAV, PAP, EAV, EAP, and SAV

DV Type		1	2	3	4	5	6	7	8	9	10
PAV	<i>r</i>	.100**	.011	.065	.070*	.032	.041	.057	.073*	.070*	.061
	<i>p</i>	.005	.777	.066	.048	.369	.249	.106	.039	.047	.083
	<i>N</i>	798	704	796	795	795	795	795	795	795	795
PAP	<i>r</i>	.033	.094*	.028	.082*	.090*	.117**	.123**	.080*	-.027	.035
	<i>p</i>	.354	.013	.433	.021	.011	.001	.000	.025	.441	.327
	<i>N</i>	798	704	796	795	795	795	795	795	795	795
EAV	<i>r</i>	.142**	.105**	.132**	.115**	.150**	.076*	.141**	.115**	.057	.117**
	<i>p</i>	.000	.005	.000	.001	.000	.033	.000	.001	.110	.001
	<i>N</i>	798	704	796	795	795	795	795	795	795	795
EAP	<i>r</i>	.154**	.130**	.149**	.149**	.216**	.175**	.165**	.186**	.023	.227**
	<i>p</i>	.000	.001	.000	.000	.000	.000	.000	.000	.509	.000
	<i>N</i>	798	704	796	795	795	795	795	795	795	795
SAV	<i>r</i>	.174**	.083*	.104**	.077*	.093**	-.010	.122**	.112**	.088*	.145**
	<i>p</i>	.000	.028	.003	.030	.009	.778	.001	.002	.013	.000
	<i>N</i>	798	704	796	795	795	795	795	795	795	795

Note. DV Type = Dating Violence Type; PAV = Physical Abuse Victim; PAP = Physical Abuse Perpetrator; EAV = Emotional Abuse Victim; EAP = Emotional Abuse Perpetrator; SAV = Sexual Assault Victim; AUDIT = Alcohol Use Disorders; 1 = How often do you have a drink containing alcohol?; 2 = How many drink containing alcohol do you have on a typical day when you are drinking?; 3 = How often do you have 5 or more drinks on one occasion?; 4 = How often during the last year have you found that you were not able to stop drinking once you had started?; 5 = How often during the last year have you failed to do what was normally expected of you because of drinking?; 6 = How often during the last year have you needed a drink first thing in the morning to get yourself going after a heavy drinking session?; 7 = How often during the last year have you had a feeling of guilt or remorse after drinking?; 8 = How often during the last year have you been unable to remember what happened the night before because of your drinking?; 9 = Have you or someone else been injured because of your drinking?; 10 = Has a relative, friend, doctor, or other health care worker been concerned about your drinking or suggested you cut down? *r* = Pearson's R-correlation. *N* = valid sample. \**p* < 0.05. \*\**p* < 0.01.

Table 18. Bivariate Correlation Matrix among the Updated Illinois Rape Myth Acceptance Scale Items 1-10 and PAV, PAP, EAV, EAP, and SAV

DV Type		1	2	3	4	5	6	7	8	9	10
PAV	<i>r</i>	.043	.118**	.061	.117**	-.013	.067	.090*	.105**	.090*	.066
	<i>p</i>	.228	.001	.084	.001	.720	.057	.011	.003	.011	.063
	<i>N</i>	798	798	798	798	798	798	796	796	797	798
PAP	<i>r</i>	-.004	.034	.035	.034	.020	-.022	.020	-.013	-.014	.012
	<i>p</i>	.921	.336	.318	.342	.574	.542	.575	.705	.686	.732
	<i>N</i>	798	798	798	798	798	798	796	796	797	798
EAV	<i>r</i>	.071*	.104**	.054	.081*	.011	.001	.026	.047	.039	.053
	<i>p</i>	.044	.003	.131	.021	.754	.970	.458	.185	.270	.132
	<i>N</i>	798	798	798	798	798	798	796	796	797	798
EAP	<i>r</i>	.033	.045	.048	.012	.011	.000	.102**	.056	.040	.031
	<i>p</i>	.358	.207	.175	.746	.763	.992	.004	.113	.257	.387
	<i>N</i>	798	798	798	798	798	798	796	796	797	798
SAV	<i>r</i>	.055	.153**	.036	.133**	.028	.081*	.040	.079*	.095**	.017
	<i>p</i>	.120	.000	.304	.000	.431	.022	.263	.027	.007	.636
	<i>N</i>	798	798	798	798	798	798	796	796	797	798

Note. DV Type = Dating Violence Type; PAV = Physical Abuse Victim; PAP = Physical Abuse Perpetrator; EAV = Emotional Abuse Victim; EAP = Emotional Abuse Perpetrator; SAV = Sexual Assault Victim; 1 = If a girl is raped while she is drunk, she is at least somewhat responsible for letting things get out of hand; 2 = When girls go to parties wearing slutty clothes, they are asking for trouble; 3 = If a girl goes to a room alone with a guy at a party, it is her own fault if she is raped; 4 = If a girl acts like a slut, eventually she is going to get into trouble; 5 = When girls get raped, it's often because the way they said "no" was unclear; 6 = If a girl initiates kissing or hooking up, she should not be surprised if a guy assumes she wants to have sex; 7 = When guys rape, it is usually because of their strong desire for sex; 8 = Guys don't usually intend to force sex on a girl, but sometimes they get too sexually carried away; 9 = Rape happens when a guy's sex drive goes out of control; 10 = If a guy is drunk, he might rape someone unintentionally. *r* = Pearson's R-correlation. *N* = valid sample. \**p* < 0.05. \*\**p* < 0.01.

Table 19. Bivariate Correlation Matrix among the Updated Illinois Rape Myth Acceptance Scale Items 11-22 and PAV, PAP, EAV, EAP, and SAV

DV Type		11	12	13	14	15	16	17	18	19	20	21	22
PAV	<i>r</i>	.055	.023	.051	.050	.057	.023	.057	.054	.059	.046	.020	.059
	<i>p</i>	.122	.525	.147	.154	.110	.509	.108	.127	.096	.196	.566	.098
	<i>N</i>	798	798	798	797	797	796	797	798	798	798	797	797
PAP	<i>r</i>	-.071*	-.008	.001	-.013	-.034	-.069	.016	-.001	-.017	-.018	.002	-.036
	<i>p</i>	.045	.827	.974	.707	.337	.050	.653	.987	.637	.615	.965	.306
	<i>N</i>	798	798	798	797	797	796	797	798	798	798	797	797
EAV	<i>r</i>	.003	.008	.046	.071*	.087*	.031	.022	.035	.028	.027	.035	.029
	<i>p</i>	.932	.816	.199	.045	.014	.386	.535	.326	.422	.450	.320	.410
	<i>N</i>	798	798	798	797	797	796	797	798	798	798	797	797
EAP	<i>r</i>	.007	.002	-.010	.012	.031	.009	.003	-.025	-.011	-.028	-.036	-.033
	<i>p</i>	.834	.945	.770	.742	.381	.796	.942	.479	.761	.425	.310	.349
	<i>N</i>	798	798	798	797	797	796	797	798	798	798	797	797
SAV	<i>r</i>	-.057	-.033	.070*	.037	.045	.010	.077*	.039	.053	.063	.049	.017
	<i>p</i>	.109	.351	.047	.298	.209	.772	.029	.275	.131	.076	.167	.642
	<i>N</i>	798	798	798	797	797	796	797	798	798	798	797	797

Note. DV Type = Dating Violence Type; PAV = Physical Abuse Victim; PAP = Physical Abuse Perpetrator; EAV = Emotional Abuse Victim; EAP = Emotional Abuse Perpetrator; SAV = Sexual Assault Victim; 11 = It shouldn't be considered rape if a guy is drunk and didn't realize what he was doing; 12 = If both people are drunk, it can't be rape; 13 = If a girl doesn't physically resist sex—even if protesting verbally—it can't be considered rape; 14 = If a girl doesn't physically fight back, you can't really say it was rape; 15 = A rape probably doesn't happen if a girl doesn't have any bruises or marks; 16 = If the accused "rapist" doesn't have a weapon, you really can't call it rape; 17 = If a girl doesn't say "no" she can't claim rape; 18 = A lot of times, girls who say they were raped agreed to have sex and then regret it; 19 = Rape accusations are often used as a way of getting back at guys; 20 = A lot of times, girls who say they were raped often led the guy on and then had regrets; 21 = A lot of times, girls who claim they were raped have emotional problems; 22 = Girls who are caught cheating on their boyfriends sometimes claim it was rape. *r* = Pearson's R-correlation. *N* = valid sample. \**p* < 0.05. \*\**p* < 0.01.

## *Regression*

Five binary logistic regression analyses were run to further examine the relationships between independent risk factors for each form of dating violence. For the analyses, only those students who answered ‘yes’ or ‘no’ to being victims or perpetrators of dating violence were included in the analysis. The variables included in each model were selected based on their statistical significance as independent risk factors. We converted continuous variables to dichotomous variables to standardize the variables into common units of classification, which allowed for more accurate interpretation of the results. We replaced the original data with classifications designated with 0 and 1. The AUDIT sum classifications were determined by pre-established cut points (a score of 8 or greater indicates risky drinking behavior) and behavioral cut points (engaging in the behavior or not engaging in the behavior) were used for the HUQ. The IRMA questionnaire did not include a pre-established cut point or classification cut points so we used the median of 86 as the cut point. Participants scoring below the median were considered to endorse rape myths more than other participants. The regression models are presented in the following manner: a) predictors of physical abuse victimization, b) predictors of physical abuse perpetration, c) predictors of emotional abuse victimization, d) predictors of emotional abuse and e) predictors of sexual assault victimization.

