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## Event-Specific and Individual Factors Impacting College Student' Decisions to Intervene During a Potentially Risky Scenario: A Vignette Study

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## ABSTRACT

### EVENT- SPECIFIC AND INDIVIDUAL FACTORS IMPACTING COLLEGE STUDENTS' DECISIONS TO INTERVENE DURING A POTENTIALLY RISKY SCENARIO: A VIGNETTE STUDY

By

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AUGUST 5<sup>th</sup>, 2019

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Sexual victimization on college campuses is a widespread issue in the United States. Institutions of higher education have attempted to address the issue of sexual violence through various prevention programs, including bystander intervention initiatives. Unfortunately, much of the extant literature on bystander intervention has focused on the relationship between bystander characteristics, group size, group membership, and willingness to intervene. Little is known about how situational characteristics (e.g., victim and offender characteristics) affect a bystander's likelihood of intervening during sexual violence. It is imperative to understand and investigate the potential impact of incident-specific factors as these variables have the potential to influence the effectiveness of bystander intervention programs because some of these characteristics may be more influential in promoting helping behaviors than others. Using data from a single university located in a large Southern metropolitan city, the present study investigates the impact of location, same sex versus opposite sex dyads for victim and offender, and perceptions of alcohol use on self-reported probability of intervention in an ambiguous sexual scenario. Limitations and policy implications are discussed.

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STUDENTS' DECISIONS TO INTERVENE DURING A POTENTIALLY RISKY  
SCENARIO: A VIGNETTE STUDY

BY

CHRISTINA YONG HOFFMAN

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of  
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in the  
Andrew Young School of Policy Studies  
of  
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## ACCEPTANCE

This dissertation was prepared under the direction of the candidate's Dissertation Committee. It has been approved and accepted by all members of that committee, and it has been accepted in partial fulfillment of the requirements for the degree of Doctor in Philosophy in Criminal Justice and Criminology in the Andrew Young School of Policy Studies of Georgia State University.

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## **DEDICATION**

This dissertation is dedicated to all survivors of sexual violence.

“But still, like air, I’ll rise.”

-Maya Angelou

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**TABLE OF CONTENTS**

DEDICATION ..... IV

ACKNOWLEDGEMENTS ..... V

LIST OF TABLES ..... VIII

LIST OF FIGURES ..... IX

LIST OF ABBREVIATIONS ..... X

1 INTRODUCTION ..... 1

2 SEXUAL VIOLENCE AGAINST COLLEGE WOMEN..... 5

    2.1 The Extent of Sexual Victimization ..... 6

        2.1.1 *Sexual victimization and college students* ..... 7

    2.2 Risk Factors for Sexual Victimization ..... 10

3 SEXUAL ASSAULT PREVENTION AND RISK REDUCTION PROGRAMS .... 16

    3.1 The Bystander Effect ..... 18

    3.2 College Bystander Intervention Programs ..... 20

    3.3 Evaluations of Bystander Intervention Programs ..... 23

    3.4 Event-Specific Variables that May Impact Bystander Involvement ..... 28

        3.4.1 *Bystander intervention & victim/offender sex* ..... 28

        3.4.2 *Bystander intervention & victim/offender race* ..... 29

        3.4.3 *Bystander intervention & the victim-offender relationship* ..... 31

        3.4.4 *Bystander intervention & the bystander-victim-offender relationship*  
..... 31

        3.4.5 *Bystander intervention & alcohol use* ..... 33

        3.4.6 *Bystander intervention & the perception of danger* ..... 34

3.5 Bystander-Specific Characteristics that May Impact Decisions to Intervene ...	35
4 METHODOLOGY .....	39
4.1 Sample and Data Collection .....	39
4.2 Research Design .....	43
4.3 Hypotheses .....	45
4.4 Measures .....	46
4.4.1 <i>Vignette</i> .....	46
4.4.2 <i>Bystander intervention</i> .....	48
4.4.3 <i>Control variables</i> .....	48
4.5 Analytical Plan .....	51
5 RESULTS .....	52
5.1 Summary of Findings .....	74
6 DISCUSSION .....	77
6.1 Conclusion .....	95
APPENDICES .....	96
Appendix A .....	96
REFERENCES .....	107
VITA .....	127

## LIST OF TABLES

Table 4.1 Descriptive Statistics of the Sample .....	42
Table 4.2 Reliability Analyses .....	51
Table 5.1 Bivariate Analysis for Probability of Calling the Police .....	53
Table 5.2 Pearson Correlations for Probability of Calling the Police .....	54
Table 5.3 Bivariate Analysis for Probability of Saying Something .....	56
Table 5.4 Pearson Correlations for Probability of Saying Something .....	57
Table 5.5 Bivariate Analysis for Probability of Doing Something .....	59
Table 5.6 Pearson Correlations for Probability of Doing Something .....	60
Table 5.7 OLS Regression Analyses .....	66
Table 5.8 OLS Regression Analyses with Interactions .....	70

## LIST OF FIGURES

Figure 5.1 Sex by Location .....	72
Figure 5.2 Sex by Sexual Orientation .....	73
Figure 5.3 Sex by Homophobia .....	74

## **LIST OF ABBREVIATIONS**

AAU --- Association of American Universities

ANOVA --- analysis of variance

CPR --- cardiopulmonary resuscitation

IHE --- institution of higher education

LGBT --- lesbian, gay, bisexual, and transgender

NCVS --- National Crime Victimization Survey

NCWSV --- National College Women Sexual Victimization study

NISVS --- National Intimate Partner and Sexual Violence Survey

OLS --- Ordinary Least Squares

POLs --- Peer Opinion Leaders

VIF --- Variance Inflation Factor

## 1 INTRODUCTION

University administrators attempt to maintain an image of a pristine “ivory tower” – a safe place for scholarly minds to achieve higher education. Unfortunately, this image often runs counter to reality. In 1987, Koss and colleagues published a landmark study that drew attention to the prevalence of sexual assault on college campuses. Alarming, from her work and other work that followed, it was determined an estimated 20 to 25% of females attending college are victims of rape or attempted rape during their college careers (Hines, Armstrong, Reed, & Cameron, 2012; Karjane, Fisher, & Cullen, 2002). A national report funded by the National Institute of Justice and Bureau of Justice Statistics concluded that approximately 28 out of 1,000 college women are raped each year (Fisher, Cullen, & Turner, 2000). Furthermore, a recent report published by the Association of American Universities (AAU) based off a survey of twenty-seven institutions of higher education showed that rates of undergraduate female students reporting nonconsensual sexual contact involving force or incapacitation ranged from 13 to 30% (Cantor et al., 2015). Moving beyond general prevalence estimates, the victimization of other vulnerable populations, specifically gender and sexual minorities, has been highlighted in multiple reports (Cantor et al., 2015; Hill & Silva, 2005). Considering this body of research together, it is clear that sexual victimization on college campuses is commonly occurring.

Prevalence rates seem to be fairly consistent across studies and time; however, recently sexual assault on college campuses has received increased attention, especially in the media. Publicized incidents of campus sexual violence have the potential to affect prospective students’ decisions to apply to and attend certain universities (Janosik &

Gehring, 2003). Commentary about campus crime and campus safety issues has been extensive not only in the popular press, but in the legal and higher-education arenas as well (Gregory & Janosik, 2002). Colleges and universities have a moral and legal obligation to support survivors of sexual violence and prevent sexual victimization against students. Various Congressional mandates have been enacted or amended in an effort to combat campus violence and sexual assault (e.g., the Violence Against Women Act of 1994 (42 U.S.C. 13925(a)), the Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act and the Campus Sexual Violence Elimination act (20 U.S.C. § 1092(f)), the 1992 Campus Sexual Assault Victims' Bill of Rights (Pub. L. No. 102-325, § 486(c)), and Title IX of the Education Amendments of 1972 (20 U.S.C. § 1681)). In addition to government legislation (and sometimes in response to it), institutions of higher education have attempted to address the issue of sexual violence through various prevention programs, including bystander intervention initiatives (Banyard, Plante, Moynihan, 2005; Coker et al., 2014; Foubert, Newberry, & Tatum, 2007; Gidycz, Orchowski, & Berkowitz, 2011; Miller et al., 2012; Salazar, Vivolo-Kantor, Hardin, & Berkowitz, 2014).

Stemming from the work of Latané and Darley (1970), bystander intervention curricula teach safe and appropriate methods of interrupting potentially dangerous situations (Banyard, Moynihan, & Plante, 2007; Coker et al., 2015). This approach is especially beneficial for the college student population for two reasons. First, bystanders are frequently present during the pre-assault phase (Burn, 2009; Cantor et al., 2015). Second, research suggests that college students are unrealistically optimistic and underestimate their personal chances of experiencing negative life events, such as

victimization (Cantor et al., 2015; Weinstein, 1980); therefore, peers may be better suited to identify potentially dangerous situations. Evaluations of currently utilized bystander intervention programs indicate positive attitudinal (e.g., lower rape myth acceptance) and behavioral (e.g., increased self-reported bystander behaviors) changes (Banyard et al., 2005; Gidycz, Orchowski, Berkowitz, 2011). Most importantly, there is also evidence that bystander intervention initiatives decrease violent victimization and perpetration rates (Coker et al., 2016).

Unfortunately, much of the extant literature on bystander intervention and college sexual assault has focused on the relationship between bystander characteristics and willingness to intervene. Little is known about how event-specific characteristics (e.g., victim and offender characteristics) affect a bystander's likelihood of intervening during sexual violence. It is imperative to understand and investigate the potential impact of event-specific factors as these variables have the potential to influence the effectiveness of bystander intervention programs. Further, some event-specific characteristics may be more influential in promoting helping behaviors than others. Presently, it is also unknown if or how the context of the situation may matter. The current study attempts to address this void in the literature.

Chapter Two presents an in-depth review of the sexual victimization literature, more generally, as well as the rise of college students as a population of interest. Chapter Two defines the various behaviors that fall on the sexual victimization continuum and provides information regarding prevalence rates and risk factors for sexual violence. Chapter Three highlights early research on the bystander effect (Latané & Darley, 1970) and the progression from rape awareness campaigns to the use of bystander intervention

programs on college campuses. Comprehensive descriptions of currently utilized bystander intervention initiatives are provided, as well as the results of multiple evaluations. Chapter Three concludes with a review of prior studies examining how a variety of event-specific characteristics can motivate or hinder a bystander's decision to help. Chapter Four outlines the research design and methodology for the current research endeavor. The complete survey used in data collection is attached as Appendix A. Chapter Five presents the results of the present study. Finally, Chapter Six offers an in-depth discussion of the findings, limitations, and policy implications stemming from this study.

## 2 SEXUAL VIOLENCE AGAINST COLLEGE WOMEN

Rape and sexual assault emerged as a major sociopolitical concern during the 1970s with the assistance of the women's rights movement (Donat & D'Emilio, 1992; Finkelhor, 1982). Over decades of research, social scientists have widely recognized that sexual assault occurs on a continuum; therefore, it is important that measures of sexual victimization include, but separate, a wide range of offenses and behaviors (Belknap & Erez, 1995; Belknap, Fisher, & Cullen, 1999; Cook, Gidycz, Koss, & Murphy, 2011; DeKeseredy, 1995; DeKeseredy & Kelly, 1993; Fitzgerald et al., 1988; Koss, Leonard, Beezley, & Oros, 1985; Leidig, 1992). To illustrate, DeKeseredy (1995) advocates for the separation of different types of sexual victimization to better inform prevention strategies and policy, as well as to give respondents additional opportunities to disclose victimization. In an effort to procure the most accurate estimates, the operationalization of rape and other forms of sexual violence has evolved (Cook et al., 2011; Fisher & Cullen, 2000).

The study of sexual violence has progressed from the stereotypical stranger rape scenario (Estrich, 1987) to encompass a continuum of sexually violent behaviors. For example, Koss and colleagues (1988) were among the first to raise awareness regarding the differences between stranger and acquaintance rape. Relatedly, other researchers have progressed the discipline by differentiating between forcible, incapacitated, and drug-facilitated rape (Kilpatrick, Resnick, Rugiero, Consoscenti, & McCauley, 2007).

Stemming from the works of previous researchers (Belknap et al., 1999; Fisher, Cullen, Turner, 2000; Kilpatrick et al., 2007; Koss, Gidycz, & Wisniewski, 1987; Tjaden & Thoennes, 1998), *forcible rape* is operationalized as unwanted penetration by force or

threat of force. Penetration includes penile-vaginal, penile-anal, digital-vaginal, digital-anal, object-vaginal, object-anal, mouth on genitals, and mouth on someone else's genitals (Fisher & Cullen, 2000). *Drug-facilitated rape* refers to unwanted penetration that involves drugs or alcohol given to the victim by the perpetrator without the victim's knowledge or consent, while *incapacitated rape* is defined as unwanted penetration that occurs after the victim voluntarily consumes alcohol and/or drugs but is too intoxicated or high to provide consent (Kilpatrick et al., 2007; Lawyer, Resnick, Bakanic, Burkett, & Kilpatrick, 2010). *Sexual assault* or *unwanted sexual contact* is operationalized as unwanted or uninvited touching of a sexual nature. Behaviors can include forced kissing, grabbing, fondling, and touching of private parts either under or over clothing (Belknap et al., 1999; Fisher et al., 2000). *Sexual coercion* includes unwanted sexual intercourse or sexual contact as a result of threats of non-physical punishment (e.g., being fired from a job, lowering an academic grade, damaging reputation, social exclusion), promises of rewards (e.g., being hired or promoted, raising an academic grade, assistance with course work), or continual pestering and verbal pressure (Belknap et al., 1999; Cantor et al., 2015; Fisher et al., 2000; Koss et al., 1987).

## **2.1 The Extent of Sexual Victimization**

Research on the prevalence of sexual victimization spanning the last four decades has indicated that experiencing sexual victimization is a fairly common occurrence for American females in the general population (Kilpatrick, Edmunds, & Seymour, 1992; Kilpatrick et al., 2007; Russell, 1982), while ongoing research has begun to document the occurrence of sexual victimization in males as well (Basile, Chen, Black, & Saltzman, 2007; Breiding, Smith, Basile, Walters, Chen, & Merrick, 2014; Turchik, 2012; Weiss,

2010). Early research by Russell (1982) in which she surveyed 930 randomly selected adult females in San Francisco, found that 41% of women reported at least one completed or attempted rape in their lifetime that followed the legal definition of forcible rape in the state of California. Using a very conservative definition of rape<sup>1</sup>, the National Women's Study revealed that 13% of the 4,008 women surveyed reported experiencing at least one completed forcible rape in their lifetimes, with 0.7% reporting a completed rape victimization within the past year (Kilpatrick et al., 1992). This national report also uncovered the frequency of revictimization. In fact, 39% of victims indicated they had been raped more than once in their lifetimes (Kilpatrick et al., 1992). Efforts have been made to measure the extent of other forms of sexual victimization in the general population as well. Estimates from the National Intimate Partner and Sexual Violence Survey (NISVS) indicate that 12.5% of women and 5.8% of men experienced sexual coercion at some point in their life. Further, approximately one in four women (27.3%) and one in ten men (10.8%) had experienced unwanted sexual contact in their lifetimes (Breiding et al., 2014).

*2.1.1 Sexual victimization and college students.* Although various researchers have sampled the general population, several studies have utilized samples confined to college women that have produced similar results (Cantor et al., 2015; Fisher, Cullen, & Turner, 2000; Koss, Gidycz, & Wisniewski, 1987; Koss & Oros, 1980; Krebs et al., 2016; Krebs, Lindquist, Warner, Fisher, & Martin, 2007). Koss and colleagues (1987) conducted a nationally-representative study using a sample of college students enrolled in

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<sup>1</sup> Rape was defined as "an event that occurred without the woman's consent, involved the use of force or threat of force, and involved sexual penetration of the victim's vagina, mouth or rectum" (Kilpatrick et al., 1992).

thirty-two colleges and universities. Their findings indicated that 27.5% of the 3,187 women surveyed had experienced a completed or attempted rape since the age of 14, with a prevalence rate of 8.3% within the previous six months (Koss et al., 1987). This seminal piece of work is the source of the popular “1 in 4” statistic that has been widely distributed by the media. Further, Koss et al. (1987) found experiencing unwanted sexual contact or sexual coercion since the age of 14 was also quite common (14.4% and 11.9% respectively).

More recent national-level surveys investigating campus sexual violence include the National College Women Sexual Victimization (NCWSV) study conducted by Fisher and colleagues (2000) and the American Association of Universities (AAU) Climate Survey on Sexual Assault and Sexual Misconduct (Cantor et al., 2015). The NCWSV study is a large-scale research effort that collected data from a random sample of 4,446 female college students who were attending a two- or four-year college or university in the fall of 1996 (Fisher et al., 2000). With a response rate of 85.6%, results indicated that 2.5% of respondents experienced either a completed or an attempted rape during the six-month reference period (Fisher et al., 2000). Additionally, 3% of the women surveyed endured completed or attempted sexual coercion (Fisher et al., 2000). Similar to the findings from the National Women’s Study, the NCWSV study revealed that revictimization is quite common; specifically, 22.8% of rape victims experienced two or more rapes (Fisher et al., 2000).

Another national-level, multi-site research effort is the AAU Campus Climate Survey on Sexual Assault and Sexual Misconduct. The AAU study is unique in that a uniform methodology was implemented across multiple institutions of higher education

(IHEs). Twenty-seven colleges and universities participated in the AAU study, resulting in a total sample size of 779,170 undergraduate and graduate students. Although the mean response rate was 19.3%, the AAU study yielded data from a total of 150,072 participants (Cantor et al., 2015). Overall, 11.7% of students across all of the universities reported experiencing nonconsensual penetration or sexual touching by force or incapacitation since enrollment (Cantor et al., 2015). To standardize prevalence rates for the period while attending a four-year institution, estimates were calculated for seniors and indicated that 21.2% of seniors experienced either attempted or completed rape or sexual battery. Additionally, prevalence rates were provided for the 2014-2015 academic school year – 11% of undergraduate students were victims of nonconsensual sexual contact, with 4.4% of victims experiencing acts involving penetration (Cantor et al., 2015). Most notably, this national report is credited for revealing that, beyond undergraduate females, students identifying as transgender, genderqueer, non-conforming, questioning, or as something not listed on the survey are the most vulnerable student subpopulation and at the highest risk for experiencing campus sexual violence (Cantor et al., 2015). Although estimates across studies differ slightly due to differences in samples and methodology, one point arises. Sexual violence is clearly commonly occurring among the college population in the United States.

The research focus on college women continues to present day (Rennison & Addington, 2014). There are three main reasons to use college samples. First, females between the ages of 18 to 24 (i.e., the traditional age of college students) experience higher rates of rape and sexual assault than females in any other age bracket (Koss et al., 1987; Sinozich & Langton, 2014). Second, many nationally-representative studies of

women (i.e., samples including both college and community women) “typically report lifetime rates for rape or rates from adolescence that are comparable to rates found in convenience samples often conducted with college students” (Cook, Gidycz, Koss, & Murphy, 2011, p. 204). Other studies have found that rates of sexual victimization are actually higher among women in the general public (Baum & Klaus, 2005; Merrill et al., 1998; Sinozich & Langton, 2014; Rennison & Addington, 2014), although college females may be more vulnerable to drug-facilitated or incapacitated rape (Kilpatrick et al., 2007). Third, most relevant to the current dissertation, beyond the benefits of convenience sampling, there are policy implications. Although difficult to implement within the community-at-large, prevention programming can be (and has been) federally mandated at the university-level. As a direct result of federal legislation, multiple sexual assault prevention initiatives have been implemented in institutions of higher education across the nation, including bystander intervention programs (Coker et al., 2011; Banyard et al., 2007; Foubert, Brosi, & Bannon, 2011; Foubert et al., 2007; Gidycz, Orchowski, & Berkowitz, 2011; Miller et al., 2012), which will be discussed in detail in the following chapter.

## **2.2 Risk Factors for Sexual Victimization**

In addition to thoroughly investigating the extent of sexual victimization, the current literature has highlighted general risk factors for sexual violence such as demographic variables. While males and females are similarly likely to be victims of violence generally (Morgan & Kena, 2017; Rennison, 2000), females have a higher likelihood of experiencing sexual assault and rape (Crowell & Burgess, 1996; Hines, Armstrong, Reed, & Cameron, 2012; Tjaden & Thoennes, 2006; Rennison, 2000).

