

*BE A WATCH DAWG: USING A SEXUAL VIOLENCE CAMPAIGN TO INCREASE PROSOCIAL
BYSTANDER BEHAVIOR*

by

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(Under the Direction of Jessica L. Muilenburg)

ABSTRACT

This study developed and tested the preliminary efficacy of a campus-wide sexual violence prevention social media marketing (SMM) campaign, *Be a Watch Dawg*. This research study was conducted in three phases consisting of: a formative study with the target population (Phase I); campaign development (Phase II); and testing the preliminary efficacy of the campaign (Phase III). Phase I data were collected through focus groups with the target population and a cross-sectional survey; these data were used to inform campaign messaging and content. Phase II involved the development of campaign messaging, slogans, hashtags, web-based and social media content, and posters. In Phase III, the *Be a Watch Dawg* campaign was implemented and evaluated. The *Be a Watch Dawg* campaign was implemented at the University of Georgia in Fall 2017. The *Be a Watch Dawg* campaign focused on sexual violence prevention by encouraging prosocial bystander behavior among college students. Because alcohol is a risk factor in sexual violence and may inhibit prosocial bystander behavior among college students, this campaign also focused on alcohol's role in sexual violence and bystander behavior. The campaign included social media content, photos, and videos with the campaign hashtag about

sexual violence, bystander intervening strategies, and risk reduction strategies to reduce the risk of sexual violence. This study proposed that exposure to the campaign would be predictive of increased prosocial bystander behavior, intentions to intervene, and decreased alcohol use pre- to post-campaign launch. Results indicate that the *Be a Watch Dawg* campaign had a significant positive effect on prosocial bystander behavior and intentions to intervene. Further, evaluation of the campaign's social media data revealed that the campaign reached a large number of people on social media across Facebook, Instagram, and Twitter (i.e. 43,160). Findings reveal that a social media marketing campaign is a promising strategy to increase prosocial bystander behavior. Implications for future programming include the focus on alcohol's role in prosocial bystander behavior and behavioral strategies that can help college students to reduce the risk of sexual violence.

INDEX WORDS: Sexual violence, alcohol, college students, evaluation, social media marketing

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DEDICATION

This dissertation is dedicated to my husband and partner in life, Domenick. I am forever grateful for your constant love, support, and encouragement. Thank you for always believing in me and for cheering me on when I needed it most. You make me better. I love you.

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CHAPTER 1

INTRODUCTION

Background

The sexual victimization of college women is a serious and complex public health problem that occurs at college campuses across the United States (U.S.), with one in four college women experiencing sexual violence during their college careers (White House Task Force to Protect Students from Sexual Assault, 2014). College women are at risk of experiencing sexual violence due to a variety of risk factors within the college environment. These issues range from individual-level factors, such as alcohol use, attitudes, and intentions, to campus policies surrounding campus sexual violence. Understanding the risk and protective factors is crucial to developing effective programming for sexual violence among college students. Sexual violence prevention efforts call for a multi-level approach among college students; however, none to date address the role of alcohol use in prosocial bystander behavior (DeGue et al., 2012, 2014a).

College Students and Risk Behaviors

A key developmental phase called emerging adulthood occurs during the college years, which takes places from 18 to 25 years of age and marks a period of profound change, autonomy, independence, and identity development (Arnett, 2000). It is also a time when individuals are more likely to engage in risk behaviors, such as substance use, risky sexual practices, and unsafe driving behaviors such as driving under the influence of alcohol (Arnett,

2000). These behaviors are detrimental to college students' overall health and safety. Further, engaging in sexual behavior under the influence of alcohol increases college students' risk of experiencing sexual violence in the college environment (Abbey et al., 2002; Abbey, Zawacki, Buck, Clinton, & McAuslan, 2001a; Arnett, 2000; Lang et al., 2011; Testa, Vanzile-Tamsen, & Livingston, 2004).

Sexual Violence on College Campuses

The sexual victimization of college women is a significant public health problem at college campuses across the U.S. (American College Health Association, 2015; Cantor et al., 2015; Fisher, Cullen, & Turner, 2000; Zinzow & Thompson, 2015). In 2016 alone, roughly 10% of college women had experienced sexual violence while attending college (American College Health Association, 2016; White House Task Force to Protect Students from Sexual Assault, 2014). Nearly 34% of women who have experienced rape were sexually assaulted between 18 and 24 years of age (Black et al., 2010). Defined as any sexual act against an individual without their freely given consent or against someone unable to consent or refuse contact, sexual violence contributes to negative mental, emotional, and physical health outcomes in individuals who experienced sexual violence (Basile, Smith, Breiding, Black, & Mahendra, 2014; Cantor et al., 2015; Centers for Disease Control and Prevention, 2016; Fisher et al., 2000). According to the Centers for Disease Control and Prevention (CDC), sexual violence encompasses a wide spectrum of nonconsensual physical and non-physical acts including forced penetration, unwanted sexual contact, and noncontact sexual experiences such as stalking or verbal threats and harassment (Basile et al., 2014; Centers for Disease Control and Prevention, 2016).

Among women across age groups, college-aged women aged 18 through 25 years are at highest risk of sexual violence victimization (Brieding et al., 2014; Cantor et al., 2015; Fisher et

al., 2000). Two nationally representative samples of college students show that, in 2014 alone, 9.8 – 10.5% of college women experienced nonconsensual sexual touching and 4.2 – 4.9% experienced nonconsensual sexual penetration (American College Health Association, 2015; Cantor et al., 2015). According to the Association of American Universities' (AAU) 2015 Campus Climate Survey of Sexual Misconduct and Sexual Assault, over 23% of college women had experienced sexual violence since entering college (Cantor et al., 2015).

After experiencing sexual violence, individuals often experience a wide array of physical health issues and negative mental health outcomes (Allsworth, Anand, Redding, & Peipert, 2009; Black et al., 2011; Capaldi, Knoble, Shortt, & Kim, 2012; Lang, Salazar, Wingood, DiClemente, & Mikhail, 2007). College women who have experienced sexual violence are more likely to experience chronic illnesses, chronic headaches, sleep disturbances, sexually transmitted infections (STIs), and unwanted pregnancy compared to women who have not experienced sexual violence. After experiencing sexual violence, individuals are more likely to have anxiety and depression, and higher rates of suicide (Allsworth et al., 2009; Black et al., 2011; Capaldi et al., 2012; Lang et al., 2007).

Despite the high incidence of sexual victimization among college students, sexual violence is vastly underreported to law enforcement and on-campus officials. Less than 28% of sexual violence incidents that occur among college students are reported to campus authorities and official agencies, such as law enforcement and Title IX offices (Cantor et al., 2015; Fisher, Daigle, Cullen, & Turner, 2003). Further, more than 50% of individuals who experienced forced penetration on campus did not report the incident because they did not think it was “serious enough” (Cantor et al., 2015). However, nearly 70% of individuals who experience sexual violence tell someone, including but not limited to friends, family members, and intimate

partners (Fisher et al., 2003; Orchowski, Meyer, & Gidycz, 2009).

Sexual Perpetration among College Men

The prevalence of sexual violence perpetration among U.S. college men supports the high rates of sexual violence against college women. Studies show that roughly 31-35% of college men report perpetrating at least one act of sexual coercion. Further, 16.8% of college men report perpetrating forced sexual contact (Abbey & McAuslan, 2004; DeGue et al., 2012; White & Smith, 2004). In a prospective analysis of sexual violence perpetration, findings show that 27.5% of college men reported perpetrating a moderate act of sexual aggression, which was defined as perpetrating unwanted sexual contact, sexual coercion, or attempted rape, and 3.7% reported a severe act of sexual perpetration, defined as engaging in perpetration behaviors that met the legal definition of rape (Loh, Gidycz, Lobo, & Luthra, 2005). In a sample of 341 college men at a Southern midsized public university, 25% of college men reported some form of sexual coercion, 11.4% reported behaviors that meet legal definitions for attempted rape or rape, and over 5% reported behaviors that meet legal definitions for attempted rape or rape with a group of two or more men (Swartout, 2013). Overall, these findings highlight the fact that sexual violence perpetration among college men is a major problem across college campuses.

Alcohol Use and Sexual Violence

Alcohol use increases the likelihood of sexual violence against college women. Roughly half of all sexual violence incidents involve alcohol use by perpetrators, victims, or both (Abbey, Zawacki, & Buck, 2005; Abbey, McAuslan, & Ross, 1998; Abbey, McAuslan, Ross, & Zawacki, 1999; Graham, Bernards, Abbey, Dumas, & Wells, 2014). Studies have shown that 33–72% of sexual assaults among college students involve alcohol consumption by one or both parties (Abbey, 2002; Mohler-Kuo, Dowdall, Koss, & Wechsler, 2004). College women who engage in

excessive alcohol use are at higher risk of experiencing sexual violence, though it is important to note that research has not found a causal relationship between alcohol use and sexual victimization (Abbey, 2002; Abbey, Buck, Zawacki, & Saenz, 2003; Abbey et al., 2001b; Testa & Livingston, 2009; Testa, Livingston, & Collins, 2000; Testa, Hoffman, & Livingston, 2010; Maria Testa et al., 2004). Cross-sectional studies among college students have indicated a positive relationship between alcohol use and experiencing sexual violence (Testa & Livingston, 2009; Testa et al., 2000; Testa et al., 2004). Moreover, alcohol causes alcohol myopia, or distorted perceptions of reality, disrupted cognitive decision-making processes; thus, alcohol increases the risk of sexual assault (Testa & Livingston, 2009; Testa et al., 2000; Testa et al., 2004).

Sexual Violence and Alcohol Expectancies

Alcohol expectancies play a key role in sexual violence occurrences among college students. Alcohol expectancies related to sexual violence refer to alcohol-related sexual beliefs in which alcohol is treated as an facilitator of sex (Abbey et al., 2003; Abbey et al., 1999; Jozkowski & Wiersma, 2014; Muehlenhard, Humphreys, Jozkowski, & Peterson, 2016). The college socialization process can enable alcohol expectancies, particularly among the party culture where binge drinking occurs (Muehlenhard et al., 2016). Within college sexual violence, alcohol expectancies are assessed to understand whether alcohol increases sexual aggression among college men who expect alcohol to make them more aggressive and more sexually disinhibited. Various studies indicate that sexual aggression is highest among college men with high sexual alcohol expectancies, further supporting alcohol's negative effect on college sexual violence (Abbey et al., 2003; Abbey, Zawacki, Buck, Clinton, & McAuslan, 2004; Abbey,

Saenz, & Buck, 2005; Abbey et al., 1999; Abbey, Wegner, Pierce, & Jacques-Tiura, 2012; Tuliao & McChargue, 2014).

Alcohol and Prosocial Bystander Behaviors

It is well-established that alcohol contributes to sexual violence in the college setting. However, recent studies also suggest that alcohol plays a role in college students' ability to prevent sexual violence. Recent studies show that alcohol use decreases college students' likelihood of intervening in sexual violence as a prosocial bystander, especially among college men (Fleming & Wiersma-Mosley, 2015; Orchowski, Berkowitz, Boggis, & Oesterle, 2015). The *bystander model*, which is used extensively in sexual violence prevention interventions, targets underlying social norms and encourages individuals to intervene in sexual violence as prosocial bystanders (Banyard et al., 2009; Banyard, Plante, & Moynihan, 2004; Basile, Smith, Breiding, Black, & Mahendra, 2014; Coker et al., 2011; Moynihan, Stapleton, & Banyard, 2009; Potter, 2012b; Salazar, Vivolo-Kantor, Hardin, & Berkowitz, 2014; White House Task Force to Protect Students from Sexual Assault, 2014).

Fleming and Wiersma-Mosley (2015) found that college men were less likely than women to intervene in coercive situations between a male and female while under the influence of alcohol. Findings also show that men with high scores in alcohol expectancies related to sex were less likely to intervene in sexual violence against women, indicating that more permissible attitudes towards sexual coercion occur while under the influence of alcohol (Fleming & Wiersma-Mosley, 2015). Within a sample of college men, Orchowski et al. (2015) found that heavy drinkers (defined as consuming five or more drinks on more than one occasion in the past 30 days) were significantly less likely to act as a prosocial bystander in contexts of potential

sexual violence compared to non-heavy drinkers. Overall, heavy alcohol use is associated with lowered bystander intervention among college men (Orchowski et al., 2015).

Study Purpose

This mixed methods study developed and tested the preliminary efficacy of a campus-wide sexual violence prevention social media marketing (SMM) campaign among college students, the *Be a Watch Dawg* campaign. In partnership with the University of Georgia University Health Center, I developed the *Be a Watch Dawg* campaign, which focuses on bystander intervening and alcohol use, at the University of Georgia and implemented the campaign in Fall 2017. This campaign purported to increase sexual violence prevention using the bystander model. Because alcohol is a risk factor for sexual violence victimization, perpetration, and decreases the likelihood of intervening, the campaign also aimed to decrease alcohol use and address misperceived norms about alcohol use among college students. The campaign included social media content, photos, and videos with the campaign hashtag about sexual violence, bystander intervening strategies, and risk reduction strategies to reduce the risk of sexual violence. This research study was conducted in three phases consisting of: a formative study with the target population (Phase I); campaign development (Phase II); and testing the preliminary efficacy of the campaign (Phase III).

Phase I consisted of a mixed methods study to understand UGA college students' attitudes, experiences, and social media preferences to inform the development of the sexual violence prevention SMM campaign. Data were collected through focus groups and a cross-sectional survey with the target population. Focus groups consisted of discussions on students' experiences as a UGA student, student health behaviors, their social media preferences, and opinions on possible campaign names, hashtags, and health messages. The cross-sectional

survey asked about student health behaviors, bystander behaviors and attitudes, and perceived norms about bystander behaviors among UGA students. Cross-sectional survey data were strictly used to inform data-driven campaign content and messages. Phase II involved the development of campaign messaging, slogans, hashtags, web-based and social media content, and posters. In summer 2017, I worked with a research team consisting of two UGA undergraduate research assistants, one Master's-level research assistant, and a graphic designer to develop campaign content. Data from phase I informed the campaign title, hashtags, images, and content. All campaign content is grounded in the study's theoretical model. We held focus groups with UGA students to test campaign content with the target audience and gain feedback for improvement. Then, we revised and finalized all campaign-related social media content (e.g. photos, "memes," videos, text), posters, and campaign website.

In phase III, we implemented and evaluated the preliminary efficacy of the sexual violence prevention SMM campaign using a quasi-experimental design. Data were collected from two independent cross-sectional samples with a nested cohort pre- and posttest design (Bowen et al., 2009; Shadish, Cook, & Campbell, 2002). Two independent cross-sectional samples of students were recruited (N=303) to complete electronic survey assessments: Cross-sectional sample 1 (n=159) completed an electronic survey assessment pre-campaign. and completed post-test assessments. Cross-sectional sample 2 (n=144), including a subset of cross-sectional sample 1 which participated in a cohort subsample (n=59), complete electronic survey assessments post-campaign. The study inclusion criteria were: (1) 18-24 years of age; (2) currently enrolled full-time in undergraduate courses on the main campus of University of Georgia; (3) reside in Athens, GA or within the surrounding area during Fall 2017; and (4) drank alcohol within the past three months.

The proposed pilot study evaluated whether exposure to the SMM campaign is associated with increased intentions to intervene in sexual violence among college students who consumed alcohol at least once in the past three months. The expected outcomes include demonstrating the acceptability, feasibility, and preliminary efficacy of this sexual violence prevention SMM campaign to encourage prosocial bystander behavior and reduce alcohol use in students (National Institute on Alcohol Abuse and Alcoholism, 2015).

This study is grounded in Social Norms Theory, Social Cognitive Theory, and Theory of Planned Behavior. Social Norms Theory calls for the replacement of misperceived and false norms with healthy norms in an effort to change perceptions of common behaviors (Berkowitz, 2005). Social Cognitive Theory was used to understand the campaign's effect on individuals' knowledge and attitudes (Bandura, 2001a, 2001b). Knowledge and attitudes directly contribute to intentions to act as a prosocial bystander as evidenced in Theory of Planned Behavior, which asserts that knowledge and attitudes by way of intention are predictive of behavior (Ajzen, 1991). This research hypothesized that college students' prosocial bystander behavior and intentions will increase and alcohol use will decrease after exposure to the campus-wide SMM campaign. Further, this study hypothesized that exposure to the SMM campaign would be statistically associated with decreased alcohol expectancies related to sexual violence and alcohol use, and more favorable bystander attitudes, knowledge, and behavior.

Specific Aims

Aim 1: Assess usability, exposure, and reach of the *Be a Watch Dawg* campaign.

Aim 1.1: Track data analytics across the *Be a Watch Dawg* campaign social media platforms (e.g., Facebook, Instagram, Snapchat, and Twitter); the number of “likes,” “followers,” “shares,” and comments, as well as views, reach, and hashtags used on social media platforms.

Aim 1.2: Perform a content analysis of the social media user-generated content using the campaign hashtag.

Aim 2: Assess preliminary efficacy of the *Be a Watch Dawg* campaign to increase prosocial bystander behavior and intentions to intervene and decrease alcohol use.

Aim 2.1: Evaluate whether exposure to the *Be a Watch Dawg* campaign is associated with a set of theoretically derived constructs (e.g. bystander attitudes, social norms regarding intervening, prosocial bystander behavior, alcohol use and alcohol-related norms, alcohol expectancies) pre- to post-campaign launch.

Public Health Implications

The long-term goal of this research is to develop an evidence-based SMM campaign to increase prosocial bystander intervention in sexual violence in college students. The outcomes of this study include demonstrating the acceptability, feasibility, and preliminary efficacy of an evidence-based SMM campaign to encourage prosocial bystander intervention in sexual violence and decrease alcohol use. If successful, this study will warrant additional research into the campaign's efficacy using a larger and more rigorous quasi-experimental design.

CHAPTER 2

LITERATURE REVIEW

Introduction

This chapter provides an overview of sexual violence prevention and discusses the risk factors associated with sexual violence victimization and perpetration among college students. This section discusses college sexual violence and alcohol use prevention strategies and strengths and weaknesses of these strategies. I also examine the bystander model and theoretical foundation used to inform the social media marketing (SMM) campaign.

College as a Developmental Period

A key developmental stage called emerging adulthood occurs among college-aged adults between 18 to 25. This period is marked by profound growth, change, and autonomy and represents an important transitional time in development when many individuals undergo education and training that impacts the course of their lives through college attendance (Arnett, 2000). During this developmental stage, emerging adults explore their independence and social roles that help them to formulate long-term adult roles. College also represents a transition into adulthood and marks a period when emerging adults test their newfound independence, establish relationships, and develop their identity.

Many substance use and sexual risk behaviors increase during adolescence and peak during emerging adulthood before declining during adulthood (Heron et al., 2012; Mason & Spoth, 2012). Compared to individuals in other age groups, emerging adults are more likely to engage in substance use, risky sexual practices, and unsafe driving behavior such as driving

under the influence of alcohol (American College Health Association, 2016; Arnett, 2000). Risk behaviors are especially prevalent among students within the college environment. Compared to emerging adults not attending college, college students are more likely to engage in excessive alcohol use, drug use, and unprotected sex. These behaviors are detrimental to college students' overall health and safety (American College Health Association, 2016; Arnett, 2000).

Alcohol Use

Risky alcohol use is a major public health problem among undergraduate college students in the U.S. According to the American College Health Association, in 2016 roughly 64% drank alcohol within the past 30 days (American College Health Association, 2016). Of those students who drank alcohol, 69% of those students engaged in binge drinking ($BAC > .08$) and 76% engaged in more severe binge drinking behaviors ($BAC > .10$) (American College Health Association, 2016). Alcohol use is higher among college students than young adults in their age group who are not attending college. Roughly 38% of college students ages 18–22 reported binge drinking in the past month compared to 33% of 18-22 year olds not attending college (Center for Behavioral Health Statistics and Quality, 2016). In 2015, nearly 40% of college students had engaged in binge drinking within the past month (Center for Behavioral Health Statistics and Quality, 2016).

Alcohol use can also result in more serious health and safety outcomes among college students. Over 1,800 college-aged adults die in alcohol-related motor vehicle accidents and unintentional injuries (Hingson, Zha, & Weitzman, 2009; Hingson, 2010). In 2016, over 20% of college students reported driving after drinking any amount of alcohol and nearly 2% of college students reported driving after drinking five or more drinks in the past month (American College Health Association, 2016). It is estimated that roughly 646,000 college students are assaulted

each year by a student who had been drinking alcohol. Further, alcohol is involved in roughly 112,000 arrests among college students per year (Hingson et al., 2009).

College students experience a multitude of other negative consequences from excessive alcohol use. National data from 2016 show that about a third of college students (33.1%) reported doing something they later regretted and 28% forgot where they were or what they did while under the influence of alcohol (American College Health Association, 2016).

Sexual Risk Behaviors

College students are also at risk of engaging in risky sexual behaviors, including unprotected sex, multiple sex partners, and sex while under the influence of alcohol. In 2016, nearly 10% of college students reported having four or more sexual partners within the past year. Further, almost half (47%) of students who had engaged in vaginal sex reported using no form of contraception during their last sexual encounter. Roughly 20% of college students reported having unprotected sex while under the influence of alcohol (American College Health Association, 2016). College students are also at risk of experiencing sexual violence (American College Health Association, 2016; Black et al., 2011; Brieding et al., 2014; Sinozich & Langton, 2014).