### *Predictors of Physical Abuse Victimization*

Gender, parent relationship (married), parent relationship (separated), both forms of interparental violence (father-to-spouse abuse, mother-to-spouse abuse), Greek-life membership, rape myth acceptance (IRMA), and hooking-up behaviors (Hookup) were included in the model predicting physical abuse victimization (Table 20). These variables

were selected because they had the strongest correlations as independent risk factors. The overall model was significant in predicting physical abuse victimization ( $\chi^2(8) = 64.419$ ,  $p < .0001$ ) and explained 20.7% (Nagelkerke  $R^2 = .207$ ) of the variance. When controlling for all variables in the model, those who witnessed their father physically abuse his spouse were 8.136 (Wald = 18.718,  $p < .0001$ ) times more likely to be a victim of physical abuse than those who did not witness father-to-spouse abuse. Further, when controlling for all variables in the model, females were 5.257 (Wald = 8.777,  $p < .003$ ) times more likely than males to be a victim of physical abuse. Participants who have hooked-up at least once were 5.356 (Wald = 15.311,  $p < .0001$ ) times more likely to be a victim of physical abuse than those who have never hooked-up. Mother-to-spouse abuse, married parents, separated parents, Greek-life membership, and rape myth acceptance were identified as independent risk factors for physical abuse victimization, but were not statistically significant in the model.

#### *Predictors of Physical Abuse Perpetration*

Only two variables, father-to-spouse abuse and AUDIT Item 6 (*How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?*), were included in the model predicting for physical abuse victimization (Table 21). The logistic regression model predicting physical abuse perpetration was significant ( $\chi^2(2) = 8.309$ ,  $p < .016$ ), explaining 14.2% of variance (Nagelkerke  $R^2 = .142$ ). Witnessing their father-to-spouse abuse, increased an individual's odds of perpetrating physical abuse by 15.960 times (Wald = 8.511,  $p < .004$ ) when controlling for other variables. Though not statistically significant, participants who needed a drink first thing in the morning after a heavy drinking session (AUDIT Item 6)

were 8.918 times (Wald = 3.390,  $p < .066$ ) more likely to perpetrate physical abuse than those who have never reported needing a drink first thing in the morning after a heavy drinking session.

Table 20. Binary Logistic Regression Model Predicting the Risk Factors Related to Physical Abuse Victimization. N= 772 (valid cases)

Predictors	Beta	Std. Error	Wald	df	Sig.	OR	95% Confidence Interval	
							Lower Bound	Upper Bound
Gender**	1.660	.560	8.777	1	.003	5.257	1.754	15.759
Parent's relationship (married)	.004	.362	.000	1	.991	1.004	.494	2.040
Parent's relationship (separated)	.720	.837	.741	1	.389	2.055	.399	10.600
Interparental violence (father)**	2.096	.485	18.718	1	.000	8.136	3.148	21.031
Interparental violence (mother)	.090	.775	.014	1	.907	1.095	.240	5.001
Greek life	.371	.316	1.398	1	.237	1.454	.782	2.703
IRMA (<86)	-.457	.337	1.846	1	.174	.633	.327	1.224
Hookup**	1.678	.429	15.311	1	.000	5.356	2.311	12.415

Note. OR = odds ratio calculated as  $\text{Exp}(B)$ ; Interparental violence (father) = has witnessed father physically abuse spouse; Interparental violence (mother) = has witnessed mother physically abuse father; Greek-life = member of a fraternity or sorority; IRMA (<86) = sum scores below the median score of 86 (accepted rape myths more than the median); Hookup = dummy variable of HUQ sum (0 = never hooked up, 1 = hooked-up, any amount). \*\* $p < 0.01$ .

#### *Predictors of Emotional Abuse Victimization*

The logistic regression model predicting emotional abuse victimization was significant ( $\chi^2(5) = 122.203, p < .0001$ ), explaining 22.2% of variance (Nagelkerke  $R^2 = .222$ ). All variables were significant in the model (Table 22). In terms of gender, females had greater odds of experiencing emotional abuse (OR = 3.368, Wald = 24.382,  $p < .0001$ )

than males. Witnessing father-to-spouse abuse increased someone’s odds of being a victim of emotional abuse 3.020 times (Wald = 8.040,  $p < .005$ ) when controlling for all other variables. Those who were in a fraternity or sorority were 1.649 times (Wald = 6.946,  $p < .008$ ) more likely than those who were not in a fraternity or sorority to be a victim of emotional abuse. Participants who have engaged in a hookup were more likely to experience emotional abuse (OR = 4.643, Wald = 48.463,  $p < .0001$ ) than those who have never engaged in a hookup. Lastly, those with married parents were less likely to experience emotional abuse than those with separated or divorced parents, when controlling for other factors (OR = .606, Wald = 5.725,  $p < .017$ )

Table 21. Binary Logistic Regression Model Predicting the Risk Factors Related to Physical Abuse Perpetration. N= 788 (valid cases)

Predictors	Beta	Std. Error	Wald	df	Sig.	OR	95% Confidence Interval	
							Lower Bound	Upper Bound
Interparental violence (father)**	2.770	.950	8.511	1	.004	15.960	2.482	102.626
AUDIT Item 6	2.188	1.188	3.390	1	.066	8.918	.868	91.593

Note. OR = odds ratio calculated as  $\text{Exp}(B)$ ; Interparental violence (father) = Has witnessed father physically abuse spouse; AUDIT Item 6 = Alcohol Use Disorder Identification Test Item 6 dummy variable (*How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?* 0 = never, 1 = at least once). \*\* $p < 0.01$ .

#### *Predictors of Emotional Abuse Perpetration*

The logistic regression model predicting emotional abuse perpetration was significant ( $\chi^2(7) = 47.207, p < .0001$ ), explaining 17.6% of variance (Nagelkerke  $R^2 = .176$ ). Three variables were significant in the model (Table 23). Hispanics or Latinos were more likely than other races or ethnicities to perpetrate emotional abuse (OR =

3.475, Wald = 9.093,  $p < .003$ ), when controlling for other risk factors. Witnessing father-to-spouse abuse increased someone's odds of perpetrating emotional abuse 3.694 times (Wald = 6.304,  $p < .012$ ) when controlling for all other variables. Participants who reported they have had a relative, friend, doctor, or other health care worker been concerned about their drinking or suggested they cut down were 4.873 times (Wald = 10.067,  $p < .002$ ) more likely to perpetrate emotional abuse than participants who have not had a relative, friend, doctor, or other health care work been concerned about their drinking or suggested they cut down. Participants who have engaged in a hookup with a friend (more than once) or with a past-romantic partner were more likely to perpetrate emotional abuse than any other type of hookup. Regardless of the type of hookup, engaging in at least one hookup was not a significant predictor of emotional abuse perpetration.

Table 22. Binary Logistic Regression Model Predicting the Risk Factors Related to Emotional Abuse Victimization. N = 777 (valid cases)

Predictors	Beta	Std. Error	Wald	df	Sig.	OR	95% Confidence Interval	
							Lower Bound	Upper Bound
Gender**	1.214	.246	24.382	1	.000	3.368	2.080	5.453
Greek life**	.500	.190	6.946	1	.008	1.649	1.137	2.391
Parent's relationship (married)*	-.501	.209	5.725	1	.017	.606	.402	.913
Interparental violence (father)**	1.105	.390	8.040	1	.005	3.020	1.407	6.483
Hookup**	1.535	.221	48.463	1	.000	4.643	3.013	7.154

Note. OR = odds ratio calculated as  $\text{Exp}(B)$ ; Greek life = member of a fraternity or sorority; Interparental violence (father) = Has witnessed father physically abuse spouse; Hookup = HUK sum dummy variable (0 = never hooked up, 1 = hooked-up, any amount). \* $p < 0.05$ . \*\* $p < 0.01$ .



Table 23. Binary Logistic Regression Model Predicting the Risk Factors Related to Emotional Abuse Perpetration. N= 695 (valid cases)

Predictors	Beta	Std. Error	Wald	df	Sig.	OR	95% Confidence Interval	
							Lower Bound	Upper Bound
Hispanic**	1.246	.413	9.093	1	.003	3.475	1.547	7.808
Interparental violence (father)*	1.307	.520	6.304	1	.012	3.694	1.332	10.246
AUDIT risky	.561	.371	2.282	1	.131	1.752	.846	3.625
AUDIT Item 10**	1.584	.499	10.067	1	.002	4.873	1.832	12.960
Hookup	.483	.665	.528	1	.468	1.621	.440	5.965
Friend (>1)	.211	.447	.224	1	.636	1.235	.515	2.964
Romantic partner	.810	.480	2.844	1	.092	2.247	.877	5.757

Note. OR = odds ratio calculated as  $\text{Exp}(B)$ ; Interparental violence (father) = Has witnessed father physically abuse spouse; AUDIT risk = risky drinking behavior (sum score of Alcohol Use Disorder Identification Test items dummy variable; 0 = less than 8; 1 = 8 or more; 8 or more indicates risky drinking behavior); AUDIT Item 10 = Alcohol Use Disorder Identification Test Item 10 dummy variable (*Has a relative, friend, doctor, or other health care worker been concerned about your drinking or suggested you cut down?* 0 = never, 1 = at least once); Hookup = dummy variable of HUQ sum (0 = never hooked up, 1 = hooked-up, any amount); Friend (>1) = dummy variable for HUQ Item 4 (*I have engaged in a hookup with a friend with whom I have hooked-up more than once;* 0 = never, 1 = at least once); Romantic partner = dummy variable for HUQ Item 5 (*I have engaged in a hookup with someone with whom I was previously in a romantic relationship;* 0 = never, 1 = at least once). \* $p < 0.05$ . \*\* $p < 0.01$ .