Victimization is especially high among females in their late teens and early twenties (Rennison, 2000). The extant literature examining the relationship between race and sexual victimization is mixed. Many studies have found that there are no statistically significant differences between races in terms of prevalence estimates (Basile et al., 2007; Brener, McMahon, Warren, & Douglas, 1999; Finklehor, Hotaling, Lewis, & Smith, 1990). Some research indicates that American Indian/Alaskan Native women have higher lifetime rape prevalence rates (Tjaden & Thoennes, 2006) compared to other racial groups. Other studies report that non-Hispanic White women experience the highest rates of rape and sexual assault (Koss et al., 1987; Merrill et al., 1998; Moore, Nord, & Peterson, 1989); however, Gross et al. (2006), identified African American women as the most at risk for sexual violence. A national-level study conducted by Cantor and colleagues (2015) concluded that, for most forms of sexual victimization, Asian students were least likely to report being a victim, while no other discernable differences existed between the other racial groups. Additional research is needed to clarify the role race plays as a risk factor for sexual violence.

Above and beyond demographic characteristics, victims often have lifestyles that involve high risk behaviors and situations that enhance their vulnerability and present them as attractive targets for crime (Cohen & Felson, 1979; Henson, Wilcox, Reynolds, & Cullen, 2010). Routine activities theory, proposed by Cohen and Felson (1979), is an opportunistic model of crime victimization and posits that crime occurs where there is a convergence in time and space of three key elements: (1) motivated offenders, (2) suitable targets, and (3) the absence of capable guardians in preventing a predatory violation. A potential victim's daily or routine activities increase or decrease their risk of

victimization by affecting the probability that the three elements will occur at the same place and time (Cohen & Felson, 1979; Fisher, Sloan, Cullen, & Lu, 1998; Meier & Miethe, 1993). Consistent with routine activities theory, lifestyle-exposure theory (Hindelang, Gottfredson, & Garofalo, 1978) discusses how an individual's lifestyle affects their exposure to victimization risk. Most importantly, Hindelang et al. (1978) argue that the likelihood and frequency of motivated offenders, suitable targets, and the absence of capable guardians convening is higher for some groups than for others (i.e., young, African-American males). Central to lifestyle-exposure theory is the argument that demographic and socioeconomic characteristics affect available lifestyle choices, such as where an individual lives or with whom they associate (Hindelang et al., 1978). Both routine activities theory and lifestyle-exposure theory share similar assumptions and, since it is often difficult to distinguish between the two, studies generally use a combination of both theories (see Choi, 2008; Fisher et al., 1998; Holtfreter, Reisig, & Pratt, 2008).

Life on a college campus is conducive to victimization in many ways. Many college students arrive on campus with a newfound sense of freedom, making decisions for themselves for the first time with limited adult supervision. Class schedules often make their routines predictable; thus, it may not be difficult for would-be offenders to know if a student's dorm room is unattended or where on campus a certain individual might be. Additionally, research shows that brain maturation and the development of executive cognitive functioning extends into the mid-20s (De Luca et al. 2003); therefore, this population may struggle with impulse control, response inhibition, and sensation seeking (Johnson, Blum, & Giedd, 2009). Moreover, an excess of unstructured time

combined with a culture centered on partying creates an environment where college students are at risk for victimization. The settings in which victims and offenders come in contact with one another are often centered on activities involving the “recreational pursuit of fun” (Mustaine & Tewksbury, 2000, p. 343). On college campuses, these activities often involve the use of alcohol and drugs. Indeed, binge drinking and experimentation with illicit drug use are often perceived as normative behaviors in college social situations (Martens et al., 2006; Shinew & Parry, 2005).

When sexual assault occurs, alcohol and/or drug use are usually involved (Abbey, 2002; Abbey, Ross, McDuffie, & McAuslan, 1996; Fisher, Daigle, Cullen, & Turner, 2003). In fact, more often than not, both the offender and victim had been consuming alcohol at the time of the sexual assault, with estimates of alcohol involvement ranging from 66 to 74% for the perpetrator and 55 to 70% for the victim (Hines et al., 2012; Jackson, Gilliland, & Veneziano, 2006). Drug use also elevates risk for sexual victimization. For example, marijuana use in the past thirty days approximately doubles the odds of becoming a victim of attempted or completed rape (Champion, Foley, Durant, Hensberry, Altman, & Wolfson, 2004). Additionally, Raghavan and colleagues (2004) identified that the likelihood of sexual victimization is significantly elevated for individuals who use cocaine. In fact, cocaine use during the preceding month increased the odds of sexual victimization by 370% (Raghavan, Bogart, Elliott, Vestal, & Schuster, 2004). Drinking and drug use increase exposure to potential offenders because individuals spend more time outside of their homes by attending parties and frequenting bars (Kilpatrick, Acierno, Resnick, Saunders, & Best, 1997; Knibbe, 1998; Single & Wortley, 1993). Alcohol consumption can also decrease an individual’s personal

guardianship. Inebriation lowers the ability to protect oneself from victimization and delays the recognition of danger, leaving the individual more vulnerable (Abbey, 2002; Clodfelter, Turner, Hartman, & Kuhns, 2010; Cloitre, 1998; Franklin, Franklin, Nobles, & Kercher, 2012; Harrington & Leitenberg, 1994; Hines et al., 2012; Monks, Tomaka, Palacios, & Thompson, 2010). Therefore, sexual offenders may strategically target these individuals for victimization.

Related to alcohol and drug use, the context in which these substances are consumed is associated with victimization risk. Several studies have examined the relationship between Greek membership and alcohol behavior, indicating that students who are members of fraternities or sororities are heavier consumers of alcohol compared to their non-Greek counterparts (Barry, 2007; Eberhardt, Rice, & Smith, 2003; Sher, Bartholow, & Nanda, 2001; Tampke, 1990). Further research has documented the perpetuation of rape culture and greater rape myth acceptance by Greek organizations (Bleeker & Murnen, 2005; Boswell & Spade, 1996; Humphrey & Kahn, 2000; Jozkowski & Wiersma-Mosley, 2017; Murnen & Kohlman, 2007). In fact, Kalof (1993) found that, compared to non-sorority women, women who belong to a sorority are more likely to be forcibly raped and also have higher rates of incapacitated and drug-facilitated rape. These nonconsensual sexual experiences are typically perpetrated by a fraternity member or during fraternity functions (Copenhaver & Grauerholz, 1991). Boeringer (1996) similarly found that fraternity members are more likely to use alcohol or drugs to obtain sex by rendering women incapable of consent. Relevant to this point, women who are friends with men who get women drunk in order to have sex with them are at higher risk than other women of being sexually assaulted (Schwartz & Pitts, 1995). The same

mechanisms promoting rape culture in fraternities may also explain sexual aggression among male collegiate athletes (Boeringer, 1996; Frintner & Rubinson, 1993; McCray, 2015). As such, there may be subgroups of college students who are at higher risk for sexual violence than others. For example, individuals who are single (Belknap, 1987; Cass, 2007), have multiple sexual partners (Brener et al., 1999; Mandoki & Burkhart, 1989), or have histories of sexual abuse are more likely to be victimized (Fisher et al., 2000; Himelein, 1995; Koss & Dinero, 1989; Siegel & Williams, 2003).

Great strides have been taken to document the prevalence of sexual violence on university campuses. There is a general consensus that rape and sexual assault are commonly occurring among college populations. Further, prior researchers have thoroughly identified multiple risk factors that are predictive of sexual victimization. Now that the problem has been identified, as well as the individuals most likely to be targeted, the next step is to examine prevention efforts to curb sexually violent behaviors and promote a safe environment for higher education. The following chapter discusses the most promising form of sexual violence prevention – bystander intervention programs.

### **3 SEXUAL ASSAULT PREVENTION AND RISK REDUCTION PROGRAMS**

Providing sexual assault prevention and risk reduction programs is federally mandated at all United States colleges and universities that receive federal funding by the 2013 Campus Sexual Violence Elimination Act, an amendment to the Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act (20 U.S.C. § 1092(f)). Early methods of addressing campus sexual violence include rape awareness campaigns and educational programming. These initiatives typically involve mixed-sex workshops focused on providing information on sexual assault prevalence, debunking rape myths, discussions on sex roles and gender-stereotypical behavior, as well as practical suggestions for safe dating practices (Söchting, Fairbrother, & Koch, 2004). Rape awareness campaigns and educational programs operate under the assumption that changes in attitudes (e.g., decreases in negative attitudes towards women or rape myth acceptance) will result in changes in behaviors (e.g., a decrease in the actual incidence of sexual assault); however, this is not a finding that has been supported in the literature (Anderson & Whiston, 2005; Breitenbecher, 2000; Breitenbecher & Scarce 1999; Daigle, Fisher, & Stewart, 2009; Rozee & Koss, 2001; Söchting et al., 2004). As such, it has been recommended that prevention programs cease emphasis on attitudinal change given the absence of empirical support for such interventions (Koss & Dinero, 1989).

Recently, recommendations have been made to shift the focus of prevention efforts away from participants as potential perpetrators or victims towards highlighting the role of the participant as a bystander (Burn, 2009; DeGue et al., 2014; McMahon & Banyard, 2012). The bystander approach tackles the problem of college sexual violence in a broader community context by appealing to community members to challenge social

norms supportive of sexual assault and take an active role in interrupting potential high-risk situations (Banyard et al., 2007; Banyard, Plante, & Moynihan, 2005; Burn, 2009; Coker et al., 2011; Foubert, Newberry, & Tatum, 2007; McMahon & Banyard, 2012). This method is especially beneficial for institutions of higher learning as, among college students, bystanders are frequently present during the pre-assault phase (Burn, 2009; Cantor et al., 2015; Hoxmeier, Flay, & Acock, 2018). Additionally, National Crime Victimization Survey (NCVS) statistics from 1993 through 1999 indicate that 29% of sexual assaults or rapes occur in the presence of a third party (Planty, 2002).

Research suggests that college students are unrealistically optimistic and underestimate their personal chances of experiencing negative life events, such as victimization (Cantor et al., 2015; Weinstein, 1980); therefore, peers may be better suited to identify potentially dangerous situations. Bystander intervention approaches teach participants to take action instead of responding with apathy or tolerance (Gidycz, Orchowski, & Berkowitz, 2011; Miller et al., 2012; Salazar et al., 2014). Active learning exercises and role playing are utilized to promote prosocial bystander behaviors (Banyard et al., 2007; Gidycz et al., 2011; Lonsway et al., 2009). Different tactics to intervene are often referred to as the Four Ds: (1) direct; (2) distract; (3) delegate; and (4) delay (Coker et al., 2015). Direct tactics are when the bystander inserts themselves into a situation to stop sexual violence. Direct tactics can also include speaking out against societal norms that promote sexual violence (e.g., when someone tells an inappropriate joke or brags about sexually aggressive behavior. Distraction tactics are a way for the bystander to divert the attention of the sexual aggressor to remove the potential victim from harm. The bystander could, for example, alarm the potential assailant by saying that their car is

being towed. Delegation tactics are when two or more individuals work together to disrupt a potentially violent situation. Lastly, delay tactics are reactive tactics that are implemented after sexual violence has occurred. Delay tactics include providing emotional support and directing an individual to the available campus resources after they have disclosed their victimization (e.g., the counseling center or rape crisis hotline).

### **3.1 The Bystander Effect**

Interest in the study of bystander intervention emerged following the tragic sexual assault and murder of Kitty Genovese in 1964. The most shocking details of this heinous crime revealed that the attack occurred over the course of half an hour and that, allegedly, thirty-eight witnesses failed to intervene or call the police (Gansberg, 1964; Darley & Latané, 1968). Within the discipline of social psychology, the story of Kitty Genovese developed as an antithesis to the parable of the Good Samaritan and greatly influenced research into what is now widely known as the bystander effect (Latané & Darley, 1970). The main proposition of the bystander effect is that “the presence of other people serves to inhibit the impulse to help” (Latané & Darley, 1970, p. 38) has been illustrated in a variety of experimental conditions (see Latané & Nida, 1981). The presence of others works to diffuse responsibility, and potential blame, among all observers (Darley & Latané, 1968; Fischer et al., 2011; Latané & Darley, 1970; Latané & Nida, 1981).

According to Latané and Darley (1970), for intervention to occur, bystanders must go through a five-step cognitive and behavioral process: (1) notice something is wrong; (2) interpret the situation as an emergency; (3) develop a degree of personal responsibility; (4) believe that he or she has the necessary skills and resources to act; and (5) implement the action of choice. Latané and Darley (1970) further identified three

psychological processes that might interfere with this five-step model of intervention. The first process is diffusion of responsibility, which pertains to “the tendency to subjectively divide the personal responsibility to help by the number ( $N$ ) of bystanders” (Fischer et al., 2011, p. 518), thus reducing the psychological cost associated of nonintervention. The second process is evaluation apprehension (Fischer et al., 2011), also known as audience inhibition (Latané & Darley, 1970; Latané & Nida, 1981). This process refers to the fear of being judged by others when acting publicly; that is, bystanders run the risk of embarrassment if they misinterpret a situation as an emergency when it is not or if their intervention of choice is judged negatively by others. Therefore, social desirability may hinder a bystander’s willingness to help. Lastly, social influence (Latané & Darley, 1970; Latané & Nida, 1981), or pluralistic ignorance (Fischer et al., 2011), is the reliance on the reactions of others to define an ambiguous situation. The inaction of others can cause an individual to question their interpretation of a situation and whether or not help is required.

In support of Latané and Darley’s (1970) concept of audience inhibition, Hoxmeier and colleagues (2018) found that students who intervened were qualitatively different from non-interveners. Using a sample of 815 undergraduate college students, the researchers concluded that students who had utilized prosocial helping behaviors in the past reported greater perceived behavior control (i.e., the perceived ease or difficulty to perform an intervention tactic), as well as more supportive subjective norms (i.e., the perceived approval or disapproval from their friends) and more positive attitudes (i.e., the perceived helpfulness of performing an intervention tactic) towards intervention behaviors, compared to students who chose not to intervene (Hoxmeier et al., 2018).

Furthermore, past interveners reported a significantly greater intent to intervene in the future versus non-interveners (Hoxmeier et al., 2018).

Early research on bystander behaviors primarily focused on the impact of group size. Specifically, an increase in group size (i.e., more strangers) decreased helping behavior and the likelihood of intervention (Fischer et al., 2011; Harris & Robinson, 1973; Howard & Crano, 1974; Levine & Crowther, 2008; Rutkowski, Gruder, & Romer, 1983); however, group membership and social cohesion were found to diminish this relationship. That is, even when group size increased, bystanders were more likely to intervene when amongst a group of friends than with strangers (Darley & Latané, 1968; Levine & Crowther, 2008; Rutkowski et al., 1983). Further, victim in-group membership and status were found to be important variables in determining the likelihood of receiving aid from others (Dovidio et al., 1997; Burn, 2009; Levine, Cassidy, Brazier, & Reicher, 2002; Ridgeway & Diekema, 1989). Therefore, interpersonal similarity or friendship among bystanders and victim(s) have important implications for determining intervening behaviors. Factors that influence bystander intervention during victimization specifically are discussed later in this chapter.

### **3.2 College Bystander Intervention Programs**

The seminal theoretical work of Latané and Darley (1970) has stimulated subsequent empirical research on and development of bystander intervention initiatives. Although there are a variety of bystander intervention programs being conducted at U.S. college campuses, two are worthy of a fuller description. *Bringing in the Bystander* is a bystander intervention program that is currently being implemented across hundreds of colleges and universities in the United States and has a robust evidence-base (University

of New Hampshire, 2008). Developed at the University of New Hampshire, the *Bringing in the Bystander* curriculum is flexible and can be tailored to the specific needs of different campuses. The program can be administered in a single 90-minute session or a more comprehensive multi-session program that totals four and a half hours in length (Banyard et al., 2005; University of New Hampshire, 2008). Furthermore, the program can be customized for both single-sex and co-ed audiences, Greek-letter organizations, and collegiate athletes (Banyard et al., 2005; Moynihan, Banyard, Arnold, Eckstein, & Stapleton, 2010; 2011). *Bringing in the Bystander* aims to do the following: (1) develop skills for both direct and indirect intervention while keeping the bystander's own safety in mind; (2) increase knowledge and awareness of scope and causes of sexual violence; (3) increase a sense of responsibility for creating change in one's community and commit to playing an active role in decreasing sexual violence; and (4) increase recognition of inappropriate behavior along the continuum of sexual and relationship violence and how to respond to it safely and appropriately (University of New Hampshire, 2008).

The program is highly interactive – participants are led through various discussions and active-learning exercises by a team comprised of one male and one female peer facilitator who serve as role models (Banyard et al., 2005). Facilitators and participants discuss their own experiences with bystander responsibility (e.g., situations where they chose to intervene or not, situations when they witnessed someone else intervene, situations when someone intervened on their behalf), bringing attention to personal and event-specific factors that influence bystander helping behavior. Participants are provided with information regarding local prevalence rates of campus sexual violence to highlight that this is an issue that impacts them directly. Group members are asked to

identify various sexually violent behaviors and place them on a continuum, while also brainstorming ways to help deescalate such behaviors. Facilitators present the “pyramid of aggression as a model that demonstrates how seemingly harmless jokes, objectification, and dehumanization of a group of people contribute to acts of violence” (Banyard et al., 2005, p. 48). Finally, participants are given information regarding local resources (e.g., contact information and location of the campus rape crisis center) and are taught how to develop skills as a bystander through role-playing scenarios. Interactive exercises are used to model and teach skills regarding how to be an active bystander before, during, or after sexual violence occurs. Facilitators emphasize “understanding appropriate levels of intervention, being mindful of personal safety, and different personal options bystanders may employ depending on the nature of the situation” (Banyard et al., 2005, p. 49). After two months, participants are invited back for a thirty-minute booster session where they are reminded of key aspects of the *Bringing in the Bystander* prevention program and asked to discuss any recent opportunities they may have experienced to implement their bystander plan of action.

Another widely implemented and rigorously evaluated bystander intervention program is *Green Dot*. *Green Dot* was developed at the University of Kentucky in an effort to increase both proactive and reactive bystander behaviors and subsequently reduce sexual violence on college campuses (Coker et al., 2011; Coker et al., 2015). The *Green Dot* program is distributed in two phases. The first phase is comprised of a 50-minute motivational speech targeted towards first-year students (Coker et al., 2016; Coker et al., 2011; Coker et al., 2015). The purpose of the *Green Dot* speech is to raise awareness regarding the issue of campus sexual violence, introduce students to the

concept of active bystander behaviors, persuade students to get involved in prevention, and provide information regarding additional services and resources at the VIP Center (Coker et al., 2011; Coker et al., 2015). The second phase of the *Green Dot* program consists of four to six hours of intensive bystander training. During this phase, students attend small-group sessions where they are trained in recognizing high-risk situations and given skill-building opportunities to safely and effectively use bystander behaviors (Coker et al., 2016; Coker et al., 2015). *Green Dot* is similar in content to previous bystander intervention programs, including *Bringing in the Bystander*, with one major distinction. The intensive bystander training is voluntary and open to all students; however, the primary method of recruitment is through a Peer Opinion Leaders (POLs) strategy. Based on the diffusion of innovation theory (Rogers & Cartano, 1962), *Green Dot* selects influential peer leaders (e.g., fraternity or sorority leaders, student body leaders, captains of varsity sports teams, students earning Deans' honorary academic recognition) to encourage the spread of bystander behaviors through their social networks (Coker et al., 2015).

### **3.3 Evaluation of Bystander Intervention Programs**

Much of the extant literature on bystander intervention and college sexual assault has focused on the relationship between bystander characteristics and willingness to intervene (see Banyard et al., 2007; Coker et al., 2011; Foubert, Brosi, & Bannon, 2011; Foubert et al., 2007; Gidycz et al., 2011). A review of the literature indicates that bystander intervention initiatives are effective in producing short-term beneficial changes in attitudes, cognitions, knowledge, and behaviors (e.g., rape myth acceptance, sexual aggression, hypergender ideology) associated with sexual victimization (Anderson &

Whitson, 2005; Banyard et al., 2007; Breitenbecher, 2000; Daigle et al., 2009; Gidycz et al., 2011; Salazar et al., 2014; Vladutiu, Martin, & Macy, 2011).

Previous evaluations of the *Bringing in the Bystander* program have found that treatment participants showed significant positive changes (i.e., greater bystander efficacy, increased knowledge regarding sexual violence, increased expressed willingness to help, increased self-reported bystander behaviors, appreciation of the “pros” of being an active bystander, and lower rape myth acceptance) relative to the control group (Banyard et al., 2007; Banyard et al., 2005; Moynihan, Banyard, Cares, Potter, Williams, & Stapleton, 2015). Although self-reported bystander behaviors declined and were no longer significant at the long-term follow-ups (i.e., four and twelve months post-intervention), there were persistent effects for efficacy, knowledge, and attitudes (Banyard et al., 2007). Some evaluations concluded that the program was found to be beneficial for both male and female participants (Banyard et al., 2007; Banyard et al., 2005), while others have found that women had a greater willingness to intervene and reported more intervention behaviors than men (Moynihan et al., 2015).