Sexual Violence on College Campuses

According to the Centers for Disease Control and Prevention (CDC), sexual violence encompasses a wide spectrum of nonconsensual physical and non-physical acts including forced penetration, unwanted sexual contact, and noncontact sexual experiences such as stalking or verbal threats and harassment (Basile et al., 2014; Centers for Disease Control and Prevention, 2016). Sexual violence includes any sexual act against an individual without their freely given consent or against someone unable to consent or refuse contact (Basile et al., 2014; Cantor et al.,

2015; Centers for Disease Control and Prevention, 2016; B. S. Fisher et al., 2000).

The sexual victimization of college women is a significant public health problem at college campuses across the US. One in four U.S. college women are sexually assaulted during college (White House Task Force to Protect Students from Sexual Assault, 2014). In 2016 alone, roughly 10% of U.S. college women had experienced sexual violence during college, which nearly tripled the amount of college men who had experienced sexual violence (3.3%) (American College Health Association, 2016; White House Task Force to Protect Students from Sexual Assault, 2014).

In 2016, 9.6% of college women reported experiencing nonconsensual sexual touching, 4.2% experienced nonconsensual attempted sexual penetration, and 2.6% experienced nonconsensual sexual penetration (American College Health Association, 2016). According to the Association of American Universities' (AAU) 2015 Campus Climate Survey of Sexual Misconduct and Sexual Assault, over 23% of college women had experienced sexual violence since entering college (Cantor et al., 2015). College-aged women are at increased risk of experiencing sexual violence victimization (American College Health Association, 2016; Cantor et al., 2015; Fisher et al., 2000; Sinozich & Langton, 2014; Zinzow & Thompson, 2015). Studies examining sexual violence among women indicate that 18-25 year old women experience the highest rate of sexual violence victimization compared to adolescent and adult women (Brieding et al., 2014; Cantor et al., 2015; B. Fisher et al., 2000).

Negative Health Outcomes

Experiencing sexual violence is associated with a wide array of physical health issues and negative mental health outcomes (Black et al., 2011; Davidson, Hughes, George, & Blazer, 1996; Kaukinen, 2014; Lang et al., 2007). College women who have experienced sexual violence

are more likely to experience chronic illnesses, chronic headaches, sleep disturbances, sexually transmitted infections (STIs), and unwanted pregnancy compared to women that have not experienced sexual violence (Allsworth et al., 2009; Jones et al., 2015; Lang et al., 2011, 2007). Experiencing sexual violence is also associated with negative mental health outcomes such as anxiety and depression, and higher rates of suicide (Black et al., 2011; Coker et al., 2012; Davidson et al., 1996; Jones et al., 2015).

Despite the high incidence of sexual victimization among college students, sexual violence is vastly underreported to law enforcement and on-campus officials. Less than 28% of sexual violence incidents that occur among college students are reported to campus authorities and official agencies, such as law enforcement and Title IX offices (Cantor et al., 2015; Fisher et al., 2003). Further, more than 50% of individuals who experienced even the most severe sexual assault incidents (e.g. forced penetration) on campus did not report the incident because they did not think it was “serious enough” (Cantor et al., 2015). However, nearly 70% of individuals who experience sexual violence tell someone, including but not limited to friends, family members, and intimate partners (Fisher et al., 2003; Orchowski et al., 2009).

Sexual Perpetration among College Men

Sexual perpetration is a major problem at college campuses across the US, and the prevalence of sexual perpetration among college men supports the high rates of sexual violence against college women. In a longitudinal study of N=197 college men at a large urban college, 35% of college men reported engaging in at least one act of sexual coercion, and 16.8% reported forced sexual contact (Abbey & McAuslan, 2004). In a five-year longitudinal study at an urban university (N=835), White and colleagues found that 31% of college men reported at least one act of sexual coercion (White & Smith, 2004). In a prospective analysis of sexual violence

perpetration among N=325 college men at a large Midwestern university, findings show that 27.5% reported perpetrating a moderate act of sexual aggression and 3.7% reported a severe act of sexual perpetration (Loh et al., 2005).

Further, Swartout (2013) found that 25% of college men reported perpetrating at least one form of sexual coercion, 11.4% reported behaviors that meet legal definitions for attempted rape or rape, and over 5% reported behaviors that meet legal definitions for attempted rape or rape with a group of two or more men (Swartout, 2013). Overall, these findings highlight the fact that sexual violence perpetration among college men is a major problem across college campuses.

College Environment and Sexual Violence

College campuses in the U.S. must adhere to federally mandated reporting requirements under the Jeanne Clery Act to prevent sexual violence by promoting campus security as well as protect survivors of sexual violence (Clery Center for Security on Campus Inc., 2016) First passed in 1990, the Jeanne Clery Act requires any college or university receiving federal funding to share their crime statistics and on-campus initiatives to prevent crime and protect the safety of students and the greater campus community (Clery Center for Security on Campus Inc., 2016).

The Violence Against Women Act (VAWA), introduced in 1990 by then-Senator Joe Biden and which President Clinton signed into law in 1994, put into place a national strategy to combat the severity of violence against women in the US (White House, n.d.). In 2013 President Obama signed an expansion of the original VAWA jurisdiction, the VAWA Reauthorization, into law which amended the Clery Act (Clery Center for Security on Campus Inc., 2016; U.S. Department of Education, 2014; U.S. Department of Justice, 2015b). In 2014, the Department of Education released the final regulations for the VAWA Reauthorization to expand the definition of sexual consent as well as the rights and resources to those who experience sexual violence,

including sexual assault, domestic violence, sexual harassment, and stalking, on college campuses. Under the regulations, colleges and universities were required to revise their policies on sexual assault, dating violence, and stalking to provide programs to new students and employees, ongoing educational prevention programs, and have procedures in place that must be followed when an incident occurs on campus as well as maintain campus statistics on sexual and dating violence. Policies must also include disciplinary action proceedings and involve law enforcement for any incidents that are criminal offenses (U.S. Department of Education, 2014).

The education amendment of 1972, Title IX, prohibits sexual discrimination in educational institutions that receive federal funding, which includes the vast majority of colleges and universities across the U.S. (U.S. Department of Justice, 2015a). Supreme Court decisions and guidance from the U.S. Department of Education facilitated a broad scope of sexual harassment and sexual violence that fall under Title IX. Universities are legally required to respond to and rectify sexual violence and sexual harassment cases, as failure to do so puts their federal funding at risk (Ali, 2011; U.S. Department of Justice, 2015a).

Under the amended Clery Act and Title IX, institutions are required to provide specific options, information, and resources to survivors of sexual violence on campus and have policies and solutions in place that comply with both laws (Clery Center for Security on Campus Inc., 2016) The Campus Sexual Violence Elimination Act further supports the federal regulations of the Clery Act, complementing Title IX in order to address violence against women on college campuses. Schools must then develop an annual security report documenting their safety and security efforts and share it with the greater campus community by October 1st each year (Clery Center for Security on Campus Inc., 2016). Despite federal regulations surrounding campus sexual assault, the majority of college sexual violence cases go unreported to campus authorities

or law enforcement (Krebs, Lindquist, Warner, Fisher, & Martin, 2007; Orchowski et al., 2009; Sable, Danis, Mauzy, & Gallagher, 2006).

Risk Factors for Sexual Violence

A variety of factors that contribute to sexual violence on college campuses. These range from individual-level factors, such as attitudes and rape myth beliefs, to campus policies surrounding campus sexual violence. A broad understanding of these risk and protective factors is crucial to developing effective programming for sexual violence among college students. Researchers have called for a multi-level approach to sexual violence prevention among college students (DeGue et al., 2012, 2014a).

Individual-level Risk Factors

A variety of individual-level factors contribute to the sexual victimization of college women. Traditional gender ideologies of female passivity and male ideologies of masculinity and the power differential between men and women are at the core of attitudes, cognitions, beliefs, and behavior surrounding sexual violence. These traditional beliefs contribute to sexist attitudes and belief in male dominance (Abbey et al., 2012; Gidycz, Orchowski, & Berkowitz, 2011; Muehlenhard et al., 2016; Muehlenhard & Linton, 1987).

Overall, gendered socialization has contributed to male sexual violence perpetration among college students. Studies show that hostile attitudes towards women, attitudes about traditional gender roles, attitudes rape myth acceptance, dating and sexual behaviors, and the belief in male dominance are associated with increased perpetration among college men (Abbey & McAuslan, 2004; Gidycz et al., 2011; Kilmartin, Conway, Friedberg, McQuoid, & Tschan, 1999; McDermott, Kilmartin, Mckelvey, & Kridel, 2015; Muehlenhard & Linton, 1987). These gender norms also contribute to sexual scripts where men and boys feel social pressure to be

sexually active in order to be deemed masculine (Muehlenhard et al., 2016). Similarly, hypermasculinity and adhering to traditional masculine stereotypes are also related to higher levels of sexual violence perpetration against women (Eisler & Blalock, 1996; Eisler, Franchina, Moore, Honeycutt, & Rhatigan, 2000; Jakupcak, Lisak, & Roemer, 2002). Attitudes towards date rape also contribute to increased likelihood of sexual violence perpetration (Abbey et al., 2003; Muehlenhard & Linton, 1987).

Microsystem-level Risk Factors

The risk factors for sexual violence that exist within the microsystem include risk factors associated with family and peer groups (Kaukinen, 2014). Familial risk factors that put an individual at increased risk of perpetration include witnessing parental violence, experiencing child abuse, violent modes of parental conflict resolution, and parental divorce (Abbey & McAuslan, 2004; Capaldi et al., 2012; Gillum & DiFulvio, 2012). Peer risk factors are often associated with social groups that the individual is within, as is indicated in Social Norms Theory (Aronowitz, Lambert, & Davidoff, 2012; Deming, Covan, Swan, & Billings, 2013; Kilmartin et al., 1999; Swartout, 2013). According to Social Norms Theory in the context of campus sexual assault perpetration, characteristics of and the association with certain peer groups puts a college male at increased risk of sexual violence perpetration (Berkowitz, 2005).

Characteristics within these groups that lead to increased sexual violence perpetration include peer approval of dating and sexual violence, and friendships with peers who endorse sexual violence, and peer support for physical abuse. Additionally, having friends who talk about women with hostility and the mistreatment of female partners is associated with higher sexual perpetration among college men (Franklin, Bouffard, & Pratt, 2012; Gidycz et al., 2011; Jacques-Tiura et al., 2015; Koss, Gidycz, & Wisniewski, 1987; Swartout, 2013). Further, association with

fraternities and athletic groups among college students have also been linked to higher rates of male sexual violence perpetration (Boswell & Spade, 1996; Foubert & Perry, 2007; Franklin, 2010; Franklin et al., 2012). Foubert and colleagues (2007) found that men in fraternities were nearly three times more likely to commit sexual violence perpetration compared to their non-Greek counterparts, and incidents of rape frequently occurs at a fraternity house (Boswell & Spade, 1996; Copenhaver & Grauerholz, 1991; Franklin et al., 2012).

Sorority membership is a risk factor for sexual violence victimization (Copenhaver & Grauerholz, 1991; Franklin, 2010; Franklin, 2016). One study found that nearly 25% of sexual violence completed or attempted rape victims were sorority members (Copenhaver & Grauerholz, 1991). Further, sorority membership has been associated with high alcohol use, a significant risk factor for sexual violence. Among college women in Greek life, sexual violence victimization is higher among sorority members living in a sorority house (Copenhaver & Grauerholz, 1991; Franklin, 2010). Formal social institutions like sororities and fraternities perpetuate ideologies in which members deem sexual violence perpetration, acceptance of rape myths, and heavy alcohol use appropriate among group members (Fabiano, Perkins, Berkowitz, Linkenbach, & Stark, 2003; Franklin et al., 2012; Gidycz, Orchowski, & Berkowitz, 2011; LaBrie, Hummer, Grant, & Lac, 2010).

Exosystem-level Risk Factors

Factors within the college campus also contribute to sexual violence perpetration among college men. The general culture of a campus can contribute to sexual violence. Studies have found that a number of community-level risks exist and pertain to college campuses include societal tolerance for violence, lack of accountability for perpetrators, and patriarchal and rape-supportive environments (Franklin, 2010; Krug, Mercy, Dahlberg, & Zwi, 2002). In one study,

findings show that alcohol outlet density (e.g. the number of places that sell alcohol within a vicinity) is linked to higher rates of intimate partner violence –related incidents (Cunradi, Mair, Ponicki, & Remer, 2011, 2012). There are also specific risk factors within college students that contribute to higher incidences of sexual violence on campus. Fisher et al. (2000) found that large or small campuses that had a lower percent of full-time students, higher number of campus fraternities, lower population density were associated with higher rape rates on campus (Fisher et al., 2000).

Alcohol and Sexual Violence

Alcohol Use among College Students

Alcohol use is a major problem among college students. According to the American College Health Association, in 2016 roughly 64% of U.S. college students drank alcohol within the past 30 days (American College Health Association, 2016). Of those students who drank alcohol, 69% of those students engaged in binge drinking (Blood Alcohol Content (BAC) > .08) and 76% engaged in more severe binge drinking behaviors (BAC > .10) (American College Health Association, 2016). Alcohol use is higher among college students than young adults in their age group who are not attending college. According to the NSDUH, roughly 38% of college students ages 18–22 reported binge drinking in the past month compared to 33% of 18–22 year olds not attending college (Center for Behavioral Health Statistics and Quality, 2016). In 2015, nearly 40% of college students had engaged in binge drinking within the past month, which is higher than binge drinking among non-college attending individuals in the same age group (32.6%) (Center for Behavioral Health Statistics and Quality, 2016).

Alcohol consumption increases the likelihood of violence against college women. Between 33-72% of all incidents of sexual violence involve alcohol use by perpetrators,

individuals who experience sexual violence, or both (Abbey, Zawacki, et al., 2005; Abbey et al., 2001b; Antonia Abbey et al., 1998, 1999; Graham, Bernards, Abbey, et al., 2014; Testa & Cleveland, 2017). Many college women report experiencing an “incapacitated assault,” in which they were sexually assaulted while drugged, drunk, passed out, or otherwise incapacitated (Abbey, 1991; Abbey et al., 2002, 2001a; Cantor et al., 2015; Jozkowski & Wiersma, 2014; Lindquist et al., 2009; Testa et al., 2004).

College women who engage in heavy episodic drinking (HED) are at higher risk of experiencing sexual violence (Abbey et al., 2002; Abbey et al., 1999; Testa et al., 2000). Compared to college women who have not been victimized, sexually victimized women are more likely to engage in HED (Abbey et al., 2002; Testa et al., 2000; Testa & Cleveland, 2017; Testa et al., 2004). Alcohol use increases sexual aggression among men, and women who engage in HED are typically in settings such as bars or parties with men also engaging in alcohol use. Therefore, women who engage in HED are at higher risk of victimization because they more likely to be in the presence of more sexually aggressive men (Abbey, Clinton-Sherrod, McAuslan, Zawacki, & Buck, 2003; Abbey et al., 1999; Graham, Bernards, Wayne Osgood, et al., 2014; Orchowski et al., 2015; Testa, Hoffman, Lucke, & Pagnan, 2015; Testa et al., 2004).

Alcohol use is a major contributor to sexual violence perpetration, particularly among college men (Abbey, Zawacki, & Buck, 2005; Abbey, McAuslan, & Ross, 1998; Abbey, McAuslan, Ross, & Zawacki, 1999; Graham, Bernards, Abbey, Dumas, & Wells, 2014). Some researchers have even proposed that HED plays a causal role in some cases of perpetration. Among perpetrators, alcohol use is related to more sexual and aggressive behavior (Abbey, Zawacki, & Buck, 2005; Abbey, McAuslan, & Ross, 1998; Abbey, McAuslan, Ross, & Zawacki, 1999; Graham, Bernards, Abbey, Dumas, & Wells, 2014). Thus, alcohol plays a major role in

sexual assault in the college environment, which is already one that perpetuates and normalizes binge drinking behavior (Boyd, McCabe, & Morales, 2005; Haines & Spear, 1996; Wechsler et al., 2002). Usually the perpetrator and victim engage in drinking together prior to the assault, which is reflective of alcohol consumption that occurs before rape and other violent crimes (Abbey, 1991; Abbey et al., 2001a; Abbey et al., 2003, 1999; Testa et al., 2004; Thompson, Kingree, Zinzow, & Swartout, 2015; Young, Grey, Abbey, Boyd, & McCabe, 2008; Zawacki, Abbey, Buck, McAuslan, & Clinton-Sherrod, 2003).

Alcohol Expectancies Related to Sex and College Sexual Violence

Outcome expectancies, a major theoretical construct in Bandura's Social Cognitive Theory, refers to an individual's expectations about how different people evaluate their behavior and their willingness to let others' evaluations drive their behavior (Bandura, 1977, 1997, 2001a, 2001b). This concept has been applied to examine expectancies about alcohol, called *alcohol expectancies*, which refers to individual beliefs about the effects of alcohol use on thoughts, emotions, and behaviors. Research demonstrates that alcohol expectancies related to sex are related to sexual aggression and sexual perpetration among college men, such that women who drink alcohol are perceived as sexually available, sexually promiscuous, and are targets for sexual aggression (Abbey et al., 2004; Abbey et al., 1999; George et al., 1995).

Some college students feel that alcohol "loosens them up" and that they need to engage in alcohol use to meet potential sexual partners (Muehlenhard et al., 2016). In one study, Graham et al. (2014) performed observations of alcohol-facilitated sexual aggression at over 100 bars and nightclubs and found that over 90% of incidents involved a male approaching a female. Further, initiators' level of sexual aggressiveness was associated with the females' levels of intoxication. This suggests that perpetrators may be on the lookout for women who incapacitated or look

particularly vulnerable to sexual coercion (Graham, Bernards, Wayne Osgood, et al., 2014; Graham, Bernards, Abbey, Dumas, & Wells, 2016; Graham, Bernards, Abbey, et al., 2014). Alcohol expectancies about sex are related to sexually aggressive behavior among college men. Studies show that sexual aggression is highest among college men with high sexual alcohol expectancies related to sex, indicating alcohol's role in sexual violence perpetration (Abbey et al., 2003, 2004; Abbey, Saenz, et al., 2005; Antonia Abbey et al., 1999, 2012; Tuliao & McChargue, 2014).

Alcohol and Sexual Consent

Alcohol use has a negative impact on clarity of sexual consent. According to federal regulations under VAWA, alcohol clouds cognitive judgment and decision-making processes, thus sexual consent cannot be given or received prior to a sexual encounter while one or more partners are intoxicated (Collins Fantasia, Fontenot, Sutherland, & Lee-St., 2015a; Jozkowski & Sanders, 2012; Lindquist et al., 2009; Satinsky & Jozkowski, 2015). Intoxication can inhibit a woman's likelihood of understanding that someone is trying to sexually assault them. Sexual consent can be communicated using both nonverbal and verbal cues while two people are sober (Humphreys, 2007; Jozkowski & Peterson, 2013; Jozkowski, 2013a). However, under the influence of alcohol, college students reported using more nonverbal cues to communicate sexual consent rather than verbal, more direct indicators, such as verbally asking someone if they want to have sex (Muehlenhard et al., 2016).

Alcohol use is associated with misperceptions of sexual interest (Abbey et al., 2003; Farris, Treat, Viken, & McFall, 2008a, 2008b; Testa et al., 2006). College men under the influence of alcohol are more likely to perceive women consuming alcohol as more sexually interested in them compared to non-drinking women (Abbey et al., 2003; Farris et al., 2008a,

2008b; Testa et al., 2006). Alcohol use also interferes with the likelihood of recognizing cues of sexual intent. Intoxicated men are more likely to focus on perceived positive cues from women, which may not accurately reflect women's intentions (Abbey, 2002; Abbey et al., 2012; Abbey, Wegner, Woerner, Pegram, & Pierce, 2014; Muehlenhard et al., 2016; U.S. Department of Health and Human Services, 2004; Wegner, Abbey, Pierce, Pegram, & Woerner, 2015).

Sexual Consent Policies and Alcohol

The U.S. Department of Education's 2014 revisions to VAWA defines sexual consent as "the affirmative, unambiguous, and voluntary agreement to engage in a specific sexual activity during a sexual encounter" (U.S. Department of Education, 2014). Under this legal definition of sexual consent, VAWA declares the following about alcohol use and sexual consent:

"An individual who was asleep, or mentally or physically incapacitated, either through the effect of drugs or alcohol or for any other reason, or who was under duress, threat, coercion, or force, would not be able to consent (U.S. Department of Education, 2014)."