#### *Predictors of Sexual Assault Victimization*

The logistic regression model predicting sexual assault victimization was significant ( $\chi^2(4) = 74.675, p < .0001$ ), explaining 21.2% of variance (Nagelkerke  $R^2 = .212$ ). All four variables in to the model were significant (Table 24). When controlling for gender, risky drinking behaviors (AUDIT risky), and hookup behaviors (Hookup), witnessing father-to-spouse abuse were 6.219 times (Wald = 17.802,  $p < .0001$ ) more likely than those who did not witness father-to-spouse abuse to be a victim of sexual assault. Being female was a strong predictor of being sexually assaulted, with an odds ratio of 6.589 (Wald = 17.057,  $p < .0001$ ). Participants who have engaged in a hookup,

regardless of hookup type, were significantly more likely to experience sexual assault than those who have never engaged in a hookup (OR = 6.292, Wald = 21.619,  $p < .0001$ ). When controlling for all other variables, those who have risky drinking behaviors, were 2.403 times more likely than those who do not have risky drinking behaviors to experience sexual assault (Wald = 9.461,  $p < .002$ ). Overall, the three risk factors that were most predictive of being a sexual assault victim were being female, engaging in a hookup, and witnessing father-to-spouse abuse.

Table 24. Binary Logistic Regression Model Predicting the Risk Factors Related to Sexual Assault Victimization. N= 691(valid cases)

Predictors	Beta	Std. Error	Wald	df	Sign	OR	95% Confidence Interval	
							Lower Bound	Upper Bound
Gender**	1.885	.456	17.057	1	.000	6.589	2.693	16.120
Interparental violence (father)**	1.828	.433	17.802	1	.000	6.219	2.661	14.536
AUDIT risky**	.877	.285	9.461	1	.002	2.403	1.374	4.201
Hookup**	1.839	.396	21.619	1	.000	6.292	2.898	13.660

Note. OR = odds ratio calculated as  $\text{Exp}(B)$ ; Interparental violence (father) = Has witnessed father physically abuse spouse; AUDIT risk = AUDIT sum dummy variable (sum score 8 or greater indicates risky alcohol behaviors; 0 = less than 8; 1 = 8 or more); Hookup = dummy variable of HUQ sum (0 = never hooked up, 1 = hooked-up, any amount). \*\* $p < 0.01$ .

## CHAPTER FIVE

### Discussion

Included in this chapter is a discussion of the findings within the context of the four research questions and associated sub-questions. This is preceded by a discussion of the identified limitations. Lastly, study conclusions and recommendations for future research and public health professionals are also presented.

#### *Discussion of Findings*

##### *Participants and Dating Violence*

Consistent with existing literature, we found that students in this sample were more likely to experience emotional or verbal abuse than any other form of dating violence (Mason & Smithy, 2012; Zurbriggen, Gobin, & Freyd, 2010). Overall, victimization rates were higher than perpetration rates for all types of dating violence. The frequency of sexual assault victimization among females in the sample was less than the national average of 1 in 4 or 5 females (CDC, 2016). Only 11.1% of females reported being sexually assaulted since the age of 18. This rate is the similar to the rates of sexual assault reported in the Massachusetts Institute of Technology (MIT) Campus Climate Survey (MIT, 2014). Albeit the rate of sexual assault victimization in our sample was less than the national rate, it was not surprising because rates have been reported to vary from campus to campus due to differences in campus climate, location, and the student population (Krebs et al., 2007; MIT, 2014; Stanford University, 2014). These results are

evidence for the continuation of campus climate surveys across the nation's universities and colleges.

In terms of reporting, females were more likely to report victimization and perpetration of all six types of dating violence. These results are similar to the research conducted by Whitaker (2013) at a southeastern university, where he found that females were more likely than males to report physical (29.3% vs. 15.3%) and emotional violence (41.4% vs. 39.0%). Though the reported rates of physical and emotional abuse in our sample are less than those found by Whitaker (2013), it is still important to know that females were more likely than males to report both experiencing and perpetrating dating violence. One possible explanation for this is that females who have perpetrated physical abuse may have done so in self-defense (Gover, Kaukinen & Fox, 2008). Females may feel more comfortable reporting dating violence perpetration because female-to-male violence is less stigmatized than male-to-female violence (Johnson, 1995). Moreover, males may be simply less willing than females to report physically abusing their dating partner (Johnson, 1995).

When asked to report their dating violence history, a notable amount of students claimed they did not know if they had been a victim or perpetrator of emotional abuse. One explanation is that dating violence, especially emotional abuse, can be defined by an expansive set of behaviors that may or may not be perceived as unhealthy or abusive. The operationalization of the term *violence* has affected estimates of dating violence among college students. Often violence is associated with physical assault, that may or may not involve the use of a weapon (Shorey et al., 2015). The operationalized definition of violence may not include emotional or verbal abuse, threats, stalking, or sexual

aggression (Koss, Gidycz, & Wisniewski, 1987). When compared to studies that examined several types of dating violence or used specific definitions of each type, studies that examined only one type of dating violence or included general definitions reported overall lower estimates of dating violence (Gover, Kaukinen, & Fix, 2008; Shorey et al., 2015). The current study examined several types of dating violence, but used general definitions to define them.

### *Risk Factors and Predictors of Dating Violence*

Gender was a significant predictor of physical abuse victimization, emotional abuse victimization, and sexual assault victimization. This is not surprising, considering women are more likely than men to report dating violence. When controlling for alcohol consumption, hookup relationships, and interparental violence, females were 6.589 times more likely than males to experience sexual assault. The finding was expected, because women tend to be at a higher risk of sexual assault victimization than their male counterparts (CDC, 2016).

In terms of race and ethnicity, being Hispanic or Latino was a significant predictor of perpetrating emotional abuse. When controlling for alcohol use, hooking-up relationships, and interparental violence, Hispanic students were 3.475 times more likely to perpetrate emotional abuse when compared to students of other races and ethnicities. Research specifically focused on the Hispanic or Latino culture and dating violence is limited, but existing literature suggests that Hispanics are more likely to experience dating violence when compared to White, non-Hispanics (Caetano, Schafer, Clark, Cunradi & Raspberry, 2000). Furthermore, researchers suggest that individuals who are highly acculturated (i.e. process of adjusting culturally and psychologically when

transitioning between cultures) to U.S. society are more likely to perpetrate abuse than Hispanics who are not highly acculturated (Caetano et al., 2000). During the process of acculturation, Hispanics may experience stressful life conditions such as poverty and segregation, which in turn can create frustration and lead to increased alcohol consumption and the use of violence to resolve conflicts between dating partners (Caetano, 1987; Caetano et al., 2000). It is also suggested that Hispanic couples that are uneven, meaning one partner is more acculturated than the other, are more likely to experience higher rates of dating violence when compared to Hispanic couples that are even (Caetano et al., 2000).

Consistent with the current literature, alcohol was identified as a risk factor for dating violence victimization and perpetration (Mouilso, Fischer, & Calhoun, 2012). Heavy alcohol use has been associated with increased chances of physical abuse perpetration (Roudsari, Leahy, & Walters, 2009; Shorey et al., 2015). In the current study, students who displayed signs of alcohol dependency were almost nine times more likely than non-alcohol dependent students to perpetrate physical abuse, when controlling for other risk factors. They were also almost five times more likely to perpetrate emotional abuse. Excessive alcohol use was also found to be a predictor of sexual assault victimization. Several hypotheses were formulated about why alcohol consumption would predict physical, emotional, and sexual violence. One possible explanation is that alcohol inhibits an individual's information processing capacity, thus indirectly increasing aggressive behaviors (Giancola, Josephs, Parrott, & Duke, 2010; Lang, Goeckner, Adesso, & Marlatt, 1975; Shorey et al., 2015). The perpetrator may not perceive his or her aggressive actions as violent and may even feel justified for acting in

such a manner (Giancola, Josephs, Parrott, & Duke, 2010; Shorey et al., 2015). A second explanation is that alcohol is associated with lessened sensitivity to social cues and body language allowing for increased misperceptions of sexual intent, therefore creating a higher chance of experiencing unwanted sexual contact or violence (Shorey et al., 2015). Lastly, sexual assault is associated with increased mental distress, such as anxiety and depression (Mouilso, Fischer & Calhoun, 2012). Therefore, it is possible that students who are sexually assaulted may use alcohol to cope with the aftermath of the traumatic event. This suggests that alcohol use has a reciprocal relationship with sexual assault victimization. Heavy alcohol consumption may predict the likelihood of experiencing sexual assault, but sexual assault victimization may predict future heavy alcohol consumption (Mouilso, Fischer & Calhoun, 2012). Future research should attempt to establish temporality between alcohol use and sexual assault victimization.

Research suggests that collegiate athletes are more likely to perpetrate dating violence, specifically rape, when compared to their counterparts (Gidycz, Warkentin & Orchowski, 2007). In this study, in contrast to other research, being a NCAA athlete was not found to be significantly related to dating violence perpetration or victimization. There are several hypotheses for these findings. First, at the time of data collection, the university was under public scrutiny for not properly handling reported incidents of sexual assault and dating violence over the years prior. The highly-publicized cases involved student-athletes, therefore students who identified as NCAA athletes may have lied about their dating violence history, in order to preserve their athletic program or reputation. According to the Male Peer Support Theory described in Chapter One, all-male peer groups are more likely than other peer groups to form strong bonds of secrecy

(Schwartz & Nograd, 1996). This bond can prevent members from revealing private information about other group members to non-members (Schwartz & Nograd, 1996). For example, in a study of 704 college student-athletes, male athletes were more likely than females to deny involvement and claim unfair targeting when asked about their involvement with sexual violence (Sawyer, Thompson & Chicorelli, 2002). Further, all-male peer groups are more likely to legitimize violence against women, therefore, they may be less likely to side with the victim (Schwartz & Nograd, 1996). Athletes have also been known to harass, threaten, and intimidate the victim to keep him or her from reporting information as well (Murnen & Kohlman, 2007; Franklin, Bouffard, & Pratt, 2012).