The *Community Programming Initiative*, a male-only bystander education program, reported that program participants’ perceptions of other men’s likelihood to intervene when they witnessed inappropriate sexual behavior were higher at the four- and seven-month follow-up periods than at baseline, while for the control group, perceptions were lower than at baseline (Gidycz et al., 2011). Additionally, program participants had larger decreases in associations with sexually aggressive peers and sexually explicit media compared to the control group. Although men themselves did not report a higher tendency to intervene as a result of program participation, they engaged in less sexual

aggression than control group participants at the four-month follow-up (1.5% versus 6.7%). Finally, men who completed the program had a heightened understanding of consent compared to men who did not (Gidycz et al., 2011). Similar findings have been reported in an evaluation of the *Men's Program* (Foubert et al., 2007) and *RealConsent* (Salazar et al., 2014).

In addition to producing positive attitudinal and behavioral changes like similar bystander intervention programs (Coker et al., 2011), multiple evaluations of *Green Dot* have also explored its effectiveness in reducing violent victimization and perpetration rates (Coker et al., 2016; Coker et al., 2015). Coker and colleagues (2015) compared the frequency rates of violent victimization and perpetration across three colleges with and without *Green Dot*, with the University of Kentucky acting as the intervention campus. Using data collected in April 2010, the results of this evaluation indicated that the University of Kentucky had significantly lower rates of self-reported sexual harassment and stalking victimization and perpetration, as well as lower rates of total violent victimization compared to the two campuses lacking a bystander intervention program (Coker et al., 2015). Coker et al. (2016) expanded upon their previous evaluation of *Green Dot* to examine sexual violence outcomes over a four-year period (i.e., 2010-2013). Consistent with the previous evaluation, violent victimization and perpetration were significantly lower for the University of Kentucky versus the comparison campuses (Coker et al., 2016). Specifically, victimization rates were significantly lower for unwanted sex, sexual harassment, stalking, and psychological dating violence (Coker et al., 2016). When all types of interpersonal violence were included, there was a 17% reduction in victimization in the intervention (46.4%) relative to the comparison (55.7%)

campuses. Additionally, violent perpetration rates at the University of Kentucky were significantly lower for sexual harassment, stalking, and psychological dating violence. When all types of interpersonal violence perpetration were included, there was a 21% difference in perpetration between the intervention (25.5%) and comparison campuses (32.2%). Further, the rates of violent victimization and perpetration were lower for the University of Kentucky than the comparison campuses for each year (Coker et al., 2016).

A recent meta-analysis conducted by Jouriles and colleagues (2018) examined the effectiveness of bystander intervention programs in twenty-four scholarly journal articles. The findings are similar to those mentioned above. Students who participated in bystander intervention training have more pro-social attitudes and beliefs towards sexual violence than students who did not participate in a bystander intervention program; however, these effects are small in magnitude and diminished over time (Jouriles, Krauss, Vu, Banyard, & McDonald, 2018). Interestingly, Jouriles et al. (2018) determined program effects did not differ in terms of program delivery methods (i.e., facilitator-led versus video, online, and poster campaigns), facilitator status (i.e., peer versus non-peer), or group composition (i.e., single- or mixed-sex). This finding is especially beneficial because it demonstrates that positive effects arise despite the variety of ways bystander intervention curricula can be disseminated; therefore, colleges and universities can design their bystander intervention program with convenience and flexibility in mind. It is important to note, however, that Mindthoff, Stephens, and Madhivanan (2018) caution readers and assert that the conclusions drawn by Jouriles and colleagues (2018) should be reconsidered, as their meta-analysis did not fully meet the guidelines outlined by the

PRISMA checklist (Moher et al., 2015), and thus does not reach the level of rigor required to conduct a systematic review.

A vast majority of these studies exclude measures of sexual victimization and perpetration, instead focusing on outcomes that are thought to be precursors to sexual violence (Lonsway et al., 2009). Regrettably, changes in attitudes, cognitions, and beliefs are unlikely to be long-term and there is little evidence to suggest that these are related to actual behavioral changes (Daigle et al., 2009). Additionally, the available research suggests that programs that focus on attitudes, cognitions, and beliefs may be ineffective in reducing the incidence of sexual victimization or perpetration (Anderson & Whitson, 2005; Breitenbecher, 2000; Daigle et al., 2009). In addition to these concerns, sexual assault interventions may also face the problem of boomerang effects (Bosson, Parrott, Swan, Kuchynka, & Schramm, 2015; Byrne & Hart, 2016; Malamuth, Huppin & Linz, 2018). Boomerang effects refer to “an increased probability that relatively high-risk males will endorse more sexually violent attitudes and be willing to behave more aggressively after the intervention compared to before” (Malamuth et al., 2018, p. 21). Boomerang effects occur because high-risk males may internalize interventions as a perceived threat to their personal choices and actions; therefore, high-risk males may react with angry or hostile behaviors (Malamuth et al., 2018). Currently, no evidence exists to suggest that bystander intervention programs succeed in changing high-risk males’ attitudes, cognitions, beliefs, or behaviors; however, bystander intervention initiatives may still be successful by reducing the opportunities that high-risk males have to carry out sexual violence (e.g., changing the responses of other individuals around them).

### **3.4 Event-Specific Variables that May Impact Bystander Involvement**

Little is known about how event-specific characteristics (e.g., victim and offender characteristics) impact a bystander's likelihood of intervening during sexual violence. This area is important to investigate as these event-specific factors have the potential to influence the effectiveness of bystander intervention programs. Previous studies from other victimization literature (e.g., child abuse, domestic violence, bullying, college hazing) can shed light on which event-specific variables increase or decrease bystander involvement.

*3.4.1 Bystander intervention & victim/offender sex.* Previous research has highlighted a variety of demographic factors that impact the likelihood of bystander involvement. One of these demographic characteristics is sex. Bystanders are more likely to intervene in severe domestic violence situations when the perpetrator is male (Chabot, Tracy, Manning, & Poisson, 2009). This finding appears true for violent victimization, more generally, as well. Third parties are significantly more likely to call the police when a man assaults a woman, while violent disputes between men appear to be handled privately (Felson, Messner, Hoskin, 1999).

Although there is a void in the literature regarding sexual victimization and bystander involvement specifically, previous studies have demonstrated that the sex of the victim has a significant impact on the level of blame attribution they receive for their victimization experience. Compared to male rape victims, female victims are perceived as less culpable (Vandiver & Dupalo, 2012). Furthermore, due to traditional sex roles and gender stereotyping, it is not uncommon for individuals to assume that males are incapable of being raped (Burt, 1980; Davies, Walker, Archer, & Pollard, 2013; Howard,

1984; Vandiver & Dupalo, 2012). Using a sample of 585 college students, Vandiver and Dupalo (2012) concluded that participants were significantly more likely to perceive scenarios as involving rape when the victim was female, compared to when the victim was male. Despite this discrepancy, a recent national report has revealed that approximately 6.4% of male college students have been victims of nonconsensual sexual touching by force or incapacitation (Cantor et al., 2015). While the rape experiences of women have gained notoriety and public attention at the national-level, the experiences of male victims have stayed in the shadows. For these reasons, it is hypothesized that there would be a greater likelihood of bystander intervention for female victims of sexual assault than male victims. Additionally, it is hypothesized that bystanders will be more likely to intervene when the assailant is male versus when the assailant is female.

*3.4.2 Bystander intervention & victim/offender race.* Another demographic variable that potentially impacts bystander involvement is race. A review of 1,068 medical records (i.e., all adults suffering from nonlethal cardiac arrest who were seen by municipal emergency medical personnel in Memphis, Tennessee between March 1989 and June 1992) revealed that Black individuals are significantly less likely than White individuals (9.8% versus 21.4%) to receive bystander-initiated cardiopulmonary resuscitation (CPR) when suffering from cardiac arrest outside of a hospital (Brookoff, Kellermann, Hackman, Somes, & Dobyns, 1994).

Typically, research on helping behaviors has focused on the race of the victim. Fewer studies have examined the race of the helper. Prior research indicates that White bystanders may be more likely to help White victims than Black victims (Gaertner, 1975; Saucier, Miller, & Doucet, 2005); however, this in-group preference is not demonstrated

by Black participants. Kunstman and Plant (2008) revealed that Black participants do not significantly differ in whether they helped Black or White victims during staged emergencies, while White participants are more likely to help White victims (88%) than Black victims (58%). Racial differences in bystander behavior among college students have also been reported. In a study of college students and intervention behaviors in the context of sexual violence, Black participants reported more bystander behaviors (e.g., “Stopped and checked in with a friend who looked very intoxicated when they were being taken upstairs at a party”) during the previous semester than White participants, as well as fewer missed opportunities for intervention (Brown, Banyard, & Moynihan, 2014).

Race may also be responsible for differential helping behaviors elicited during sexual victimization. Historically, racial stereotypes have depicted the “typical” rapist as a Black male and the “typical” victim as a White female (Donovan, 2007; George & Martínez, 2002; Hirsch, 1981). Previous research has widely documented the relationship between racial bias and attribution of blame. Studies show that participants hold biases against Black victims, where Black victims are blamed more and their victimization is deemed less serious than when the victim is White (Donovan, 2007; Dupuis & Clay, 2013; Foley, Evancic, Karnik, King, & Parks, 1995; Willis, 1992). Victim blaming is most likely to occur in interracial circumstances (i.e., involving different races), regardless of victim race (George & Martínez, 2002; Willis, 1992). Currently, there is a void in the literature establishing whether or not race is a factor that influences bystander intervention during sexual victimization.

3.4.3 *Bystander intervention & the victim-offender relationship.* Whether or not the victim and offender appear to know one another can influence a bystander's decision to intervene. Social norms regarding privacy may inhibit bystanders from becoming involved if the offender is assumed to be a non-stranger. "The widely held adage of 'minding one's own business'" (Hart & Miethe, 2008, p. 639) may explain the typical inactive response of bystanders. Previous research supports this notion. Shotland and Straw (1976) found that in cases where a man physically assaults a woman, both men and women were less likely to intervene if they were told the victim and offender were married than if the perpetrator was a stranger. Furthermore, if no information was provided regarding the victim-offender relationship, participants assumed that the couple was romantically involved versus strangers, acquaintances, or friends (Shotland & Straw, 1976). Felson and colleagues (1999) similarly concluded that third parties are much less likely to call the police to report a violent dispute if the offender and victim are a couple – whether married, formerly married, or unmarried. This hesitation to intervene may be because bystanders attribute more cost to intervening in instances of partner assault (i.e., domestic violence) versus stranger assault. Although a stranger would most likely run away when confronted, bystanders fear that an offender known to the victim would stay and fight back (Shotland & Straw, 1976). The victim-offender relationship similarly has the potential to hinder bystander involvement in cases of sexual victimization if witnesses assume or perceive that the individuals are romantically involved.

3.4.4 *Bystander intervention & the bystander-victim-offender relationship.* As with the victim-offender relationship, whether or not the bystander knows either the victim or the offender can influence their likelihood of involvement. In general, it is

postulated that bystanders are more likely to intervene if the victim is in their friendship group (Levine & Crowther, 2008; Burn, 2009); however, empirical results are mixed and differ based on the type of victimization. Conversely, bystanders who identify the perpetrator as a friend may be less likely to view the perpetrator's behavior as a problem that requires action (Bennett & Banyard, 2016). In a study of 269 self-reported witnesses to public episodes of child abuse, Christy and Voight (1994) found that the likelihood of intervention increased with the bystander knowing either the victim or the perpetrator. Research on hazing may help inform the likelihood of bystanding when the offender knows the people involved. For example, 79% of students chose not to report hazing incidents due to membership within the participating organization (Allan & Madden, 2008). This lack of reporting is heavily influenced by a code of silence that permeates both student athletic organizations and Greek fraternities and sororities (Lipkins, 2006). Furthermore, previous research has demonstrated that fraternity members are significantly less likely to intervene during a college hazing scenario compared to non-fraternity members (McCreary, 2012).

Knowing the people involved has also been shown to matter for intervening in sexual or intimate partner violence. Having a relationship with either the victim or offender can impact an individual's perceptions regarding the severity of a situation, as well as which behaviors are deemed a problem that require action (Bennett & Banyard, 2016). Using a sample of 389 college undergraduates, Banyard (2002) found no difference in bystander outcomes with regard to whether a friend or a stranger needed help during an incident of sexual or physical intimate partner violence. On the other hand, Bennett and colleagues (2017) concluded that, while women are equally likely to intend

to help a victim whether they know the perpetrator or not, men are more likely to come to a victim's assistance if they do not know the perpetrator. Contrary to the findings of Bennett et al. (2017), a study conducted by Nicksa (2014) determined that college males were more likely to report a suspected sexual assault if the offender was a friend versus a stranger; however, this finding was only evident for college males who were informed that their identities would be revealed to the public.

*3.4.5 Bystander intervention & alcohol use.* The presence of alcohol is another event-specific characteristic that has been found to influence bystander intervention. Using NCVS statistics from 1993 through 1999, Planty (2002) found that third parties were more likely to assist in violent situations if the offender was believed to have been under the influence of alcohol or drugs. Chabot and colleagues (2009) concluded that college students were more likely to intervene in a severe instance of domestic violence when they attributed a male attacker's behavior to drunkenness. In the context of sexual assault, Hoxmeier et al. (2018) found that a larger proportion of undergraduate college students did not intervene mid-assault when the victim was described as intoxicated (58.1% of students who had an opportunity to intervene chose not to) than when the victim was depicted as forced to engage in sexual activity (13.8% of students who had an opportunity did not intervene).

Although there is a lack of bystander research specifically, in cases of rape, offenders who are intoxicated are often viewed as less culpable (Coates & Wade, 2004; Richardson & Campbell, 1982). Alcohol consumption is a central part of college culture (Wechsler, Dowdall, Davenport, & Castillo, 1995) and binge drinking in college social situations is often perceived as normative behavior (Larimer, Lydum, Anderson, &

Turner, 1999). As such, alcohol-related sexual assaults are especially prevalent on college campuses (Abbey, 2002; Abbey, Ross, McDuffie, & McAuslan, 2006; Harrington & Leitenberg, 1994). In fact, more often than not, both the offender and victim had been consuming alcohol at the time of the sexual assault, with numbers ranging from 66% to 74% for the perpetrator and 55% to 70% for the victim (Hines, Armstrong, Reed, & Cameron, 2012; Jackson, Gilliland, & Veneziano, 2006). Unfortunately, intoxicated victims may experience negative treatment and increased blame attribution; this reaction is especially so if the victim is female (Hammock & Richardson, 1997; Richardson & Campbell, 1982; Schuller & Stewart, 2000; Sims, Noel, & Maisto, 2007). Research indicates that, when both the victim and the offender were described as experiencing equal levels of alcohol intoxication, participants rated the female victim *more* and the male offender *less* responsible than the other party for the sexual assault (Stormo, Lang, & Stritzke, 1997). Stemming from previous research, it is theorized that the likelihood of bystander involvement would decrease when the sexual assault victim is described as intoxicated and increase when the offender is portrayed as intoxicated.

*3.4.6 Bystander intervention & the perception of danger.* Bystanders are more likely to intervene when situational cues indicate that the potential danger to the victim is high (Fischer et al., 2006). In a study of domestic violence situations, bystanders reported a greater likelihood of intervention as the severity of abuse increased (Chabot et al., 2009). Similarly, in cases of sexual violence, bystanders were more likely to help in situations high in severity (e.g., high risk of rape) versus in low severity situations (e.g., unwanted sexual contact) (Bennett, Banyard, & Edwards, 2017).

### **3.5 Bystander-Specific Characteristics that May Impact Decisions to Intervene**

In addition to the event-specific characteristics described above, there are bystander-specific factors that may also impact bystander helping behaviors. Rosenberg (1979) defines self-esteem as a favorable or unfavorable attitude towards oneself. Prior research has indicated that higher self-esteem is associated with enhanced initiative and higher levels of volunteerism (Baumeister, Campbell, Krueger, & Vohs, 2003; Briggs, Landry, & Wood, 2007). Additionally, higher self-esteem has been found to be tied to increased self-efficacy (Judge & Bono, 2001), which is the appraisal of one's capabilities of performing a task (Bandura, 1982); therefore, individuals with higher self-esteem may believe that they have the necessary skills and capabilities to intervene in risky situations (i.e., step four of Latané and Darley's (1970) cognitive and behavioral process). As evidence, LePine and Van Dyne (1998) found that individuals with high self-esteem were most willing to speak out and criticize group behaviors.

Along with self-esteem, self-control may also explain differential helping behaviors. According to Ahmed (2008), self-control is linked to prosocial behaviors and moral emotions (e.g., guilt and shame). Individuals who experience feelings of guilt and shame may be more likely to develop a degree of personal responsibility (i.e., step three of Latané and Darley's (1970) cognitive and behavioral process) when they come upon an individual in need of aid. In fact, Ahmed (2008) determined that shame acknowledgement significantly predicts the likelihood of intervention during episodes of bullying. Homophobia may also impact decisions to intervene. There is some evidence to suggest that homosexual individuals are less likely to receive assistance compared to

heterosexual individuals (Gray, Russell, & Blockley, 1991; Shaw, Borough, & Fink, 1994).

Another factor that can impact an individual's decision to intervene is previous sexual victimization experiences. Some research indicates that previously experiencing victimization may have an impact on both prosocial and antisocial bystanding behaviors (Cao & Lin, 2015). To illustrate, teenagers who experienced cyberbullying themselves were more likely to help other victims of cyberbullying (Van Cleemput, Vandebosch, & Pabian, 2014). Finally, attitudes towards sexual coercion have the ability to motivate or hinder a bystander from intervening. Individuals who find sexual coercion acceptable may not be able to initiate Latané and Darley's (1970) cognitive and behavioral process for intervention because they might not notice sexually coercive or aggressive behaviors as wrong nor deem the situation as an emergency. Further, Malamuth and colleagues (2018) assert that sexual violence interventions may produce boomerang effects in particularly high-risk individuals; therefore, these individuals may behave in an antisocial manner versus engaging in prosocial helping behaviors.

While great strides have been taken to better understand what factors motivate or hinder a bystander to intervene in a given situation, there are still gaps in the literature. As evidence, less is known about whether the location of the incident impacts helping behaviors. Two studies were identified as including location in their examinations of bystanding behaviors. Howard and Crano (1974) found that undergraduate college students were significantly more likely to intervene during a potential book theft if the incident occurred in the student lounge than if the incident occurred in the library or dining area. More recently, Brewster and Tucker (2016) examined the significance of

location on undergraduate college students' likelihood of intervention during a verbal argument and physical struggle between a male and female. Results indicated that subjects expressed more willingness to intervene when the situation occurred on-campus versus off-campus (Brewster & Tucker, 2016). Location is especially important to investigate because there is a wide array of situations that bystanders of sexual violence may find themselves in, and there are a range of settings where intervention can take place. Additionally, there is some research that demonstrates behavioral scripts are associated with physical spaces. That is, different patterns of behavior can be elicited in predictable ways by different locations (Schoggen, 1989). Specifically, the sexual victimization literature has highlighted bars and college fraternities as especially high-risk locations for sexual violence. Fraternities often promote and sustain behaviors that perpetuate rape culture; further, alcohol is often used in conjunction with sexually coercive and aggressive behaviors in order to obtain sex (Boeringer, 1996; Frintner & Rubinson, 1993; Martin & Hummer, 1989; Parks, Miller, Collins, & Zeta-Zanatta, 1998; Thompson & Cracco, 2008). In these distinct areas, college students may view sexually aggressive or coercive behaviors as normal conduct. On the other hand, college students may be especially cued to recognize the potential risk for sexual victimization in these specific locations, especially if they have been exposed to rape awareness programming. It is hypothesized that college students will be more likely to intervene when given vignettes depicting fraternity-hosted socials or off-campus bars.

In addition to physical spaces, another limitation of the current bystander and victimization literature is the focus on heterosexual pairs, as well as the focus on male assailants (e.g., Bennett & Banyard, 2016; Levine & Crowther, 2008; Shotland & Straw,

1976; Stormo et al. 1997). The current study attempts to address this void in the literature by including all possible sex combinations between victim and offender (i.e., male assailant and female victim; male assailant and male victim; female assailant and male victim; female assailant and female victim). Finally, although the role of victim or offender alcohol use on bystander behaviors has been investigated for violent victimization (Planty, 2002), including domestic violence (Chabot et al., 2009), there is a lack of research on cases of rape specifically. Although strides have been made to examine blame attribution as a result of alcohol consumption, the current study explores whether or not victim or offender alcohol use impacts decisions to intervene. In an effort to address these gaps, the purpose of the current study is to examine whether or not location, victim/offender sex, and alcohol use impact bystander intervention during an ambiguous sexual scenario between two individuals (i.e., nonconsensual sexual contact – that is, inappropriate touching of a sexual nature that may or may not progress to a more serious form of sexual victimization).