To align with these federal regulations, U.S. campuses that receive federal funding must have sexual assault policies stating that affirmative consent cannot be given or received if the individuals involved are incapacitated by alcohol (U.S. Department of Education, 2014; U.S. Department of Justice, 2015a, 2015b). However, VAWA does not specify the definition of incapacitation by alcohol among college students (U.S. Department of Education, 2014). VAWA indicates that incapacitation should be measured through students' BAC levels, cognitive functioning, the number of drinks consumed, or any other measures of students' abilities to consent. Incapacitation depends on a variety of factors, including but not limited to gender, drinking patterns, individual differences in size, and how much a person has eaten prior to drinking (Courtney & Polich, 2009; Hingson, 2010; NIAAA, 2007); thus, ambiguity exists in

college-level sexual assault policies on the amount of alcohol college students must consume to be considered incapacitated and therefore for sex to be deemed nonconsensual (DeGue et al., 2014b; Muehlenhard et al., 2016; Richards, 2016; U.S. Department of Education, 2014).

Furthermore, instances of sexual assault among college students are further complicated by the fact that in most cases, both the perpetrator and victim engage in voluntary drinking prior to the incident (Abbey et al., 2002; Testa & Livingston, 2009). Researchers and policy-makers have argued that it is difficult to know whether sex without consent, and therefore an act of sexual violence, had occurred when both individuals involved were intoxicated. This raises a number of questions about how and whether sexual consent was provided during the act and how to define sexual assault at the campus level. Colleges and universities' policies on the response to alcohol-involved sexual assaults between men and women vary by institution and can depend on the campus officials responsible for handling sexual assaults. Some campuses hold the men responsible for sexual assault perpetration, while others hold the person who initiated sex responsible, regardless of gender, for perpetration (Muehlenhard et al., 2016).

Considering the wide range of possibilities regarding campus response to alcohol-involved sexual assault on college campuses, it is evident that alcohol has a negative effect on sexual consent (Abbey, Zawacki, Buck, Clinton, & McAuslan, 2004; Muehlenhard et al., 2016; Richards, 2016; Testa et al., 2004). Even without the involvement of alcohol, researchers have struggled to define sexual consent (Collins Fantasia, Fontenot, Sutherland, & Lee-St., 2015b; Fantasia, 2011; Humphreys, 2007; Jozkowski & Peterson, 2013; Jozkowski, 2013b, 2015). Alcohol's role in sexual consent among college students complicates sexual assault occurrences between students, as well as sexual assault reporting and campus response (Antonia Abbey et al., 2004; Muehlenhard et al., 2016; Richards, 2016; Testa et al., 2004).

Alcohol and Sexual Violence Prevention Programs

Recent programming for college students combines alcohol use reduction and sexual violence prevention to target sexual assault risk reduction (Gilmore, Lewis, & George, 2015; Lewis, Patrick, Atkins, Kim, & Norris, 2014). One web-based program targets sexual assault risk reduction and alcohol use reduction among college women who engage in HED. Researchers tested the efficacy of this web-based program using a randomized controlled trial (RCT) design, and findings indicate that women reported reduced risk of experiencing sexual assault and decreased heavy episodic drinking behaviors after completing the program. These findings have implications for future programming that target both alcohol use reduction and sexual violence prevention among female college students (Gilmore et al., 2015). While effective, this program focused on individual-level risk reduction strategies pertaining to alcohol and sexual assault and did not include community-level strategies to address campus sexual assault.

Bystander Model

Introduction to the Bystander Model

The bystander model is a community-level strategy in sexual violence prevention that has been used to effectively address campus sexual assault. Since the introduction of the bystander model in 1968, it has been applied to various sexual violence prevention interventions for a variety of audiences. The bystander model aims to shift social norms by encouraging help-seeking behaviors, adoption of policies to promote bystander behavior; and by celebrating the bystander's intervention actions (Tabachnick, 2009, 2013). The bystander model takes on the philosophy that all members of the community share a common responsibility to change social norms to prevent sexual violence (Banyard, Moynihan, & Plante, 2007; Banyard, Moynihan, Cares, & Warner, 2014; Banyard et al., 2004). Bystander-focused prevention efforts teach

campus and community members how to safely and effectively intervene in situations that involve sexual and interpersonal violence as well as how to care for individuals who experience sexual violence immediately after an incident. Further, bystander programs focus on changing social norms through education, awareness, and skill-building (Banyard et al., 2004; Moynihan et al., 2009).

History of Bystander Model

The origins of the bystander model can be traced back to the 1964 rape and murder of Kitty Genovese, who was attacked, raped, and killed. Nearly 40 people witnessed the attack but did nothing to help. Her murder shocked Americans and started a national conversation about how citizens could watch the attack and not help. This event sparked the wide body of research on the “bystander effect” that followed the attack (Tabachnick, 2009). The term “bystander” refers to any member of society who has the potential to influence a situation in which sexual violence is at risk of occurring at a given time. As Tabachnick (2009) describes it, “most of society bears witness – is a bystander – to sexual violence.”

Latané and Darley first proposed the bystander model in 1968, in which they described altruism and the social norms that influence individuals’ likelihood of intervening in potentially dangerous situations (Darley & Latané, 1968; Latané & Darley, 1968; Latané & Darley, 1970). In the wake of the Genovese murder, Latané and Darley (1968) proposed a five-step process for bystander intervention, which include: 1) Notice the event along a continuum of actions; 2) Consider whether the situation demands your action; 3) Decide if you have a responsibility to act; 4) Choose what form of assistance to use, and; 5) Understand how to implement the choice safely. The continuum of actions refers to actions on the part of someone who could be considered a perpetrator. The continuum ranges from “healthy, age-appropriate, mutually

respectful, & safe” behaviors to “sexually abusive and violent” actions according to Anderson’s *The Touch Continuum* (2000) (Tabachnick, 2009).

Alcohol and Prosocial Bystander Behaviors

It is well-established that alcohol contributes to sexual violence in the college setting. However, recent studies also suggest that alcohol plays a role in college students’ ability to prevent sexual violence (Fleming & Wiersma-Mosley, 2015; Orchowski et al., 2015). Recent studies show that alcohol use decreases college students’ likelihood of intervening in sexual violence as a prosocial bystander, and that these specific behaviors vary by gender (Fleming & Wiersma-Mosley, 2015; Orchowski et al., 2015). Fleming and Wiersma-Mosley (2015) found gender differences in prosocial bystander behaviors between college men and women while under the influence of alcohol. Specifically, results indicate that college men were less likely than women to intervene in coercive situations between a male and female while under the influence of alcohol. Further, they found that individuals with high alcohol expectancies related to sex were less likely to intervene in sexual violence contexts among women, implying that sexual attributes associated with sexual violence resulted in more permissible attitudes towards sexual coercion while under the influence of alcohol (Fleming & Wiersma-Mosley, 2015).

Orchowski et al. (2015) found similar findings in a study sample of college men. Heavy episodic drinkers were significantly less likely to act as a prosocial bystander in contexts of potential sexual violence compared to non-heavy drinkers. Specifically, compared to non-heavy drinkers, findings show that college men who engaged in heavy drinking were less likely to seek help if someone sounded like they were in trouble or if they saw something suspicious at a party, e.g. if they suspected someone at a party had been drugged. Further, they were significantly less likely to intervene in sexual violence if the perpetrator was a friend and had much higher

acceptance of rape myths than non- heavy-drinking college men. Overall, heavy alcohol use is associated with lowered bystander intervention among college men (Orchowski et al., 2015).

These studies indicate that heavy alcohol use reduces the likelihood of intervening in sexual assault as a prosocial bystander (Fleming & Wiersma-Mosley, 2015; Orchowski et al., 2015). Alcohol clouds judgment and decreases awareness of one's surroundings, thus college students who engage in HED are less likely to notice situations in which sexual assault is at risk of occurring (Abbey, Saenz, Buck, Parkhill, & Hayman Jr., 2006; Fleming & Wiersma-Mosley, 2015; Orchowski et al., 2015; U.S. Department of Health and Human Services, 2004). College students who engage in HED likely frequent bars and parties where alcohol is served in environments where individuals are more vulnerable to sexual coercion and unwanted sexual contact (Abbey et al., 1999; Benson, Gohm, & Gross, 2007; Testa et al., 2000; Testa & Cleveland, 2017; Testa et al., 2004). Considering the staggering number of alcohol-involved sexual assaults among college students, bystanders have a great amount of power in preventing sexual assault (Abbey et al., 1999; Testa & Cleveland, 2017). As such, these study findings have important implications for college sexual assault prevention.

Bystander Model in Sexual Violence Prevention

The bystander model has been extensively applied to sexual violence prevention among college students. Using the bystander model in the context of college campuses focuses on engaging prosocial "bystanders," or active informal helpers on campus, and empowering them to intervene in situations in which peers may be at risk of sexual assault with the larger goal of preventing sexual assault among college students in the campus community (Banyard et al., 2004). The White House's National Task Force to End Sexual and Domestic Violence Against

College Women highlights the *bystander model* as a promising strategy to combat sexual violence on college campuses.

The bystander model also impacts the social context in which sexual violence occurs by strengthening existing social norms against sexual violence within a community or college campus. Many sexual violence prevention programs have used the bystander model effectively to target underlying social norms and increase prosocial bystanders behavior and knowledge in college students, including *Bringing in the Bystander*, *Know Your Power*, *Green Dot*, *RealConsent*, and *The Men's Project* (Banyard et al., 2014, 2004; Barone, Wolgemuth, & Linder, 2007; Coker et al., 2011a; Gidycz et al., 2011; Salazar et al., 2014). Evaluations of such programs show that engaging college students as prosocial bystanders results in long-term sexual violence prevention (Banyard et al., 2014; Coker et al., 2011a; Gidycz et al., 2011; Salazar et al., 2014).

Evidence-Based Sexual Violence Prevention Programs

A variety of strategies exist to reduce sexual violence, though few have been deemed effective in reducing sexual victimization and perpetration (DeGue et al., 2014a). The three most common types of sexual violence prevention programs that have been found to be effective focus on the victim, the perpetrator, or bystanders. Programs aimed at sexual violence victims and perpetrators typically include risk reduction techniques. Victimization programs aim to provide knowledge, awareness, and skills to reduce the likelihood of victimization, whereas perpetration programs aim to reduce the risk that an individual will engage in sexually aggressive behavior (DeGue et al., 2014a). Bystander programs aim to alter social norms that support sexual violence and empower men and women to intervene as a prosocial bystander among peers to prevent an incident of sexual assault (Banyard et al., 2007; DeGue et al., 2014a; Potter, 2012b; Salazar et

al., 2014; Storer, Casey, & Herrenkohl, 2015).

The Centers for Disease Control and Prevention conducted a thorough systematic review of sexual violence prevention programs, and found only three to be efficacious (e.g., evaluated using a rigorous evaluation method) in reducing sexual perpetration: *Safe Dates*, *Shifting Boundaries*, and *RealConsent* (DeGue et al., 2014a; Dodge, 2009; Salazar et al., 2014; Taylor, Stein, Mumford, & Woods, 2013). *Safe Dates* is a dating prevention program for middle and high school students. It involves a 10-session curriculum addressing social norms, attitudes, and healthy relationship skills, as well as a play about dating violence and a poster contest. The program was evaluated using a randomized controlled trial (RCT) design, and outcomes indicate reduced perpetration and victimization (Dodge, 2009). *Shifting Boundaries* is a school-based dating violence prevention program for middle school students consisting of a six-session classroom-based curriculum and an intervention in the school that addresses policy and safety issues in schools. Evaluation findings show that the school-wide intervention, but not the curriculum alone, effectively reduced perpetration and victimization among students (Taylor, Stein, & Burden, 2010; Taylor et al., 2013).

RealConsent is a web-based sexual violence prevention program for college men addressing sexual communication, sexual consent, and positive bystander behaviors (Salazar et al., 2014; Salazar, Vivolo-Kantor, & McGroarty-Koon, 2016). A rigorous RCT evaluation showed that *RealConsent* participants reported more bystander behavior, increased intentions to act as a prosocial bystander, and greater knowledge of bystander behavior compared to the comparison and control groups (Salazar et al., 2014).

However, there are a number of other sexual violence prevention programs that are found to be promising, meaning they have been tested for efficacy using less rigorous research designs,

but still resulted in behavioral changes (Banyard et al., 2007; Ann L Coker et al., 2011; DeGue et al., 2014a). Two of these promising programs, *Green Dot* and *Bringing in the Bystander*, use the bystander model and aim to reduce sexual violence among college student audiences (Banyard et al., 2007; Coker et al., 2011). The following section provides an evaluation of recent bystander prevention programs among college students, organized into the following categories: in-person programs; web-based programs; and, social marketing campaigns.

College Sexual Violence Bystander Programs

In-Person Programs

Bringing in the Bystander

Banyard and colleagues developed a bystander-focused education and awareness model for sexual assault prevention on college campuses called *Bringing In The Bystander* (BITB) (Banyard et al., 2009; Banyard et al., 2007). *Bringing In The Bystander* curriculum consists of an in-person workshop on sexual violence prevention that addresses bystander responsibility and taking ownership for others' safety. The program can be delivered via a 90-minute session or three 90-minute sessions lasting 4.5 hours in total, and both versions of the program include booster sessions. *Bringing in the Bystander* addresses the wide continuum of sexual and dating violence by addressing microaggressions such as permissive language about rape to more sexually aggressive acts like sexual violence occurring in dorms. Sessions teach bystander skills and allow individuals to practice their skills, as well as create a bystander plan to outline how they will intervene in potentially risky situations. Students are also encouraged to sign a pledge to intervene as a prosocial bystander in sexual or dating violence (Banyard et al., 2009; Banyard et al., 2007; Moynihan, Banyard, Arnold, Eckstein, & Stapleton, 2010, 2011; Moynihan et al., 2009).

Banyard and colleagues evaluated *Bringing In The Bystander* using a cross-sectional longitudinal study design with N=389 undergraduate students who had not been previously trained as a sexual violence peer advocate (Banyard et al., 2007). Participants were randomly assigned to one of two treatment groups or a control group. The first treatment group attended one 90-minute prevention program, the second treatment group attended the three-session 4.5-hour prevention program, and the control group received no prevention program. Participants in the treatment groups also received a 30-minute booster session administered 2 months after the prevention program. Participants completed assessments at pre-test, posttest, and 2-, 4-, and 12-month follow-up points. Compared to the pre-test assessment, findings indicate positive increases in attitudes, self-efficacy and intention to intervene as an active bystander among both one-session and three-session treatment group at posttest, and at 2- and 4-month follow-ups, with more significant changes in the three-session treatment group. Compared to pre-test, there were still significant increases in efficacy, decision-making, and rape myth acceptance in the one-session treatment groups at 12-month, though the 4.5-hour training participants also had positive changes in bystander attitudes at this time point (Banyard et al., 2007).

Bringing In The Bystander has since been implemented at colleges and universities across the US. It has been tailored to specific college student populations, including students in leadership roles such as resident assistants, and students in fraternities, sororities, and student athletes (Banyard et al., 2009; Bennett, Banyard, & Garnhart, 2014; Moynihan et al., 2010, 2009). *Bringing In The Bystander* has been found to be efficacious across evaluation studies of program implementation with various student populations (Banyard et al., 2009; Bennett et al., 2014; Moynihan et al., 2010, 2009).

Green Dot

Green Dot is another widely used bystander education sexual assault prevention intervention on college campuses. *Green Dot* is an in-person bystander program implemented in two phases. Phase I consists of a 50-minute speech given to primarily first-year undergraduate students, which introduces and provides statistics on sexual violence among college students, provides examples of bystander intervention in sexual violence, and invites students to participate in the second phase of the program (Coker et al., 2011, 2016; Cook-Craig et al., 2014). Phase II consists of an intensive six-hour peer educator training and group discussion called Students Educating and Empowering to Develop Safety (SEEDS). SEEDS is facilitated by a trained (non-peer) educator during a “weekend retreat.” *Green Dot* program staff also identify and recruit peer opinion leaders to identify potential participants for SEEDS working with faculty, students, and residence assistants on campus (Coker et al., 2011).

Coker and colleagues first evaluated *Green Dot* using a cross-sectional survey among a sample of N=7,945 students at the University of Kentucky, where *Green Dot* was implemented. Survey results indicate that individuals who participated in the training or attended the speech reported greater bystander behaviors than students who did not attend the speech or training (Coker et al., 2011). In 2010, *Green Dot* was evaluated using a more rigorous quasi-experimental design with three college campuses, one of which received the *Green Dot* program and two control campuses that did not implement bystander programs (Coker et al., 2015). Compared to students at the control institutions, University of Kentucky students reported less experiences of unwanted sexual and dating violence victimization and perpetration, sexual harassment, stalking on campus (Coker et al., 2015; Coker et al., 2011a). Like *Bringing in the Bystander*, *Green Dot* is implemented at colleges and universities across the US.

InterACT

The *InterACT* Sexual Assault Prevention program is an interactive, skill-building theater-based performance that aims to educate participants on campus sexual assault and effective bystander intervention strategies (Ahrens, Rich, & Ullman, 2011). Actors and educators acted in a theater-based performance for college students enrolled in two undergraduate communications courses. In the unscripted, interactive performance, actors improvise and adapt to the audience to provide bystander education and skill-building. *InterACT* was evaluated using a longitudinal within-group design. Participants (N=509) completed pre-test, posttest, and 3-month follow-up surveys. Findings indicate that participants' intentions to act as a prosocial bystander behavior increased from pre-test to posttest and at the 3-month follow-up point (Ahrens et al., 2011).

Barone et al.'s (2007) The Men's Project

Barone and colleagues evaluated changes in college men's attitudes and behaviors based on their participation in a violence against women bystander education intervention called *The Men's Project*, a voluntary 10-week training with sessions lasting two hours in length (Barone et al., 2007). *The Men's Project* participants were recruited from all-male dormitories, intercollegiate athletic teams, and fraternities using purposive sampling. Men were selected for participation via applications and interviews, and were selected based on their contribution to diversity, desire to learn and gain skills to prevent sexual violence, and a willingness to reflect on their own behaviors.

Four focus groups were conducted at the conclusion of *The Men's Project* to examine the impact of the program (Barone et al., 2007). Out of the 28 college men in *The Men's Project*, 19 participated in one of the focus groups. Findings indicate a greater understanding of gender and identity, increased awareness of homophobic and sexist comments, and rape myths as well as

decreases in rape-supportive attitudes. They also indicated intentions to intervene in sexual violence after participating in the program; men reported greater confidence and ability to intervene in sexual violence (Barone et al., 2007).

Gidycz et al.'s (2011) The Men's Project

Gidycz and colleagues evaluated a separate bystander intervention for college men also called the *Men's Project* (Gidycz et al., 2011). This intervention was designed specifically for first-year college men and aims to increase awareness of social norms on sexual aggression on college campuses to foster a healthy notion of masculinity and supportive culture for students. This program consists of a scripted curriculum implemented in a 1.5-hour session with a 1-hour booster session delivered immediately after the 1.5-hour session. The curriculum teaches bystander behaviors, social norms, sexual violence awareness, and bystander intervention skills modeling to male college freshmen (Gidycz et al., 2011). Evaluation of the *Men's Project* was conducted using a quasi-experimental longitudinal design, and findings show no statistical association between participation in the program and bystander behaviors or positive attitude changes across time points (Gidycz et al., 2011).

The Men's Program

The Men's Program is a sexual violence prevention program for college men focusing on bystander intervention (Foubert, Godin, & Tatum, 2010; Langhinrichsen-Rohling, Foubert, Brasfield, Hill, & Shelley-Tremblay, 2011). The program is delivered through a one-hour in-person session focusing on facilitated discussions and a video displaying male-on-male sexual violence, which is intended to show men how rape feels from a survivor's perspective. Next, the male peer presenters make connections between the male-on-male rape and male-on-female rape scenes. This program aims to enhance audience members' empathy toward rape survivors,

decrease male defensiveness about perpetration, and dispel rape myths. Through a quasi-experimental pre- and posttest design, evaluation of findings indicate greater intentions to act as a prosocial bystander (Foubert, Godin, et al., 2010; Langhinrichsen-Rohling et al., 2011).

The Women's Program

The Women's Program is the female-version of *The Men's Program*, focusing on bystander efficacy, behaviors, and skill-building among college women (Foubert, Godin, et al., 2010; Langhinrichsen-Rohling et al., 2011). This in-person program also includes a one-hour session that includes facilitated discussions and a DVD from the National Judicial Education Program on bystander behaviors (Foubert, Langhinrichsen-Rohling, Brasfield, & Hill, 2010). Through a quasi-experimental pre-posttest design, college women reported increases in bystander behavior and intention after participating in the program (Foubert, Langhinrichsen-Rohling, et al., 2010).

Web-based Program

RealConsent

RealConsent is a web-based program sexual violence program specifically developed for college men. Grounded in Social Cognitive Theory, Social Norms Theory, and bystander education model, the intervention aims to reduce risk for sexual violence perpetration and increase bystander behavior to prevent sexual violence against women. The program consists of six 30-minute interactive web modules consisting of didactic activities and episodes of a serial drama to model sexual communication, consent, and positive bystander behaviors (Salazar et al., 2014, 2016).

RealConsent was evaluated using an RCT with a large sample of college men. Primary outcome measures included prosocial intervening behaviors and sexual violence perpetration and

secondary outcome measures included a variety of possible mediating variables linked to intervention activities (e.g., knowledge of assault rape, self-efficacy to intervene, intentions to intervene, outcome expectancies for intervening. Findings indicate that *RealConsent* participants reported more bystander behavior, increased intention to act as a prosocial bystander, and greater knowledge of bystander behavior compared to the comparison and control groups. Further, the program was successful in decreasing males' sexual violence perpetration and increasing prosocial bystander behaviors six months after the intervention (Salazar et al., 2014).