An additional hypothesis about why there was no significant relationship between being a NCAA athlete and dating violence perpetration or victimization, is that the athletes represented in the study were more likely to identify as a member of an individually-focused sport than a team-focused sport. Despite the lack of evidence, there exists a notion that male athletes involved in physically aggressive team sports, present a higher risk for sexual violence than their male peers who do not play physically aggressive team sports (Sawyer, Thompson, & Chicorelli, 2002). In this study, of the 62 athletes who identified which sport they played, only 10 indicated that they were a member of a physically aggressive team sport, such as football or basketball. In addition, more female athletes completed the survey than male athletes (41 vs. 27); therefore, our results may reflect the fact that those athletes who are more likely to perpetrate dating violence were underrepresented in the sample.



Research suggests that fraternity and sorority members are more likely to be associated with sexual assault victimization and perpetration (Gidycz, Warkentin & Orchowski, 2007; Moynihan et al., 2011). In the current study, being in a fraternity or sorority was not a predictor of experiencing sexual assault. This finding could be explained by the campus culture in which the research was conducted. Researchers have suggested that universities with official Greek-life housing are more likely to have higher rates of reported sexual assault (Moynihan et al., 2011; Sawyer, Thompson & Chicorelli, 2002). Greek-affiliated housing is thought to increase the number of fraternity-hosted parties, thus increasing the frequency of binge-drinking, and in return could increase the chances of experiencing alcohol-induced sexual assault (Franklin, 2010). The university in which the current study was conducted does not have official sorority or fraternity houses; therefore, the Greek-life community may face less of a risk than students attending universities that have official fraternity and sorority houses. An additional explanation could be that it is not the membership in a sorority or fraternity that increases the risk of sexual assault, but rather the proximity or amount of exposure to the culture of Greek-life (e.g. attending fraternity parties where binge drinking is encouraged, exposure to rape-supportive male peer groups) (Humphrey & Kahn, 2000; Murnen & Kohlman, 2007). Although Greek-life was not found to be a predictor of sexual assault, it was related to physical abuse victimization and emotional abuse victimization. When controlling for other variables, being in a fraternity or sorority was a significant predictor of being a victim of emotional abuse. Future researchers should refocus their efforts from studying the relationship between Greek-life and sexual assault, to the relationships between Greek-life and other forms of dating violence.

The current project was one of few studies about dating violence conducted at a religious university. The existing literature on religious affiliation, religiosity, and dating violence is conflicting. There is evidence that religious affiliation, in terms of church attendance and attending a non-secular university, can be both risk and protective factors when predicting dating violence (Berkel, Vandiver & Bahner, 2004). In the current study, there were no significant relationships identified between religious affiliation and dating violence. These results do not support the idea of “moral communities” as a protective factor for dating violence. Though the study was conducted at a private, religious institution, where it is predicted that such a place of higher education would reinforce religious and spiritual education and regulate risky behaviors (e.g. alcohol consumption, casual sex), there is no evidence for or against religion being a risk factor of dating violence. Only two significant relationships between religiosity and dating violence were identified. Students who reported that religion was an important part of their up-bringing were less likely to perpetrate emotional abuse or be the victim of sexual assault. One explanation for this is that if religion was an important factor during a student’s up-bringing, it can be assumed that the student was more likely to attend church as a child, thus decreasing the likelihood of experienced dating violence (Berkel, Vandiver & Bahner, 2004). Researchers theorize that attending church during childhood is a protective factor of dating violence victimization and perpetration because youth who attend church may be more exposed to messages that discourage engaging in risky behaviors, such as premarital sex and alcohol consumption, in comparison to youth who do not attend church (DuRant, Altman, Wolfson, Barkin, Kreiter, & Krowchuk, 2000).

Overall, witnessing father-to-spouse physical abuse was a consistent predictor of all forms of dating violence perpetration and victimization. There are several potential explanations for these findings. First, as previous researchers have suggested (Karlsson, Temple, Weston, & Le, 2016), students who were raised by abusive fathers may have learned, through observation and experience, that some level of violence is “normal” or acceptable in dating relationships. Therefore, these students are more likely to become victims of physical or emotional abuse in future dating relationships (Karlsson, Temple, Weston, & Le, 2016). Second, the intergenerational transmission of violence theory suggests that witnessing and experiencing violence as a child leads to greater use of violence as an adult (Bandura, 1977; Carr & VanDeusen, 2002). In other words, children who witnessed father-to-mother or mother-to-father abuse may have learned through observational learning that violence is an acceptable response to conflict in dating relationships and may become more likely to perpetrate the same form of violence as their parents (Bandura, 1973; Carr & VanDeusen, 2002).

Several interesting findings emerged with respect to the gender of the perpetrating parent. First, witnessing interparental violence was a significant predictor for physical, emotional, and sexual aggression. However, witnessing father-to-spouse physical abuse was a significant predictor for physical abuse victimization and perpetration, emotional abuse victimization and perpetration, and sexual assault victimization, whereas witnessing mother-to-spouse physical abuse was only a significant predictor for physical abuse victimization and emotional abuse victimization. These differences suggest that future research should continue specifying the gender of the perpetrator in an event of interpersonal violence.

### *Participants and Rape Myth Acceptance*

In this study, male students did not display a high rate of rape myth acceptance. This was surprising, considering existing literature indicates that male college students are more likely to endorse rape myths than female college students (McMahon, 2010). Despite overall rejection of rape myths, certain myths received more endorsement than others. The statements representing victim blaming (IRMA Items #1-6) had the lowest mean scores, therefore the highest level of acceptance. There is an issue with measuring rape myth acceptance, especially among college students because of the change in the culture of dating violence and sexual assault. College students are frequently exposed to campus prevention programs where the issues surrounding sexual violence and rape culture are presented (McMahon, 2010; McMahon & Farmer, 2011). Some of these programs may address rape myths as negative; therefore, students may have a greater awareness that certain rape myths are not socially acceptable so when asked, they are more likely to reject rape myths (McMahon, 2010; McMahon & Farmer, 2011). This could be problematic because these myths may not be overtly expressed, but exist in subtle forms (McMahon, 2010). Further, even though the participants rejected rape myths overall, they may have disagreed with rape myths to adhere to the political correctness that accompanies research on rape culture.

### *Rape Myth Acceptance and Religious Beliefs*

The original research question was about rape myth acceptance and religious beliefs, but the questions that participants answered on the survey measured religious affiliation, rather than spirituality. Overall, there were no significant relationships between religious affiliation and rape myth acceptance. Moreover, there were no

predictive relationships between the level of importance of religion and rape myth acceptance. A person's denomination may be misleading about to what extent he or she adheres to his or her affiliation's beliefs and attitudes. Future research should address a person's level of religiosity and spirituality and its relationship with rape myth acceptance.

### *Hookup Culture and Dating Violence*

In the United States, the prevalence of hooking up among college students falls somewhere between 60% and 80% (England et al., 2008; Gute & Eshbaugh, 2008; Littleton, Tabernik, Canales, & Backstrom, 2009; Paul, McManus, & Hayes, 2000). The proportion of students who reported hooking-up at least once (56.2%) was slightly outside this range. Students were asked to estimate the percent of students at their university who hookup to identify whether or not they incorrectly perceive the behaviors of their peers. Students estimated that 56.46% of their peers hookup. When comparing the peer estimate to the proportion of students who reported hooking-up, the participants only slightly overestimated the prevalence of hooking-up on campus. This finding is counter to the literature that suggests college students tend to overestimate unhealthy behaviors and underestimate healthy behaviors (England et al., 2008; Gute & Eshbaugh, 2008; Littleton, Tabernik, Canales, & Backstrom, 2009; Paul, McManus, & Hayes, 2000). Moreover, this finding does not support the literature that suggests college students are more likely to publicly accept a behavior, but secretly disapprove through pluralistic ignorance (Lambert, Kahn, & Apple, 2003). The students in the current study correctly estimated the hookup behaviors of their peers; therefore, they may be more realistic when it comes to acknowledging the presence of hookup culture on campus.

With exception of physical abuse perpetration, hookup culture was positively related to dating violence. Not surprising, in the current study, all five hookup relationships were significantly related to sexual assault victimization supporting prior research focusing on hookup culture and aggressive behaviors (Heldman & Wade, 2010; Kraus & Russel, 2008). Researchers suggest sexual risk-taking (e.g. having multiple sexual partners, hooking up) co-exists with aggressive behaviors among young adults (Klipfel, Claxton, & van Dulmen., 2014). Therefore, sexual risk-taking is associated with all forms of dating violence. For example, Flack et al. (2015) used HUUQ scores to predict which hookup relationships were related with sexual assault. They identified that the riskiest hookup relationships were those with acquaintances and previous romantic partners (Flack et al., 2015). In the current study, hooking-up with an acquaintance was the riskiest hookup relationship in regards to experiencing sexual assault, but hooking-up with a previous romantic partner was not. Hooking-up with a friend once and hooking-up with a friend more than once were both riskier hooking-up relationships for sexual assault than hooking-up with a former romantic partner.

In addition to identifying the relationship between hookup relationships and sexual assault, this study aimed to identify which hookup relationships were related to other forms of dating violence. Overall, we found that as the hookup relationship became more intimate, the more likely someone was to report dating violence. This was true for physical abuse victimization, emotional or verbal victimization, and emotional or verbal perpetration. One hypothesis for this is that when people are friends, they tend to be exposed to each other more often; therefore, increasing the number of opportunities in which they could engage in a hookup and experience dating violence. A second reason

can be explained with reference to the dating aggression theory, which suggests that aggression increases with commitment and seriousness of the relationship (Klipfel et al., 2014). Essentially, as dating partners become closer to each other, one partner may gain more knowledge about the other and become more comfortable with the dynamics of the relationship. This increases the level of trust between the dating couple, thus one partner may become more comfortable perpetrating emotional or physical violence against their partner in order to ease tension or conflict, without the fear of them leaving or ending the relationship (Mason & Smithey, 2012).