## 4 METHODOLOGY

### 4.1 Sample and Data Collection

To calculate the appropriate sample size necessary to complete the current research project, information was extracted from a meta-analysis evaluating the impacts of bystander and victim/requester sex on prosocial helping behaviors in general (Eagly & Crowley, 1986). Of the 172 studies included in their meta-analysis, 36 effect sizes pertaining to victim/requester sex were available. A mean effect size of -0.23 was computed, indicating that females were significantly more likely to receive help than males (Eagly & Crowley, 1986). According to the guidelines set forth by Cohen (1977), an effect size of 0.2 is considered a small effect. With the assistance of an online sample size calculator (<http://www.sample-size.net/sample-size-means/>), the appropriate sample size was calculated using  $\alpha = 0.05$ ,  $\beta = 0.20$ , and  $d = -0.23$ , indicating a required sample of 594 vignettes. Since each participant only receives one vignette, the current study required a sample size of 594 individuals.

Once the appropriate sample size was established, the researcher determined how to generate a sample of college students. To reach college students, the decision was made to survey students enrolled in university classes at a single large, urban university in the Southeast region of the United States. Six different courses were selected. Two of the courses were large university-wide courses. These courses are a requirement for all undergraduate students attending the sample university. They are high-volume courses with students from a wide variety of majors across the university. Four criminal justice courses that have a mix of majors enrolled were also sampled to reach the required sample size calculated above. With approval from the instructors of record, a member of

the research team visited the six aforementioned classrooms during the Spring 2019 semester. During these classroom visits, the purpose of the research project was introduced, the informed consent was provided and explained, and paper surveys (see Appendix A) were distributed to students who were present. Signed consent forms were collected for each participant. The research team collected and separated completed surveys from signed informed consent forms and manually entered data into SPSS version 24.0 (IBM Corp, 2016).

The sample for the present study included all college students over the age of 18 who were enrolled in the six courses selected for inclusion. A total of 748 students were enrolled in these courses. Of those students, 627 students participated in the research project, for a response rate of 83.8%. One survey was excluded from analysis, as the respondent was under the age of 18, for a total sample of 626 students. Descriptive statistics of the sample can be found in Table 4.1. The sample was predominately female (62.8%), with a mean age of 20.3 years old. The majority of students were Black (41.8%), followed by White (26.8%), Asian (16.9%), and multiracial or “other” (14.4%). Seventeen percent of the sample reported being Hispanic/Latinx. According to the sample university’s website, the student population is majority female (59%) and predominantly Black (41.8%), followed by White (24.9%), and Asian (13.2%). Approximately 12.5% of the student population were multiracial or “other.” A two proportion  $z$ -test was performed to test whether the demographics of the sample were significantly different from the sample university’s undergraduate population. The undergraduate population totals 25,228 students, as reported by the Georgia State University Fact Book for the 2017-2018 academic school year (<https://oie.gsu.edu/files/2018/10/FACT-BOOK-2017.pdf>). Results

indicated that there were significantly more Asian ( $z = 2.72$ ;  $p < 0.01$ ) and Hispanic ( $z = 5.44$ ;  $p < 0.001$ ) students in the sample compared to the sample university's undergraduate population. It should be noted, however, that the sample university collected information on race and being Hispanic in a single measure.

Almost all (84.7%) of the sample identified as heterosexual, with the remaining 15.3% identifying as lesbian, gay, bisexual, or other. Most of the sample were freshmen (41.9%), while 24.4% were sophomores, 22% were juniors, and 11.4% were seniors. Just over five percent (5.4%) of the sample reported being a member of a Greek fraternity or sorority and 1.6% indicated that they were a collegiate athlete. Three percent of the sample were international students. Just under 30% of the sample previously participated in either a rape awareness or bystander intervention program. Although nearly three-quarters of the sample (74.7%) knew what the #MeToo movement represents, only 17% indicated that they had personally participated in the #MeToo movement by either signing a petition, attending a protest, or posting the #MeToo hashtag on their personal social media. Approximately a quarter of the sample reported experiencing attempted or completed rape and 59.4% of the sample indicated that they personally knew a victim of sexual violence.

Table 4.1 Descriptive Statistics of the Sample (N = 626)

Variable Name	M (SD)	% (N)
<i>Vignette Variables</i>		
Location		
Campus	---	33.1 (207)
Fraternity-Hosted Social	---	34.0 (213)
Off-Campus Bar	---	32.9 (206)
Victim-Offender Sex		
Female victim/Male offender	---	26.2 (164)
Male victim/Male offender	---	24.8 (155)
Female victim/Female offender	---	25.2 (158)
Male victim/Female offender	---	23.8 (149)
Victim-Offender Alcohol Use		
Neither	---	26.2 (164)
Victim ONLY	---	24.8 (155)
Offender ONLY	---	24.1 (151)
Both	---	24.9 (156)
<i>Intervention Variables</i>		
Probability of calling police	33.8 (28.36)	---
Probability of saying something	64.7 (32.68)	---
Probability of doing something	50.9 (35.43)	---
<i>Participant Variables</i>		
Age	20.3 (3.67)	---
Female	---	62.8 (392)
Hispanic/Latinx	---	17.0 (106)
Race		
White	---	26.8 (167)
Black	---	41.8 (260)
Asian	---	16.9 (105)
Multiracial/Other	---	14.5 (90)
Heterosexual/Straight	---	84.7 (525)
Freshman	---	41.9 (260)
Criminal Justice major	---	21.9 (137)
Greek affiliation	---	5.4 (34)
Collegiate athlete	---	1.6 (10)
International student	---	3.0 (19)
Sexual violence programming	---	29.2 (182)
Completed/attempted rape victims	---	24.6 (154)
Know a victim of sexual violence	---	59.4 (371)
#MeToo involvement	---	17.0 (106)
Self-Esteem	21.2 (5.88)	
Homophobia	17.2 (7.51)	
Low Self-Control	53.6 (9.18)	
Acceptance of Sexual Coercion	16.0 (7.28)	
Social Desirability Bias	4.8 (1.65)	

## 4.2 Research Design

The purpose of the current study is to examine whether or not location, victim/offender sex, and alcohol use impact bystander intervention during an ambiguous sexual scenario between two individuals (i.e., nonconsensual sexual contact – that is, inappropriate touching of a sexual nature that may or may not progress to a more serious form of sexual victimization). To accomplish this goal, the current project utilizes a factorial survey design (i.e., vignette research). Essentially, vignette research recreates hypothetical scenarios with real-world complexity in a controlled environment. Vignette studies are a mixture of laboratory experiments and social survey research (Atzmüller & Steiner, 2010; Aviram, 2012; Ludwick & Zeller, 2001; Wallander, 2009) and are particularly appealing for studying situations that present moral or ethical dilemmas to tap into decision-making processes (Atzmüller & Steiner, 2010; Aviram, 2012; Taylor, 2006).

Critics of vignette research often highlight whether intentions reflect actual behavior. Fishbein and Ajzen's (1975) theory of reasoned action and Ajzen's (1991) theory of planned behavior argue that intention is an important and effective predictor of future behavior. As a general rule, the stronger one's intention to perform a behavior, the more likely one is to actually perform the behavior (Ajzen, 1991). Intention has been used extensively by social scientists to predict a wide range of behaviors, including knowledge sharing (Reychav & Weisberg, 2010), voting (Granberg & Holmberg, 1990), exercise (Valois, Deshamais, & Godin, 1988), sunscreen use (Myers & Horswill, 2006), and smoking cessation (Norman, Conner, & Bell, 1999). Further, vignettes have been utilized in criminological research to study public opinions on various punishments and

sanctions (see Applegate, Cullen, Link, Richards, & Lanza-Kaduce, 1996; Applegate & Davis, 2006; Rossi, Simpson, & Miller, 1985; Sims, Chin, & Yordon, 2007; Turner, Cullen, Sundt, & Applegate, 1997), decision-making amongst criminal justice professionals (see Applegate, Turner, Sanborn, Latessa, & Moon, 2000; Hogan, Lambert, Hepburn, Burton, & Cullen, 2005; Murrie, Cornell, & McCoy, 2005), and perceptions of procedural justice (see Barkworth & Murphy, 2015; Nix, Pickett, Wolfe, & Campbell, 2017), to name a few.

A vignette is comprised of dimensions (i.e., variables) with varying categories or levels (i.e., values), while the vignette universe consists of all possible combinations of dimension levels (Ludwick & Zellar, 2001; Wallander, 2009). According to Wallander (2009, p. 506), factor orthogonality is obtained “by letting each of the dimensions included in the vignettes vary independently with respect to its levels.” Factor orthogonality is essential because it allows the researcher to disentangle the unique effect of variables that are normally highly correlated with one another in the real world (Ludwick & Zellar, 2001). Once the vignette universe (i.e., all different variations of the vignette) has been identified and created, a randomly selected subpopulation of vignette sets is selected for each person in the sample so that all categories of the independent variables have an equal probability of selection (Ludwick & Zeller, 2001). This type of method allows for statistical testing of the impact of variations on the independent variables on respondents’ reactions to the scenario (Aviram, 2012). Each respondent’s set of vignettes is unique and the unit of analysis is the vignette itself (Rossi & Anderson, 1982); therefore, a small number of respondents can generate a large number of observations based on the number of vignettes each respondent receives (Ludwick &

Zeller, 2001; Wallander, 2009). For the purposes of the current research endeavor, each participant was provided with a single vignette.

In addition to using vignettes, the current project also includes survey questions, such as respondent characteristics, to use as controls and to analyze whether these characteristics influence responses. These measures, along with the bystanding behaviors included, are discussed in further detail below.

### **4.3 Hypotheses**

Building upon previous research, this study aims to address several limitations and gaps in the extant bystander intervention and victimization literature. Specifically, the following hypotheses guide this study:

**H<sub>1</sub>:** Bystander helping behaviors will be influenced by behavioral scripts associated with different locations regardless of the type of intervention.

**H<sub>1a</sub>:** Bystanders will be more prone to intervene in locations where they are especially cued to recognize victimization risk (i.e., bars and fraternity-hosted socials).

**H<sub>2</sub>:** Bystander intervention will vary across victim-offender sex combinations regardless of the type of intervention.

**H<sub>2a</sub>:** Bystanders will be more prone to intervene when the victim is female and when the offender is male.

**H<sub>3</sub>:** Bystander helping behaviors will be influenced by perceived victim/offender alcohol use regardless of the type of intervention.

**H<sub>3a</sub>:** Bystanders will be more prone to intervene when the offender is suspected of being under the influence, while bystanders will be less

inclined to intervene when the victim is suspected of being under the influence.

**H4:** Bystander intervention will be dependent on individual respondent characteristics regardless of the type of intervention.

**H4a:** Bystanders will be more prone to intervene if they have higher self-esteem and greater self-control. Additionally, bystanders who personally know a victim of sexual violence will be more inclined to intervene.

**H4b:** Bystanders will be hindered from intervening if they have greater feelings of homophobia or attitudes that endorse sexual coercion.

Furthermore, bystanders who have previously experienced sexual victimization will be less likely to intervene.

#### **4.4 Measures**

*4.4.1 Vignette.* Vignettes depicted an ambiguous sexual scenario between two individuals (i.e., nonconsensual sexual contact – that is, inappropriate touching of a sexual nature that may or may not progress to a more serious form of sexual victimization). Since sexual victimization occurs on a continuum, it is likely that presenting a scenario on either end of the victimization spectrum would affect and predict intervention. For example, it is predicted that most respondents would indicate that they would intervene when encountering a forcible rape in progress. See Appendix A for the vignette template.

The independent variables that were manipulated in each vignette included location, victim/offender sex, and alcohol use. These variables were selected in an effort to address several gaps in the literature. Location has gone largely unstudied in previous

bystander and sexual victimization research. In addition to physical spaces, the current bystander and victimization literature has narrowly focused on heterosexual pairs and male assailants (e.g., Levine & Crowther, 2008; Shotland & Straw, 1976; Stormo et al. 1997). The current project attempts to address this void by examining the impact of victim-offender sex combinations on bystander intervention. Finally, while the role of victim or offender alcohol use on bystander behaviors has been investigated for violence (Chabot et al., 2009; Planty, 2002), there is a lack of research on cases of sexual victimization specifically. *Location* has three levels: (1) walking across campus on your way to class; (2) at a fraternity-hosted social; and (3) at an off-campus bar on the weekend. *Victim/offender sex* has four levels: (1) male/female; (2) male/male; (3) female/male; (4) female/female. *Alcohol use* has 4 levels: (1) the offender is slurring their speech and stumbling over their feet; (2) the victim is slurring their speech and stumbling over their feet; (3) both are slurring their speech and stumbling over their feet; (4) neither the victim nor offender are slurring their speech nor stumbling over their feet. The vignette universe is calculated as the product of the levels (i.e., values) attached to the various dimensions (i.e., variables) included in the study (Wallander, 2009). In this case, the current study utilizes a 3×4×4 factorial design, resulting in 48 different vignettes. The structure of the vignettes was largely influenced by and adopted from the work of Bennett, Banyard, and Edwards (2017). Again, for the purposes of the current study, each participant was provided with a single vignette. Vignettes were randomly assigned to study participants. Table 4.1 indicates that the randomization process resulted in an approximately even distribution of dimensions across vignettes.

4.4.2 *Bystander intervention.* The dependent variable of interest is intervention. Studies on bystander intervention have primarily focused on whether or not individuals will take action and have largely ignored what the individual would do (Dovidio, Piliavin, Schroeder, & Penner, 2006). Previous research has indicated that there are many tactics and ways in which a bystander can intervene (McMahon, Hoffman, McMahon, Zucker, & Koenick, 2013; McMahon & Banyard, 2012; Palmer, 2016); therefore, intervention was measured in multiple ways. First, the respondent was asked if they would intervene through three different methods: (1) calling the police; (2) saying something; and (3) doing something. Examples of behaviors (e.g., saying something and doing something) were provided to cue respondents. For each method of intervention, all respondents were also asked to indicate the probability that they would intervene, from 0% to 100%. This measure allowed for increasing the variability of the dependent variable, intervention. Finally, the respondent was provided with an open-ended option to explain in their own words what they would say and what they would do. The probability measures of the three forms of intervention were utilized for the current analyses.

4.4.3 *Control variables.* Data were collected on several respondent characteristics since previous research has indicated that they may be related to the likelihood of bystander intervention. The respondents were asked to report their age, race/ethnicity, sex, gender identity, sexual orientation, academic year, whether they are an international student, and whether they are a member of Greek life and/or collegiate athletics. Further, respondents were administered the Rosenberg Self-Esteem Scale (Rosenberg, 1979) as higher self-esteem is associated with enhanced initiative and higher levels of volunteerism (Baumeister et al., 2003; Briggs et al., 2007). The Rosenberg Self-

Esteem Scale has excellent internal consistency (Rosenberg, 1979) and has been shown to be reliable ( $\alpha > 0.80$ ) with a variety of samples (Bagley, Bolitho, & Bertrand, 2007; Gray-Little, Williams, & Hancock, 1997; Jamil, 2006; Robins, Hendin, & Trzesniewski, 2001; Swenson, 2003). Scores on the Rosenberg Self-Esteem Scale range from 0 to 30, with higher scores indicating greater levels of self-esteem. Additionally, participants were asked to complete the Behavior/Negative Affect Subscale of the Homophobia Scale (Fisher, Davis, Yarber, & Davis, 2010; Wright, Adams, & Bernat, 1999) since they may be presented with vignettes involving same-sex pairs. The Homophobia Scale is highly reliable, with a Cronbach's alpha coefficient ( $\alpha$ ) of 0.958 and has demonstrated very good internal consistency (Wright et al., 1999). Scores could range from 11 to 55, with higher scores indicating greater feelings of homophobia. The Low Self-Control Scale proposed by Grasmick and colleagues (1993) was also administered, since prior research suggests that self-control is linked to prosocial behaviors and morality (Ahmed, 2008). Grasmick et al.'s (1993) Low Self-Control Scale demonstrates sufficient internal consistency and reliability ( $\alpha = 0.805$ ). Scores on the Low Self-Control Scale range from 24 to 96. Higher scores are indicative of lower self-control. The Grasmick et al. (1993) Low Self-Control Scale is utilized extensively in criminological research (Pratt & Cullen, 2000).

Respondents were also asked about their previous sexual victimization experiences, as well as whether or not they personally know a victim of sexual violence. Some research indicates that previously experiencing victimization may have an impact on both prosocial and antisocial bystanding behaviors (Cao & Lin, 2015). The majority of the behaviorally-specific indicators of sexual victimization were adapted from the works of Fisher and colleagues (2000). Measures capturing incapacitated and drug-facilitated rape

were adapted from Kilpatrick et al. (2007). A measure of sexual aggression was included, as prior research has indicated that sexual violence interventions may produce boomerang effects in particularly high-risk individuals (Malamuth et al., 2018). The current study utilized a measure of sexual aggression developed by Krahe, Bieneck, and Scheinberger-Olwig (2007). The Acceptance of Sexual Coercion Scale has high internal consistency ( $\alpha = 0.96$ ), with higher scores indicating attitudes that are more condoning of sexual coercion (Tomaszewska & Krahe, 2016). Scores on the Acceptance of Sexual Coercion Scale range from 13 to 65. Finally, social desirability bias was measured using a shortened form of the Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1960; Ray, 1984), where higher scores indicating higher levels of social desirability bias. This shortened eight-item scale is adequate in internal consistency ( $\alpha = 0.77$ ) (Ray, 1984). Of the original eight items, four were utilized to create a social desirability measure. Items were removed from the scale to achieve a higher alpha coefficient, resulting in greater reliability for the study sample. Reliability analyses were conducted with the current sample and alpha coefficients for the abovementioned scales can be found in Table 4.2. As depicted in Table 4.2, all of the scales are highly reliable with the exception of the shortened Marlowe-Crowne Social Desirability Scale. Albeit Cronbach's Alpha is widely used as an estimator for reliability tests, it has been criticized for its lower bound value which underestimates the true reliability (Peterson & Kim, 2013); still, the alpha coefficient for the shortened Marlowe-Crowne Social Desirability Scale indicates moderate reliability (Hinton, McMurray, & Brownlow, 2014). See Appendix A for the complete questionnaire.

*Table 4.2 Reliability Analyses*

<b>Scale</b>	<b>Alpha Coefficient (<math>\alpha</math>)</b>
Self-Esteem Scale	0.910
Behavior/Negative Affect Subscale of the Homophobia Scale	0.934
Low Self-Control Scale	0.841
Acceptance of Social Coercion Scale	0.959
Social Desirability Bias Scale	0.612

#### **4.5 Analytical Plan**

Statistical analyses were conducted in multiple stages using SPSS version 24.0 (IBM Corp, 2016). The analysis began with an investigation of the descriptive statistics (e.g., measures of central tendency and measures of dispersion). The bivariate stage of the analysis was performed using either a one-way analysis of variance (ANOVA) with post-hoc tests for nominal predictors (with three or more categories) or t-tests for dichotomous indicators since all dependent variables of interest (i.e., intervention) are ratio-level variables. In her review of the factorial survey approach, Wallander (2009) concluded that the most common statistical method for analyzing factorial survey designs is through regression analysis. Given the distribution of the dependent variables, Ordinary Least Squares (OLS) regression is utilized at the multivariate stage of analysis.

## 5 RESULTS

Results of the bivariate analyses can be found in Tables 5.1 through 5.6. First, bivariate analyses were conducted for the probability of calling the police (see Tables 5.1 and 5.2). Several significant differences emerged. The mean probability of calling the police was significantly higher when the incident occurred on campus ( $M = 37.9$ ) versus at a fraternity-hosted social ( $M = 31.7$ ) or at an off-campus bar ( $M = 31.8$ ;  $p < 0.05$ ). When it comes to victim-offender sex, the mean probability of calling the police when there was a male victim and female offender was significantly lower ( $M = 26.2$ ) than the mean probability of calling the police when there was a female victim and male offender ( $M = 38.5$ ) or when there was a male victim and male offender ( $M = 38.4$ ;  $p < 0.05$ ). There were significant differences in the probability of calling the police across various participant characteristics as well. Males reported a lower probability of calling the police than females (30.4 versus 35.9 respectively;  $p < 0.05$ ), while Asian students reported significantly higher probabilities of calling the police ( $M = 41.4$ ) than White ( $M = 30.5$ ) and Black students ( $M = 32.5$ ;  $p < 0.05$ ). Participants who reported personally knowing a victim of sexual violence reported significantly lower probabilities of calling the police than participants who did not personally know a victim of violence (31.1 versus 37.5 respectively;  $p < 0.01$ ). Finally, the Acceptance of Sexual Coercion Scale and the Social Desirability Bias Scale were significantly and positively associated with the probability of calling the police ( $p < 0.01$ ); however, the correlation coefficients indicated that these relationships were very weak.