Social Marketing Campaigns Addressing Campus Sexual Violence

College campuses across the U.S. have implemented social marketing campaigns targeting campus sexual violence. A variety of social marketing campaigns aim to raise awareness of campus sexual violence, prevention strategies, sexual consent, and advertising nurse examinations after experiencing a sexual assault (Borsky, McDonnell, Turner, & Rimal, 2016; Konradi & DeBruin, 1998; Potter, 2012c; Thomas, Sorenson, & Joshi, 2016; White House Task Force to Protect Students from Sexual Assault, 2014). However, only a handful of existing sexual violence prevention campaigns have been evaluated, though these studies have been implemented with varying levels of rigor. Thomas and colleagues (2016) implemented and evaluated a campus-wide banner campaign on sexual consent called *Consent is Good, Joyous, Sexy* and found that exposure to the campaign was associated with increased student engagement in sexual assault prevention activities on campus (e.g. sexual assault education, awareness, and prevention).

Sexual violence awareness campaigns are useful educational strategies for spreading messages against sexual violence across the campus community. However, the most effective sexual violence prevention interventions for college students have utilized the bystander model

(Banyard et al., 2014, 2004; Barone et al., 2007; Ann L Coker et al., 2016; Potter, 2012c; Salazar et al., 2014). To date, the bystander model has been integrated into two social marketing campaigns addressing sexual violence among college students and only one of those campaigns, *Know Your Power*, has been rigorously evaluated (Borsky et al., 2016; Potter, 2012a).

Know Your Power is a social marketing campaign that uses a social norms approach and encouraging prosocial bystander behavior using images and messages displayed throughout campus, which increases prosocial bystander awareness and behavior in college students (Potter, 2012b; Potter & Stapleton, 2011). It aims to engage college students within the campus community in sexual violence prevention using the bystander model and aims to change social norms and perceptions surrounding sexual assault on campus. Particularly, the campaign does this by addressing rape myths, sexual violence and alcohol use via potential date rape, and prosocial bystander behaviors. *Know Your Power* content includes four variations of posters modeling prosocial bystander behavior displayed in high-traffic areas around campus over a six-week period. Grounded in Prochaska and DiClemente's transtheoretical model (TTM), *Know Your Power* was evaluated using a quasi-experimental pre-posttest design and findings indicate that participants reported more bystander behaviors, greater intention to act as a prosocial bystander, and increased bystander knowledge after being exposed to the campaign (Potter, 2012b).

The *Red Flag Campaign*, a social marketing campaign that also aims to increase bystander behavior among students, is described as a low-resource, low-intensity intervention that aims to prevent sexual violence and dating violence among college women (Borsky et al., 2016). The campaign was designed to supplement a 30-minute presentation delivered at student orientation. The campaign is implemented over the course of a week through posters on campus.

Using a quasi-experimental design, findings show that participants at the school in which the campaign was implemented reported greater bystander behavior. However, this study has some methodological issues that should be noted. Study attrition was high in this study from pre- to posttest and final results are based on a sample of N=86 college students, thus the study does not have enough power to establish changes due to the campaign (Borsky et al., 2016). Overall, using the bystander model holds the most promise for addressing sexual violence among college students using a social marketing campaign.

Social Marketing Campaigns Addressing College Alcohol Use

Colleges and universities across the U.S. have implemented a wide variety of social marketing campaigns on alcohol use, many of which are grounded in the Social Norms Theory (DeJong et al., 2006a; DeJong, 2010a; Fitzpatrick, Martinez, Polidan, & Angelis, 2016; Foxcroft, Moreira, Almeida Santimano, & Smith, 2015b; Gomberg, Schneider, & DeJong, 2001). Many of these alcohol use social norms campaigns address college students' misperceptions in the amount their peers drink because college students overestimate the amount their peers engage in alcohol use on campus (DeJong et al., 2006a; DeJong, 2010a; Fitzpatrick et al., 2016; Foxcroft et al., 2015b; Gomberg et al., 2001). In 2016, college students perceived over 90% of their peers to engage in alcohol use when in reality 63% of students drank alcohol (American College Health Association, 2016).

In the late 1980s, Wes Perkins and Alan Berkowitz suggested the idea of a social norms campaigns addressing alcohol misconceptions among college students and researcher Michael Haines was the first to implement such a campaign at Northern Illinois University (Berkowitz, 2005; Haines & Spear, 1996). Since then, various institutions have implemented social norms campaigns addressing alcohol use among college students (Haines & Spear, 1996; Hee Sun Park,

Smith, & Klein, 2011; Hee Sun Park, Smith, Klein, & Martell, 2011). William DeJong developed and implemented a social norms campaign addressing alcohol misconceptions at 32 institutions nationwide. Through multiple randomized controlled trials, findings across universities has suggested that social norms marketing campaigns are an effective approach at changing students' overall perceptions of how much drinking occurs in the college environment and decreased likelihood to engage in excessive alcohol use (DeJong et al., 2006b; DeJong, 2010b; Gomberg et al., 2001).

Other types of social marketing campaigns addressing alcohol use on college campuses have used informational strategies that aim to educate college students on risky drinking and negative consequences of alcohol use. However, informational campaigns have been largely unsuccessful in facilitating changes in college drinking (DeJong, 2010b). Social norms campaigns addressing alcohol use on college campuses have been the most widely evaluated and effective campaigns for reducing alcohol use and misperceived norms among college students (DeJong et al., 2006a; DeJong, 2010b).

Strengths and Limitations of Existing Campaigns for College Students

Evidence-based social marketing campaigns addressing alcohol and sexual violence indicate that social marketing is an effective strategy to engage college student audiences in attitude and behavior change (Borsky et al., 2016; DeJong et al., 2006a; DeJong, 2010b; Potter, 2012c). However, these social marketing campaigns are antiquated in that they do not use social media platforms to deliver the campaign. Social media is widely used among college students (Duggan, 2015). According to the Pew Research Center, social media usage is greatest among 18-29 year olds compared to individuals over 30. In 2016, 86% of 18-29 year olds used at least one social media platform (Greenwood, Perrin, & Duggan, 2016). Over three-quarters of

individuals in this age group use social media every day. In 2016, 76% of 18-29 year olds visited Facebook, the most popular social media platform across age groups, daily. Social media use has increased in popularity at an astronomical rate. Since 2006, social media usage among this age group has risen roughly 70% (Greenwood et al., 2016). Social media's popularity among this age group makes it an ideal space to deliver public health interventions.

Social media is a promising strategy to engage with and communicate messages to college students. Because of the wide usage among the target age group, campaigns delivered to college students in 2017 should use social media to engage the target audience (Greenwood et al., 2016). Although it has not been evaluated, *It's On Us* is a social media marketing campaign launched by the White House in 2014, targeting social norms and encouraging individuals to assume responsibility to act as a prosocial bystander to prevent sexual violence by encouraging individuals to "take the pledge" to help stop sexual violence using social media (White House Task Force to Protect Students from Sexual Assault, 2014).

Social media expands the campaign reach and is an ideal outlet to reach college students, and also can strengthen the rigor of the campaign evaluation (Neiger et al., 2012; Neiger, Thackeray, Burton, Giraud-Carrier, & Fagen, 2013; Slater, Kelly, & Thackeray, 2006; Thackeray, Neiger, Hanson, & McKenzie, 2008). Existing alcohol reduction campaigns and bystander sexual violence campaigns rely solely on images and messages on campus and lack an online presence across social media and web-based components. As Neiger and colleagues (2012) note, the use of social media in a campaign can increase the fidelity because web metrics can be used to assess exposure, reach, and overall campaign uptake among users. Evaluation of campaign exposure and reach were not assessed in the alcohol reduction campaigns and *Know Your Power* measured exposure through the use of researchers' observational assessments of the

number of students that viewed project-related posters on campus (Neiger et al., 2012; Potter, 2012a). The use of web and social media metrics to track exposure and reach in a social marketing campaign can thus result in a more rigorous evaluation. Social media use is also a more cost-effective marketing strategy compared to traditional social marketing campaigns using television and radio advertising, and printed materials (Neiger et al., 2013). Social media also has the potential to enhance sustainability of current social marketing approaches, which may involve more time, personnel, and materials (Neiger et al., 2012). Thus, a social media marketing campaign can be a beneficial approach to prevention among college students for a wide variety of reasons.

Theoretical Framework

Conceptual Model

The present study's conceptual model is informed by the bystander model, which is described in a previous section of the literature review (Banyard et al., 2007; Darley & Latané, 1968; Latané & Darley, 1968; Latané & Darley, 1970; Moynihan et al., 2009; Tabachnick, 2009), Social Norms Theory (Berkowitz, 2005; Perkins & Berkowitz, 1986), Social Cognitive Theory (Bandura, 2001a, 2001b), and Theory of Planned Behavior (Ajzen, 1991). Theoretical pathways are illustrated in Figure 1.1, with primary outcomes outlined in red.

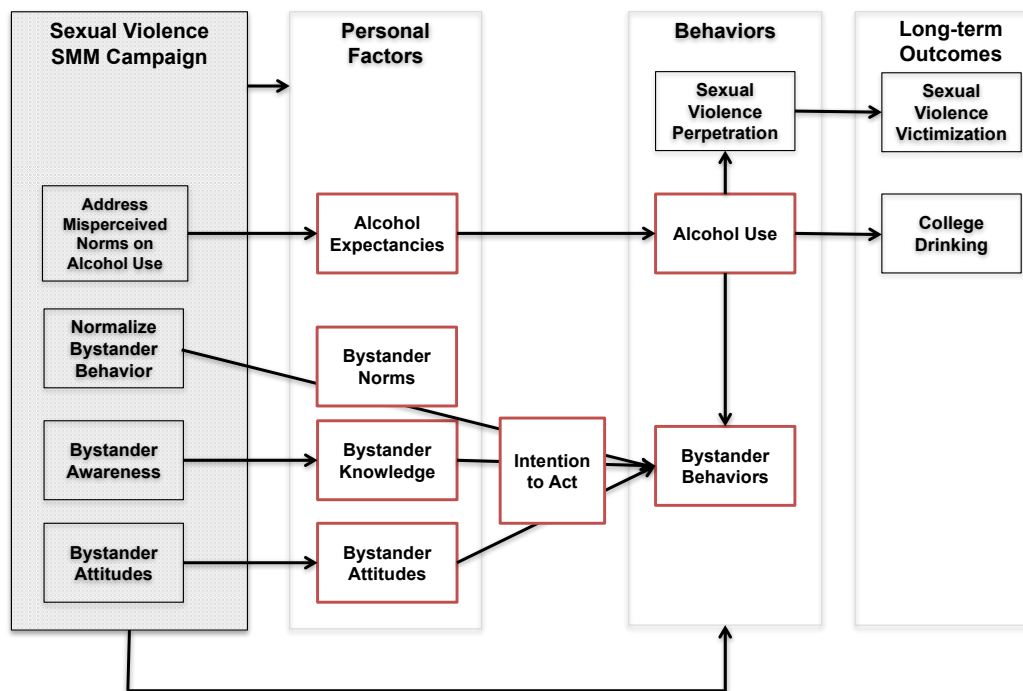


Figure 1.1. Theoretical Framework of Sexual Violence Prevention SMM Campaign.

Social Norms Theory

Social Norms Theory indicates that human behavior is driven by our perceptions of what is “normal” or “typical” and the perceived reward or repercussion of what will occur if we stray from our perceived norms (Berkowitz, 2005). Because behavior is driven by perceived norms rather than the actual behavior, Social Norms Theory calls for the replacement of misperceived norms, or false norms, with healthy norms in an effort to change perceptions of common behaviors (Berkowitz, 2005).

Social Norms Theory is often used as the theoretical foundations of social marketing campaigns in health promotion because it can be used as a strategy to educate the target population of misperceived and actual norms surrounding a specific health behavior (Berkowitz, 2005; Glanz, Rimer, & Viswanath, 2008). In the context of social marketing, Social Norms Theory aims for the target audience to correct misperceived norms to change behavior. Further, it

is used in social marketing campaigns on college campuses to inform students of actual norms versus misperceived norms surrounding alcohol use and sexual violence prevention (DeJong et al., 2006a; DeJong, 2010b; Fabiano et al., 2003; Foxcroft, Moreira, Almeida Santimano, & Smith, 2015a; Gidycz et al., 2011). This research assumed that addressing misperceived norms surrounding alcohol will result in changes in alcohol expectancies related to sexual violence, thereby decreasing alcohol use. Additionally, this study hypothesized that the campaign's focus on normalizing bystander behaviors will increase intention to act as a prosocial bystander, which will increase bystander behavior.

Theory of Planned Behavior

Theory of Planned Behavior (TPB) suggests that behavior is driven by intentions to perform a certain behavior (Ajzen, 1991; University of Twente, 2010). TPB asserts that attitudes, subjective norms, and perceived behavioral control are connected to behavior through intention to act. Intentions are driven by attitudes towards the specific behavior, the subjective norms, and their perceived behavioral control. By way of intentions, attitudes impact behavior. Specific attitudes towards the targeted behavior impact intentions to perform that behavior, which are predictive of an individual's likelihood to perform that behavior (Ajzen, 1991; University of Twente, 2010). This study hypothesized that intentions to act as a prosocial bystander is predictive of bystander behavior.

Social Cognitive Theory (SCT)

Bandura's Social Cognitive Theory (SCT) explains the reciprocal relationship between individual cognitive processes, behavior, and their environment (Bandura, 1977, 1997, 2001a, 2001b). Cognitive processes within SCT include a person's attitudes, knowledge, and expectations that, in turn, affect their behavior. These cognitive processes and behaviors are

influenced by environmental factors, such as social norms. This research hypothesized that exposure to the sexual violence prevention campaign will have a positive effect on individuals' bystander attitudes and behaviors (Bandura, 2001a, 2001b).

A key psychological determinant of behavior in SCT is *outcome expectancies*, which is the value individuals place on particular outcomes (Bandura, 2001a, 2001b). This research hypothesized that addressing alcohol-related misperceived norms in the campaign will positively impact individuals' alcohol expectancies related to preventing sexual violence, thereby decreasing alcohol use. It was expected that the likelihood to intervene as a prosocial bystander will increase by reducing alcohol use.

Implications for Future Campaign Development

Because both alcohol and sexual violence social norms campaigns have been deemed effective, future research should focus on addressing risky alcohol use and prosocial bystander behavior for sexual violence prevention in a social marketing campaign using social media. Considering the potential evaluation benefits of including social media in a campaign and its capability to expand campaign reach, a social media marketing campaign would be an ideal strategy for addressing alcohol use and sexual violence on campus among college students. Further, extensive research shows that alcohol is a key contributor to sexual violence against college women, and the large majority of sexual assaults on campus involve alcohol use among victims, perpetrators, and, in most cases, both (Abbey, 1991; Abbey et al., 2002, 2001a; Cantor et al., 2015; Jozkowski & Wiersma, 2014; Lindquist et al., 2009; Testa et al., 2004). Recent studies also show that alcohol use decreases college students' likelihood of intervening in sexual violence as a prosocial bystander, especially among college men (Fleming & Wiersma-Mosley, 2015; Orchowski et al., 2015).

Though alcohol is included as a component within Potter's (2012) *Know Your Power* by addressing date rape drugs, alcohol has not otherwise been included as a major outcome in sexual violence prevention social marketing campaigns. Because research now shows that alcohol use inhibits the likelihood of intervening as a prosocial bystander among college students, it is imperative that college-wide prevention efforts discourage alcohol use, particularly among students who drink alcohol, as a strategy to increase prosocial bystander intervention in sexual violence.

Both alcohol and sexual violence campaigns have been determined to be effective using the social norms approach, so addressing both alcohol and prosocial bystander behavior in a social media marketing campaign is a dual approach to prevention. This study proposed that a social media marketing campaign seeking to reduce alcohol use and encourage prosocial bystander intervention in college students can address two major problems on college campuses, alcohol use and sexual violence, that are empirically linked. This innovative approach to prevention is be the first evidence-based campus-wide social marketing campaign employing social media and has the potential to be a sustainable approach to sexual violence prevention on campus.

Chapter Summary

Sexual violence among college women is a significant public health problem at colleges and universities across the U.S. that is often addressed in prevention programming using the bystander model. However, most bystander programs are implemented through in-person facilitation, which puts a heavy burden on staff and students and limits program sustainability.

Social marketing campaigns like Potter's (2012) *Know Your Power* campaign have the potential to become a widely used strategy for addressing sexual violence on college campuses,

particularly if they also use social media in the campaign delivery. Considering the wide use of social media among college students, social media is an ideal tool for communicating sexual violence prevention messaging to this audience and have the potential to reach a broad audience (Duggan, 2015). Thus, a social media marketing campaign could strengthen current social marketing approaches for sexual violence prevention (Borsky et al., 2016; Konradi & DeBruin, 1998; Potter, 2012a).

Though the bystander model is demonstrated as a proven strategy for engaging college students in sexual violence prevention on campus, recent research suggests that alcohol use negatively impacts college students' likelihood of intervening in sexual violence as a prosocial bystander. However, no existing sexual violence prevention programs consider the relationship between alcohol use and prosocial bystander behaviors in sexual violence prevention. In partnership with the UGA's University Health Center, I developed a sexual violence prevention social media marketing (SMM) campaign that aims to discourage alcohol use among students as a means of increasing prosocial bystander intervention in sexual violence that will be implemented in Fall of 2017. This multiphase mixed methods study informed, developed and examined the preliminary efficacy of a campus-wide sexual violence prevention SMM campaign, *Be a Watch Dawg*, among college students using a quasi-experimental pre- and posttest design. This research hypothesized that college students' prosocial bystander behavior and intentions will increase and alcohol use will decrease after exposure to the campus-wide SMM campaign. Further, exposure to the SMM campaign was hypothesized to be statistically associated with decreased alcohol expectancies related to sexual violence and alcohol use, and more favorable bystander attitudes, knowledge, and behavior.

CHAPTER 3

METHODOLOGY

Study procedures for Phases I through III were approved by University of Georgia's Institutional Review Board. Approved consent forms, focus group protocols, and measures are in the appendices.

Approach

This study used a mixed methodology approach to inform, develop, and test the preliminary efficacy (Bowen et al., 2009) of a sexual violence prevention social media marketing (SMM) campaign at UGA among undergraduate students aged 18 to 24 years of age. This research occurred in three phases: Phase I, a formative mixed-methods study with the target population to inform the development of the campaign; Phase II, campaign development and focus groups testing campaign content with the target population; and Phase III, campaign implementation and testing preliminary efficacy of the campaign through a quasi-experimental nested cohort study.

Phase I: Formative Research

Phase I is a mixed-methods study that aimed to understand UGA undergraduate students' attitudes, experiences, and preferences to inform the development of the sexual violence prevention SMM campaign. Data were collected through focus groups with the target population. Phase I also consisted of a cross-sectional survey assessment administered to UGA

undergraduate students to assess bystander behaviors and social norms to inform the development of campaign messaging and content.

Qualitative Focus Groups

The qualitative focus group study recruited a sample (N=18) of UGA undergraduate students to participate in five focus groups consisting of eleven young women and seven college men. Two focus groups were held with male participants and three focus groups were held with female participants. Study participants were recruited through referrals, flyers, emails, social media, and in-class announcements. The eligibility criteria for participation included the following: a) 18 years of age or older; b) currently an undergraduate student at the University of Georgia; c) currently residing in the US or a US territory; and, d) have the ability to read and write in English. Focus groups consisted of discussions of students' experiences as a UGA student, student health behaviors, their social media preferences, and opinions on possible campaign names, hashtags, and health messages.

Data Collection

Data were collected using focus groups. The focus group protocol is included in Appendix A. Each focus group lasted roughly 75 minutes. Focus groups were conducted in private classrooms on University of Georgia's campus. Focus groups were audio-recorded using a digital audio recorder and were transcribed verbatim by trained research assistants.

The purpose of each focus group was to understand UGA undergraduate students' attitudes, behaviors, and preferences to inform the development of the sexual violence prevention SMM campaign. Students were asked about their exposure to and attitudes towards sexual violence prevention at UGA, bystander attitudes and behaviors, opinions about rape myths, and their opinions on potential campaign titles, messaging, and content. Focus group questions and

probes aimed for UGA men and women to expand upon their attitudes, opinions, and preferences. We conducted three focus groups with UGA undergraduate women (n=11) and two focus groups with UGA undergraduate men (n=7) before developing campaign materials. Participants were compensated for their time with \$15 gift cards to the UGA bookstore.

Data Management

Data were transcribed verbatim by undergraduate research assistants. After the first transcription, a second research assistant completed an in-depth read through of the transcription to check for accuracy. NVivo version 11.0 (QSR International, 2017) was used to facilitate qualitative data management and analysis. Data presented in the results are de-identified. After second transcriptions were completed, transcripts were loaded into NVivo 11.0 for data analysis.