In this study hooking-up with an acquaintance was riskier than hooking-up with a stranger. In a stranger hookup, a person may be warier or less likely to allow a physically intimate interaction to progress with whom he or she is not familiar. In other words, hooking-up with an acquaintance is riskier than hooking-up with a stranger, because when someone is previously exposed to a person, he or she is more likely to trust that person (Mason & Smithey, 2012). They may be more likely to trust an acquaintance to an extent that sometimes invites unwarranted sexual violence, like sexual assault, attempted rape, or completed rape.

### *Hookup Culture and Victim Blaming*

The results of this study suggest that beliefs in rape myths are negatively related to students' hooking-up behaviors. The moderate relationship suggests that those students who endorse more rape myths are less likely to engage in the hookup culture. Though unexpected, this result can be educational for public health professionals. As previously stated, this could be due to the possibility that students are more likely to reject rape myths to be politically correct, when in reality they may privately endorse victim blaming

statements (McMahon, 2007). A second explanation of this finding is that those who are hooking-up are more aware of rape culture in general. Lastly, though not well supported, researchers have suggested those who engage in the hookup culture are more accepting of the social movement towards the sexual freedom of men and women (Allison & Risman, 2013; Bogle, 2008; Garcia, Reiber, Massey, & Merriwether, 2012).

### *Limitations*

Though the outcomes are valuable, this study has a number of limitations that should be considered when interpreting the results. As with any research project, some limitations to data interpretations may have been introduced during the data collection procedures; however, we included several procedures to reduce bias.

Physical, emotional, and sexual violence victimization and perpetration were never explicitly defined in the survey, leaving participants to generate their own definitions of each. This is a benefit in that it revealed important information about student's level of knowledge regarding dating violence. However, without specifically defining physical, emotional, and sexual violence victimization and perpetration within the question, some participants may have had difficulty re-calling an instance of dating violence. For example, several participants indicated they did not know if they had physically abused an intimate partner, because it is not uncommon for participants to only think of the most extreme forms of physical abuse (e.g. hitting, abuse involving a weapon) rather than considering a range of experiences.

Although the sample size was large, it was not representative of the university's student body. A majority of the sample were upperclassmen, therefore freshmen and sophomores were under represented making it difficult to distinguish unique experiences



based on grade classification. According to researchers, female college students are at an increased risk for sexual assault during the first few weeks of their freshmen and sophomore years (Flack et al., 2008). Freshmen transition from the security of their parents' home to the less-restricted lifestyle of a dormitory, while sophomores transition from the dormitory to even less-restricted off-campus housing (e.g. apartments, fraternity and sorority housing) (Flack et al., 2008). These transitions increase the vulnerability of freshmen and sophomores, thus increasing the opportunity for sexual assault to occur. In our sample freshmen and sophomores experienced sexual assault less than juniors and seniors, but we cannot conclude whether or not grade classification was a risk or protective factor for sexual assault because, although we specified a specific time frame (since the age of 18), we never inquired about their year in school at the time of the incident.

Additionally, the number of athletes represented in the sample was small, which prevented us from exploring the relationship between dating violence and the type of sport they played. For example, male athletes involved in physically aggressive team-based sports are thought to be at a greater risk of perpetrating dating violence when compared to male athletes who play individual-based sports (Sawyer, Thompson, & Chicorelli, 2002). We were unable to provide evidence for or against this risk factor because only nine male participants classified as belonging to a physically aggressive athletic-team.

This study did not address some of the situational factors that may have influenced participant's responses. The university was under public scrutiny at the time of data collection, therefore students may have been influenced by the pressure of social

desirability. Students may have under reported or over reported certain behaviors and attitudes to counteract any negative reputations that may have developed during the time of data collection. Future studies should include a measure of social desirability to address this limitation.

### *Recommendations and Conclusion*

As one of three known studies in which the context of relationships were examined as a risk factor for sexual assault, and as the first known study in which the context of relationships were examined as a risk factor for all forms of dating violence, this study revealed valuable information about dating violence among college students. There were several risk factors identified as significant predictors for dating violence victimization and perpetration. Most risk factors were consistent with the current literature, while a few were not. Gender, alcohol consumption, and witnessing interparental violence were identified as significant predictors for dating violence in this sample, however other highly supported risk factors, such as athletic team membership, Greek-life affiliation, and rape myth acceptance were not. This inconsistency supports the idea that risk factors vary from campus to campus. Campus climate surveys are needed on colleges and universities across the nation to identify which risk factors are of greatest importance. This information will allow researchers to tailor prevention programs to meet each university's campus culture.

The percentage of participants in the study who reported being a victim of sexual assault was much lower than the national averages. Though positive, these results could be indicative of a bigger issue: reporting. Because the university in which the study was conducted has a negative history of university officials handling sexual assault

inappropriately, students may not have felt uncomfortable reporting a history of sexual violence. Moreover, there was only one reported sexual assault perpetration, which could also be explained by the university's history involving poor compliance with Title IX standards. Although research suggests that students are more likely to disclose sensitive experiences via anonymous surveys, researchers have identified several barriers to reporting of dating violence (Katz, Olin, Pazienza & Rich, 2013). They suggest that reporting perpetration of dating violence may be influenced by the student's perception that the incident is a private matter or it "doesn't count" as a reportable incident (Katz, Olin, Pazienza & Rich, 2013). When raising awareness on college campuses, school officials should focus their efforts to making sure victims feel comfortable when reporting incidences of sexual assault.

Overall, the reported rates of dating violence were less than what is expected on U.S. college campuses. When creating the survey for this study, physical and emotional abuse were generally defined. Students may not have known what constituted as dating violence. Several students reported that they did not know if they had been a victim or perpetrator of dating violence, therefore it is important to include specific definitions of each form of dating violence in educational or prevention programs. This would help students better understand the behaviors that are considered unhealthy and aggressive, and subsequently would produce more accurate estimates of dating violence on college campuses.

The current study was one of few studies conducted at a private, faith-based university; therefore, this research should be replicated at other non-secular universities to establish reliability of the findings. Specifically, future research should identify how

and if religiosity and spirituality influence dating violence victimization and perpetration. In addition, there is very little research on religious affiliation and rape myth acceptance, further supporting the need for more research at faith-based institutions.

Lastly, hookup culture is ever-present across college campuses and should be considered when examining dating violence among college students. The context of a relationship has been identified as a risk factor for sexual assault and other forms of violence. Universities should continue to identify to what extent hookup culture is present on campus, and tailor prevention programs to fit the population's needs. Continued research on casual sexual encounters is essential to understand fully how hookup culture influences dating violence.

The findings from the current study are especially noteworthy considering there were relatively low rates of dating violence when compared to national averages. Until the risk factors of dating violence are disentangled and universities understand which risk factors are pertinent to their students, college men and women will continue to be victimized by dating violence.

## APPENDICES

## APPENDIX A

Table A1. Literature Review Results

<b>In-Text Citation</b>	<b>Study Purpose</b>	<b>Sample Characteristics</b>	<b>Location</b>	<b>Public or Private Institution</b>	<b>Methodology</b>	<b>Key Results</b>	<b>RF Assessed</b>	<b>Perpetration, Victimization, or Both</b>	<b>HU Culture?</b>
<b>Angelone, Mitchell, &amp; Lucente, 2012</b>	To examine the influence of multiple offender motivations, relationship length, and gender role beliefs on perceptions of male-on-female date rape.	undergraduate students (N=348)	Northeastern	Public	Quantitative survey; Participants read 1 of 10 vignettes that described male-on-female date rape. Recruited from a psychology department participant pool	Relationship length is not predictive of rape attributions. Egalitarian gender role attitudes are associated with lower levels of victim blame.	relationship length; gender role beliefs	Perpetration	No
<b>Bouffard, 2010</b>	To explore the concept of entitlement through various measures (male-peer support) to understand sexual aggression	sexually active, heterosexual undergraduate males (N=325) from two universities	Midwestern; Western	Private	Quantitative paper-and-pencil survey	All four measures of entitlement were significantly and positively correlated with hostility toward women and rape-supportive attitudes and behaviors. Entitlement was able to distinguish sexually aggressive and nonaggressive men.	Entitlement; self-control; sexual partners; pornography; adversarial sexual beliefs; rape myth adherence	Perpetration	No

Continued

<b>In-Text Citation</b>	<b>Study Purpose</b>	<b>Sample Characteristics</b>	<b>Location</b>	<b>Public or Private Institution</b>	<b>Methodology</b>	<b>Key Results</b>	<b>RF Assessed</b>	<b>Perpetration, Victimization, or Both</b>	<b>HU Culture?</b>
<b>Corprew &amp; Mitchell, 2014</b>	To examine correlates that contribute to sexually aggressive attitudes toward women.	undergraduate, heterosexual males (N=217) from three universities; one predominately White (n=182), two were HBCU (n=28, n=7)	All southern	All private	Quantitative, self-report survey; recruited from psychology classes, student centers and gym facilities	Hostility toward women is not a precursor to sexually aggressive attitudes No significant relationship among disinhibition, fraternity membership, and hyper masculine attitudes	fraternity membership; disinhibition; hyper masculinity	Perpetration	No
<b>Crane &amp; Eckhardt, 2013</b>	To explore the predictive factors of dating violence perpetration	undergraduate female students (N=43)	Midwestern	unknown	Longitudinal, quantitative, daily online survey	female alcohol consumption had no association to FMPV; anger, anxiety, and sadness were all significant in predicting FMPV; MFPV predicted higher rates of daily FMPV	male partner's aggressive behavior; alcohol use; negative affect	Perpetration	No
<b>Flack, Hansen, Hopper, Bryant, lang, Massa &amp; Whalen, 2015)</b>	to examine the role of hooking up as a risk factor for IPV	undergraduate female students (N=373) attending a small liberal arts school	Northeastern	Public	Quantitative, online survey, stratified random sample	78% of CSA took place during hookups; the riskiest hook up relationships were acquaintances and previous romantic relationships	relationship type; alcohol use	Victimization	Yes
<b>Franklin, 2010</b>	To examine the various risk factors related to (1) unwanted sex resulting from verbal coercion; (2) alcohol-induced sexual assault; and (3) completed rape as a result of threats or force.	college undergraduate women (N=185)	Northwestern	Public	Quantitative, self-report survey; convenience sample	Increased number of sex partners and affiliation with Greek-life were the two most significant risk factors; women who reported completed rape by threat or force were significantly more likely to be in a sorority	Alcohol; drug use; danger cue recognition; risky sex practices; sex while intoxicated; age at first intercourse; traditional gender roles; RMA; Sorority affiliation; pornography consumption	Victimization	Yes (Risky sex practices)