Table 5.1 Bivariate Analysis for Probability of Calling the Police (N = 626)

Variable Name	M (SD)	F	t
<i>Vignette Variables</i>			
Location		3.245*	
Campus <sup>ab</sup>	37.9 (29.10)		
Fraternity-Hosted Social <sup>a</sup>	31.7 (29.19)		
Off-Campus Bar <sup>b</sup>	31.8 (26.35)		
Victim-Offender Sex		6.986***	
Female victim/Male offender <sup>c</sup>	38.5 (27.46)		
Male victim/Male offender <sup>d</sup>	38.4 (30.63)		
Female victim/Female offender	31.4 (25.87)		
Male victim/Female offender <sup>cd</sup>	26.2 (26.24)		
Victim-Offender Alcohol Use		2.081	
Neither	29.5 (28.11)		
Victim ONLY	36.9 (30.72)		
Offender ONLY	35.5 (28.56)		
Both	33.5 (25.55)		
<i>Participant Variables</i>			
Sex			-2.344*
Male	30.4 (27.25)		
Female	35.9 (28.86)		
Hispanic/Latinx			1.422
Yes	37.4 (28.09)		
No	33.1 (28.40)		
Race		3.523*	
White <sup>e</sup>	30.5 (27.09)		
Black <sup>f</sup>	32.5 (29.16)		
Asian <sup>ef</sup>	41.4 (27.41)		
Multiracial/Other	34.6 (28.33)		
Sexual Orientation			0.623
Heterosexual/Straight	34.2 (28.58)		
Other	32.3 (27.42)		
Academic Year			0.345
Freshman	34.4 (27.46)		
Non-freshman	33.6 (29.12)		
Major			0.797
Criminal Justice major	35.5 (28.65)		
Other major	33.3 (28.25)		
Greek affiliation			-1.359
Yes	27.4 (23.15)		
No	34.2 (28.62)		
Collegiate athlete			0.354
Yes	37.0 (32.36)		
No	33.8 (28.33)		
International student			1.894
Yes	45.9 (33.75)		
No	33.4 (28.14)		

Sexual violence programming		-0.200
Yes	33.3 (28.46)	
No	33.8 (28.30)	
Completed/attempted rape victims		-1.224
Victims	31.2 (27.21)	
Non-victims	34.5 (28.67)	
Know a victim of sexual violence		-2.780**
Yes	31.1 (27.38)	
No	37.5 (29.32)	
#MeToo involvement		0.827
Yes	35.7 (28.72)	
No	33.2 (28.23)	

Note: \* $p \leq 0.05$ ; \*\* $p \leq 0.01$ ; \*\*\* $p \leq 0.001$

<sup>abcdef</sup> variables with the same superscript are significantly different at  $p \leq 0.05$

*Table 5.2 Pearson Correlations for Probability of Calling the Police*

Variable Name	Pearson's $r$	$p$
<i>Participant Variables</i>		
Age	0.022	0.583
Self-Esteem	0.036	0.368
Homophobia	-0.021	0.600
Low Self-Control	-0.007	0.856
Acceptance of Sexual Coercion	0.120	0.003
Social Desirability Bias	0.128	0.001

Second, bivariate analyses were conducted for the probability of saying something (see Tables 5.3 and 5.4). Similar to the bivariate analyses conducted for the probability of calling the police, there were significant differences in the mean probability of saying something across locations. Specifically, the mean probability of saying something at a fraternity-hosted social was significantly higher ( $M = 69.1$ ) than the mean probability of saying something when confronted with an incident on campus ( $M = 59.3$ ;  $p < 0.05$ ). For victim-offender sex, the mean probability of saying something when there was a male victim and female offender was significantly lower ( $M = 57.9$ ) than the mean probability of saying something where there was a female victim and male offender ( $M = 70.7$ ) or when there was a female victim and female offender ( $M = 68.8$ ;  $p$

< 0.05). Additionally, the mean probability of saying something when there was a male victim and male offender was significantly lower ( $M = 60.9$ ) than the mean probability of saying something when there was a female victim and male offender ( $M = 70.7$ ;  $p < 0.05$ ). There were also significant differences in probabilities of saying something in relation to perceptions of victim-offender alcohol use. That is, the mean probability of saying something when only the victim appears drunk was significantly higher ( $M = 70.0$ ) than the mean probability of saying something when neither the victim or offender appeared drunk ( $M = 59.7$ ;  $p < 0.05$ ). There were significant differences in the probability of saying something across various participant characteristics as well. Again, males reported a lower probability of intervention via saying something than females (60.7 versus 67.0 respectively;  $p < 0.05$ ), while Black students reported significantly lower probabilities of saying something ( $M = 59.7$ ) than White students ( $M = 69.7$ ;  $p < 0.05$ ). Heterosexual/straight participants reported significantly lower probabilities of saying something compared to their lesbian, gay, bisexual, and transgender (LGBT) peers (63.2 versus 73.3 respectively;  $p < 0.01$ ). International students reported significantly lower probabilities of saying something compared to domestic students (45.3 versus 65.2 respectively;  $p < 0.01$ ). Individuals who indicated previous participation in sexual violence programming (i.e., rape awareness and/or bystander intervention programs) reported higher probabilities of saying something ( $M = 72.3$ ) compared to individuals who had not gone through sexual violence programming ( $M = 61.5$ ;  $p < 0.001$ ). Participants who stated that they had experienced completed and/or attempted rape (i.e., forcible rape, incapacitated rape, drug-facilitated rape) reported higher probabilities of saying something than non-victims (72.0 versus 62.4 respectively;  $p < 0.001$ ).

Furthermore, participants who indicated that they personally knew a victim of sexual violence reported higher probabilities of saying something ( $M = 69.1$ ) than participants who did not personally know a victim of violence ( $M = 58.4$ ;  $p < 0.001$ ). Students who participated in the #MeToo movement reported higher probabilities of saying something compared to students who did not actively participate in the #MeToo movement (77.7 versus 62.1 respectively;  $p < 0.001$ ). Finally, the Homophobia Scale and the Acceptance of Sexual Coercion Scale were negatively associated with the probability of saying something ( $p < 0.001$ ), while the Social Desirability Bias Scale was positively related to the probability of saying something ( $p < 0.01$ ); however, the correlation coefficients indicated that these relationships were weak to very weak.

*Table 5.3 Bivariate Analysis for Probability of Saying Something (N = 626)*

<b>Variable Name</b>	<b>M (SD)</b>	<b>F</b>	<b>t</b>
<i>Vignette Variables</i>			
Location		4.873**	
Campus <sup>a</sup>	59.3 (34.18)		
Fraternity-Hosted Social <sup>a</sup>	69.1 (31.81)		
Off-Campus Bar	65.6 (31.40)		
Victim-Offender Sex		5.629***	
Female victim/Male offender <sup>bd</sup>	70.7 (30.23)		
Male victim/Male offender <sup>d</sup>	60.9 (34.50)		
Female victim/Female offender <sup>c</sup>	68.8 (30.13)		
Male victim/Female offender <sup>bc</sup>	57.9 (32.68)		
Victim-Offender Alcohol Use		2.674*	
Neither <sup>e</sup>	59.7 (35.03)		
Victim ONLY <sup>e</sup>	70.0 (29.03)		
Offender ONLY	64.3 (32.96)		
Both	65.2 (32.79)		
<i>Participant Variables</i>			
Sex			-2.330*
Male	60.7 (33.53)		
Female	67.0 (32.00)		
Hispanic/Latinx			0.860
Yes	67.1 (31.43)		
No	64.1 (32.96)		

Race		3.843**
White <sup>f</sup>	69.7 (29.39)	
Black <sup>f</sup>	59.7 (34.83)	
Asian	68.4 (29.31)	
Multiracial/Other	64.4 (34.56)	
Sexual Orientation		-2.751**
Heterosexual/Straight	63.2 (33.15)	
Other	73.3 (27.79)	
Academic Year		1.202
Freshman	66.6 (31.70)	
Non-freshman	63.4 (33.28)	
Major		-0.441
Criminal Justice major	63.6 (34.87)	
Other major	65.0 (31.99)	
Greek affiliation		0.547
Yes	68.1 (30.24)	
No	64.4 (32.85)	
Collegiate athlete		1.575
Yes	80.8 (17.41)	
No	64.4 (32.83)	
International student		-2.624**
Yes	45.3 (39.74)	
No	65.2 (32.30)	
Sexual violence programming		3.785***
Yes	72.3 (30.01)	
No	61.5 (33.28)	
Completed/attempted rape victims		3.245***
Victims	72.0 (29.34)	
Non-victims	62.4 (33.41)	
Know a victim of sexual violence		4.055***
Yes	69.1 (30.86)	
No	58.4 (34.32)	
#MeToo involvement		4.548***
Yes	77.7 (25.97)	
No	62.1 (33.27)	

Note: \* $p \leq 0.05$ ; \*\* $p \leq 0.01$ ; \*\*\* $p \leq 0.001$

<sup>abcdef</sup> variables with the same superscript are significantly different at  $p \leq 0.05$

*Table 5.4 Pearson Correlations for Probability of Saying Something*

<b>Variable Name</b>	<b>Pearson's <i>r</i></b>	<b><i>p</i></b>
<i>Participant Variables</i>		
Age	-0.015	0.711
Self-Esteem	-0.020	0.622
Homophobia	-0.381	0.000
Low Self-Control	-0.041	0.309
Acceptance of Sexual Coercion	-0.190	0.000
Social Desirability Bias	0.106	0.008

Lastly, bivariate analyses were conducted for the probability of doing something (see Tables 5.5 and 5.6). The mean probability of doing something when confronted with an incident on campus was significantly lower ( $M = 41.3$ ) than the mean probability of doing something if an incident occurred at a fraternity-hosted social ( $M = 59.8$ ) or at an off-campus bar ( $M = 51.4$ ;  $p < 0.05$ ). Additionally, the mean probability of doing something while at a fraternity-hosted social was significantly higher than the mean probability of doing something while at an off-campus bar ( $p < 0.05$ ). When it comes to victim-offender sex, the mean probability of doing something when there was a female victim and male offender ( $M = 59.7$ ) than when there was a male victim and a female offender ( $M = 43.7$ ) or when there was a male victim and male offender ( $M = 45.4$ ;  $p < 0.05$ ). There were significant differences in the probability of intervention by doing something across various participant characteristics as well. Higher probabilities for doing something were reported by female (53.2 versus 46.9 for males;  $p < 0.05$ ), Hispanic (58.7 versus 49.2 for non-Hispanic;  $p < 0.01$ ), and LGBT (58.1 versus 49.7 for heterosexual/straight;  $p < 0.05$ ) college students. International students reported significantly lower probabilities of doing something compared to domestic students (29.7 versus 51.5 respectively;  $p < 0.01$ ). Individuals who indicated previous participation in sexual violence programming reported higher probabilities of doing something ( $M = 58.1$ ) compared to individuals who had not gone through sexual violence programming ( $M = 47.9$ ;  $p < 0.001$ ). Participants who stated that they had experienced completed and/or attempted rape reported higher probabilities of doing something than non-victims (55.8 versus 49.4 respectively;  $p < 0.05$ ). Moreover, participants who indicated that they personally knew a victim of sexual violence reported higher probabilities of doing

something ( $M = 55.4$ ) than participants who did not personally know a victim of sexual violence ( $M = 44.5$ ;  $p < 0.05$ ). Students who participated in the #MeToo movement reported higher probabilities of doing something compared to students who did not actively participate in the #MeToo movement (63.4 versus 48.3 respectively;  $p < 0.001$ ). Finally, participant age, the Homophobia Scale, and the Acceptance of Sexual Coercion Scale were negatively associated with the probability of doing something, whereas the Social Desirability Bias Scale was positively related to the probability of doing something ( $p < 0.05$ ); however, the correlation coefficients indicated that these relationships were weak to very weak.

*Table 5.5 Bivariate Analysis for Probability of Doing Something (N = 626)*

<b>Variable Name</b>	<b>M (SD)</b>	<b>F</b>	<b>t</b>
<i>Vignette Variables</i>			
Location		14.978***	
Campus <sup>ab</sup>	41.3 (34.40)		
Fraternity-Hosted Social <sup>ac</sup>	59.8 (35.65)		
Off-Campus Bar <sup>bc</sup>	51.4 (33.87)		
Victim-Offender Sex <sup>2</sup>		7.227***	
Female victim/Male offender <sup>de</sup>	59.7 (33.50)		
Male victim/Male offender <sup>d</sup>	45.4 (37.11)		
Female victim/Female offender	53.9 (34.27)		
Male victim/Female offender <sup>e</sup>	43.7 (34.78)		
Victim-Offender Alcohol Use		1.443	
Neither	46.6 (36.14)		
Victim ONLY	54.7 (34.49)		
Offender ONLY	50.7 (35.16)		
Both	51.8 (35.73)		
<i>Participant Variables</i>			
Sex			-2.149*
Male	46.9 (35.66)		
Female	53.2 (35.13)		
Hispanic/Latinx			2.524**
Yes	58.7 (32.78)		
No	49.2 (35.77)		
Race		1.841	
White	55.1 (33.96)		
Black	47.4 (37.08)		

Asian	49.7 (32.21)	
Multiracial/Other	53.4 (36.52)	
Sexual Orientation		-2.105*
Heterosexual/Straight	49.7 (35.67)	
Other	58.1 (33.10)	
Academic Year		1.595
Freshman	53.6 (34.65)	
Non-freshman	49.0 (35.82)	
Major		0.174
Criminal Justice major	51.3 (36.05)	
Other major	50.7 (35.23)	
Greek affiliation		1.570
Yes	60.1 (33.04)	
No	50.3 (35.52)	
Collegiate athlete		0.425
Yes	55.5 (36.09)	
No	50.7 (35.45)	
International student		-2.653**
Yes	29.7 (32.25)	
No	51.5 (35.35)	
Sexual violence programming		3.291***
Yes	58.1 (34.44)	
No	47.9 (35.43)	
Completed/attempted rape victims		1.934*
Victims	55.8 (35.64)	
Non-victims	49.4 (35.28)	
Know a victim of sexual violence		2.102*
Yes	55.4 (34.72)	
No	44.5 (35.58)	
#MeToo involvement		4.049***
Yes	63.4 (32.79)	
No	48.3 (35.38)	

Note: \* $p \leq 0.05$ ; \*\* $p \leq 0.01$ ; \*\*\* $p \leq 0.001$

<sup>abcde</sup> variables with the same superscript are significantly different at  $p \leq 0.05$

*Table 5.6 Pearson Correlations for Probability of Doing Something*

<b>Variable Name</b>	<b>Pearson's <i>r</i></b>	<b><i>p</i></b>
<i>Participant Variables</i>		
Age	-0.087	0.031
Self-Esteem	-0.060	0.138
Homophobia	-0.338	0.000
Low Self-Control	0.011	0.776
Acceptance of Sexual Coercion	-0.165	0.000
Social Desirability Bias	0.091	0.024

Results from the multivariate stage of analysis can be found in Table 5.7<sup>2</sup>. Coefficients are presented as standardized betas. According to Afifi and Clarke (1990), an independent variable's standardized beta coefficient captures the variable's contribution to the prediction of the dependent variable; therefore, standardizing coefficients allows us to compare the relative importance of each independent variable in the regression model. Standardized coefficients are interpreted as every increase of one standard deviation in the independent variable results in  $\beta$  change in standard deviation in the dependent variable (Afifi & Clarke, 1990). Before running an OLS regression predicting the probability of calling police (see Model 1 in Table 5.7), the six assumptions of OLS regression were tested and were not violated by the data. There is a linear relationship between the independent variables and dependent variable. There are no outliers in the data. Variance Inflation Factors (VIFs) are used to quantify the severity of multicollinearity in OLS regression analyses. As a rule of thumb, VIFs greater than 10 indicate high multicollinearity (Lin, 2008); however, a cutoff of 5 is also commonly used (Sheather, 2009). VIFs indicate that there is no multicollinearity between the independent variables. The Durbin-Watson statistic ( $d = 1.97$ ) demonstrates that there is no autocorrelation between the residuals (Rutledge & Barros, 2002). The normal probability plot suggests that the data are homoscedastic (Das & Imon, 2016). The residual errors of the regression line are approximately normally distributed. There are many rules of thumb for determining the number of independent variables that are appropriate for a given sample size (VanVoorhis & Morgan, 2007). Green (1991), for example, suggests  $N > 104 + m$  (where  $m$  is the number of independent variables) for testing individual

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<sup>2</sup> Homophobia significantly predicted intervention for respondents who received vignettes depicting same-sex and opposite-sex pairs; therefore, homophobia was included in the full model.

predictors. Harris (1985), on the other hand, suggests between ten and thirty participants per independent variable. Following these rules of thumb, the number of independent variables included in the model is appropriate for the sample size. Model 1, the OLS regression model for predicting the probability of calling the police, produced  $R^2 = 0.139$ ,  $F(29, 560) = 3.121$ ,  $p = .000$ . Overall, Model 1 statistically significantly predicted the probability of calling the police and was a good fit for the data. Furthermore, the independent variables included in Model 1 explained 13.9% of the variance in the dependent variable, the probability of calling the police.

First, the impact of incident-specific variables on probability of calling the police was investigated. Compared to incidents occurring on campus grounds, respondents reported significantly lower probabilities of calling the police when confronted with a scenario taking place at a fraternity-hosted social ( $\beta = -0.101$ ;  $p < 0.05$ ) or at an off-campus bar ( $\beta = -0.129$ ;  $p < 0.01$ ). When examining the impact of victim-offender sex, respondents reported significantly lower probabilities of calling the police when there was a male victim and female offender ( $\beta = -0.173$ ;  $p < 0.001$ ) or when there was a female victim and female offender ( $\beta = -0.097$ ;  $p < 0.05$ ) compared to when there was a female victim and male offender. The last event-based characteristic involves victim-offender perceived alcohol use. Compared to whether neither the victim or offender appear intoxicated, participants reported significantly higher probabilities of calling the police when only the victim appeared drunk ( $\beta = 0.104$ ;  $p < 0.05$ ).

Various bystander-specific characteristics were also predictive of the probability of calling police. Females reported significantly higher probabilities of calling the police compared to males ( $\beta = 0.149$ ;  $p < 0.001$ ). Compared to White college students, Asian

college students reported significantly higher probabilities of calling the police ( $\beta = 0.131$ ;  $p < 0.01$ ). Additionally, individuals who scored higher on the Social Desirability Bias Scale ( $\beta = 0.110$ ;  $p < 0.01$ ) or the Acceptance of Sexual Coercion Scale ( $\beta = 0.107$ ;  $p < 0.05$ ) reported higher probabilities of calling the police.

Next, comparisons were made between predictor variables' standardized beta coefficients to identify the strength of the effect of each variable that contributed in predicting the probability of calling the police. Keith (2014) advises that 0.02 represents a small effect, 0.15 corresponds with a medium effect, and 0.35 is a large effect. The independent variables that emerged as significant predictors in the regression model all contributed a medium effect on the probability of calling the police, with female victim/female offender having the smallest effect ( $\beta = -0.097$ ) and male victim/female offender having the largest effect ( $\beta = -0.175$ ). A one standard deviation increase in Acceptance of Sexual Coercion score resulted in an increase of 0.107 standard deviations in the probability of calling the police. Additionally, a one standard deviation increase in Social Desirability Bias score resulted in an increase of 0.111 standard deviations in the probability of calling the police.

Before running an OLS regression predicting the probability of intervention via saying something (see Model 2 in Table 5.7), the six assumptions of OLS regression were tested and were not violated by the data. There is a linear relationship between the independent variables and dependent variable. There are no outliers in the data. VIFs indicate that there is no multicollinearity between the independent variables (Lin, 2008; Sheather, 2009). The Durbin-Watson statistic ( $d = 1.81$ ) demonstrates that there is no or low autocorrelation between the residuals (Rutledge & Barros, 2002). The normal

probability plot suggests that the data are homoscedastic (Das & Imon, 2016). The residual errors of the regression line are approximately normally distributed. Model 2, the OLS regression model for predicting the probability of saying something, produced  $R^2 = 0.284$ ,  $F(29, 560) = 7.650$ ,  $p = .000$ . Overall, Model 2 statistically significantly predicted the probability of saying something and was a good fit for the data. Furthermore, the independent variables included in Model 2 explained 28.4% of the variance in the dependent variable, the probability intervention via saying something.

First, the impact of event-based characteristics on probability of saying something was investigated. Compared to incidents occurring on campus grounds, respondents reported significantly higher probabilities of saying something when confronted with a scenario taking place at a fraternity-hosted social ( $\beta = 0.142$ ;  $p < 0.001$ ). When examining the impact of victim-offender sex, respondents reported significantly lower probabilities of saying something when there was a male victim and male offender ( $\beta = -0.114$ ;  $p < 0.01$ ) or when there was a male victim and female offender ( $\beta = -0.155$ ;  $p < 0.001$ ) compared to when there was a female victim and male offender. Lastly, compared to when neither the victim or the offender appeared drunk, individuals reported significantly higher probabilities of saying something when both the victim and offender appeared drunk ( $\beta = 0.105$ ;  $p < 0.01$ ), when only the victim appeared drunk ( $\beta = 0.141$ ;  $p < 0.001$ ), as well as when only the offender appeared drunk ( $\beta = 0.088$ ;  $p < 0.05$ ).