Data Analysis

Grounded theory methodology was used to inform data analysis of focus group data. Once the files were transcribed, resulting transcripts were analyzed using the constant comparative method and guided by constructionist grounded theory (Charmaz, 2006; Charmaz, 2002). We completed open coding of focus group data to develop a preliminary codebook. We created a coding structure based on focus group questions and participant responses (Glaser, 1998; Glaser & Strauss, 1967). We each coded one focus group with the preliminary codebook, then revisited and refined the codebook. The codebook was continually refined as themes emerged during data analysis.

The refined codebook was uploaded into NVivo qualitative software and each research team member recoded the first focus group transcript and all remaining transcripts within NVivo. The coding structure went through several iterations until a final coding structure was developed

and applied to all transcripts. The research team independently coded each transcript, and the transcripts went through several iterations of coding and were then compared to ensure consistency. When discrepancies occurred, we held coding meetings until 100% agreement was met. The resulting passages related to bystander intervention, sexual violence risk situations, intervening strategies, campaign messaging, and campaign platforms and content.

Cross-sectional Survey

To inform the development of data-driven campaign messages and content, survey items were included in a larger cross-sectional survey assessment administered to a sample (N=459) of undergraduate students in spring 2017. Students were recruited through undergraduate public health courses, email announcements, and through social media. The larger survey assessment asked about student health behaviors, sexual health, technology use, including use of mobile phones and social media. Items that were included to inform campaign messages asked about intentions to act as a prosocial bystander among friends and strangers. Survey eligibility criteria included: a) must be at least 18 years of age, b) enrolled in undergraduate classes at the University of Georgia or University of South Carolina, c) currently residing in the U.S. and d) fluent in English. See Appendix B for the cross-sectional survey items.

Data Collection and Analysis

Data collection occurred over spring 2017 using electronic survey assessments administered through Qualtrics survey software. SPSS version 25.0 was used to observe descriptive data on intentions to intervene as a prosocial bystander among UGA students (IBM Corp., 2017). Descriptive statistics and frequencies were analyzed and data were used to inform two social media posts on social norms and intentions to intervene for the *Be a Watch Dawg* campaign (figures 3.1 and 3.2).



Figure 3.1. Campaign Social Media Post on Intentions to Intervene with Friends.



Figure 3.2. Campaign Social Media Post on Intentions to Intervene with Strangers.

Phase II: Campaign Development

Phase II involved the development of campaign messaging, slogans, hashtags, web-based and social media content, and posters, which the research team completed during summer 2017. The research team consisted of one Masters-level research assistant and two undergraduate-level research assistants. Data from phase I informed the campaign title, hashtags, images, and

content. All campaign content is grounded in the study's theoretical model. The research team held weekly meetings during June and July 2017 to discuss and develop campaign content. The graphic designer developed the campaign logo with input from the research team. The research team created social media content with photos and graphics using Venngage and Canva. We also created one video filmed on a smartphone. We discussed content drafts during weekly meetings and reviewed and refined drafts based on team members' feedback. This process continued throughout campaign development and implementation.

Phase III: Campaign Evaluation

In Phase III, we implemented and evaluated the preliminary efficacy of the SMM campaign, entitled *Be a Watch Dawg*. The campaign was implemented in Fall 2017 at the University of Georgia. We examined the preliminary efficacy of the sexual violence prevention SMM campaign using a quasi-experimental design. Data were collected from two independent cross-sectional samples with a nested cohort pre- and posttest design (Bowen et al., 2009; Shadish, Cook, & Campbell, 2002). Two independent cross-sectional samples of students were recruited (N=244) to complete electronic survey assessments: Cross-sectional sample 1 (n=159) completed an electronic survey assessment pre-campaign. A subset of cross-sectional sample 1 also participated in a cohort subsample (n=59) and completed post-test assessments. Cross-sectional sample 2 (n=85) completed electronic survey assessments post-campaign. The study inclusion criteria were: (1) 18-24 years of age; (2) currently enrolled full-time in undergraduate courses on the main campus of University of Georgia; (3) reside in Athens, GA or surrounding areas within a 10-mile radius during Fall 2017; and (4) drank alcohol within the past three months. The hybrid study design assessed changes within the intact campus community through

the independent cross-sectional samples and individual-level changes in behaviors and attitudes through the cohort pre-post sample (Shadish, Cook, & Campbell, 2002). The current study design has been previously used to evaluate college-based social marketing campaigns on alcohol and sexual violence prevention (DeJong et al., 2006a; Gomberg et al., 2001; Potter, 2012a).

In addition, we tracked data analytics and poster locations to track campaign exposure and reach. Social media analytics data were gathered to track social media viewership. Data analytics of campaign social media accounts on Facebook, Instagram, and Twitter were tracked. We also tracked user-generated social media content posted on Facebook, Instagram, and Twitter related to the campaign using the campaign hashtags.

Campaign Implementation

The *Be a Watch Dawg* campaign was implemented in Fall 2017 at the University of Georgia, from August 31, 2017 – November 2, 2017. The campaign was administered via posters, bus advertisements, stickers, and through Instagram, Facebook, and Twitter social media posts. We posted social media content on Instagram, Facebook, and Twitter every day with posts containing the campaign hashtags, #beawatchdawg and #watchdawgnation. We also used Facebook and Instagram ads to promote the campaign to users based on age, location, and college attendance information.

The campaign posters were displayed on campus in dorms, buildings where classes are held, Ramsey Student Center, University Health Center, Miller Learning Center, The Joe Frank Harris Commons, and in participating bars and food retailers in downtown Athens. We tracked when and where the posters were put up to track reach. In addition, stickers with the campaign logo were posted on lamp posts throughout Athens, GA and distributed to UGA students. Bus

advertisements with the campaign logo were also displayed on all UGA buses from September 25 – October 22, 2017 (figure 3.3).



Figure 3.3. *Be a Watch Dawg* Campaign UGA Bus Advertisement.

We used a combination of promotional strategies to engage students in sexual assault prevention throughout the campaign related to alcohol and sexual assault prevention. Content addresses a variety of strategies and situations related to sexual assault and alcohol use, such as educating students on situations that require intervention, giving tips on intervening safely and effectively as a prosocial bystander, teaching students to create a “game plan” for staying safe when students go out at night and alcohol use occurs, and encouraging students to watch out for their friends and peers when they go out. Table 3.1 below details the SMM campaign content, platforms, and theoretical constructs the content addresses. We administered the campaign on Facebook, Instagram, and Twitter using the username @InterveneUGA, and posted content on at

least one of the accounts every day during campaign implementation. In addition, we used paid Facebook ads to target 18-24 year-olds in Georgia and Instagram ads to target 18-24 year-olds in Athens, GA.

Table 3.1. *Be a Watch Dawg* Campaign Content.

Theoretical Construct	Campaign Content Purpose	Campaign Content	Social Media Platform
Misperceived Norms on Alcohol Use	Facts, photos, and content dispelling misperceived norms about the amount students on campus drink alcohol.	Photo of students playing games at a table with text on image reading “AN EPIC GAME NIGHT.” Caption: Who needs alcohol to have an epic night? Check out @doitsoberUGA for fun sober activities on campus	Instagram, Facebook, Twitter
		You can go out but you don't have to get wasted. Having one drink is okay. Caption: Going out does not have to mean getting smashed. Getting wasted isn't what college is about.	Instagram, Facebook, Twitter
		Video of college students talking about how epic their night will be [assumed about drinking] Next clip: Friends binge-watching <i>Game of Thrones</i> . Caption: Watch Dawgs know that an epic night does not have to include alcohol.	Instagram, Facebook
Alcohol Expectancies	Facts, photos, and videos dispelling positive outcome expectancies of alcohol use among related to sexual violence	Picture of a guy passed out dressed as batman. Text on image reads: Watch Dawgs don't let Halloween get the best of them. Caption: Watch Dawgs make a game plan and prepare so they're aware of risky situations and don't fall asleep on the job. Happy Halloween, y'all!	Instagram, Facebook, Twitter
		Stock image of liquor bottle and woman cowering in corner with text on image reading, “Alcohol increases the occurrence and severity of domestic violence.” Caption: Heavy drinking can create an unhappy, stressful partnership that increases the risk of conflict and violence. If you notice a couple you know drinking heavily all the time, this is a red flag.	Instagram, Facebook, Twitter
Alcohol Use	Content encouraging students to drink less alcohol and to drink responsibly to be a prosocial bystander and to stay alert and aware	Photo with text: Watch Dawgs don't let alcohol get in the way. Caption: If everyone is drinking, how can we know what's going on around us? Watch Dawgs are aware of their surroundings and intervene when they see risky situations	Instagram, Facebook, Twitter
Rape Myth Acceptance	Content conveying messages leading on to be rape myths, but that display actions of	Two pictures of three college guys with the following text on the screen in Frame 1: “I saw this girl passed out at a party, so I did what most guys would do...” and Frame 2: “I got her a blanket and water and called her friend to take her home.” Caption: Fact: Most guys are Watch Dawgs.	Instagram, Facebook, Twitter

	students taking care of their peers	Text on image of a true story about a college woman who was followed by a male stranger while walking down a street with her friends. Enlarged text to highlight rape myth-related attitudes: Her female friends said, “If you weren’t wearing that outfit, he wouldn’t have followed us.”	Instagram, Facebook, Twitter
Bystander Behavior	Educate on how to intervene effectively	Infographic with text on colored background providing information on how to intervene using the 4 D’s of bystander intervention: be direct; distract; delegate; delay.	Instagram, Facebook, Twitter
	Highlight situations in which sexual violence might be at risk (i.e. sexual violence risk situations) that would necessitate intervening	Image of red flag with text on flag reading, “WARNING” then another image in the same post that showcases situations that are sexual violence risk situations, i.e. red flags. For example, one picture is a stock image of a couple fighting and the male has his fist clenched in a threatening way to encourage intervening in potential domestic violence incidents.	Instagram, Facebook, Twitter, Snapchat at campaign events
	Provide tips to reduce the risk of sexual assault	Tip sheets called “Watch Dawgs Going Out Tips” on risk reduction strategies to prepare for a night out with friends and create a plan in advance to reduce the risk of a sexual violence risk situation. For example, one post reads: “Be Prepared: • Offer food, water, and non-alcoholic drink options • Carry a charged phone, portable charger, credit card, cash, and an ID • Let others know about your plan and location” Caption: Watch Dawgs have a game plan before stepping onto the field. Follow these tips to get ready for the big weekend!	Instagram, Facebook, Twitter
	Encourage students to intervene in sexual violence risk situations	Photo of a football field with text next to it, reading: Have a game plan when you go out. Caption: Watch Dawgs have a game plan when they go out. Check out our Facebook for tips on creating yours. 1, 2, 3, break!	Instagram, Facebook, Twitter
Intentions to intervene	Increase intention to intervene in sexual assault among UGA students, with friends and strangers alike	Photos/infographics with data on students who would intervene if they had the chance to do so: Text on screen reads: 99% in a sample of UGA students wouldn’t leave an intoxicated friend behind during a night out. Caption: Watch Dawgs never leave friends behind. Be the 99%.	Instagram, Facebook, Twitter
		Photos/infographics with data on students who would intervene if they had the chance to do so: For example, text on image reading “93% in a sample of UGA students would tell someone if their drink was spiked.” Caption: Watch Dawgs speak up if they see suspicious activity that could put someone at risk. Let’s make it 100 percent, y’all!	
Bystander Attitudes	Content and photos showing that prosocial bystander behavior can make a difference in sexual violence	Images with text of a true story about a UGA student intervening in a domestic violence dispute, in which she called 911 and served as a witness when the female partner filed a lawsuit against the abusive partner. Text highlighted reads, “I may not be an expert, but I am a person that has the ability to listen and support those in need.” Caption: Katy is a UGA student just like you. Read her powerful story on how she intervened & made a difference in stopping domestic violence.	Instagram, Facebook, Twitter
	Content, highlighting the fact that intervening does not have to be difficult	Image of guy passed out at bar with another guy next to him. Talk bubble pointing to the coherent guy saying, “Are you okay?” Caption: Intervening doesn’t have to be hard. It could be as simple as asking a person if they’re okay.	Instagram, Facebook, Twitter

Campaign Evaluation

Setting

The University of Georgia (UGA) in Athens, GA was the setting for all proposed study activities. UGA is the state of Georgia's flagship and largest public university in the state with over 600 clubs and organizations, and division 1 NCAA athletics. In 2015, UGA had 27,547 undergraduate students (57% undergraduate women; 43% undergraduate men; 71% White; 9% Asian; 7% Black/African American; 5% Hispanic; 4% multiracial). Among undergraduates, 98% of freshmen live in campus housing or residence halls and 33% of all college students live on campus. UGA has 35 fraternities and 27 sororities; 26% of undergraduate students belong to a Greek community.

Participants

Data were collected from two independent cross-sectional samples of undergraduate students at the University of Georgia (N=244). Cross-sectional sample 1 (n=159) completed the pre-campaign assessment. A subset of cross-sectional sample 1, the cohort subsample (n=59), also completed post-campaign assessments. Cross-sectional sample 2 (n=85) completed electronic survey assessments post-campaign.

Inclusion Criteria

To participate, students must have been between: (1) 18-24 years of age; (2) currently enrolled full-time in undergraduate courses on the main campus of the University of Georgia; (3) residing in Athens, GA or surrounding areas within a 10-mile radius during Fall 2017; and (4) drank alcohol within the past 3 months. Unique links to the pre-test survey, post-test cross-sectional sample survey, and post-test cohort sample survey were created and these links were

distributed to two separate random samples of UGA undergraduate students enrolled in courses on the main campus in Athens, GA.

Recruitment and Sampling

Two independent cross-sectional samples of students were recruited (N=244) to complete electronic survey assessments: The baseline cross-sectional sample (n=159) completed electronic survey assessments pre-campaign. A subset of cross-sectional sample 1 also participated in a nested cohort subsample (n=59) and completed post-campaign assessments. The second cross-sectional sample (n=85) completed electronic survey assessments post-campaign. We recruited participants using the UGA Student Affairs' data request form to draw two random samples of undergraduates' email addresses at two separate time points (cross-sectional sample 1 was recruited for the pre-campaign assessment and the second cross-sectional sample was recruited for post-campaign assessment) based on eligibility criteria.

After obtaining the email lists of 1,500 students at pre-campaign and 750 students at post-campaign, we emailed the students on each list in three waves. We sent the first wave of emails to a subset of students on the list and continued to send emails in waves until the target survey completion goal was reached for each data collection time point. The email sent to students contained a link to a Qualtrics survey. Clicking this link brought up a webpage containing a brief study overview. If students were interested in participating, they clicked a tab that advanced them to a survey, where they were screened for eligibility. Eligible participants were taken to a consent page and, if they agreed to participate, they clicked on another tab to complete the survey. Then, participants were prompted to enter a unique study ID, which we used to link pre- and post-campaign data for the cohort sample. The pre- and post-test surveys contained an embedded link to a separate survey for students to enter their email to receive the study

incentive, a \$5 Amazon e-giftcard. This process was repeated for recruitment and survey administration of the second cross-sectional sample for the post-campaign assessment.

We recruited participants from the pre-campaign cross-sectional sample for participation in the post-campaign nested cohort sample. The pre-campaign incentive survey also contained a question asking if participants would like to be re-contacted in 2-3 months to take the post-campaign survey, as well as a form to enter their email if they agreed to be re-contacted for participation in for the cohort subsample. Then, we randomly selected email addresses from this list inviting students to participate in the post-campaign survey as part of the cohort subsample.

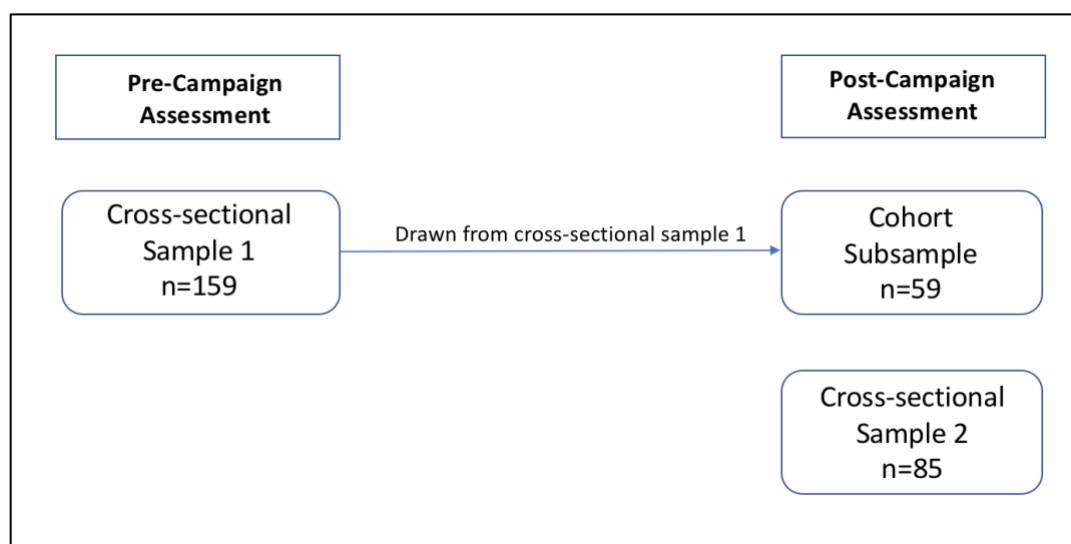


Figure 3.4. Phase III Study Design.

Measures

We used a web-based data collection approach to administer pre- and posttest assessments using the Qualtrics survey platform. Pre- and posttest surveys included a combination of demographic items (e.g. race, ethnicity, age, year in school, living arrangements, participation in athletics, Greek life membership, etc.) and several scales measuring outcome variables indicated in Table 3.2. The posttest questionnaire also included questions to assess exposure and reach of the campaign, and attitudes towards the campaign. Exposure to the

campaign was assessed through “Have you seen the *Be a Watch Dawg* campaign?” Other questions to assess exposure include the following: “Have you seen any campaigns on campus about sexual assault?”; “Where have you seen the campaign?”; “Where [physical locations] have you seen the campaign?” and; “On what social media platforms have you seen the campaign?” The full outcomes measures are included in Appendix C.

Table 3.2. Measures of Study Variables.

Variable	Measure	# Items	α
Alcohol Expectancies	Revised Alcohol Expectancy Questionnaire (George et al., 1995)	40	.72
Alcohol Use	Weekly Drinking and Heavy Episodic Drinking (National Institute on Alcohol Abuse and Alcoholism, 2003)	3	n/a
Alcohol, Tobacco, and Other Drug Use	NIDA modified Alcohol, Smoking, and Substance Involvement Screening Test (NMASSIST) (National Institute on Drug Abuse, 2012)	8	n/a
Alcohol Norms	Drinking norms rating form (Baer, Stacy, & Larimer, 1991)	2	n/a
Bystander Social Norms	Reactions to Offensive Language & Behavior (Kilmartin et al., 1999; Loh et al., 2005)	19	.99
Bystander Attitudes	Bystander Attitudes Scale (Banyard et al., 2007)	10	.94
Bystander Intention to Act	Intent to Help Friends Scale: Brief Version (Victoria L Banyard et al., 2014)	10	.93
	Intent to Help Strangers Scale: Brief Version (Victoria L Banyard, 2008; Victoria L Banyard et al., 2014)	8	.94
Bystander Behavior	Bystander Behavior Scale (Banyard et al., 2007; Banyard, 2008; Banyard et al., 2014)	10	.89

Demographic Variables

Respondents were asked about their age, gender, year in school, major, living arrangements, participation in athletics, Greek life membership, and extracurricular activities. The study inclusion criteria were: (1) 18-24 years of age; (2) currently enrolled in undergraduate courses on the UGA’s main campus in Athens, GA; (3) reside in Athens, GA or surrounding areas within a 10-mile radius; and (4) drank alcohol within the past 3 months. Any responses outside of inclusion criteria did not allow respondents to continue the online assessment.

Data Analysis Plan

Data Analytics

Data analytics were used to assess campaign usability, exposure, and reach post-campaign. We obtained frequencies, means, and proportions for all campaign social media accounts on Twitter, Facebook, and Instagram. Facebook data analytics tracked the number of users, page visits, and number of likes, reactions, shares, and clicks on content posted on the page. Twitter data analytics tracked the number of Twitter followers, views, clicks, replies, retweets, and tweet likes. Instagram Insights was used to track the number of Instagram followers, content views, number of clicks on the campaign website link in the Instagram profile, and the average time followers are on Instagram in a typical day. We also recorded the number of Facebook, Twitter, and Instagram followers gained over time to determine if the SMM campaign had a reach of over 1,500 students by the end of the campaign and assessed whether the campaign webpage had a viewership averaging over two minutes based on reported reach statistics of a previous SMM feasibility study (Dowshen, Lee, Matty Lehman, Castillo, & Mollen, 2015).

Content Analysis

This research planned to perform a content analysis of user-based social media posts with the campaign hashtags, #beawatchdawg and #watchdawgnation. However, there were too few social media posts aside from the campaign social media account's social media content. No organic social media posts were generated by campaign followers and none used the campaign hashtag. As a result, a content analysis was not performed for this analysis.