Continued

<b>In-Text Citation</b>	<b>Study Purpose</b>	<b>Sample Characteristics</b>	<b>Location</b>	<b>Public or Private Institution</b>	<b>Methodology</b>	<b>Key Results</b>	<b>RF Assessed</b>	<b>Perpetration, Victimization, or Both</b>	<b>HU Culture?</b>
<b>Gidycz, Warkentin, &amp; Orchowski, 2007</b>	To explore the relationship between alcohol use, athletic participation, fraternity membership, early sexual experiences, and perpetration of verbal, physical, and sexual aggression among college men over a 3-month interim.	undergraduate men (N=425)	Midwestern (NCAA Division I school; Member of Mid-American Conference)	public	Longitudinal, quantitative survey (baseline, 3 month follow-up)	Previous perpetration of verbal, physical, or sexual aggression was the only predictor of perpetrating that form of aggression over the follow-up; no relationship between fraternity membership and IVP	alcohol use; fraternity membership; athletic team membership; history of aggression; early sexual experiences	Perpetration	No
<b>Gover, Kaukinen, &amp; Fox, 2008</b>	To examine the relationship between experiencing and perpetrating dating violence and exposure to violence in the family of origin	undergraduate students (N=2,541) at two universities	Both Southeastern	unknown	Quantitative, self-report survey; convenience sample	victims of childhood abuse and those who witnessed physical violence between parents had perpetrated higher rates of physical violence in dating relationships compared to those who did not	family of origin violence; child abuse; self-control; risky sexual behaviors	Both	No
<b>Klipfel, Claxton, &amp; M. van Dulmen, 2014</b>	To describe the occurrence of emotional, physical, and sexual aggression victimization within different types of relationships	college students (N=174); Caucasian and female (n=141)	Midwestern	unknown	Quantitative, self-report surveys; recruited from psychology subject pool	physical aggression was the least common among all CRSEs; high prevalence of interpersonal aggression within committed relationships	Type of relationship	Victimization	Yes

Continued



<b>In-Text Citation</b>	<b>Study Purpose</b>	<b>Sample Characteristics</b>	<b>Location</b>	<b>Public or Private Institution</b>	<b>Methodology</b>	<b>Key Results</b>	<b>RF Assessed</b>	<b>Perpetration, Victimization, or Both</b>	<b>HU Culture?</b>
<b>Loiselle &amp; Fuqua, 2007</b>	To assess the link between alcohol consumption and women's risk detection abilities in a risky sexual vignette	undergraduate women ages 21-27 years (N=42) attending Western Michigan University	Northeastern (Western Michigan University)	public	RCT (control group received alcohol to bring BAC to 0.04; placebo did not receive alcohol); Stimulus story; quantitative, self-report survey was used to assess other variables	31% report being a victim of sexual assault (57.1% of these were under the influence of alcohol; 57% of perpetrators were under the influence of alcohol; 57% of the assaults involved physical force)	alcohol use; RMA	Victimization	No
<b>Maldonado, Watkins &amp; DiLillo, 2014</b>	To examine risk factors for intimate partner aggression (IPA) within Finkel and Eckhardt's I3 model,	undergraduate students (N=236) involved in a committed, heterosexual dating relationship; women (N=138)	Midwestern	Public	Qualitative, online survey; recruited from psychology courses	the three-way interaction was significant indicating that as alcohol consumption increased, the interaction of trait anger and childhood physical abuse became increasingly more positive; all three increase IPA	childhood physical abuse; anger; alcohol use	Perpetration	No
<b>Mason &amp; Smithey, 2012</b>	To examine Merton's Classical Strain Theory as a causative factor in IPV among college students; theorize that college students experience general life strain and cumulative strain	undergraduate students (N=142); race/ethnic sample representative of university demographics; female (51%)	Southern (Texas Tech University)	Public	Quantitative, self-report survey, recruited from lower-division courses	the longer the relationship, the more likely to experience IPV; the more time spent working or away from partner decreased likelihood of IPV; length of time in a relationship increased likelihood of sexual coercion	Stress; relationship length; academic and economic strain	Both	No

Continued

<b>In-Text Citation</b>	<b>Study Purpose</b>	<b>Sample Characteristics</b>	<b>Location</b>	<b>Public or Private Institution</b>	<b>Methodology</b>	<b>Key Results</b>	<b>RF Assessed</b>	<b>Perpetration, Victimization, or Both</b>	<b>HU Culture?</b>
<b>Mouilso, Fischer, &amp; Calhoun, 2012</b>	To examine the relationship between alcohol use (frequency of drinking and frequency of binge drinking) and sexual assault in college women.	first-year college women (n=319)	Southeastern	unknown	Prospective, quantitative survey (3 separate surveys over 6.5 months); recruited from research pool	Both frequent binge drinking and frequent drinking increased risk of sexual assault compared to those who did not binge drink or drink frequently; experiencing a sexual assault did not predict changes in future alcohol use	frequency of drinking; frequency of binge drinking	Victimization	No
<b>Roudsari, Leahy, &amp; Walters, 2009</b>	To identify predictors of partner violence among heavy-drinking college students	college students (N=280) aged 18 years or older; all reported at least one heavy-drinking ("binge") episode in the past 2 weeks	Southern	Private	Quantitative, self-report survey; recruited from psychology and health undergraduate courses and flyers across campus	Male students reported alcohol use in 100% of the incidents of physical abuse; being non-White was significantly associated with higher victims' threatening abuse, physical abuse, and total abuse scores and perpetrators' threatening abuse and physical abuse scores	alcohol use; gender	Both	No
<b>Shorey, Stuart, McNulty &amp; Moore, 2014</b>	To examine the temporal relationship between acute alcohol use, marijuana use, and male perpetrated physical, psychological, and sexual dating violence	undergraduate male students who were in a dating relationship of at least one month (N=67)	Southeastern	unknown	Longitudinal, quantitative, daily online survey	All three indicators of alcohol use were significantly associated with increased odds of psychological aggression perpetration; heavy alcohol use was significantly associated with increased odds of physical aggression	alcohol use; marijuana use	Perpetration	No

Continued

<b>In-Text Citation</b>	<b>Study Purpose</b>	<b>Sample Characteristics</b>	<b>Location</b>	<b>Public or Private Institution</b>	<b>Methodology</b>	<b>Key Results</b>	<b>RF Assessed</b>	<b>Perpetration, Victimization, or Both</b>	<b>HU Culture?</b>
<b>Sutton &amp; Simons, 2014</b>	To expand on the current literature by investigating familial, individual, and sociocultural risk factors for sexual assault	undergraduate students (N=624) (54% women)	Southeastern	unknown	Quantitative, self-report survey; recruited from social science classes	"Getting a date drunk or stoned" and "Trying to turn a date on by touching" were the most reported coercive strategies for men and most often experienced by women victims; interparental hostility and harsh parenting were positively associated with men and women hooking up	family of origin violence; hook-up culture	Both	Yes
<b>Whitaker, 2013</b>	To explore whether males and females attribute different reasons to their IPV, and whether these attributes help to distinguish among physical and psychological IPV tactics	undergraduate students (N=5,035) who had perpetrated IVP in the past year; males (n=1,336)	Southeastern	Public	Quantitative, online, cross-sectional survey	Females were more likely to report perpetration of physical IPV (29.3 vs 15.3%) and emotional IPV (41.4 vs. 39.0%); most common attributes were "I lost my temper" (72.5%) and "to make my partner listen" (62.0%); "I was drunk or high" was not significant	alcohol use; personality characteristics	Perpetration	No

Continued

<b>In-Text Citation</b>	<b>Study Purpose</b>	<b>Sample Characteristics</b>	<b>Location</b>	<b>Public or Private Institution</b>	<b>Methodology</b>	<b>Key Results</b>	<b>RF Assessed</b>	<b>Perpetration, Victimization, or Both</b>	<b>HU Culture?</b>
<b>Zinzow &amp; Thompson, 2012</b>	To understand the prevalence, severity, and predictors of repeated sexual coercion and assault (SCA) in a non-criminal sample of college males.	undergraduate, first-year, full-time male students (N=795)	Southeastern	unknown	Longitudinal, quantitative, self-report surveys; participants were surveyed at the end of each of their 4 years in college	Single and repeat offenders endorsed riskier behaviors and sexually aggressive beliefs than non-perpetrators. Repeat offenders scored higher than single offenders on risky behaviors, sexually aggressive beliefs, and antisocial traits.	Demographics; adverse childhood experiences; antisocial personality characteristics; attitudes toward women and forced sex; perceived social norms; sexual behavior; substance use	Perpetration	No
<b>Zurbriggen, Gobin &amp; Freyd, 2010</b>	To test if childhood emotional abuse is positively associated with late adolescent sexual aggression victimization and perpetration for both genders.	college sophomores (male, N=79, female, N=105)	Western	public	Mixed methods; quantitative self-report survey; qualitative one-on-one interview; second wave of a two-wave longitudinal study	Childhood emotional abuse was strongest predictor of adolescent sexual perpetration for women and the strongest predictor of adolescent sexual victimization for men	childhood emotional abuse	Both	No