In terms of bystander-specific characteristics, Asian college students reported significantly higher probabilities of saying something compared to White college students ( $\beta = 0.098$ ;  $p < 0.05$ ). Prior participation in sexual violence programming ( $\beta = 0.087$ ;  $p < 0.01$ ) and personal involvement in the #MeToo movement ( $\beta = 0.104$ ;  $p < 0.01$ ) were

predictive of higher probabilities of saying something. Conversely, international students reported significantly lower probabilities of saying something compared to domestic students ( $\beta = -0.099$ ;  $p < 0.01$ ). Individuals who reported greater feelings of homophobia reported lower probabilities of saying something ( $\beta = -0.379$ ;  $p < 0.001$ ) while individuals who scored higher on the Social Desirability Bias Scale reported higher probabilities of saying something ( $\beta = 0.083$ ;  $p < 0.05$ ).

Next, comparisons were made between predictor variables' standardized beta coefficients to identify the strength of the effect of each variable that contributed in predicting the probability of saying something using rules of thumb outlined by Keith (2014). In this model, most of the independent variables had a medium effect on predicting intervention by saying something ( $\beta$  ranged from 0.083 to 0.155) with the exception of homophobia. The standardized beta coefficient for the Homophobia Scale was -0.379, indicating a large effect. A one standard deviation increase in Homophobia score resulted in a decrease of 0.379 standard deviations in the probability of saying something. Furthermore, a one standard deviation increase in Social Desirability Bias score resulted in an increase of 0.083 standard deviations in the probability of saying something.

Finally, before running an OLS regression predicting the probability of intervention via doing something (see Model 3 in Table 5.7), the six assumptions of OLS regression were tested and were not violated by the data. There is a linear relationship between the independent variables and dependent variable. There are no outliers in the data. VIFs indicate that there is no multicollinearity between the independent variables (Lin, 2008; Sheather, 2009). The Durbin-Watson statistic ( $d = 2.00$ ) demonstrates that

there is no autocorrelation between the residuals (Rutledge & Barros, 2002). The normal probability plot suggests that the data are homoscedastic (Das & Imon, 2016) and the residual errors of the regression line are approximately normally distributed. Model 3, the OLS regression model for predicting the probability of doing something, produced  $R^2 = 0.265$ ,  $F(29, 560) = 6.975$ ,  $p = .000$ . Overall, Model 3 statistically significantly predicted the probability of doing something and is a good fit for the data. Furthermore, the independent variables included in Model 3 explained 26.5% of the variance in the dependent variable, the probability intervention by doing something.

*Table 5.7 OLS Regression Analyses (N = 626)*

Variable Name	Model 1	Model 2	Model 3
	Call Police	Say Something	Do Something
	$\beta$ (SE)	$\beta$ (SE)	$\beta$ (SE)
<i>Vignette Variables</i>			
Location			
Campus (referent)	---	---	---
Fraternity-Hosted Social	-0.101* (2.73)	0.142*** (2.86)	0.239*** (3.16)
Off-Campus Bar	-0.129** (2.76)	0.051 (2.88)	0.094* (3.19)
Victim-Offender Sex			
Female victim/Male offender (referent)	---	---	---
Male victim/Male offender	-0.003 (3.14)	-0.114** (3.30)	-0.154*** (3.65)
Female victim/Female offender	-0.097* (3.13)	-0.041 (3.28)	-0.090* (3.62)
Male victim/Female offender	-0.175*** (3.15)	-0.155*** (3.30)	-0.194*** (3.64)
Victim-Offender Alcohol Use			
Neither (referent)	---	---	---
Victim ONLY	0.104* (3.15)	0.141*** (3.29)	0.107** (3.63)
Offender ONLY	0.074 (3.19)	0.088* (3.33)	0.093* (3.69)
Both	0.054 (3.17)	0.105** (3.32)	0.099* (3.67)
<i>Participant Variables</i>			
Age	0.068 (0.35)	0.034 (0.36)	-0.050 (0.39)

Female	0.149 (2.65)	-0.068 (2.77)	-0.051 (3.06)
Hispanic/Latinx	0.089 (3.60)	0.059 (3.78)	0.113** (4.17)
Race			
White (referent)	---	---	---
Black	0.020 (3.01)	-0.053 (3.15)	0.016 (3.48)
Asian	0.131** (3.78)	0.098* (3.96)	0.043 (4.37)
Multiracial/Other	-0.001 (3.91)	-0.043 (4.10)	-0.022 (4.53)
Heterosexual/Straight	-0.018 (3.41)	-0.014 (3.57)	-0.035 (3.96)
Freshman	0.030 (2.61)	0.038 (2.73)	0.018 (3.01)
Criminal Justice major	0.030 (2.89)	-0.039 (3.02)	0.009 (3.34)
Greek affiliation/College athlete	-0.040 (4.61)	0.050 (4.83)	0.063 (5.34)
International student	0.044 (6.94)	-0.099** (7.28)	-0.058 (8.03)
Sexual violence programming	-0.004 (2.51)	0.087** (2.63)	0.073* (2.91)
Completed/attempted rape victims	-0.040 (2.93)	0.054 (3.07)	0.002 (3.39)
Know a victim of sexual violence	-0.069 (2.53)	0.058 (2.66)	0.068 (2.92)
#MeToo involvement	0.049 (3.24)	0.104** (3.41)	0.108** (3.75)
Self-Esteem	0.008 (0.21)	0.062 (0.22)	-0.012 (0.24)
Homophobia	-0.051 (0.17)	-0.379*** (0.18)	-0.326*** (0.20)
Low Self-Control	0.029 (0.14)	0.040 (0.14)	0.071 (0.16)
Acceptance of Sexual Coercion	0.107* (3.19)	-0.030 (3.34)	-0.031 (3.69)
Social Desirability Bias	0.111** (0.75)	0.083* (0.79)	0.099** (0.87)
Constant (unstandardized B)	8.099	55.756***	51.840***
R <sup>2</sup>	0.139	0.284	0.265

Note: \* $p \leq 0.05$ ; \*\* $p \leq 0.01$ ; \*\*\* $p \leq 0.001$

First, the impact of incident-specific characteristics on probability of doing something was investigated. Compared to incidents occurring on campus grounds, respondents reported significantly higher probabilities of doing something when confronted with a scenario taking place at a fraternity-hosted social ( $\beta = 0.239$ ;  $p < 0.001$ ) or at an off-campus bar ( $\beta = 0.094$ ;  $p < 0.05$ ). For victim-offender sex, compared to instances where there was a female victim and male offender, participants reported significantly lower probabilities of doing something when there was a male victim and male offender ( $\beta = -0.154$ ;  $p < 0.001$ ), when there was a female victim and female offender ( $\beta = -0.090$ ;  $p < 0.05$ ), and when there was a male victim and female offender ( $\beta = -0.194$ ;  $p < 0.001$ ). Lastly, victim-offender perceived alcohol use was predictive of the probability of doing something. Specifically, compared to scenarios where neither the victim or the offender appeared drunk, individuals reported significantly higher probabilities of doing something when both the victim and offender appeared drunk ( $\beta = 0.099$ ;  $p < 0.05$ ), when only the victim appeared drunk ( $\beta = 0.107$ ;  $p < 0.01$ ), as well as when only the offender appeared drunk ( $\beta = 0.093$ ;  $p < 0.05$ ).

As with the previous models, multiple bystander-specific variables were predictive of the probability of intervention via doing something. As evidence, respondents who identified as Hispanic/Latinx reported higher probabilities of doing something compared to their non-Hispanic/Latinx peers ( $\beta = 0.113$ ;  $p < 0.01$ ). Prior participation in sexual violence programming ( $\beta = 0.073$ ;  $p < 0.05$ ) and personal involvement in the #MeToo movement ( $\beta = 0.108$ ;  $p < 0.01$ ) were predictive of higher probabilities of doing something. Similar to the results of Model 2, individuals who reported greater feelings of homophobia reported lower probabilities of doing something

( $\beta = -0.326$ ;  $p < 0.001$ ) while individuals who scored higher on the Social Desirability Bias Scale reported higher probabilities of saying something ( $\beta = 0.099$ ;  $p < 0.01$ ).

Comparisons were then made between predictor variables' standardized beta coefficients to identify the strength of the effect of each variable that contributed in predicting the probability of doing something using guidelines set forth by Keith (2014). Again, results were similar to Model 2. Most of the independent variables included in Model 3 had a medium effect on predicting intervention by doing something ( $\beta$  ranged from 0.073 to 0.239) with the exception of homophobia. The standardized beta coefficient for the Homophobia Scale was -0.326, which is just under the threshold for a large effect. A one standard deviation increase in Homophobia score resulted in an increase of 0.326 standard deviations in the probability of doing something. Furthermore, a one standard deviation increase in Social Desirability Bias score resulted in an increase of 0.099 standard deviations in the probability of doing something.

The bivariate stage of analysis uncovered significant differences in mean probabilities of intervention between males and females, across intervention types; therefore, exploratory analyses were conducted to investigate the potential for several interactions with respondent sex. Specifically, these analyses explored possible interactions between sex and location, sex and sexual orientation, as well as sex and homophobia. As shown in Table 5.8, these interactions were only found to be significant for Model 5. Model 5 depicts the full OLS regression predicting the probability of intervention by saying something, with interactions included, and produced  $R^2 = 0.311$ ,  $F(32, 556) = 7.839$ ,  $p = .000$ . Overall, Model 5 statistically significantly predicted the probability of saying something and was a good fit for the data. Furthermore, the

independent variables included in Model 5 explained 31.1% of the variance in the dependent variable, the probability of saying something.

*Table 5.8 OLS Regression Analyses with Interactions (N = 232)*

Variable Name	<u>Model 4</u>	<u>Model 5</u>	<u>Model 6</u>
	Call Police $\beta$ (SE)	Say Something $\beta$ (SE)	Do Something $\beta$ (SE)
<i>Vignette Variables</i>			
Location			
Campus (referent)	---	---	---
Fraternity-Hosted Social	-0.064 (4.35)	0.046 (4.49)	0.146* (5.01)
Off-Campus Bar	-0.072 (4.68)	0.066 (4.83)	0.073 (5.40)
Victim-Offender Sex			
Female victim/Male offender (referent)	---	---	---
Male victim/Male offender	-0.004 (3.14)	-0.130** (3.24)	-0.159*** (3.63)
Female victim/Female offender	-0.097 (3.13)	-0.042 (3.23)	-0.091* (3.61)
Male victim/Female offender	-0.172*** (3.14)	-0.149*** (3.25)	-0.186*** (3.63)
Victim-Offender Alcohol Use			
Neither (referent)	---	---	---
Victim ONLY	0.105 (3.15)	0.148*** (3.24)	0.108* (3.63)
Offender ONLY	0.073 (3.18)	0.096* (3.28)	0.092* (3.67)
Both	0.052 (3.16)	0.107* (3.26)	0.095* (3.64)
<i>Participant Variables</i>			
Age	0.067 (0.36)	0.024 (0.36)	-0.058 (0.40)
Female	0.185 (7.74)	-0.453*** (7.99)	-0.242* (8.93)
Hispanic/Latinx	0.092 (3.61)	0.053 (3.73)	0.108* (4.16)
Race			
White (referent)	---	---	---
Black	0.021 (3.01)	-0.059 (3.10)	0.006 (3.47)
Asian	0.132** (3.76)	0.095* (3.88)	0.038 (4.33)
Multiracial/Other	-0.006 (3.91)	-0.043 (4.04)	-0.027 (4.51)

Heterosexual/Straight	-0.106 (6.22)	-0.194** (6.43)	-0.132 (7.18)
Freshman	0.031 (2.61)	0.033 (2.69)	0.015 (3.01)
Criminal Justice major	0.026 (2.90)	-0.038 (2.99)	0.013 (3.34)
Greek affiliation/College athlete	-0.040 (4.61)	0.056 (4.76)	0.066 (5.32)
International student	0.028 (7.11)	-0.089* (7.34)	-0.050 (8.20)
Sexual violence programming	-0.002 (2.52)	0.086* (2.60)	0.072 (2.91)
Completed/attempted rape victims	-0.044 (2.94)	0.058 (3.04)	0.009 (3.39)
Know a victim of sexual violence	-0.061 (2.54)	0.056 (2.63)	0.069 (2.93)
#MeToo involvement	0.039 (3.25)	0.112** (3.36)	0.113** (3.75)
Self-Esteem	0.010 (0.21)	0.068 (0.22)	-0.009 (0.24)
Homophobia	-0.059 (0.25)	-0.501*** (0.26)	-0.365*** (0.29)
Low Self-Control	0.026 (0.14)	0.053 (0.14)	0.083* (0.16)
Acceptance of Sexual Coercion	0.129** (0.18)	-0.079* (0.19)	-0.056 (0.21)
Social Desirability Bias	0.104* (0.74)	0.088* (0.77)	0.110** (0.86)
<i>Interactions</i>			
Female*Location			
Female*Campus (referent)	---	---	---
Female*Fraternity	-0.043 (5.60)	0.144* (5.78)	0.135 (6.46)
Female*Bar	-0.071 (5.82)	-0.003 (6.00)	0.042 (6.71)
Female*Sexual Orientation	0.107 (7.24)	0.216** (7.47)	0.115 (8.36)
Female*Homophobia	-0.021 (0.34)	0.274** (0.35)	0.090 (0.39)
Constant (unstandardized B)	1.558	74.795***	62.339***
R <sup>2</sup>	0.147	0.311	0.276

Note: \* $p \leq 0.05$ ; \*\* $p \leq 0.01$ ; \*\*\* $p \leq 0.001$

In Model 5, the main effects of location (i.e., on-campus, fraternity-hosted social, off-campus bar) on the probability of saying something were rendered insignificant with the inclusion of the sex by location interaction term. As illustrated by Figure 5.1, the impact of location, specifically fraternity-hosted socials, appears to matter more for females. Compared to incidents occurring on campus, female college students reported significantly higher probabilities of intervening by saying something in a fraternity environment ( $\beta = 0.114$ ;  $p < 0.05$ ).

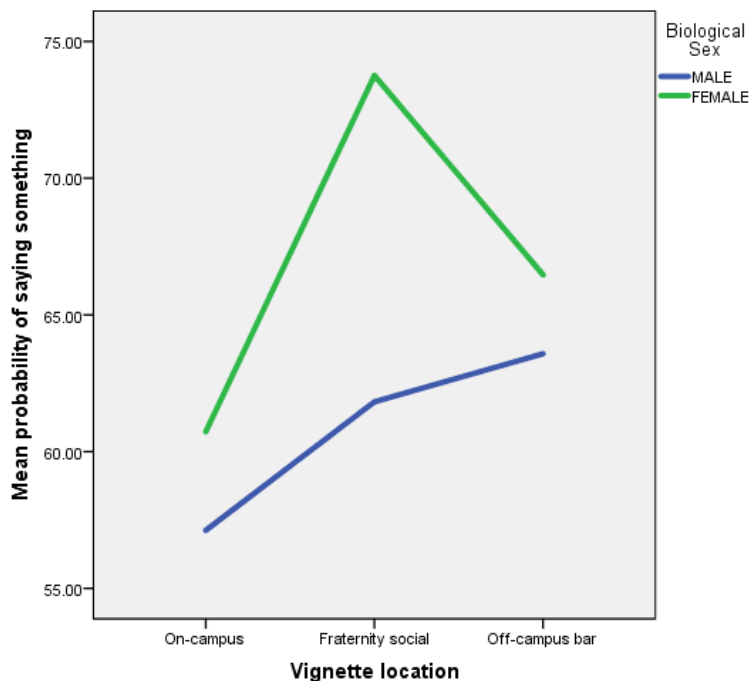


Figure 5.1 Sex by Location

In addition to location, there was a significant interaction between sex and sexual orientation ( $\beta = 0.216$ ;  $p < 0.01$ ). Figure 5.2 indicates that, overall, female college students reported higher probabilities of saying something; however, non-heterosexual males reported higher probabilities of intervention via saying something than straight females. Finally, a significant interaction existed between sex and homophobia ( $\beta =$

0.274;  $p < 0.01$ ). As depicted in Figure 5.3, the impact of homophobia appears to matter more for males inasmuch that males with greater homophobia scores report significantly lower probabilities of saying something compared to females with similarly high homophobia scores.

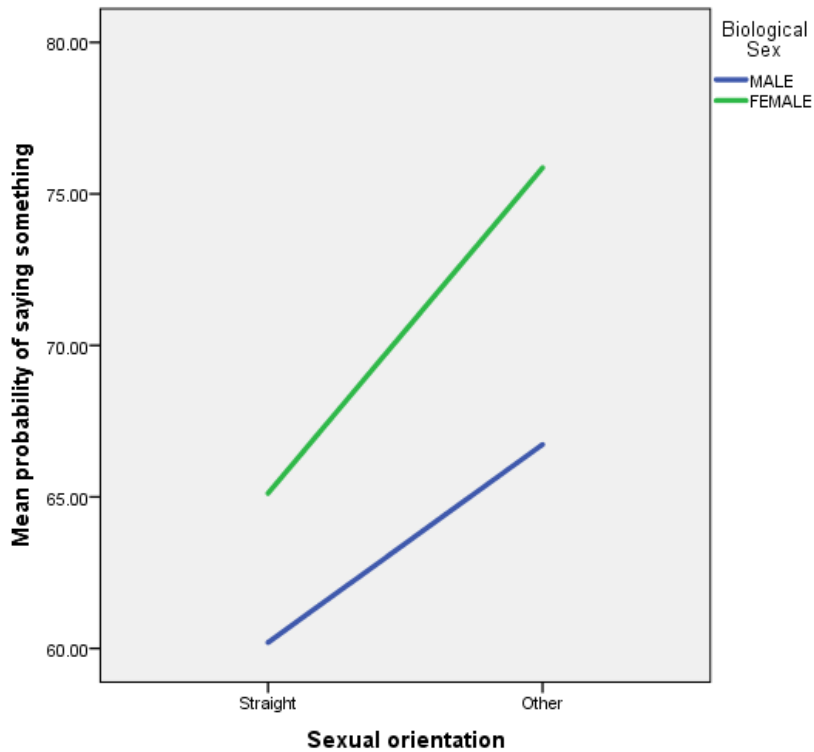


Figure 5.2 Sex by Sexual Orientation

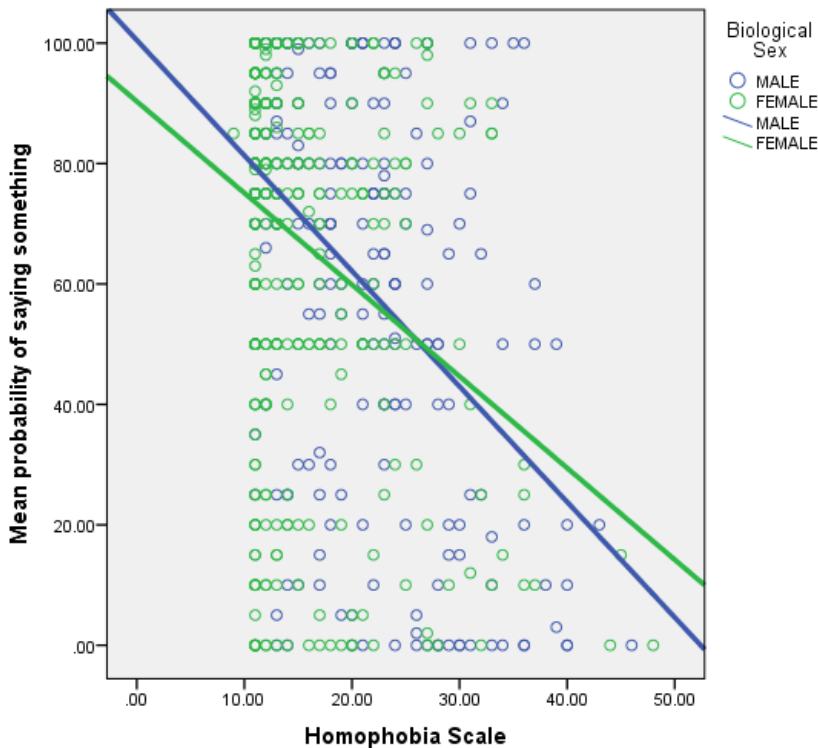


Figure 5.3 Sex by Homophobia

While the coefficients for sex ( $\beta = -0.453$ ;  $p < 0.001$ ) and sexual orientation ( $\beta = -0.194$ ;  $p < 0.01$ ) emerged as significant with the inclusion of interaction terms, these coefficients can no longer be interpreted as main effects. The coefficient for sexual orientation, for example, is the effect of sexual orientation on probability of saying something for males only (i.e., the reference group). Once interaction terms were included, the Acceptance of Sexual Coercion Scale became significant, indicating that individuals who scored higher on the Acceptance of Sexual Coercion Scale reported lower probabilities of saying something ( $\beta = -0.079$ ;  $p < 0.05$ ).