Quantitative Data Analysis

The data analytic plan involved two separate plans. The first involved analysis of the full independent pre- and post- campaign samples and the second involved analysis of pre-post changes within the cohort subsample. Analyses were performed on the specified hypotheses to detect main effects in the independent cross-sectional pre- and post- campaign samples and the cohort pre-post sample, e.g. participants who completed both pre- and post- campaign assessments (n=59). The post-campaign cross-sectional sample in the final analyses included all respondents who completed the post-campaign assessment: cross-sectional sample 2 (n=85) as well as the cohort subsample (n=59). Analyses of main effects were performed to detect differences for time and for campaign exposure. Main effects analyzed included: 1) differences in primary and secondary outcomes pre- to post- campaign and 2) effectiveness of the *Be a Watch Dawg* campaign on primary and secondary outcomes. All analyses were performed using SPSS version 25 (IBM Corp., 2017).

Pre-Post Campaign Cross-sectional Independent Samples

Descriptive statistics were calculated to summarize sociodemographic variables, primary outcome variables (e.g. prosocial intervening behavior, intentions to intervene, and alcohol use) and secondary outcome variables (e.g. bystander attitudes, reactions to offensive language and behavior, alcohol expectancies, and perceived alcohol use norms). *t*-Tests and chi-square analyses of sociodemographic variables were calculated to test for equivalence of the independent pre- and post- campaign cross-sectional samples. Variables in which differences between pre- and post- cross-sectional samples approached statistical significance ($p < .15$) were included as potential covariates in the models (Bursac, Gauss, Williams, & Hosmer, 2008). Gender identity was found to be significant ($p = .001$) and was therefore included as a covariate in all statistical models testing effects between cross-sectional samples.

Differences in outcomes pre- to post- campaign were analyzed using adjusted linear regression models for continuous variables for time. We also assessed relative odds of binge drinking, a dichotomous variable, using logistic regression with the time variable as the main predictor. Using the cross-sectional sample 2, associations between the exposure of the *Be a Watch Dawg* campaign and primary and secondary outcomes was analyzed using adjusted linear regression models for continuous variables. Using the cross-sectional sample 2 data, relative odds of binge drinking, a dichotomous variable, was assessed using logistic regression with campaign exposure as the main predictor. We examined whether exposure to the campaign moderated the effect of time (e.g. pre-post time difference) on outcomes (Jaccard & Turrisi, 2003). To test this interaction, a Time x Exposure interaction term was created by multiplying the time variable (e.g. Time 1, Time 2) by exposure to the *Be a Watch Dawg* campaign variable (i.e. Exposure). A significant interaction term would predict differences in outcomes pre- to post- campaign based on whether participants were exposed to the campaign. To assess the differences in outcomes pre-post campaign based on whether participants were exposed to *Be a Watch Dawg*, adjusted linear regression models were calculated for continuous variables with the Time x Exposure interaction term as the predictor in each model. Adjusted logistic regression was used to analyze pre-post differences in binge drinking, a dichotomous outcome, based on exposure to the campaign with the Time x Exposure interaction term as the predictor in each model.

Pre-Post Campaign Cohort Subsample

Paired samples *t*-Tests were calculated to examine pre- to post- campaign differences in primary and secondary continuous variables and a McNemar analysis was used to assess pre-post differences in binge drinking, a dichotomous variable (Adedokun & Burgess, 2012). The effect of the *Be a Watch Dawg* campaign on post-test outcomes were analyzed using adjusted linear

regression models for continuous variables, controlling for baseline outcome variables. The relative odds of binge drinking was assessed using logistic regression controlling for baseline binge drinking (Allison, 1990; Glymour, Weuve, Berkman, Kawachi, & Robins, 2005; Vickers & Altman, 2001). Controlling for the baseline outcome (i.e. Y_1) while examining the relationship between the predictor (i.e. X) and the post-test outcome (i.e. Y_2) holds merit in statistical methods, and reduces the threat of spuriousness (Allison, 1990). For example, to assess the effect of campaign exposure on post-test intentions to intervene, we controlled for the baseline variable for intentions to intervene.

CHAPTER 4

RESULTS

Specific Aims

Aim 1: Assess usability, exposure, and reach of the *Be a Watch Dawg* campaign.

Aim 1.1: Track data analytics across the *Be a Watch Dawg* campaign social media accounts on Facebook, Instagram, and Twitter, including the number of “likes,” “followers,” “shares,” and comments, as well as views, reach, and hashtags used on social media platforms.

Aim 1.2: Perform a content analysis of the social media user-generated content using the campaign hashtag.

Aim 2: Assess preliminary efficacy of the *Be a Watch Dawg* campaign to increase prosocial bystander behavior and intentions to intervene and decrease alcohol use.

Aim 2.1: Evaluate whether exposure to the *Be a Watch Dawg* campaign is associated with a set of theoretically derived constructs (e.g. bystander attitudes and social norms about intervening, prosocial bystander behavior, alcohol use and alcohol-related norms, alcohol expectancies) pre- to post-campaign launch.

Focus Group Results

Participants

We held five focus groups with N=18 college students from the University of Georgia. A total of 61.1% (n=11) participants were female and 38.9% (n=7) were male. The mean age of participants was 21.5. The majority of respondents were in fourth-year students (n=11, 61.1%); respondents ranged from second to fifth-year undergraduate students. About 27.7% (n=5)

participants were involved in Greek life; one (5.5%) male was in a fraternity and four (22.2%) females were in sororities. One male respondent (5.5%) reported that he was involved in club sports. The focus groups focused on bystander interventions, when and how to intervene, and preferred campaign messaging, content, and platforms.

Bystander Intervention

Focus groups revealed that all but one participant had experienced bystander intervention; intervened with someone else as a prosocial bystander, been intervened with, or both. Further, respondents explained that alcohol was involved in the majority of incidents in which intervening took place. Focus group participants discussed that many of these incidents occurred at bars “downtown,” referring to downtown Athens, GA, in dorms, or at parties. In most cases that participants discussed, the person who was intervened with was intoxicated.

Experiences intervening ranged greatly, from going to pick up a friend to actually preventing a male from entering an intoxicated female friend’s dorm room. One fourth-year female explained, “I mean I’ve like...gone to get people, like they texted me saying like, “I’m at the guy’s house, I don’t want to be here” and like I’ve gone to get them.” A male fourth-year student explained how he intervened with a female friend’s intoxicated roommate when he noticed that an unfamiliar male went back to their dorm:

“...he was just hanging out in the room, um, and I started talking to him and stuff like that and just to kind of, like, get a feel for him. And (pause), you know, he had said (mimicking voice) “Oh yeah, you know, we actually like grew up together, like I was coming to Athens to visit, we had planned like just like to hang out here tonight”, blah, blah, blah. And then they finally, like, got her okay, and so I went and talked to her, and I was like, you know, do you know him? And

she was like no. And so I went back into the room with one of the other guys that came with me and basically (long pause) kicked him out.”

Both female and male respondents acknowledged that they had been on the receiving end of intervening with before, particularly in situations in which they had been intoxicated and their friends helped them get home safely. Most female respondents also reported their friends have intervened, or stepped in, when males were hitting on them or trying to dance with them at a bar or club. One third-year female respondent described an incident when one of her friends intervened with her: “...there was this one time I went out with my friends. And we were talking and this guy kind of tried to come up on me. And then my friend just like kind of did the whole switch back get away.” Further, the majority of female respondents and some male respondents reported that they looked out for their friends when they went out and their friends did the same for them.

Respondents reported intervening with both friends and strangers. One fourth-year female described a situation where she intervened saying, “I mean, I think for example I don’t know if this person was in danger or not but they definitely had been left behind. They could have been possibly been put in a situation because they were so drunk or something like that and I made sure they got home...” Another fourth-year male student explained an incident where he intervened to prevent friends from going home with males at the end of a night out: “Um, I’ll have like my friends with me and then just like uh, people, or at least the guys, would just get like the wrong like assumptions about like what will be the point of like after downtown so like, I have to like intervene and be like ‘no that’s not happening...that’s not happening.’” The majority of respondents discussed feeling responsible for taking action in situations when they saw someone else in trouble. A female respondent explains, “...like if I saw it, I would feel like

the responsibility is on me.” When asked how participants felt about being intervened with, respondents agreed that it made them feel good to know that others were looking out for them. One fourth-year female said that it made her feel “relieved.” Another fifth-year female described the act of intervening with others as fostering a “sense of community” in the excerpt below:

“It’s like a sense of community. I mean you hear about stories about um, girls coming up to other girls and being like ‘Hey, this guy is kind of freaking me out can you pretend to be my best friend or something.’ You know, it’s a sense of community to kind of protect each other.”

Many respondents expressed that it would be powerful for the campaign messages to convey a sense of community and unity among students regarding bystander intervention. Specifically, students felt that campaign messages should convey that UGA students are willing to look out for others and intervene in risky situations.

Intervening Strategies

Many respondents discussed uncertainty about when would be an appropriate situation to intervene. One third-year male respondent reported the need for information on when to intervene and how to do so effectively, saying he thinks it would be helpful for the campaign to include “...strategies on you know how to intervene, maybe education on situations...that need intervening too. And then how to.” Both male and female respondents explained that they encountered many situations, often involving alcohol use, in which they were unsure if they should intervene when they were out at night. Respondents explained that they often saw others who were intoxicated and were unsure if they should intervene, as is depicted in the excerpt below:

“And they’re in a big group like they are obviously still hanging out downtown but should I intervene? Just be like, hey are you okay? Like do you, you don’t look too good. Like, even though

like nothing is happening they are just walking, you know? Like there have been situations where I didn't intervene in that because you're just like oh they're just walking. But it's like, well actually you have no idea where they are going, what, how she's feeling right now. She doesn't look too great, you know?" – *fourth-year female*

In addition to lack of clarity about situations that involve bystander intervention, some respondents also reported feeling uncertain about how to intervene effectively in risky situations. Specifically, many male respondents reported feeling worried about how they would be perceived if they intervened with a female they did not know. Male participants explained that they were concerned that a woman would perceive them as "creepy" or think they were trying to hit on them rather than help. One fourth-year male explained, "Yeah. And I think it's easy to do when I'm with a bunch of friends who are girls. Like if I was just to (pause) that would kind of feel weird for me as a guy to walk up like "hey" ..." As this young man expresses, most male participants reported that they have or would intervene to help a woman when they are with a group of female friends but were unsure of other ways to intervene in situations when they were alone or with a group of males. A third-year male respondent explained how he thinks it would be helpful for the campaign messages to address situations that require bystander intervention:

"Cause that like makes people like it would make it more like relatable to people. Uh. Especially like college students because like, for like the past example like, there have been scenarios where that's happened to people like before regardless if it's like say, if it's your friend or if it's a random stranger, we've pretty much all seen it. Especially if it's like the downtown scene."

Overall, the focus groups revealed that UGA undergraduate students varied in their levels of readiness to intervene. Some participants had intervened multiple times to help both friends and strangers, while others had difficulty identifying scenarios that necessitated intervening. As such, these responses indicated that the campaign should address both when to intervene as a prosocial bystander and how to do so in a safe and effective way.

Campaign Messaging

We tested out four different ideas of campaign titles and corresponding messages hashtags during the focus groups, and the majority of respondents liked the campaign title “Be a Watch Dawg” the most compared to other title options. The most popular hashtag was #WatchDawgNation because of the “dawgs” connotation to the UGA football team, the Bulldogs, while others identified with the culturally relevant phrase “nation.” When asked what should be depicted in the campaign, focus group respondents explained that featuring college students taking action against sexual violence would make the campaign relatable to UGA students; for this reason, many students thought that campaign content, photos, and videos should feature students like them. A third-year female explained, “Just showing you’re an average student. And you could be, that is you. Like you could be this person.” Additionally, some third and fourth -year participants reported that they are not on campus much anymore, and described the potential benefits of reaching upperclassmen by implementing the campaign both on campus and in surrounding Athens, GA community through partnerships with bars and restaurants.

Campaign Platforms and Content

Respondents were asked about social media platforms that they preferred and thought would be useful platforms for the campaign. Participants reported that Facebook, Instagram, and

Snapchat were the social media platforms they used most frequently and thought it would be beneficial to have campaign social media accounts for these platforms. In terms of the content they perceived would be most appealing to students, the majority of participants reported that photos and video content would be more engaging than social media posts with a lot of text. In reviewing some of the campaign messaging ideas in the focus group, a fourth-year female respondent explained:

“This is just a picture so the message is positive but the picture is to just get your attention. And I feel like that would be effective. It makes me think about the example you had about the guy being up on the girl in the bar. Like you could have like a guy like leaning on a girl and her looking uncomfortable.”

In addition, some respondents explained that they read posters on campus, in bathroom stalls, and on buses, and that having campaign posters might also be beneficial as a way to reach students on campus. One fourth-year male reported, “I was going to say, even buses and bathrooms, because that’s just where, because even though there’s a lot of stuff in Tate plaza and there’s a lot of people...there’s also a lot of stuff there.” A couple of students also suggested putting campaign stickers on lamp posts in downtown Athens. One male student also suggested putting up posters in establishments in downtown Athens, GA:

Male 1: Or even like if you had posters like that you could hang up in the windows downtown, like get participating places of saying like okay, I don’t know if you like, if you would have like a number, like a hot line kind of thing, but you could even have it like in the windows of the bar just in case, you know. It’s just if someone’s alone and nobody is helping out –

Male 2: (overlapping) Yeah.

Male 1: Like okay, well, I can call, if I get two seconds, I can call this number and, like (pause) get like help, like what to do, what do I do.

Campaign Data Analytics

All reported analytics reflect the campaign social media profiles on Facebook, Instagram, and Twitter called “Intervene UGA” (i.e. @InterveneUGA). All campaign social media accounts included the link to UGA Health Center’s WatchDawgs™ program website. The campaign reached 43,160 people combined through the campaign Facebook, Instagram, and Twitter, and yielded 50,854 impressions on social media users.

Facebook

Facebook analytics data is reported from August 17, 2017 to November 15, 2017, capturing data from two weeks before the campaign start date (i.e. August 31, 2017) to two weeks after the campaign ended on November 2, 2017. All definitions for Facebook data analytics are drawn from Facebook.com.

Total Reach, Engagement, and Page Likes

The campaign reached a total of 30,253 unique users; reach is defined as seeing any content associated with the campaign Facebook page. See figure 4.1 for Facebook reach throughout campaign implementation. The number of people who visited the Facebook page, or saw the page or one of its posts in news feed or ticker was 1,574. These can be people who have “liked” the Facebook page and people who have not. A total of 25,144 people who saw a campaign Facebook ad pointing to the page. A total of 3,777 people saw the campaign Facebook page or one of its posts from a story shared by a friend, which includes “liking” the campaign

page, posting to the Facebook page's timeline, “liking,” commenting on, or sharing one of the campaign Facebook posts. A total of 154 unique users “liked” the campaign Facebook page. A total of 139 of unique users “liked” the Facebook page from August 17 – November 15, 2017. Eight users “unliked” the campaign Facebook page. A total of 510 people engaged with the Facebook page; engagement includes any click or story created.

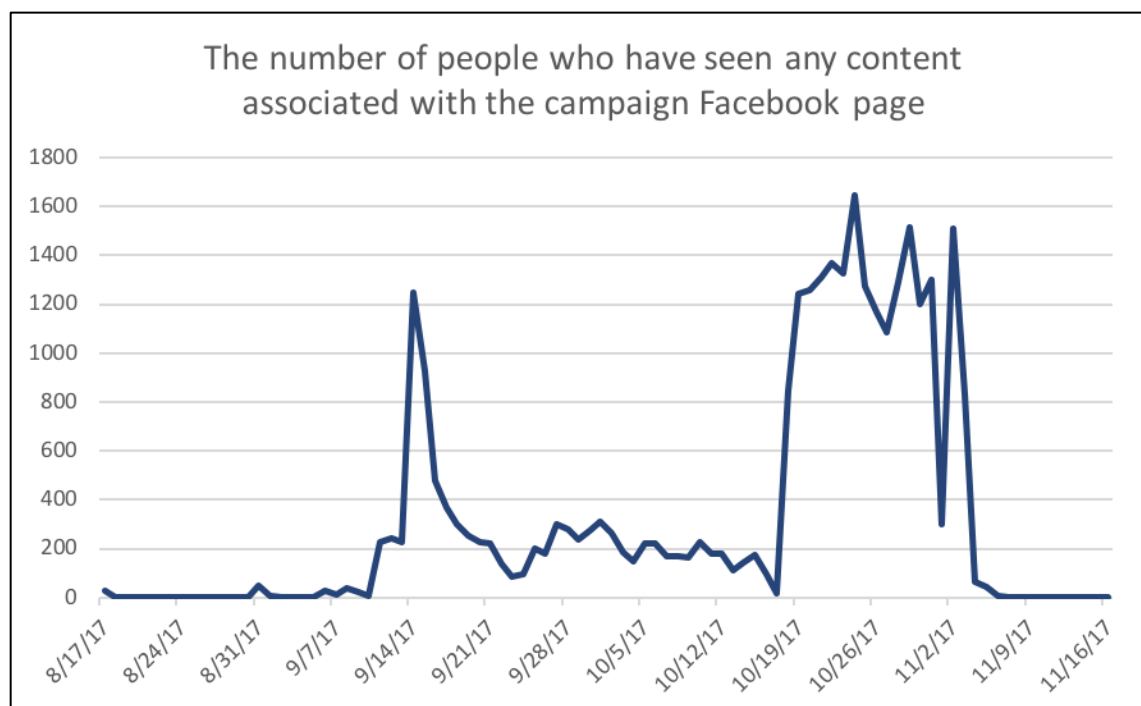


Figure 4.1. Facebook Reach of *Be a Watch Dawg* Campaign.

Impressions

Impressions are the number of times the campaign posts were seen in someone’s News Feed or ticker or through visits to the campaign Facebook page. A total count of 34,924 impressions were made throughout the campaign duration, referring to the number of times Facebook users saw any content associated with the campaign page. These impressions can be by people who have liked the campaign Facebook page and people who have not. The campaign yielded a total of 2,957 daily organic impressions, meaning the total count of the number of

times the campaign Facebook posts were seen in someone's news feed or ticker or on visits to the Facebook page, not counting paid Facebook advertising. These impressions count people who have liked the Facebook page and those who have not. The paid campaign Facebook advertisements yielded a total of 25,914 daily paid impressions, counting both those who have liked the Facebook page and who have not.

A total of 5,850 daily viral impressions occurred during the campaign, referring to the total count of the number of impressions of a story published by a friend about the campaign Facebook page. These stories include liking the campaign page, posting to the page's Facebook wall, "liking," commenting on, or sharing one of the Page posts, and mentioning the page, and phototagging the campaign page. A total of 20,656 impressions came from all of the campaign Facebook posts. The campaign totaled 5,290 viral impressions over the campaign duration, referring to times users saw Facebook posts via stories published by their friends.

Views

A total of 17,329 unique people saw at least one of the campaign page posts. The organic reach of posts was 1,422 over the campaign duration; organic reach refers to the number of people who saw the campaign Facebook posts in news feed or ticker, or on the campaign Facebook page timeline. The paid reach of posts was 12,677 across the campaign duration; paid reach refers to the number of people who saw the campaign posts in an ad or sponsored story. The viral reach of page posts totaled 3,376; viral reach refers to the number of people who saw the campaign Facebook posts through a story shared by a friend. Over the campaign duration, there were 203 daily logged-in page views from unique users.

Clicks

A total of 288 people clicked on any of the campaign content. Stories that are created without clicking on the Facebook page content (e.g. liking the Page from timeline) are not included. The campaign yielded a total of 391 clicks on any of the campaign Facebook content. Stories generated without clicks on page content (e.g., liking the page in Timeline) are not included. Only 12 people have given negative feedback (e.g. “hide” post from timeline, report posts as spam, hide all posts, and unlike page) to the page over the campaign duration.

User Demographics

A total of 128 (83%) females, 25 (16%) males and 1 (6%) person with an unknown gender “liked” the campaign Facebook page. Of the total 154 page “likes,” the campaign yielded 130 (84%) from 18-24 year olds, the target audience. Among females, 107 (86%) were 18-24 years of age, 15 (12%) were 25-34 years of age, and 2 (1.6%) were between 35-54 years of age. The majority of males (n=22, 88%) were between 18-24 years of age. The majority of 18-24 year olds who “liked” the page were female (82%). See figure 4.2 for total gender breakdown among 18-24 year-olds who saw the campaign Facebook content.