CSA=campus sexual assault; RMA=rape myth acceptance; CRSE=casual sexual relationships and experiences; IPV=intimate partner violence; FMPV=female-to-male partner violence; MFPV=male-to-female partner violence; HBCU=Historically Black Colleges and Universities

## APPENDIX B

### Sample Recruitment Email

“Dear Student,

I would like to invite you to participate in a research project in which you will be asked to complete an online questionnaire about relationships. The purpose of this project is to clarify and explore the risk factors of dating violence among college students. My fellow researchers and I plan to explore how the contexts of college dating relationships contribute to perceptions of dating violence on college campuses. Your participation is voluntary and the survey is anonymous. You will not be paid to participate, but your professor/instructor may be offering extra credit for participation. Please ask your professor about this opportunity. If you would like to know more about the project and/or participate in the study by completing the online survey, please click on ([https://baylor.qualtrics.com/SE/?SID=SV\\_73Qn1UrCoksHu4t](https://baylor.qualtrics.com/SE/?SID=SV_73Qn1UrCoksHu4t)) and read the informed consent. Additional instructions about completing the survey and receiving extra credit can also be found by clicking on the link. Should you have any questions about the research project or survey, you may contact me at [Alicia\\_Duval@baylor.edu](mailto:Alicia_Duval@baylor.edu).

Thank you,  
Alicia Duval  
MPH candidate  
Principal Investigator”

## APPENDIX C

### Sample Informed Consent

#### INFORMED CONSENT FORM

Baylor University  
**Health, Human Performance and Recreation**

#### Consent Form for Research

PROTOCOL TITLE: **“Evaluating the Risk Factors of Dating Violence among Undergraduates Attending a Faith-Based University”**

PRINCIPAL INVESTIGATOR: Alicia Duval  
FACULTY SUPERVISOR Beth Lanning

SUPPORTED BY: **Baylor University**

#### **Introduction**

Please read this form carefully. The purpose of this form is to provide you with important information about taking part in a research study. If any of the statements or words in this form are unclear, please let us know. We would be happy to answer any questions. You have the right to discuss this study with another person who is not part of the research team before making your decision whether or not to be in the study.

Taking part in this research study is up to you. If you decide to take part in this research study we will ask you to sign this form.

The principal investigator of the study is Alicia Duval. Dr. Beth Lanning, PhD, MCHES is the supervising faculty advisor. We will refer to Alicia Duval as the “researcher” throughout this form.

#### **Why is this study being done?**

The purpose of this study is to clarify and explore the risk factors of dating violence among college students attending a private, faith-based university. We want to explore how the contexts of college dating relationships contribute to perceptions of dating violence on a college campus. The information collected from this study will be used to help create an environment that promotes safe and healthy relationships among college students.

We are asking you to take part in this study because you are between the ages of 18 and 25 years, enrolled at a faith-based institution of higher education, and currently an undergraduate college student.

About a total of 500 subjects will take part in this research study.

### **How long will I take part in this research study?**

We are asking you to complete a one-time only survey. It will be distributed online using survey software. The survey should only take ~15-20 minutes to complete. If you are unable to complete the survey online, you may request a paper survey from the administrative assistant in the HHPR main office located in Marrs McLean Gym.

### **What will happen if I take part in this research study?**

- You will be provided with information about this study before starting the survey. It will include all of the information of this form and provide brief instructions for completing the survey.
- You will be asked if you consent to all of the information of this form. If you consent to participating in this study, you will be asked to click the “I Agree” box.
  - If you choose to take the survey in-person, using a paper survey, your answers will be entered into an Excel worksheet by the researcher on a password-protected computer. Upon the electronic conversion of your data, your paper survey will be stored in a locked filing cabinet in MMGYM until it can be destroyed.
- Participation is voluntary. If you decide to withdraw from the study before responding to at least 50% of the questions, your answers will not be used in the final data analysis of the project. If you answer more than 50% of the questions then your responses will be saved and included in the final analysis. You will not be penalized for withdrawing from the study. Data will be accessed only by the researchers on a password-protected computer. Data will be stored electronically on an online survey generating program that can only be accessed by the researchers.

### **Assessment**

The survey will take about 15-20 minutes to complete, at most. You will receive an Email containing a hyperlink to the online survey. Upon clicking the link, you will be asked to do the following:

- Read the consent form and agree to participation in this study.
- Complete a survey that will take about 15-20 minutes to complete, at most.
  - Survey will ask about your background information, your religious affiliations, family of origin, alcohol use, attitudes toward sexual violence, and dating and sexual experiences.

- Your answers will be completely anonymous. There will be no way for the researcher to identify who you are by the answers you provide.

### **What are the risks of taking part in this research study?**

Possible risks completing the survey include psychological stress, possibility of embarrassment, loss of confidentiality, and loss of time. Some of the questions will relate to activities that may be criminal and/or violate the Baylor Student Conduct Code. However, the survey is anonymous (IP address will not be collected) and therefore there is no risk of arrest, prosecution, or expulsion. You may feel stress or embarrassment answering personal questions regarding relationships and dating violence. You may stop answering the survey if necessary. Additionally, you may choose to end the survey or take a break at any time during the process. The Baylor counseling center is available should you become uncomfortable answering the questions or need additional counseling.

**Counseling services are available through Baylor University Counseling Center at the McLane Student Life Center, 2<sup>nd</sup> floor. Appointments may be made by calling (254) 710.2467. You may also contact the Title IX Office at 254-710-8454 or through the web at <http://baylor.edu/titleIX/> which allows for online reporting and anonymous reporting.**

The survey is anonymous and no IP address will be collected. Further, the loss of confidentiality will be protected to the extent that is allowed by law. There is always a potential risk of loss of confidentiality in all email, downloading and internet transactions. Only the researchers will have access to the survey data. The data will be destroyed within 5 years after the study is finished.

There may be other risks associated with this research project that are unknown to the researchers. If we learn about other risks, you will be notified know so that you can decide whether or not you want to continue to participate in the study.

### **Are there any benefits from being in this research study?**

While there are no benefits to you personally from taking part in this study, others may benefit in the future from the information learned as part of the study.

### **What alternatives are available?**

You may choose not to take part in this research study. If your professor is providing extra credit for participation in this survey, he/she will also have an alternative assignment you can complete for the extra credit.

### **Storing Study Information for Future Use**



We would like to store your study information for future research related to dating violence among college students. The data will be stored on a password-protected computer that is only accessible by the researcher. Study data will be stored the Department of Health, Human Performance and Recreation.

Future use of study information is required for this study. If you do not want your information to be used for future research, you should not participate in this study.

### **How Will You Keep My Study Records Anonymous?**

We will keep the records of this study confidential by:

- Setting up the Qualtrics survey as anonymous and not collecting IP addresses.
- Not asking for any information that would connect you identity to your answers.
- Not asking for your name at any point during the study.
- Using survey software that has an effective privacy policy. You can read more about the program's privacy policy here: <https://www.qualtrics.com/privacy-statement/>

Data from this study may be used for teaching, publications, or presentations at professional meetings. All data obtained will be aggregated and identifiable information removed before dissemination.

### **Study Participation and Early Withdrawal**

Taking part in this study is your choice. You are free not to take part or to withdraw at any time for any reason. No matter what you decide, there will be no penalty or loss of benefit to which you are entitled. If you decide to withdraw from this study, the information that you have already provided will be kept confidential. You cannot withdraw information collected prior to your withdrawal.

You may choose not to be in the study or to stop being in the study before it is over at any time. This will not affect your class standing or your grades at Baylor University. You will not be offered or receive any special consideration if you take part in this research study.

The researcher may take you out of this study without your permission. This may happen because:

- The information you provided is incomplete
- The researcher thinks it is in your best interest
- Other administrative reasons

### **Will I get paid for taking part in this research study?**

You will not be paid for taking part in this study, but your professor may be offering extra credit for participation. Please ask your professor about this opportunity.

### **What will it cost me to take part in this research study?**

There are no costs to you for taking part in this research study.

### **What if I have any questions or concerns about this research study?**

You can call us with any concerns or questions about the research. Our telephone numbers are listed below:

- Alicia Duval, Baylor University
  - [Alicia\\_Duval@baylor.edu](mailto:Alicia_Duval@baylor.edu)
  - 949-702-5788
  - Available Monday-Friday, 8am-5pm
- Dr. Beth Lanning, Baylor University
  - [Beth\\_Lanning@baylor.edu](mailto:Beth_Lanning@baylor.edu)
  - 254-710-4027
  - Available Monday-Friday, 8am-5pm

If you want to speak with someone **not** directly involved in this research study, you may contact the Baylor University IRB through the Office of the Vice Provost for Research at 254-710-1438. You can talk to them about:

- Your rights as a research subject
- Your concerns about the research
- A complaint about the research

### **Statement of Consent**

#### **SIGNATURE OF SUBJECT:**

I have read the information in this consent form including risks and possible benefits. I have been given the chance to ask questions. My questions have been answered to my satisfaction, and I agree to participate in the study. By clicking “I Agree” you are providing consent to be in the study.

I agree

## APPENDIX D

### Copy of Online Survey

Note: This instrument will be distributed online using Qualtrics. This is the formatting for the paper version. The instrument has been copied and pasted to this document. The actual survey is larger in font and does not split questions in half at page breaks.