### 5.1 Summary of Findings

Consistent with **H<sub>1</sub>**, bystander helping behaviors appear to be influenced by location regardless of the type of intervention. Results from the multivariate stage of analysis lend partial support for **H<sub>1a</sub>**, which states that bystanders will be more prone to

intervene in locations where they are especially cued to recognize victimization risk. Compared to on-campus scenarios, participants reported higher likelihoods of personally intervening (i.e., saying or doing something) in situations depicted at fraternity-hosted socials and off-campus bars, which have been identified by the victimization literature as especially high-risk environments. Contradicting **H1a**, participants also reported they would intervene, albeit by calling the police versus direct intervention, when confronted with scenarios occurring on campus.

Results from the present study also support **H2**. Reported likelihoods of intervention varied across victim-offender sex combinations regardless of the type of intervention. Consistent with **H2a**, participants reported significantly lower probabilities of intervention across intervention types when victim-offender sex diverged from the traditional depiction of a female victim and male offender. Although findings suggest that bystander helping behaviors are influenced by perceived victim/offender alcohol use regardless of the type of intervention (**H3**), there was only partial support for **H3a**. Participants reported that they were more likely to call the police when only the victim was described as intoxicated; however, inconsistent with **H3a**, respondents reported higher probabilities of direct intervention via saying or doing something when any alcohol use was implied.

Lastly, results from the OLS regression analyses support that bystander intervention is dependent upon individual some respondent characteristics regardless of the type of intervention (**H4**). Findings did not support **H4a**. Self-esteem, self-control, and personally knowing a victim of sexual violence did not predict intervention. There was partial support for **H4b**. Respondents with greater feelings of homophobia reported

significantly lower probabilities of saying or doing something. Higher scores on the Acceptance of Social Coercion measure were predictive of an increased likelihood of calling the police, contradicting **H<sub>4b</sub>**. Furthermore, experiencing completed or attempted rape was not predictive of intervention.

## 6 DISCUSSION

The purpose of the current study was to test the impact of event-specific variables (i.e., location, victim-offender sex, victim-offender perceptions of alcohol use) on college students' decisions to intervene (i.e., call the police, say something, do something) during an ambiguous sexual scenario. Additionally, the current study aimed to establish what, if any, respondent characteristics motivate or hinder college students' intervention decisions. This study addressed several gaps in the sexual victimization and bystander intervention literature. To that end, there are four main findings.

First, results from the OLS regression analyses partially support **H<sub>1a</sub>** and are in line with prior research (Brewster & Tucker, 2016; Howard & Crano, 1974), suggesting that bystanders take into account their location when deciding whether or not to intervene. College students seem to have differential intervention responses to inappropriate sexual touching based upon their environment. Respondents were more likely to personally intervene (i.e., say or do something) in situations that occurred at fraternity-hosted socials or off-campus bars compared to scenarios that occurred on campus; however, participants expressed higher probabilities of calling the police when confronted with a situation occurring on campus versus at a fraternity-hosted social or off-campus bar. Location also seems to matter more for females versus males. Female college students reported significantly higher probabilities of intervention via saying something at fraternity-hosted socials compared to on-campus scenarios, while male college students did not report significantly different probabilities of saying something across locations.

Bars and college fraternities have been identified as high-risk locations for sexual violence (Boeringer, 1996; Frintner & Rubinson, 1993; Martin & Hummer, 1989; Parks et al., 1998; Thompson & Cracco, 2008); therefore, college students may be especially cued to recognize the potential risk for sexual victimization in these specific locations, especially if they have been exposed to rape awareness and/or bystander intervention programming. Many bystander intervention training initiatives include role playing exercises that focus on hypothetical scenarios taking place at parties (including fraternity parties), bars, and dorm rooms since these are locations where sexual assaults typically occur (A. Gilmore, personal communication, June 13, 2019). Further, college students may perceive a greater potential for danger, in terms of victimization risk, in locations that are intrinsically tied to alcohol consumption, such as bars and fraternity parties. If college students identify fraternity parties and bars as particularly high-risk environments, this would explain their increased willingness to directly intervene in those locations. Previous studies have established that there is a greater likelihood of bystander intervention in situations high in risk (Fischer et al., 2006; Chabot et al., 2009; Bennett et al., 2017).

Unlike fraternity socials and bars, college students appear more reliant on campus police to intervene during tense or risky situations occurring on campus grounds. College students often expect that campus police have the duty to protect them from harm (Jacobsen, 2015), which may explain their proclivity to call the police when witnessing conflict while walking across campus to class. Another explanation, however, could be that college students feel less comfortable calling the police in environments where they (or others) may be engaging in deviant behaviors, such as binge drinking or recreational

drug use. Indeed, social events hosted by Greek fraternities and sororities are characterized by heavy alcohol consumption (Caron, Moskey, & Hovey, 2004) and some Greek houses even garner reputations based on their members' alcohol use (Larimer, Irvine, Kilmer, & Marlatt, 1997). Furthermore, socio-recreational drug use among college students is quite common. College students often use illicit substances to have fun and socialize with friends in leisure or party settings (Quintero, 2009). Bars have also been identified as one type of establishment where drugs are frequently purchased, used, and sold (Schensul & Burkholder, 2005). Accordingly, college students may not want to invite a police presence to locations where they are engaging in these behaviors with their friends. Instead, college students may take it upon themselves to personally intervene by saying or doing something in an informal manner in these locations in lieu of attracting law enforcement.

Location elicited different intervention responses for females (i.e., females reported significantly higher probabilities of saying something when their vignette described a fraternity-hosted social compared to on-campus), but not for males, suggesting that female college students interpret some locations as riskier than others (e.g., a fraternity-hosted social is a riskier location than walking across campus to class). This finding is to be expected. Not only do most bystander intervention training programs focus on particularly high-risk locations (i.e., fraternity parties and bars), the majority perpetuate heteronormativity by portraying male sexual violence committed against a female (A. Gilmore, personal communication, June 13, 2019). Female college students may have heightened awareness of their personal victimization risk in these locations and, thus, are better able to identify sexually inappropriate behaviors happening to others

compared to male college students. Bystander intervention initiatives should reinforce that sexual violence can take place anywhere, as well as incorporate a variety of locations and circumstances that may present college students with opportunities for intervention, such as parking decks, residence halls, and the library. Future research should also continue to explore whether different locations elicit different intervention responses and whether these differences hold true across sexes, as well as across various types of institutions of higher education. College students on traditional campuses, for example, may have heightened awareness of the potential for sexual violence in residence halls compared to college students attending classes on a commuter campus.

Second, victim-offender sex is predictive of the probability that bystanders will intervene. Indeed, **H<sub>2a</sub>** was supported by the study's findings. Across intervention types, bystanders were inhibited from intervening if the victim-offender sex combination differed from the heteronormative female victim and male assailant. More specifically, bystanders reported significantly lower probabilities of calling the police when there was a female offender (regardless of victim sex) and saying something when there was a male victim (regardless of offender sex). In terms of doing something, bystanders were significantly less likely to intervene when there was a male victim and male offender, a female victim and female offender, as well as when there was a male victim and female offender. This finding is consistent with prior studies that concluded that homosexual individuals are less likely to receive assistance compared to heterosexual individuals (Gray et al., 1991; Shaw et al., 1994). This finding is also not surprising given that empirical research has narrowly focused on heterosexual pairs. Presumed heterosexuality can negatively impact a bystander's ability to identify a victim in circumstances where

individuals are the same sex. Unfortunately, attention has most often been paid to the categorization of males as potential assailants and females as potential victims (Abbey et al., 1996; Bennett & Banyard, 2016; Koss et al., 1987; Levine & Crowther, 2008; Shotland & Straw, 1976; Stormo et al. 1997). It is true that females are at greater risk than males for experiencing sexual victimization (Cantor et al., 2015; Breiding et al., 2014); however, the assumption of heteronormative relationships and the roles men and women play in the victimization experience essentially ignores the victimization of other populations. Indeed, approximately 1.4 per 1000 college men report rape or sexual assault victimization each year (Baum & Klaus, 2005). A more recent study conducted by Turchik (2012) revealed that 17.1% of her sample of 302 male college students reported experiencing a completed rape since the age of 16. In the general United States population, an estimated 1.7% of men experience rape at some point in their lifetimes, with 23.4% of men experiencing other forms of sexual violence (Breiding et al., 2014). Empirical data challenges the presumption that males rarely experience sexual victimization (Stemple & Meyer, 2014). Additionally, a 2015 national study of U.S. college students has highlighted that gender and sexual minorities are at heightened risk for sexual victimization, even more so than undergraduate females (Cantor et al., 2015).

Most often, bystander intervention training programs address one representation of sexual violence – that of a male committing sexual violence against a woman (Ayesh, 2017) – and assume heterosexuality (Edwards et al., 2015; Potter, Fountain, & Stapleton, 2012). Indeed, some researchers are candid about their hetero-focus because “most incidents warranting bystander intervention appear to involve heterosexual interactions” (Reid & Dundes, 2017, p. 71). Although the focus on male-on-female sexual violence

may constitute a “more bang for your buck” approach, evidence clearly indicates that there are other vulnerable, underserved populations (Cantor et al., 2015; Rothman & Silverman, 2007) that should be addressed in bystander intervention curricula. Bystander intervention initiatives are founded upon building a broader sense of community among college students (Banyard et al., 2007; Banyard et al., 2005; Burn, 2009; Coker et al., 2011; Foubert et al., 2007; McMahon & Banyard, 2012), yet some student subpopulations (e.g., LGBT students) are often ignored. Although national data indicate that 96.6% of the adult population in the United States is heterosexual (Ward, Dahlhamer, Galinsky, & Joestl, 2014), a 2005 study of 8,000 Canadian and American college students reported that roughly 80-85% would be classified as exclusively heterosexual (Ellis, Robb, & Burke, 2005). More recently, in their sample of 1,592 college students, Mellins and colleagues (2017) reported that 21.2% identified as gay, lesbian, bisexual, or other. Consistent with these estimates, 15.3% of the current study’s sample identified as a sexual orientation other than heterosexual. It is imperative that bystander training utilizes an all-inclusive strategy that incorporates skill-building (e.g., active role play) to recognize risk and effectively intervene in situations where there is a male victim and female offender and in situations involving same-sex couples. Additionally, college students may benefit from bystander intervention programs providing statistics on sexual violence more generally, while also highlighting differential risk among gender and sexual minorities. Indeed, researchers and program developers are aware that bystander intervention initiatives should address a diverse student population, provide campus-based statistics, and incorporate scenarios that resonate with a wide-array of students. Bringing in the Bystander, for example, provides licensed universities with a scenario

bank which also includes situations depicting LGBT and non-binary college students; however, administrators select which scenarios they will implement (J. Stapleton, personal communication, June, 20, 2019). Other programs, specifically the Know Your Power image-based social marketing campaign, have led focus groups specific to LGBT and non-binary college students in an effort to create scenarios inclusive of their experiences; however, many heterosexual and cisgender students report that these images are not relatable (J. Stapleton, personal communication, June, 20, 2019).

A third finding of the current research project is that perceptions of victim-offender alcohol use are related to intervention. Regardless of the type of intervention, reported probabilities were consistently higher when only the victim appeared intoxicated versus when neither the victim or offender appeared drunk; however, contrary to **H<sub>3a</sub>**, participants reported higher probabilities of personally intervening by saying or doing something when any alcohol use was implied (i.e., only the victim appeared drunk, only the offender appeared drunk, both the victim and offender appeared drunk). These findings lend partial support to **H<sub>3a</sub>**. Alcohol may be a situational cue indicative of a higher likelihood of danger. That is, college students may be more aware of the potential for danger and harm towards the victim when alcohol is involved, thus, increasing their willingness to intervene. Indeed, research supports a greater likelihood of bystander intervention in situations high in risk and severity (Fischer et al., 2006; Chabot et al., 2009; Bennett et al., 2017).

On the other hand, college students may be more willing to intervene when alcohol is present because of alcohol myopia. Alcohol myopia refers to the reduction in cognitive functioning as a result of alcohol intoxication (Steele & Josephs, 1990) and can

lead to engagement in risky sexual behaviors due to disinhibition (Davis, Hendershot, George, Norris, & Heiman, 2007; MacDonald, MacDonald, Zanna, & Fong, 2000). Decreases in cognitive performance are found at even low levels of alcohol consumption (Breitmeier, Seeland-Schulze, Hecker, & Schneider, 2007). Approximately 81% of college students report consuming alcohol (Johnston, O'Malley, Bachman, & Schulenberg, 2010) and binge drinking is quite common (Wechsler & Nelson, 2008); therefore, while college students may not know the term alcohol myopia, they may have personal experiences with irresponsible decision-making while consuming alcohol and understand that cognitive impairment occurs when an individual is inebriated. Indeed, qualitative interviews show that some college students interpret intoxication as an indication of vulnerability versus culpability (Pugh, Ningard, Ven, & Butler, 2016). College students may be less likely to intervene when the victim and offender appear sober because they assume both individuals are "in their right mind."

The link between alcohol use and sexual violence has been well established in the literature (Abbey, 2002; Abbey, McAuslan, & Ross, 1998; Abbey et al., 1996; Abbey, Zawacki, Buck, Clinton, & McAuslan, 2004; Foubert, Garner, & Thaxter, 2006; Krebs, Lindquist, Warner, Fisher, & Martin, 2009; Novik, Howard, & Boekeloo, 2011). More often than not, both the offender and victim had been consuming alcohol at the time of the sexual assault (Hines et al., 2012; Jackson et al., 2006); therefore, college populations may benefit from administering alcohol and sexual violence programming in conjunction with one another. Bystander intervention programs should continue to emphasize the link between alcohol and sexual victimization, while simultaneously confronting blame attribution in instances where victims are perceived as intoxicated.

Lastly, above and beyond contextual factors, various bystander-specific variables were still predictive of intervention. In terms of race and ethnicity, Hispanic/Latinx college students were significantly more likely to do something than their non-Hispanic counterparts when confronted with an ambiguous sexual scenario. Additionally, compared to White college students, college students who identified as Asian were significantly more likely to intervene by calling the police and saying something. American culture is defined by individualism, self-reliance, and independence (Bellah, Madsen, Sullivan, Swindler, & Tipton, 1985; Kim, 1995). In contrast, Asian and Hispanic cultures are collectivistic in nature (Bond & Hwang, 1986; Kim, 1995; Ruiz, 2005; Shkodriani & Gibbons, 1995; Singelis, Triandis, Bhawuk, & Gelfand, 1995). In collectivistic societies, individuals define themselves as parts or aspects of a group and cooperation among members is high (Kim, 1995; Ruiz, 2005; Triandis, 2001). Furthermore, the goals and needs of the group supersede the goals and needs of the individual (Kim, 1995; Ruiz, 2005; Triandis, 2001). As such, Asian and Hispanic/Latinx college students may feel a duty to intervene to increase the welfare of the college community as a whole. As evidence, Ferreira and colleagues (2016) demonstrated that higher levels of collectivism were associated with greater bystander intervention in cases of cyberbullying. Another explanation could be that since racial and ethnic minority college students are often less connected to the overall college community (Bennett & Okinaka, 1990; Jones, Castellanos, & Cole, 2002; Nora & Cabrera, 1996; Parker & Flowers, 2003), these individuals are less likely to experience audience inhibition. Audience inhibition refers to the fear of being judged by others when acting publicly and has been identified as a psychological process that impedes intervention (Latané &

Darley, 1970; Latané & Nida, 1981). Racial and ethnic minority college students may not fear embarrassment or negative judgement from others for their intervention since they already lack a sense of belonging.

These findings, however, contradict previous research that concluded that Asian students reported less intent to intervene during sexual assault than White students (Hoxmeier, Acock, & Flay, 2017). Empirical evidence further suggests that Asian and Hispanic college students, particularly males, report greater acceptance of rape myths (Fischer, 1987; Jimenez & Abreu, 2003; Mori, Bernat, Glenn, Selle, & Zarate, 1995). Rape myth acceptance has been well-documented in the literature as an inhibitor of bystander intervention (Banyard, 2008; Banyard et al., 2007; Brown & Messman-Moore, 2010; Burn, 2009; McMahon, 2010); therefore, the results of the current study challenges previous research. Although many studies involving bystander intervention among college populations document minority participants in their samples (see McMahon, 2010; McMahon, Banyard, & McMahon, 2015; Kleinsasser, Jouriles, McDonald, & Rosenfield, 2015), race and ethnicity have received little attention in the extant bystander literature. Findings from the present study, as well as from Hoxmeier et al. (2017), justify further investigation into the experiences of bystanders of color and whether cultural perceptions of sexual assault influence bystander decision-making. Indeed, qualitative research by Lawson and colleagues (2012) has identified the significance of culture on an individual's perceptions of sexual violence. Programs that are culturally relevant are more likely to result in lasting changes, thereby increasing program effectiveness (Petty & Caccioppo, 1986). The sample university utilizes a sexual violence prevention program called Haven, which is required for all incoming students (e.g., freshmen, transfer

students, graduate students). Haven, an interactive online course, targets the general student body (Rape, Abuse & Incest National Network, 2019) and appears to lack culturally-specific content. Future research would benefit from exploring potential interactions between race/ethnicity and program participation and their collective impact on intervention decisions.

Relevant to race and ethnicity, multivariate modeling from the current study also suggests that international students may be less likely to intervene when confronted with a risky sexual scenario. More specifically, international students reported significantly lower probabilities of saying something compared to domestic students. Furthermore, while these findings did not reach significance, the direction of the relationship suggests international students may also be less likely to personally do something and more likely to rely and call upon law enforcement to handle external conflict they may encounter. Compared to domestic college students, international students face unique obstacles that often cause them to report negative college experiences. These challenges include culture shock, homesickness, parental and cultural pressure to succeed, social isolation, language barriers, and discrimination (Forbes-Mewett & Nyland, 2008; Lee & Rice, 2007; Misra & Castillo, 2004; Mori, 2000; Poyrazli & Lopez, 2007). As a result, international students may not fully engage in the college experience nor feel connected to their college community. These factors can affect their decision-making processes when it comes to bystander intervention because international students may fail to develop a degree of personal responsibility to intervene, which is step three of Latané and Darley's (1970) cognitive and behavior process. Additionally, recent research has demonstrated that international students are less likely to engage in risky behaviors associated with

victimization (i.e., drug use and binge drinking) compared to their non-international counterparts (Daigle, Hoffman, & Johnson, 2018). Since international students are often socially isolated and appear less likely to engage in drug use and binge drinking, they may not be present at particularly high-risk environments such as fraternity parties or bars. This possibility, coupled with the fact that the social support networks of international students are often confined to their own national groups (Mori, 2000), further reiterates the importance of studying minority populations, as well as the implementation of culturally-relevant bystander intervention initiatives.

An additional bystander characteristic that may influence an individual's decision to intervene is sexual orientation. While there were no significant main effects for sexual orientation predicting probability of intervention, an interaction term examining sex and sexual orientation was included in subsequent models. There was a significant interaction between sex and sexual orientation in the full OLS regression model predicting the probability of saying something (Model 3 in Table 5.8). Although female college students, on average, reported higher probabilities of saying something compared to male college students, non-heterosexual males reported higher probabilities of intervention via saying something versus straight females. There are two potential explanations for this finding. First, the literature shows that sexual minorities, both males and females, are less likely than their heterosexual counterparts to endorse rape myths (Anderson, Wandrew, Klossner, & Cahill, 2017; Wilson & Newins, 2019). As previously discussed, rape myth acceptance decreases the likelihood of bystander intervention (Banyard, 2008; Banyard et al., 2007; Brown & Messman-Moore, 2010; Burn, 2009; McMahan, 2010). It could be that straight females in this sample endorsed rape myths to a greater extent than gay or

bisexual males, resulting in differences in intervention. Second, research on rape acknowledgement suggests that sexual minorities may be better able, compared to straight females, to identify behaviors constituting sexual violence (Wilson & Miller, 2016). Because of this difference, it is possible that non-heterosexual males in this sample identified the inappropriate touching described in the vignette as sexual victimization while straight females did not. Although the present study lacks the statistical power to perform such analyses, future research should explore the possibility of a three-way interaction between sex, sexual orientation, and victim-offender sex.

Related to sexuality and sexual orientation, homophobia is another bystander characteristic that appears to inhibit individuals from intervening. As previously discussed, bystanders were less inclined to intervene if the victim-offender sex combination differed from the stereotypical portrayal of a female victim and a male assailant. Even after controlling for victim-offender sex combinations, individuals with greater feelings of homophobia still reported significantly lower probabilities of directly intervening by saying or doing something. This finding is especially concerning since research suggests college students who are gender or sexual minorities are especially vulnerable to experiencing sexual violence (Cantor et al., 2015) and because a large proportion of college students identify with a sexual orientation other than heterosexual (Ward et al., 2014).