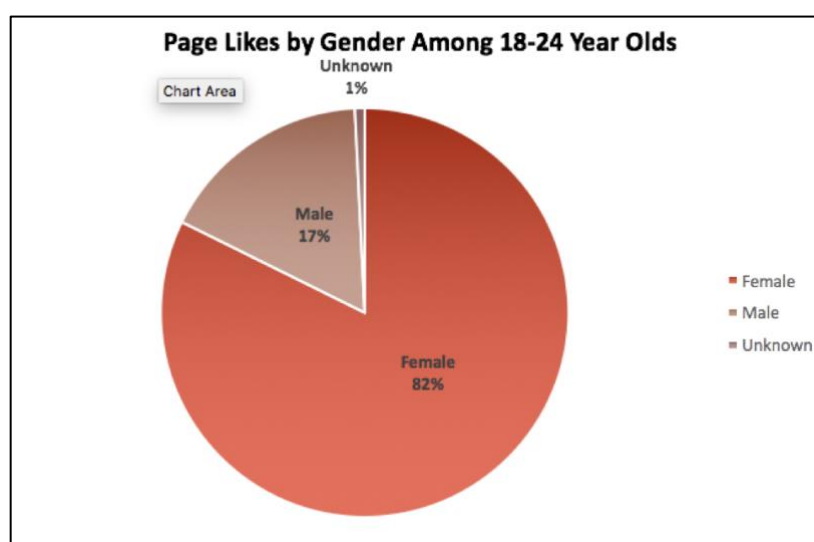


Figure 4.2. Gender Breakdown of Facebook Page Likes.

Facebook Posts

Facebook content refers to any Facebook status, photos, or videos posted to the campaign Facebook page. Campaign Facebook posts were posted from August 31, 2017 to November 2, 2017. The total reach of Facebook posts was 7,386, broken down by 1,614 organic reach and 2,753 paid reach. Throughout campaign duration, the campaign Facebook posts yielded 10,872 impressions; out of this number, 2,609 were organic impressions and 2,973 were paid impressions. The campaign posts yielded a total of 109 “likes,” 15 shares (e.g. “share” Facebook content on their own wall or a Facebook user’s wall), and 5 comments.

The reach of each individual Facebook post ranged from 10 to 2,300. The most popular Facebook post was a video posted on the last day of the campaign, November 2, 2017; this video was also promoted using a paid Facebook ad. The video yielded a total reach of 2,300, counting both organic (443) and paid (1,907) reach, 85 post clicks, and 24 likes, two comments, and two shares. The video was viewed for more than 3 seconds a total of 888 times, counting organic and paid views. This video has been viewed through an organic reach a total of 216 times. This video has been viewed for more than 3 seconds through paid Facebook advertising 672 times. In terms of total views for at least 30 seconds, the video was viewed 175 times counting organic and paid views. The video has been viewed for at least 30 seconds 35 times by organic reach and 140 times via paid reach. The video has been replayed a total of 53 times. A total of 835 unique Facebook users viewed the video for at least 3 seconds. The second most popular Facebook post, a post with a photo posted on September 14, 2017, yielded an organic reach of 1,702. It yielded 28 post clicks, 5 likes, two comments, and three shares. The least popular post was a post with a photo posted on October 4, 2017 and it yielded a total reach of 11 users.

Instagram

Instagram data reported reflects 40 Instagram posts for the campaign Instagram account (e.g. @InterveneUGA), which were posted from August 31, 2017 through November 2, 2017. All but one of the Instagram posts were photos, and one Instagram post was a video. All definitions for Instagram data analytics are drawn from the Instagram mobile app.

Total Reach, Impressions, and Page Likes

The campaign reached a total of 9,213 Instagram users throughout the campaign duration. A total of 2,157 users viewed the campaign Instagram posts through organic reach and 7,056 viewed the campaign through promoted Instagram posts. The campaign yielded a total of 12,236 impressions, meaning the total number of times the campaign Instagram posts have been seen. The Instagram posts received a total of 375 “likes” and three comments. See figure 4.3 for breakdown of “likes” on Instagram over campaign implementation. A total of 642 impressions came from users’ Instagram “home” screens (e.g. newsfeed), 71 came from viewing the campaign Instagram profile, and 11 came from hashtags that were used in the campaign Instagram posts. Two users saved two of the campaign Instagram posts, meaning they archived the posts in the “saved” folder on their account so they could easily access the post. Three people who viewed the campaign Instagram posts on their newsfeed took visited the campaign Instagram profile thereafter. The campaign yielded a total of 23 clicks to the Instagram page through one of the promoted Instagram posts.

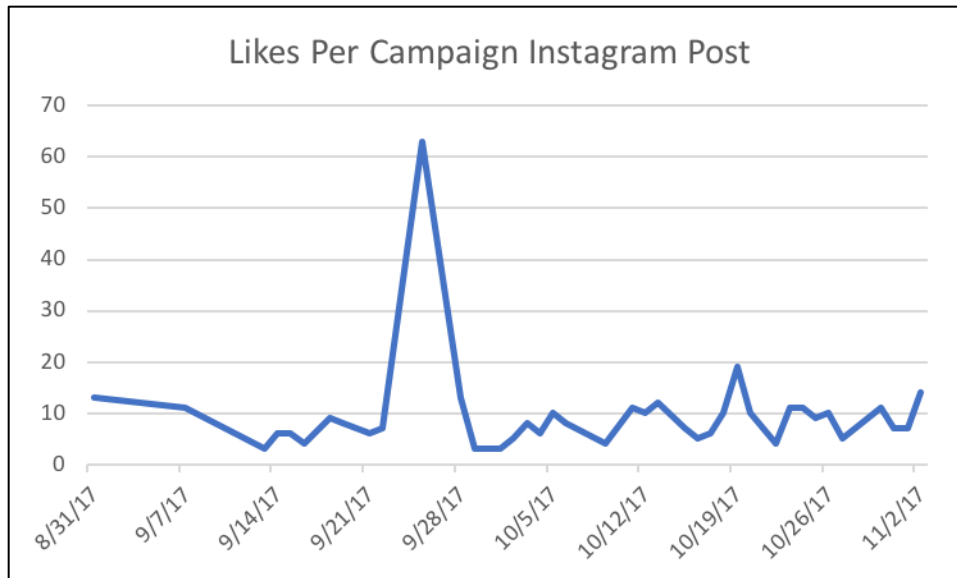


Figure 4.3. Number of Likes of Instagram Posts Received Throughout Campaign.

Instagram Posts

Three of the forty Instagram posts were promoted using paid Instagram promotions to reach an audience of 18-24 year olds in Georgia. Among the promoted Instagram posts, a total of 103 Instagram users engaged with a promoted Facebook post. The most successful Instagram post, a promoted Instagram post from September 25, 2017, shows an image of college students drinking alcohol with the caption “If everyone is drinking, how can we know what’s going on around us? Watch Dawgs are aware of their surroundings and intervene when they see risky situations” (figure 4.4).



Figure 4.4. Promoted Campaign Social Media Post.

This post alone yielded 8,600 total impressions, 6,972 post views, and 23 clicks to the campaign Instagram page. Further, this post received 63 likes and two comments. Because this post yielded a wide reach, Instagram generated audience data on the demographic breakdown of users who viewed the post. Of the 6,972 people who viewed the promoted post, 52% were female and 48% were male and all were between 18-24 years of age and currently living in Georgia. The least successful of the three promoted Instagram posts was for a post on August 31, 2017 with a picture of the campaign logo (figure 4.5). The ad yielded only 21 views and engaged four users. Because this ad yielded minimal results, Instagram cancelled the ad and did not charge payment for the advertisement. Instagram shares feedback with their users and warned that images with text reach fewer people; this warning appeared when setting up this advertisement.



Figure 4.5. *Be a Watch Dawg* Campaign Logo.

Among the non-promoted Instagram posts, the most successful Instagram post was a photo carousel post (e.g. a post with multiple photos) from October 19, 2017 with the caption, “Fact: Most guys are Watch Dawgs” (figure 4.6). This photo yielded 19 likes, reached 96 people, and yielded 165 impressions. Three Instagram posts yielded a total of three likes per post, the lowest number of likes received across Instagram posts.



Figure 4.6. Non-Promoted Campaign Social Media Post.

Twitter

Twitter data is reported from 31 Tweets that occurred from the campaign start date, August 31, 2017 to November 2, 2017. Data were extracted for reporting on December 14, 2017. The campaign yielded a total of 18 Twitter followers. All definitions for Twitter data analytics are drawn from Twitter.com. No paid Twitter advertisements occurred over the campaign duration.

Impressions, Engagements, and Clicks

The campaign yielded a total number of 3,694 impressions, defined as the total number of people who saw any Tweets throughout the campaign duration (e.g. Twitter's "impressions" have the same meaning as the "reach" on Facebook and Instagram). A total of 116 engagements, or interactions with the campaign Tweets, occurred throughout the campaign. The campaign resulted in an average engagement rate (i.e. the number of engagements divided by the number of impressions) of 2.8%. A total of 15 retweets occurred throughout the campaign. Three Tweets received likes, and none of the Tweets received replies. The campaign received 21 clicks to the campaign Twitter profile through the @InterveneUGA Twitter handle, name, or profile picture; 15 clicks to linked photo content in the Tweets; and one click to a hashtag used in Tweets. There were 27 clicks on the campaign Tweets to view more Tweet details. None of the Tweets resulted in Twitter users following the campaign Twitter. A total of 37 views and 37 engagements with photos posted with Tweets occurred throughout the campaign duration.

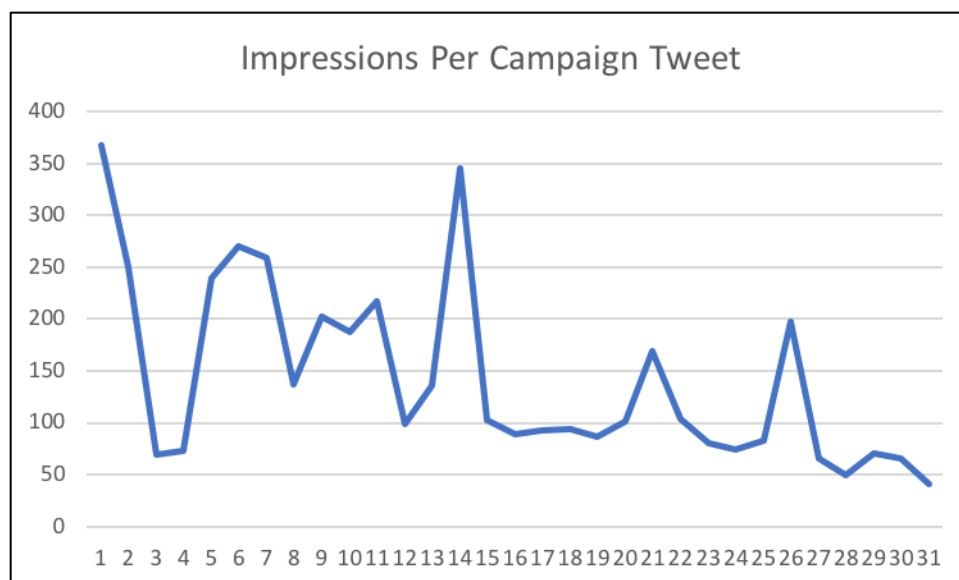


Figure 4.7. Number of Impressions Per Campaign Tweet.

Tweets

The most successful campaign Tweet was the first Tweet posted on the campaign Twitter on September 8, 2017 (#1 in Figure 4.7) and received 368 impressions, 20 engagements, and 2 retweets. This Tweet, displayed in Figure 4.8, received 1 like, 3 clicks to the campaign Twitter page, and 14 expanded views of the Tweet. The campaign Tweets received a median number of 101 impressions. The least successful Tweet occurred on the last day of the campaign, November 2, 2017, and yielded only 41 impressions, and zero engagements, retweets, replies, likes, or views.

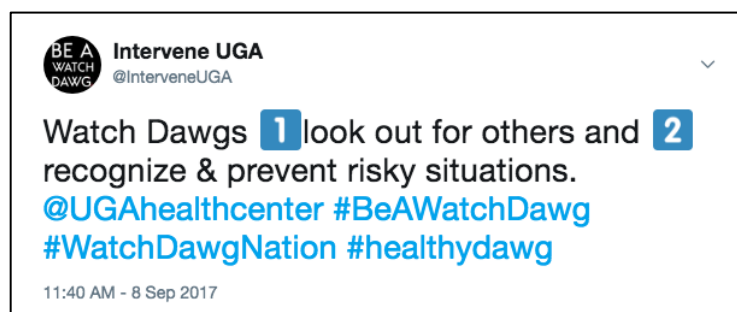


Figure 4.8. First Tweet Posted on Campaign Twitter Account.

Content Analysis

The planned research proposal included a content analysis of social media posts surrounding the campaign using the campaign hashtags (i.e. #beawatchdawg, #watchdawgnation), however the campaign did not result in an organic conversation among social media users. Specifically, no Facebook, Twitter, and Instagram users created original social media posts regarding campaign material during campaign implementation. Content analysis is traditionally used as a systematic approach to make sense of text (Bennett, 2015; Elo & Kyngäs, 2007; Weber, 1990). In recent years, content analysis has been used to analyze the presence of certain words, themes, and concepts in qualitative data, such as social media data (Bennett, 2015; Elo & Kyngäs, 2007; Weber, 1990). However, because no user-generated content occurred during the campaign implementation, we were unable to perform the planned content analysis.

Pre-Post Quantitative Survey Results

Pre-Post Campaign Cross-sectional Sample

Characteristics of the Sample

Participants included 303 undergraduate students at the University of Georgia. The baseline sample consisted of n=159 participants, and the follow-up sample consisted of n=144 participants. Respondents ranged from 18 to 24 years in age, and most respondents were 19 years old ($M = 19.8$). Most respondents were in their junior year (31%, n=85) of college. The majority (71.2%, n=195) of participants were female. Roughly 31% (n=94) of participants were members of a Greek fraternity or sorority, and 2.3% (n=7) were members of a Varsity athletics team. Before the campaign, about 78.4% (n=113) participants had demonstrated prosocial bystander

behavior and respondents had drank roughly 4.5 alcoholic drinks the last time they partied or socialized. See Table 4.1 for full sample sociodemographic variables and study variables.

Significant differences in gender identity were detected between pre- and post- samples at times 1 and 2. We controlled for any significant differences in sociodemographics between the cross-sectional samples in the final regression models.

At post-campaign, 30.6% (n=44) respondents reported seeing the *Be a Watch Dawg* campaign. Of the n=44 who had seen the campaign, the majority (90.9%, n=40) had seen campaign posters on campus in locations including but not limited to dorms (n=15), the University Health Center (n=8), the Miller Learning Center (n=8), and the library (n=7). Out of those who had seen the campaign, only 1 (2.2%) respondent reported seeing the campaign posters off-campus in a coffee shop and stickers on lamp posts in downtown Athens, GA. Roughly 25% (n=11) of those who had seen the campaign saw it on social media platforms. Six (13.6%) respondents reported seeing the campaign on Instagram and Facebook respectively, and four (9.0%) respondents had seen it on Twitter. When asked what they remembered most about the campaign, one student reported, “It’s a great way for students to be more aware and looking for sexual violence.”

Table 4.1. Equivalence of Pre- and Post- Campaign Independent Cross-Sectional Samples.

Characteristics	Pre- (n=159)	Post- (n=144)
Sociodemographics		
Age (years), mean (SD)	19.75 (1.24)	19.88 (1.21)
Member of sorority or fraternity, n (%)	44 (27.7)	50 (34.7)
Member of Varsity athletic team, n (%)	4 (2.5)	3 (2.1)
Engaged in sex, n (%)	114 (71.7)	108 (75.0)

Gender,^a n (%)***

Female	111 (69.8)	85 (59.0)
Male	47 (29.6)	31 (21.5)
Gender non-conforming	1 (0.6)	0 (0)

Year in school,^a n (%)

Freshmen	29 (18.2)	27 (23.5)
Sophomore	40 (25.2)	22 (19.1)
Junior	50 (31.4)	35 (30.4)
Senior	40 (25.2)	31 (27.0)

Primary outcome variables

Prosocial intervening behavior, mean percent (SD)	82.88% (0.25)	88.95% (2.04)
Intentions to intervene, mean (SD)	72.31 (11.12)	72.94 (11.93)
Alcohol use (e.g. # of alcoholic drinks consumed last time partied or socialized), mean (SD)	4.47 (3.61)	4.35 (3.52)
# of hours drank last time consumed alcohol, mean (SD)	3.18 (2.12)	3.06 (2.04)
Binge drinking, n (%)	97 (61.0)	81 (56.3)

Secondary outcome variables, mean (SD)

Alcohol expectancies	143.64 (19.75)	147.06 (22.20)
Bystander attitudes	49.52 (6.86)	50.33 (7.06)
Reactions to offensive language and behavior (ROLB)	45.53 (8.44)	44.89 (8.81)
Alcohol use norms	59.82 (18.78)	62.44 (19.87)
Perceived # of alcoholic drinks consumed by average UGA college student	5.28 (2.02)	5.70 (4.99)

^a question not asked in post-campaign assessment administered with cohort subsample. *** $p < .001$.

Cross-sectional Sample Results

Time. Adjusted linear regression analyses were performed to document significant changes in continuous primary and secondary outcomes, and logistic regression was performed to analyze the relative odds of binge drinking, pre- and post- campaign. Significant differences in gender identity were detected between cross-sectional pre- and post-campaign samples ($p = .001$), so gender identity was included as a covariate in all regression analyses comparing pre- and post- cross-sectional samples. Post-campaign respondents reported significantly

more prosocial intervening behaviors compared to pre-campaign respondents at ($\beta = .14$, $p = .04$). The relative odds of engaging in binge drinking was not significantly different pre- to post- campaign (AOR=1.01; 95% CI 1.26-2.13, $p = .98$). No other outcomes significantly differed pre- to post- campaign. See Table 4.2 for full regression analyses comparing pre-post differences in outcomes.

Exposure. Exposure was analyzed using adjusted linear regression models for continuous variables and logistic regression for binge drinking, a dichotomous outcome. Exposure was significantly positively related to intentions to intervene at ($\beta = .16$, $p = .06$). Campaign exposure did not have a statistically significant association with any other primary or secondary outcomes. See Table 4.2 for full regression analyses comparing differences in outcomes based on campaign exposure. The odds of engaging in binge drinking was not significantly different based on campaign exposure (AOR=1.37; 95% CI .68-2.79, $p = .38$).

Time x Exposure. There were no significant differences in continuous outcomes pre-post campaign using the Time x Exposure interaction term as the predictor (Table 4.2). Adjusted logistic regression analyses showed there were no pre-post differences in the relative odds of binge drinking based on campaign exposure (AOR=1.34; 95% CI .78-2.31, $p = .29$). Table 4.2 contains full adjusted regression analyses performed to analyze differences in time, exposure to campaign, and time x exposure among the cross-sectional samples.

Pre-Post Campaign Nested Cohort Sample

Characteristics of the Sample

Within the nested pre-post cohort sample, a total of $n=59$ participants completed both pre- and post-campaign assessments. This resulted in a 78.6% participation rate. Respondents in

the pre-post campaign cohort sample ranged in age from 18 to 22, with the mean age being 19.8. The majority of cohort sample respondents were female (71.2%, $n=42$). Most were in their senior year (30.5%, $n=18$) of college. The majority of respondents were not members of a Varsity athletics team (98.3%, $n=58$) nor were members of a Greek sorority or fraternity (66.1%, $n=39$). At baseline, roughly 81.8% ($n=45$) of the sample had demonstrated prosocial bystander behavior and had drank roughly 4.7 drinks the last time they partied or socialized.

Roughly 28.8% ($n=17$) of the cohort sample reported seeing the *Be a Watch Dawg* campaign at follow-up. Out of the 17 respondents who saw the campaign, the majority 52.9% ($n=9$) saw the campaign on campus and 17.6% ($n=3$) saw it on social media. Among the $n=3$ respondents who saw the campaign on social media, one reported seeing the campaign on Facebook, one saw the campaign on Instagram, and one saw the campaign on Twitter. The majority of respondents who saw the campaign on campus reported seeing the campaign posters in the following locations: dorms ($n=6$), the University Health Center, the Miller Learning Center ($n=4$), and the University Health Center ($n=3$). When asked what respondents remembered most about the campaign, one respondent said, “how important it is not to be a bystander.”

Cohort Subsample Results

Paired t -Test analyses did not yield significant differences in outcomes pre- to post-campaign. See Table 4.3 for full paired t -Test results. The McNemar analysis revealed there was no significant difference ($p = 1.00$) in the proportion of binge drinking (e.g. drinking five or more drinks on one occasion) pre- ($n=33$, 55.9%) to post- campaign ($n=33$, 55.9%).

Differences in outcomes at post-campaign based on exposure, controlling for baseline outcomes, were analyzed using adjusted linear regression models for continuous variables. The

relative odds of binge drinking, a dichotomous outcome, was assessed using logistic regression while controlling for the pre-campaign outcome variable of interest. Respondents who were exposed to the *Be a Watch Dawg* campaign reported drinking significantly more alcoholic drinks ($\beta = .30, p = .03$) and drank alcohol over a greater number of hours ($\beta = .28, p = .09$) compared to those who had not seen the campaign. The odds of engaging in binge drinking was higher among those who had been exposed to the campaign (AOR=8.70; 95% CI .68-110.60, $p = .095$). See Table 4.4 for full regression analyses.

Table 4.2. Regression Analyses of Study Outcomes in Cross-Sectional Sample.