Thank you so much for participating in this study! This study will help me understand more about relationships on Baylor's campus. There are four parts to this survey. Please answer every question in all four parts, and answer as honestly as possible. **All of the information you provide will remain anonymous.**

**Part 1: Background Information.** In this section, please answer each question about yourself. .

Your information will be kept strictly anonymous.

1. How old are you? Answer in years. \_\_\_\_\_
2. What is your gender?
  - a. Male
  - b. Female
  - c. Other, please specify \_\_\_\_\_
  - d. I would prefer not to answer
3. What is your classification? Please select one.
  - a. Freshman
  - b. Sophomore
  - c. Junior
  - d. Senior
  - e. Graduate Student
  - f. Seminary Student
  - g. Law Student
4. How would you describe your race/ethnicity? Please select one.
  - a. White Non-Hispanic
  - b. Black Non-Hispanic
  - c. Hispanic or Latino
  - d. Asian or Pacific Islander
  - e. Native American or Alaskan Native or Native Hawaiian
  - f. Biracial or Multiracial

g. Other, please specify

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h. I would prefer not to answer.

5. Please indicate your family's household income.
- a. Less than \$10,000
  - b. \$10,000 to \$19,000
  - c. \$20,000 to \$29,999
  - d. \$30,000 to \$39,000
  - e. \$40,000 to \$49,000
  - f. \$50,000 to \$59,000
  - g. \$60,000 to \$69,000
  - h. \$70,000 to \$79,000
  - i. \$80,000 to \$89,000
  - j. \$90,000 to \$99,000
  - k. \$100,00 to \$149,000
  - l. \$150,000 or more
6. Are you a member of a fraternity or sorority on campus?
- a. No
  - b. Yes
  - c. No longer affiliated
7. Are you a student-athlete?
- a. No
  - b. Yes
    - i. Please specify sport: \_\_\_\_\_
8. When you are not in school, where is home? Please write the name of the state or country: \_\_\_\_\_
9. How would you describe your parent's relationship?
- a. Married
  - b. Separated
  - c. Divorced
  - d. Other, please specify \_\_\_\_\_
  - e. I would prefer not to answer
10. If your parents are divorced, how old were you when they divorced? \_\_\_\_\_
11. Have you ever witnessed your father physically abuse his spouse?
- a. No
  - b. Yes
  - c. I don't know
  - d. I would prefer not to answer
12. Have you ever witnessed your mother physically abuse her spouse?
- a. No

- b. Yes
  - c. I don't know
  - d. I would prefer not to answer
13. Was religion an important part of your up-bringing?
- a. No
  - b. Yes
14. How important is religion in your life today?
- a. Very
  - b. Fairly
  - c. Not very
15. What is your religious affiliation? (Please be specific)
- 

**Part II. Alcohol Use**

For each question in the chart below, place an X in one box that best describes your answer. Your answers will remain anonymous, so please be honest.

NOTE: In the U.S., a single drink serving contains about 14 grams of ethanol or "pure" alcohol. Although the drinks below are different sizes, each one contains the same amount of pure alcohol and counts as a single drink:

**12 oz. of beer** (about 5% alcohol) = **8-9 oz. of malt liquor** (about 7% alcohol) = **5 oz. of wine** (about 12% alcohol) = **1.5 oz. of hard liquor** (about 40% alcohol)

1. How often do you have a drink containing alcohol?	Never	Monthly or less	2 to 4 times a month	2 to 3 times a week	4 or more times a week
2. How many drinks containing alcohol do you have on a typical day when you are drinking?	1 or 2	3 or 4	5 or 6	7 to 9	10 or more
3. How often do you have 5 or more drinks on one occasion?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily
4. How often during the last year have you found that you were not able to stop drinking once you had started?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily

5. How often during the last year have you failed to do what was normally expected of you because of drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily
6. How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily
7. How often during the last year have you had a feeling of guilt or remorse after drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily
8. How often during the last year have you been unable to remember what happened the night before because of your drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily
9. Have you or someone else been injured because of your drinking?	No		Yes, but not in the last year		Yes, during the last year
10. Has a relative, friend, doctor, or other health care worker been concerned about your drinking or suggested you cut down?	No		Yes, but not in the last year		Yes, during the last year

### Part III: Attitudes

Please indicate your level of agreement with each of the statements below by circling the corresponding number. There is no right or wrong answer, only opinions. Your answers are completely anonymous.

1=Strongly Agree

2=Moderately Agree

3=Neutral; Neither Agree nor Disagree

4=Moderately Disagree

5=Strongly Disagree

1. If a girl is raped while she is drunk, she is at least somewhat responsible for letting things get out of hand.  
1 2 3 4 5
2. When girls go to parties wearing slutty clothes, they are asking for trouble.  
1 2 3 4 5
3. If a girl goes to a room alone with a guy at a party, it is her own fault if she is raped.  
1 2 3 4 5
4. If a girl acts like a slut, eventually she is going to get into trouble.  
1 2 3 4 5
5. When girls get raped, it's often because the way they said "no" was unclear.  
1 2 3 4 5
6. If a girl initiates kissing or hooking up, she should not be surprised if a guy assumes she wants to have sex.  
1 2 3 4 5
7. When guys rape, it is usually because of their strong desire for sex.  
1 2 3 4 5
8. Guys don't usually intend to force sex on a girl, but sometimes they get too sexually carried away.  
1 2 3 4 5
9. Rape happens when a guy's sex drive goes out of control.  
1 2 3 4 5
10. If a guy is drunk, he might rape someone unintentionally.  
1 2 3 4 5
11. It shouldn't be considered rape if a guy is drunk and didn't realize what he was doing.  
1 2 3 4 5
12. If both people are drunk, it can't be rape.  
1 2 3 4 5
13. If a girl doesn't physically resist sex—even if protesting verbally—it can't be considered rape.  
1 2 3 4 5
14. If a girl doesn't physically fight back, you can't really say it was rape.  
1 2 3 4 5
15. A rape probably doesn't happen if a girl doesn't have any bruises or marks.  
1 2 3 4 5

16. If the accused “rapist” doesn’t have a weapon, you really can’t call it rape.  
 1 2 3 4 5
17. If a girl doesn’t say “no” she can’t claim rape.  
 1 2 3 4 5
18. A lot of times, girls who say they were raped agreed to have sex and then regret it.  
 1 2 3 4 5
19. Rape accusations are often used as a way of getting back at guys.  
 1 2 3 4 5
20. A lot of times, girls who say they were raped often led the guy on and then had regrets.  
 1 2 3 4 5
21. A lot of times, girls who claim they were raped have emotional problems.  
 1 2 3 4 5
22. Girls who are caught cheating on their boyfriends sometimes claim it was rape.  
 1 2 3 4 5

**Part IV: Dating and Sexual Experiences**

The following questions concern dating and sexual experiences. We know these are personal questions, so we do not ask your name or other identifying information. Your information is completely anonymous. We hope this helps you to feel comfortable answering each question honestly. Place a check mark in the box indicating the frequency of each experience.

**\*In this situation, a hookup is defined as “a mutually entered sexual encounter between two people that can range from kissing to sexual intercourse with or without the potential for future commitment.”**

Hook-Up* Scenario	Frequency			
	Never	Less than Monthly	Monthly	Weekly
I have engaged in a hookup with someone whom I had not met before.				
I have engaged in a hookup with a person I consider an acquaintance, but not a friend.				
I have engaged in a one-time hookup with a friend.				
I have engaged in a hookup with a friend with whom I have hooked up more than once.				
I have engaged in a hookup with someone with whom I was previously in a romantic relationship				



What percent of students would you say hookup at Baylor University (0-100%)?  
\_\_\_\_\_ %

1. Have you ever been physically abused by an intimate partner?
  - a. No
  - b. Yes
  - c. I don't know
  - d. I would prefer not to answer
  
2. Have you ever physically abused an intimate partner?
  - a. No
  - b. Yes
  - c. I don't know
  - d. I would prefer not to answer
  
3. Have you ever been emotionally/verbally abused by an intimate partner?
  - a. No
  - b. Yes
  - c. I don't know
  - d. I would prefer not to answer
  
4. Have you ever emotionally/verbally abused an intimate partner?
  - a. No
  - b. Yes
  - c. I don't know
  - d. I would prefer not to answer
  
5. Since the age of 18, have you ever been a victim of sexual assault, attempted rape, or completed rape?
  - a. No
  - b. Yes
  - c. I don't know
  - d. I would prefer not to answer
  
6. If you answered "Yes" to #3, please specify your relationship to the perpetrator?
  - a. Stranger
  - b. Acquaintance
  - c. Friend
  - d. Boyfriend/Girlfriend
  - e. Husband/Wife
  - f. Relative
  - g. I would prefer not to answer
  - h. I have never been a victim of attempted rape or completed rape

7. Since the age of 18, have you ever been a perpetrator of sexual assault, attempted rape, or completed rape?
  - a. No
  - b. Yes
  - c. I don't know
  - d. I would prefer not to answer
  
8. If you answered "Yes" to #5, please specify your relationship to the victim.
  - a. Stranger
  - b. Acquaintance
  - c. Friend
  - d. Boyfriend/Girlfriend
  - e. Husband/Wife
  - f. Relative
  - g. I would prefer not to answer
  - h. I have never been a perpetrator of attempted rape or completed rape
  
9. Have you ever participated in Title IX It's on Us BU Prevention & Awareness Training?
  - a. No
  - b. Yes
  - c. I do not know

**Counseling services are available through Baylor University Counseling Center at the McLane Student Life Center, 2<sup>nd</sup> floor. Appointments may be made by calling (254) 710.2467. You may also contact the Title IX Office at 254-710-8454 or through the web at <http://baylor.edu/titleIX/> which allows for online reporting and anonymous reporting.**

**You have completed the survey. Thank you for your participation!**

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