The association between homophobia and a decreased likelihood of intervention regardless of victim/offender sex may further be explained by a study conducted by Aosved and Long (2006), which concluded that homophobia is predictive of rape myth acceptance. As established in the victimization literature, rape myth acceptance

encompasses beliefs that tolerate and promote sexual violence (Aosved & Long, 2006; Burt, 1980; Frese, Moya, & Megías, 2004; Lonsway & Fitzgerald, 1994; McMahon, 2006). Additionally, acceptance of rape myths has been found to be negatively related to bystanders' willingness to intervene in situations involving sexual violence (Banyard et al., 2004; McMahon, 2006). That being the case, since a measure of rape myth acceptance was not included in the current study, it could be that the Homophobia Scale is also capturing the endorsement of rape myths. Additionally, homophobia is interrelated with other forms of intolerance, such as racism and sexism (Aosved & Long, 2006), and a lack of empathetic concern for others (Johnson, Brems, & Alford-Keating, 1997); therefore, individuals who are homophobic may not feel compelled to help others in general. Comparisons of standardized beta coefficients indicated that homophobia was consistently the most influential predictor of personally intervening (i.e., saying or doing something). As such, it is recommended that bystander intervention training curricula combat myths and misconceptions associated with different sexual orientations and gender identities in the same ways these programs currently tackle rape myth acceptance and traditional gender roles. Bystander intervention initiatives would benefit from focusing on diversity, inclusivity, and tolerance.

Homophobia also appears to matter more for males versus females. Males with greater feelings of homophobia reported significantly lower probabilities of saying something compared to females with similarly high homophobia scores. Kehily and Nayak (1997) assert that homophobia is a gendered phenomenon because homophobia is intrinsically tied to hegemonic masculinity. Male homophobic expression often occurs to establish a heterosexual masculine identity and/or to increase their sexual social status in

relation to other males (Kehily & Nayak, 1997); thus, male college students who are also homophobic may interpret saying something critical of inappropriate sexual touching as a non-masculine behavior. It could also be that homophobic male college students fear that any intervention on their part could potentially cause others to label them as gay, or otherwise non-heterosexual (Carlson, 2008).

In addition to the aforementioned respondent characteristics, sexual violence programming and personal involvement in the #MeToo movement emerged as significant predictors for higher probabilities of direct personal intervention (i.e., saying or doing something). These findings are supported by existing research. As evidence, various studies have documented that participation in sexual violence risk reduction programs, including bystander intervention training, is associated with increased expressed willingness to help others (Banyard et al., 2007; Langhinrichsen-Rohling, Foubert, Brasfield, Hill, & Shelley-Tremblay, 2011; Salazar et al., 2014). On a larger scale, social movements can be viewed as another way to mobilize individuals in collective action to combat sexual violence. Social networking sites have impacted the distribution of media and information, as well as provided more opportunities to participate in social movements (Castells, 2015; Passy & Giugni, 2001). Hashtag feminism, for example, involves the use of hashtags on social media platforms to engage communities in online conversations about the realities and pervasiveness of sexual violence (Berridge & Portwood-Stacer, 2015; Dixon, 2014; Horeck, 2014). Using hashtags like #MeToo, individuals are able to share their personal sexual victimization experiences with a large audience (Jaffe, 2018). The #MeToo movement has also garnered much attention from the media and popular press, which has implications. According to Sanday (1996),

increased media attention to the issue of sexual assault should also spur mobilization against sexual assault. Most relevant to the current research endeavor, however, Armstrong and Mahone (2017) found that willingness to engage in collective action against sexual violence was significantly related to bystander intervention. Future studies should continue to explore the link between bystander intervention and collective action via personal engagement in social movements, including parsing out temporal ordering.

Lastly, scores on the Acceptance of Sexual Coercion Scale were predictive of the probability of calling the police, as well as the probability of saying something.

Individuals with higher scores on the Acceptance of Sexual Coercion Scale reported significantly lower probabilities of saying something when confronted with an ambiguous risky sexual scenario. Said differently, individuals who found sexually coercive behaviors less justifiable were more likely to intervene by saying something. More surprising is the finding that respondents with higher scores on the Acceptance of Sexual Coercion Scale reported significantly higher probabilities of calling the police in their given vignette. This finding may simply be because Asian college students in this sample were more likely to accept behaviors indicative of sexual coercion, as well as be more likely to call the police in response to their vignette. Furthermore, a greater proportion of male college students were Asian (22.8%) than female college students (13.3%) and males scored higher on the Acceptance of Sexual Coercion scale. There are other plausible explanations as well. To illustrate, a history of sexual abuse has been established as a predictor of sexual aggression, albeit these samples comprised of only young males (Abbey, Jacques-Tiura, & LeBreton, 2011; White & Smith, 2004). Still, it could be that while sexually aggressive individuals are not critical of their own coercive behaviors,

they are able to identify behaviors constituting sexual violence between other individuals due to their own sexual victimization histories which, in turn, increases their likelihood of calling the police. Mosher and Anderson (1986) offer another possible explanation. In their study, sexually aggressive males experienced more anger, fear, distress, shame, and guilt when guided through realistic rape imagery than their non-sexually aggressive counterparts (Mosher & Anderson, 1986). If sexually aggressive individuals experience these emotional states when witnessing inappropriate sexual touching and kissing, it could very well compel them to call the police to curtail the discomfort they may be experiencing.

As with any study, it is important to identify limitations of the current study research. First, the data utilized encompass college students attending a single large, urban institution in the Southeast region of the United States; therefore, caution must be exercised when generalizing the results of this study to other colleges and universities across the country or to colleges and universities located in other countries. Future research should explore whether these findings hold true for different types of institutions of higher education (e.g., public versus private; suburban versus urban; residential versus commuter) across various regions, states, and cities in the United States. Second, participation in the current research was contingent upon student attendance during classroom visits; therefore, students who were absent (University-approved or otherwise) were excluded from the sample. The descriptive statistics of the sample, however, were comparable to the demographic make-up of the sample university more generally. Still, it could be that absent students are less engaged and not as connected to the campus community compared to students who were present in class; therefore, the findings of the

present study may overestimate the likelihood of intervention. Third, while delving into the qualitative responses of the participants, many stated that they did not feel the scenario was “serious enough” to warrant intervention. Future research should incorporate the sexual violence continuum (i.e., verbal sexual harassment to forcible rape) to examine how severity impacts college students’ intervention decisions. Fourth, this dissertation is founded on the belief that intentions reflect behavior; therefore, it is recommended that some caution be exercised when generalizing the findings of previous studies linking intention and behavior to the current study. There are emotional elements tied to witnessing or interrupting an individual’s (potential) sexual victimization that may make it harder to predict actual intervening behaviors. Van Boven and Loewenstein (2005, p. 287) refer to this disconnect as an empathy gap, whereby people in “‘cold,’ non-emotional states underestimate the impact of ‘hot,’ emotional arousal” on decision-making. To that end, participants in a “cold” emotional state (e.g., sitting in class and filling out the survey) may have a difficult time predicting how they would respond when confronted with sexual violence in real life. Relatedly, there is expressed concern in the bystander literature regarding social desirability bias and respondents overestimating their likelihood of intervention. While this concern is valid and noted by various researchers, many studies fail to incorporate a measure of social desirability bias (e.g., Amar, Sutherland, & Kesler, 2012; Brody & Vangelisti, 2016; Foubert, Langhinrichsen-Rohling, Brasfield, & Hill, 2010; McMahon, Postmus, & Koenick, 2011; Obermann, 2011). One of the strengths of the current study is controlling for the impact of social desirability bias on self-reported probabilities of intervention.

In addition to the aforementioned policy implications and recommendations for future research, the literature would benefit, more generally, from using hierarchical linear modeling to explore institution-, bystander-, and event-level correlates related to bystander intervention among college populations.

## **6.1 Conclusion**

Results from the present study suggest that both incident- and bystander-specific characteristics have the ability to motivate or inhibit college students' decisions to intervene. If these findings can be replicated across various institutions of higher education in different regions, states, and cities of the United States, then the success of bystander intervention initiatives in regards to reducing sexual violence on college campuses is contingent upon the inclusion of important incident-specific variables.

## APPENDIX A

Thank you for participating in this important survey. The purpose of this survey is to learn about the experiences and perceptions of college students. We hope that you can provide some insight on how to improve the college experience for others. Participation is voluntary and you may discontinue the survey at any time. All responses will be kept confidential. Please read the following scenario.

### Vignette

You are [*location*: walking across campus on your way to class; at a fraternity-hosted social; at an off-campus bar on the weekend]. You notice a [*sex of offender*: male college student; female college student]. Next to them is a [*sex of victim*: male college student; female college student]. You have never met either of these individuals before. From what you can see, the [*sex of offender*: male college student; female college student] keeps grabbing the [*sex of victim*: male college student; female college student]’s butt, rubbing up against them, and trying to kiss them. You can tell the [*sex of victim*: male college student; female college student] is trying to pull away. The [*sex of victim*: male college student; female college student] keeps removing the [*sex of offender*: male college student; female college student]’s hands from his/her body and politely says to “cut it out.” The [*sex of offender*: male college student; female college student] continues to make advances. As you get closer, you notice that the [*alcohol use*: offender; victim; both; neither (leave out)] is/are slurring their speech, stumbling over their feet, and seem to be drunk.

**PART ONE.**

This section of the questionnaire asks how you would respond to your given scenario.

1. Would you intervene by calling the police?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
2. From 0% to 100%, what is the probability that you would call the police?	_____ %	
3. Would you intervene by saying something (e.g., "Excuse me? Is there a problem here?")?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
4. From 0% to 100%, what is the probability that you would say something?	_____ %	
5. In your own words, what would you say?		
6. Would you intervene by doing something (e.g., stepping between the two individuals)?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
7. From 0% to 100%, what is the probability that you would do something?	_____ %	
8. In your own words, what would you do?		

**PART TWO.**

This section of the questionnaire asks about your personal and demographic characteristics.

1. How old are you?	_____ years old	
2. How do you describe your race/ethnicity?	<input type="checkbox"/> White or Caucasian <input type="checkbox"/> Black or African-American <input type="checkbox"/> Asian or Pacific Islander <input type="checkbox"/> Native American or American Indian <input type="checkbox"/> Multiracial (identify as two or more races) <input type="checkbox"/> Other (please specify): _____	
3. Are you Hispanic or Latinx?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
4. What is your biological sex?	<input type="checkbox"/> MALE	<input type="checkbox"/> FEMALE
5. What is your gender identity?	<input type="checkbox"/> Male <input type="checkbox"/> Female <input type="checkbox"/> Transgender <input type="checkbox"/> Other (please specify): _____	
6. What is your sexual orientation?	<input type="checkbox"/> Heterosexual <input type="checkbox"/> Lesbian <input type="checkbox"/> Gay <input type="checkbox"/> Bisexual <input type="checkbox"/> Other (please specify): _____	
7. What is your academic year?	<input type="checkbox"/> Freshman <input type="checkbox"/> Sophomore <input type="checkbox"/> Junior <input type="checkbox"/> Senior <input type="checkbox"/> Graduate student <input type="checkbox"/> Other	
8. What is your major?	_____	
9. Are you a member of a university-recognized Greek fraternity or sorority?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
10. Are you a collegiate athlete on a varsity sports team that represents Georgia State University and competes with other colleges and universities? ( <i>Note:</i> This question excludes club sports.)	<input type="checkbox"/> YES	<input type="checkbox"/> NO
18a. If yes, what sport?	_____	
11. Are you an international student?	<input type="checkbox"/>	<input type="checkbox"/>

	YES	NO
12. Have you ever received bystander intervention training?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
13. Have you ever attended a rape awareness or rape education program?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
14. In the past 12 months, have you had a head injury where you lost consciousness (were knocked out or passed out) or where you needed medical treatment (e.g., stitches)?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
14a. If yes, did you have seizures as a result of this injury?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
15. Do you know what the #MeToo movement represents?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
15a. If yes, have you signed an online petition in support of the #MeToo movement?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
15b. If yes, have you posted the hashtag (#MeToo) on your personal social media platforms?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
15c. If yes, have you attended a protest or demonstration in support of the #MeToo movement?	<input type="checkbox"/> YES	<input type="checkbox"/> NO

**PART THREE.**

Below is a list of statements dealing with your general feelings about yourself. Please indicate how strongly you agree or disagree with each statement.

	<b>Strongly Agree</b>	<b>Agree</b>	<b>Disagree</b>	<b>Strongly Disagree</b>
1. On the whole, I am satisfied with myself.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. At times, I think I am no good at all.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. I feel that I have a number of good qualities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. I am able to do things as well as most other people.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. I feel I do not have much to be proud of.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. I certainly feel useless at times.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. I feel that I'm a person of worth, at least on an equal place with others.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. I wish I could have more respect for myself.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. All in all, I am inclined to feel that I am a failure.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. I take a positive attitude toward myself.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**PART FOUR.**

This section of the questionnaire is designed to measure your thoughts, feelings, and behaviors with regard to sexuality. It is not a test, so there are no right or wrong answers. Please indicate the extent to which you agree or disagree with each statement.

	<b>Strongly Agree</b>	<b>Agree</b>	<b>Neither Agree nor Disagree</b>	<b>Disagree</b>	<b>Strongly Disagree</b>
1. Gay people make me nervous.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Gay people deserve what they get.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. If I discovered a friend was gay, I would end the friendship.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. I think homosexual people should not work with children.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. I make derogatory remarks about gay people.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. I enjoy the company of gay people.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. I make derogatory remarks like "faggot" or "queer" to people I suspect are gay.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. It does not matter to me whether my friends are gay or straight.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. It would not upset me if I learned that a close friend was homosexual.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. I avoid gay individuals.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. It does not bother me to see two homosexual people together in public.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**PART FIVE.**

This section of the questionnaire is designed to ask about you and your personality. You are asked to respond to 24 statements. Each statement describes a specific situation. You are to decide the extent to which you agree that the statement is typical of your behavior. This is not a test. There are not “right” or “wrong” responses to any of the statements. Please answer each question as honestly as you can.

	Strongly Agree	Agree	Disagree	Strongly Disagree
1. I often act on the spur of the moment without stopping to think.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. I don't devote much thought and effort to preparing for the future.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. I often do whatever brings me pleasure here and now, even at the cost of some distant goal.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. I'm more concerned with what happens to me in the short run than in the long run.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. I frequently try to avoid projects that I know are difficult.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. When things get complicated, I tend to quit or withdraw.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. The things in life that are easiest to do bring me the most pleasure.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. I dislike really hard tasks that stretch my abilities to the limit.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. I like to test myself every now and then by doing something a little risky.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Sometimes I will take a risk just for the fun of it.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. I sometimes find it exciting to do things for which I might get in trouble.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Excitement and adventure are more important to me than security.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. If I had a choice, I would almost always rather do something physical than something mental.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. I almost always feel better when I am on the move than when I am sitting and thinking.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. I like to get out and do things more than I like to read or contemplate ideas.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

16. I seem to have more energy and a greater need for activity than most other people my age.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. I try to look out for myself first, even if it means making things difficult for other people.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. I'm not very sympathetic to other people when they are having problems.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. If things I do upset people, it's their problem not mine.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. I will try to get the things I want even when I know it's causing problems for other people.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. I lose my temper pretty easily.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. Often, when I am angry at people I feel more like hurting them than talking to them about why I am angry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. When I'm really angry, other people better stay away from me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. When I have a serious disagreement with someone, it's usually hard for me to talk calmly about it without getting upset.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## PART SIX.

Individuals may experience a wide range of unwanted sexual experiences in college. Individuals do not always report unwanted sexual experiences to the police or discuss them with family or friends. The person making the advances is not always a stranger, but can be a friend, boyfriend, girlfriend, fellow student, professor, teaching assistant, supervisor, co-worker, somebody you met off campus, or even a family member. The experience could occur anywhere (e.g., on- or off-campus, in your residence, in your place of employment, or in a public place). You could be awake, or you could be asleep, unconscious, drunk, or otherwise incapacitated. Please keep this in mind as you answer the questions.

The following questions ask about different types of unwanted sexual experiences you may have experienced at any point in your life. Because of the nature of unwanted sexual experience, the language may seem graphic to you. However, this is the only way to assess accurately whether or not the individuals in this study have had such experiences. You only have to answer “yes” or “no.”

	YES	NO
1. Has anyone ever made you have sexual intercourse by using force or threatening to harm you? Just so that there is no mistake, by sexual intercourse I mean unwanted penetration. Keep in mind that penetration includes penile-vaginal, penile-anal, digital-vaginal, digital-anal, object-vaginal, object-anal, mouth on genitals, and mouth on someone else's genitals.	<input type="checkbox"/>	<input type="checkbox"/>
2. Has anyone ever attempted, but not succeeded, in making you take part in any of the unwanted sexual experiences that I have just asked you about? This would include threats that were not followed through. For example, did anyone threaten or try, but not succeed, to have vaginal, oral, or anal sex with you or try unsuccessfully to penetrate your vagina or anus with a foreign object or finger?	<input type="checkbox"/>	<input type="checkbox"/>
3. Has anyone ever made you have sexual intercourse when you didn't want to after you drank so much alcohol or took enough drugs that you were very high, drunk, or passed out? Again, by sexual intercourse I mean unwanted penetration.	<input type="checkbox"/>	<input type="checkbox"/>
4. Has anyone ever had sex with you when you didn't want to after they gave you enough alcohol or drugs to make you very high, intoxicated, or passed out?	<input type="checkbox"/>	<input type="checkbox"/>
5. Not counting the types of sexual contact already mentioned, have you ever experienced any unwanted or uninvited touching of a sexual nature? This includes forced kissing, touching of private parts, grabbing, and fondling, even it is over your clothes. Remember this could include anyone from strangers to people you know well.	<input type="checkbox"/>	<input type="checkbox"/>
6. Has anyone ever made or tried to make you have sexual intercourse or sexual contact when you did not want to by making threats of non-physical punishment such as lowering a grade, being demoted or fired from a job, damaging your reputation, or being excluded from a group for failure to comply with requests for any type of sexual activity?	<input type="checkbox"/>	<input type="checkbox"/>
7. Has anyone ever made or tried to make you have sexual intercourse or sexual contact when you did not want to by making promises of rewards such as raising a grade, being hired or promoted, being given a ride or class notes, or getting help with course work from a fellow student if you complied sexually?	<input type="checkbox"/>	<input type="checkbox"/>
8. Has anyone ever made or tried to make you have sexual intercourse or sexual contact when you did not want to by simply being overwhelmed by someone's continual pestering and verbal pressure?	<input type="checkbox"/>	<input type="checkbox"/>
9. Do you personally know someone who has disclosed that they have experienced any of the unwanted sexual experiences described in this section?	<input type="checkbox"/>	<input type="checkbox"/>

**PART SEVEN.**

Imagine a man wants to have sexual intercourse with a woman, but the woman says “no.” Under what circumstances would you find it understandable that the man uses or threatens to use physical force (e.g., hurt her, hold her down) to make her have sex with him? Rate each situation from 1 to 5, with 1 = Absolutely Not and 5 = Absolutely Yes.

I would find it understandable if...	<b>Absolutely Not 1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>Absolutely Yes 5</b>
1. He is so aroused that he cannot stop himself anymore.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. He bought her a drink or something before.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. She is drunk or stoned.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. She has slept with him before.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. She has slept with other boys before.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. She has kissed him before.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. She has allowed him to touch her breasts before.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. She said yes at first but then changed her mind.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. They have been in a relationship for some time.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. She led him on.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. She first got him aroused.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. He believes she only plays coy and really wants to have sex as well.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. He wants to show his friends that he can score with a girl.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**PART EIGHT.**

Below is a list of statements dealing with your general feelings about yourself. Please indicate whether each statement is true or false. This is not a test. There are no “right” or “wrong” responses to any of the statements. Please answer each question as honestly as you can

	TRUE	FALSE
1. I sometimes feel resentful when I don't get my own way.	<input type="checkbox"/>	<input type="checkbox"/>
2. No matter who I am talking to, I'm always a good listener.	<input type="checkbox"/>	<input type="checkbox"/>
3. There have been occasions when I took advantage of someone.	<input type="checkbox"/>	<input type="checkbox"/>
4. I sometimes try to get even, rather than forgive and forget.	<input type="checkbox"/>	<input type="checkbox"/>
5. I am always courteous, even to people who are disagreeable.	<input type="checkbox"/>	<input type="checkbox"/>
6. I have sometimes taken advantage of another person.	<input type="checkbox"/>	<input type="checkbox"/>
7. I am quick to admit making a mistake.	<input type="checkbox"/>	<input type="checkbox"/>

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20 U.S.C. § 1092(f)  
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## VITA

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