Study variables	β	SE	95% CI ^a	<i>p</i> -value
Primary outcomes				
Prosocial bystander behavior				
Time	.14	.03	.003, .13	.04*
Exposure	.08	.05	-.06, .13	.43
Time x Exposure	-.03	.09	-.19, .17	.93
Intentions to intervene				
Time	.01	1.40	-2.44, 3.08	.82
Exposure	.16	1.92	-.18, 7.41	.06 [†]
Time x Exposure	.14	3.98	-6.12, 9.64	.66
Alcohol use				
Time	.03	.41	-.58, 1.04	.58
Exposure	.03	.70	-1.13, 1.64	.72
Time x Exposure	.28	1.46	-1.57, 4.19	.37
# hours drank				
Time	.003	.24	-.47, .49	.96
Exposure	-.02	.39	-.85, .69	.84
Time x Exposure	.03	.81	-1.53, 1.68	.93
Secondary outcomes				
Alcohol expectancies				
Time	.08	2.48	-1.53, 8.23	.18
Exposure	3.70	.08	-3.94, 10.71	.36
Time x Exposure	-.05	7.68	-16.36, 13.97	.88
ROLB				

Time	-.005	1.01	-2.07, 1.89	.93
Exposure	-.05	1.43	-3.59, 2.05	.59
Time x Exposure	.34	2.95	-2.55, 9.12	.27
Bystander attitudes				
Time	.003	.82	-1.57, 1.65	.96
Exposure	-.05	1.17	-3.01, 1.63	.56
Time x Exposure	-.11	2.43	-5.68, 3.92	.72
Alcohol use norms				
Time	.05	.44	-.49, 1.24	.40
Exposure	.002	.35	-.68, .70	.98
Time x Exposure	.04	2.00	-3.20, 4.72	.71
Perceived # of drinks consumed by average student				
Time	.05	2.28	-2.39, 6.57	.36
Exposure	-.05	2.23	-8.32, 4.48	.55
Time x Exposure	.39	.72	-.53, 2.33	.22

^a controlling for covariate: gender identity. * $p < .05$; † $p < .10$.

Table 4.3. Pre- to Post- Campaign Cohort Subsample Paired-Samples *t*-Test Results.

Study variables	Pre	Post		
	M (SD)	M (SD)	<i>t</i> -Test	<i>p</i> -value
Primary outcome variables				
Prosocial bystander behavior	.83 (.27)	.87 (.22)	-1.54	.13
Intentions to intervene	69.12 (10.46)	71.30 (11.89)	-1.35	.18
Alcohol use	4.75 (4.65)	4.81 (4.52)	-.10	.92
# hours drank	3.36 (2.24)	3.25 (2.17)	.371	.71
Secondary outcome variables				
Alcohol expectancies	145.97 (22.68)	146.63 (21.03)	-.339	.74
Bystander attitudes	48.09 (7.42)	49.04 (8.16)	-1.08	.29
ROLB	45.34 (8.96)	45.76 (9.45)	-.394	.70
Alcohol use norms	61.98 (20.42)	61.00 (20.20)	.362	.72
Perceived # of drinks consumed by average student	5.53 (2.51)	5.50 (2.10)	.107	.92

Table 4.4. Cohort Subsample Pre- to Post- Campaign Outcomes Based on Exposure to the *Be a Watch Dawg* campaign.

Study variables	β	SE	95% CI ^a	<i>p</i> -value
Primary outcome variables				
Prosocial bystander behavior	-.38	.06	-.24, .04	.14
Intentions to intervene	.24	3.88	-2.32, 13.68	.16
Alcohol use	.30	1.48	.42, 6.53	.03*
# hours drank	.28	.88	-.26, 3.36	.09 [†]
Secondary outcome variables				
Alcohol expectancies	.15	6.28	-5.84, 19.99	.27
ROLB	.14	3.44	-4.20, 9.97	.41
Bystander attitudes	-.09	2.26	-6.14, 3.19	.52
Alcohol use norms	.12	5.79	-7.17, 16.67	.42
Perceived # of drinks consumed by average student	.24	.84	-.59, 2.87	.19

^a controlling for pre-campaign outcome variables. * $p < .05$; [†] $p < .10$.

CHAPTER 5

DISCUSSION

Summary

The purpose of this study was to develop and test the preliminary efficacy of a sexual violence prevention social media marketing (SMM) campaign for college students. This campaign, *Be a Watch Dawg*, was implemented in Fall 2017 in partnership with the University of Georgia University Health Center. The *Be a Watch Dawg* campaign aimed to engage college students in sexual violence prevention by increasing prosocial bystander behavior and intentions and reduce alcohol use. This campaign focused on a variety of topics related to sexual violence prevention by displaying situations that require prosocial bystander intervention, providing tips on intervening safely and effectively, teaching students to use risk reduction strategies when going out, particularly when alcohol use is involved, and encouraging students to watch out for their friends and peers when they go out. Results are presented from the campaign data analytics of *Be a Watch Dawg* social media accounts and pre- and post- campaign survey assessments.

Analysis of social media data revealed that the campaign reached a large number of people on social media across Facebook, Instagram, and Twitter (i.e. 43,160), demonstrating the feasibility of the social media marketing approach to deliver a sexual violence prevention bystander campaign. Pre-post survey data analysis revealed that the *Be a Watch Dawg* campaign implementation yielded significant findings related to prosocial bystander behavior, intentions to intervene, and alcohol use. The key findings from this study are discussed below.

Discussion

Aim 1: Assess usability, exposure, and reach of the *Be a Watch Dawg* campaign.

Aim 1.1: Track data analytics across the Be a Watch Dawg campaign's social media platforms (e.g., Facebook, Instagram, and Twitter); the number of "likes," "followers," "shares," and comments, as well as views, reach, and hashtags used on social media platforms.

The *Be a Watch Dawg* campaign demonstrated that a social media marketing campaign paired with on-campus media is a feasible approach to engage college students in sexual assault prevention using the bystander model. The campaign reached a large number of people on social media (i.e. 43,160), demonstrating the feasibility of the social media marketing approach.

Campaign data analytics were tracked on the social media platforms on which the campaign was administered, Facebook, Instagram, and Twitter, throughout campaign duration from August 17, 2017 to November 15, 2017. Across the campaign Facebook, Instagram, and Twitter accounts, the campaign resulted in a total online reach of 43,160 and made 50,854 impressions on social media users. The large reach and high number of impressions support existing literature showing that social media an appropriate platform to communicate targeted health messaging.

The reach reveals the use of social media is a feasible and appropriate strategy in health communication when aiming to alter beliefs, attitudes, and behaviors among a wide target audience. Social media marketing expands viewership of health messaging and casts a wide net. The *Be a Watch Dawg's* large reach highlights the use of social media as an appropriate platform to deliver a social media marketing campaign focused on teaching prosocial bystander behavior. The campaign's most successful reach was through Facebook. Of the total reach of 43,160, 70% were exposed to the campaign via Facebook. An explanation for the large number reached on Facebook is reflected in data from Pew Research Center showing that Facebook is the most

popular platform among social media users (Pew Research Center, 2018). Further, about 84% of those who “liked” the campaign Facebook page were between 18-24 years of age. This number is again reflective of national data showing that about 81% of 18-29 year olds actively use Facebook (Pew Research Center, 2018). Another probable explanation for the high number of young adults reached through the campaign is that we implemented paid advertisements on Facebook and Instagram that were specified to reach the target population, 18-24 year-olds in the state of Georgia. These paid ads helped us to better reach the target population.

While the campaign resulted in high exposure and reach, the campaign generated low levels of engagement. Only 288 people clicked any of the Facebook posts and campaign posts yielded a total of 109 “likes,” 15 shares, and 5 comments. Across 40 Instagram posts, posts received a total of 375 “likes” and three comments. On Twitter, campaign tweets resulted in 15 retweets, three likes, and no replies. These low numbers reveal that social media may be an appropriate and feasible platform to reach a large audience through a social media marketing campaign but may not result in high levels of engagement with social media content. However, this campaign did not prompt users to take action on social media, such as “like,” “comment,” or “share” content, so it is possible that prompting users to take specific actions on social media could result in a higher level of engagement.

Aim 1.2: *Perform a content analysis of the social media user-generated content using the campaign hashtag.*

A content analysis was unable to be performed considering the lack of user-generated content in response to the campaign, such as original content using the campaign hashtags. Content analysis is traditionally used as a systematic approach to make sense of text (A. Bennett, 2015; Elo & Kyngäs, 2007; Weber, 1990). Content analyses are useful data analysis methods

when examining social media posts surrounding a health topic, such as breast cancer or autism, current event, organic social media movements, or national campaigns, such as the “truth” campaign (LaVoie & Quick, 2013). In public health, content analyses have been used to examine a wide variety of health topics, including cancer, sexual assault, mental health, smoking, HIV testing, and sexual health (Hayes-Smith & Hayes-Smith, 2009; Jamshidimanesh, Khoie, Mousavi, Keramat, & Emamian, 2017; Kinsler et al., 2018; LaVoie & Quick, 2013; A. Park, Conway, & Chen, 2018; Rath, Shah, Sharma, & Mishra, 2018).

However, in this scenario, the campaign did not result in any social media followers creating their own content using the campaign hashtag. It is possible that the campaign did not encourage user-generated content because the campaign did not ask users take any specific actions, such as share a social media post, sign a pledge, comment, or another form of action. Instead, this campaign focused on awareness and education on sexual assault and prosocial bystander behaviors. The lack of user-based social media content reveals that a content analysis may not be an appropriate data analysis approach for a targeted social media marketing campaign.

Aim 2: Assess preliminary efficacy of the *Be a Watch Dawg* campaign to increase prosocial bystander behavior and intentions to intervene and decrease alcohol use.

Aim 2.1: *Evaluate whether exposure to the Be a Watch Dawg campaign is associated with a set of theoretically derived constructs (e.g. bystander attitudes and social norms about intervening, prosocial bystander behavior, alcohol use and alcohol-related norms, alcohol expectancies) pre- to post-campaign launch.*

Key Pre-Post Findings

The total sample had significant increases in prosocial bystander behavior pre- to post-campaign ($p < .05$). Among the total sample, campaign exposure was significantly related to increased intentions to intervene ($p < .10$). Interestingly, alcohol use ($p < .10$) and binge drinking ($p < .05$) were significantly higher among participants who had been exposed to the campaign in the cohort subsample (e.g. participants who took both pre- and post-campaign surveys).

Campaign Exposure

About a third of the pre- and post- campaign survey sample (30.6%) reported seeing the *Be a Watch Dawg* campaign. The majority of respondents who were exposed to the campaign saw it on campus (90.9%), and about 25% of those who were exposed to the campaign saw it on social media. Reported campaign exposure is similar to campaign exposure in a recent study evaluating a social media marketing campaign on sexual consent implemented on a college campus; in this study, about 38% of the sample ($N=992$) had seen the campaign six weeks into the campaign (Ortiz & Shafer, 2018). Therefore, it is possible that exposure would have been higher if the sample size was larger than $N=244$.

Interestingly, the majority of those who were exposed to the campaign saw it on-campus in places like residence halls, the health center, and the library. Though the in-person materials, such as posters and stickers, were meant to supplement the campaign's social media presence, these findings suggest that it is important that a campaign targeting college students have a strong presence on-campus as well to increase campaign visibility.

Regarding the reported exposure to the campaign via social media, about a quarter of the pre-post campaign sample was exposed to the campaign via social media. It is possible that students may have been confused because the campaign username on social media,

@InterveneUGA, did not match the campaign title. Because we used the term “Watch Dawg” in the campaign name and WatchDawgs™ is a program trademarked by UGA, branding restrictions prevented us from using “Watch Dawg” in the social media account handles (i.e. InterveneUGA. As such, students may have seen the campaign on social media without realizing it is part of the *Be a Watch Dawg* campaign and reported that they had not seen the campaign on social media.

The planned campaign implementation on social media involved a UGA organization reposting and sharing the *Be a Watch Dawg* social media posts on their Facebook, Instagram, and Twitter accounts throughout the campaign. However, to our knowledge, the organization only shared a total of three social media posts throughout the campaign. We had expected that this approach would broaden the campaign’s reach via social media. Therefore, these data reflect implementation of the campaign without purposeful shares, retweets, and reposts.

Because this campaign resulted in high exposure on social media based on social media data analytics, another possibility is that the pre- and post- campaign survey respondents did not account for the majority of students who were exposed to the campaign via social media. For these reasons, we cannot say with certainty that the reported campaign exposure via social media represents an accurate number of those who may have seen the campaign on social media. Nevertheless, results have implications for future social media marketing campaigns implemented at college campuses.

Prosocial Bystander Behavior

The results yielded increases in the main study outcome, prosocial bystander behavior, pre-post campaign implementation. To our knowledge, this is the first evaluation of a social media marketing (SMM) campaign on bystander intervention to establish pre-post differences in

prosocial bystander behavior based on their intervening behaviors specifically. A similar study evaluating a sexual violence prevention bystander multimedia social marketing campaign using posters, *Know Your Power*, found significant differences in actions taken to prevent sexual and relationship violence and stalking; however, the assessment tool examined respondents' participation in on-campus programs and activities related to sexual and relationship violence prevention, and did not assess participants' previous intervening behaviors (Potter, 2012a).

The prosocial bystander behavior assessment tool used in the current study directly assessed participants' prosocial intervening behaviors, and asked questions such as "I made sure someone didn't leave an intoxicated friend behind at a party," and "If I heard someone insulting their partner, I said something to them" (Banyard, 2008; Banyard et al., 2014; Potter, 2012a). Therefore, study findings suggest that a social media marketing campaign like *Be a Watch Dawg*, which used social media and in-person advertising, is a promising approach to increase prosocial bystander behavior among college students and increase awareness of strategies to reduce the risk of sexual violence among the broader campus community.

The campaign did not yield significant changes in prosocial bystander behavior based on campaign exposure, which is possibly due to the low number of those who had both intervened and seen the campaign ($n=51$). Thus, the sample was not adequately powered to detect significant differences in bystander behavior based on campaign exposure. The post-campaign assessment occurred only two weeks after campaign implementation and did not follow participants over time. It is possible that participants who were exposed to the campaign may not have had the opportunity to intervene since the campaign ended. Consistent with study hypotheses, those who were exposed to the campaign had significantly higher intentions to intervene compared to those who were not exposed to the campaign. As Theory of Planned

Behavior purports, intentions are predictive of behavior; therefore, we can extrapolate that those who intend to intervene will do so if they encounter risky situations in the future (Ajzen, 1991). Future studies should include another follow-up point post-campaign implementation to understand sustained changes in behavior and intentions.

The cohort subsample did not yield significant changes in prosocial bystander behavior and intentions by time and exposure. Lack of power ($n=59$) is the most likely explanation for non-significant effects; based on significant effects in the cross-sectional sample, we would expect to see changes in prosocial bystander behavior and intentions to intervene with a larger sample size.

Alcohol Use

Findings reveal mixed effects of the *Be a Watch Dawg* campaign on alcohol use. No significant changes in alcohol use were detected pre- to post- campaign among the total cross-sectional sample. Previous studies evaluating social norms campaigns to reduce alcohol use among college students have also shown mixed effects. While some studies have been successful in reducing reported alcohol use and changing perceptions of alcohol-related social norms on college campuses (Patricia M. Fabiano, Perkins, Berkowitz, Linkenbach, & Stark, 2003; Gomberg et al., 2001), others have had mixed or no effects on these outcomes (Clapp, Lange, Russell, Shillington, & Voas, 2003; Dejong et al., 2009; W DeJong et al., 2006a; William DeJong, 2010a).

However, there were significant increases in alcohol use within the cohort subsample among those who were exposed to the campaign. Respondents who were exposed to the campaign engaged in higher levels of alcohol use compared to those who were not exposed to the campaign. Throughout campaign duration, the campaign posters were located in local college

bars surrounding the university and a sorority house during the campaign duration. The bars we put campaign posters in were chosen because they were frequented by UGA college students. Further, students in Greek life have been shown to engage in higher alcohol use than non-Greek students (LaBrie et al., 2010; Lo & Globetti, 1995; Turrise, Mallett, Mastroleo, & Larimer, 2006); thus, the college women living in the sorority house with the campaign posters may engage in alcohol use. Therefore, it is possible that college students who drink alcohol regularly, as opposed to non-drinkers, were more likely to see the campaign, which is why they showed high levels of alcohol use.

Secondary Outcomes

The study did not yield significant findings in regard to the campaign effect on alcohol expectancies, reactions to offensive language and behavior, bystander attitudes, and alcohol-related social norms. Given that theory purports that attitudes and expectancies contribute to decision-making and, ultimately, behavior, it is interesting that these secondary outcomes were not significant. Non-significant findings could be due to lack of power but could also be explained by the campaign's strong focus on bystander behavior and alcohol use, the main outcomes of interest. The study hypothesized that the campaign would directly impact attitudes and expectancies, which would then influence behavior. Instead, the campaign seemed to have a direct effect on behavior but did not change attitudes and negative alcohol expectancies.

College students are regularly exposed to information on alcohol and sexual assault throughout their college career. The required sexual assault prevention program UGA students take before starting college contains information about the bystander model as a prevention strategy, in addition to the University Health Center's information on the bystander model; therefore, it is possible that their attitudes towards alcohol and the bystander model remained

unchanged by the campaign because they had already established their bystander and alcohol - related attitudes.

These findings mirror the focus group findings, which revealed that students' attitudes towards bystander intervening behaviors were relatively positive. Further, students discussed their attitudes towards alcohol, saying that they believe it increases the likelihood of negative outcomes such as sexual assault. In focus groups, students voiced that they would like more information on strategies for intervening effectively and staying safe when they go out and drink. The pre-post survey results may reveal that college students have high awareness of the bystander model and alcohol-related negative outcomes but learned about behavioral strategies for intervening and alcohol use during campaign implementation.

Limitations

This study makes a significant contribution to the literature but is not without limitations. A survey question on race/ethnicity was accidentally left off the survey, so we are unable to provide exact demographics on racial/ethnic makeup of the sample. However, we received a representative sample of UGA's undergraduate population through Student Affairs, so we can extrapolate that the sample is similar to the racial/ethnic makeup of UGA's undergraduate students. Further, there was some overlap with the pre-test survey assessment and the campaign implementation, so some students in the pre-test sample may have been exposed to the *Be a Watch Dawg* campaign before taking the pre-test survey.

Another limitation of this study is contamination of other on- and off-campus programs, campaigns, and social movements (i.e. #MeToo movement) on sexual violence that occurred during the implementation of the *Be a Watch Dawg* campaign. Generalizability may be limited

because this campaign occurred on a single university campus and messaging was tailored to the school's student population. The study may not be adequately powered to see significant effects, as some p-values in the results were approaching statistical significance at $p < .05$. This study is lacking a control group that did not receive any intervention for comparison of study outcomes. Other limitations include self-report, recall bias of alcohol use and prosocial bystander behaviors, and potential social desirability bias in survey responses.

Implications

Despite its limitations, this study makes a significant contribution to the field of public health and sexual violence prevention among college students. Study findings reveal that a social media marketing campaign is a promising strategy to both reach college students and to educate college students on the bystander model as a strategy to combat sexual violence. The preliminary efficacy of this campaign reveals the importance of tailoring an intervention to meet the needs of the target population; future intervention development studies should use formative research, such as a focus group study with the target population, before content development and implementation to ensure it appeals to the appropriate audience.

Evaluation of the *Be a Watch Dawg* campaign revealed that the majority of participants saw the campaign on-campus, despite the campaign's focus on social media marketing. Thus, future campaigns targeting college students should have a strong on-campus and social media presence to increase campaign visibility and exposure. Future campaigns on college campuses should partner with student groups, such as the Student Government Association and Greek life organizations, to increase campaign awareness and social media visibility among undergraduate students.

More research is needed to understand the relationship between secondary outcomes (i.e. bystander attitudes, reactions to offensive language and behavior, alcohol use norms, and alcohol expectancies) and the primary outcomes, bystander intervening behavior and alcohol use. Additionally, considering this study's mixed effects on alcohol use and its reliance on self-reported alcohol use, future studies should consider assessing alcohol use using breathalyzers that measure blood alcohol concentration (BAC) levels to obtain an accurate representation of college students' alcohol use.

This study was a pilot study to test the preliminary efficacy of the *Be a Watch Dawg* campaign. Given its success, even with a small sample size, a multi-site quasi-experimental study with three college campuses should be implemented to understand the efficacy of the campaign. The increases in prosocial intervening behaviors pre- to post- campaign may be a testament to the campaign's focus on bystander intervening strategies. These findings highlight the importance of teaching college students about risk reduction strategies, ways to intervene effectively, and demonstrate prosocial bystander behavior in situations and settings familiar to college students, particularly those involving alcohol. Thus, future programming should focus on alcohol's role in prosocial bystander behavior and behavioral strategies that can help college students to reduce the risk of sexual violence.

This campaign's focus on risk reduction strategies to keep oneself and others safe is innovative and is directly informed by focus group findings revealing the use of risk reduction strategies when college students go out, particularly when alcohol is involved. However, there is currently not an existing assessment tool to measure utilization of risk reduction strategies, such as eating before going out, especially if they are planning to drink alcohol, and creating a group chat with friends in advance of a night out. Focus group discussions revealed that both college

men and women use risk reduction strategies when they go out, particularly when alcohol is involved; thus, future studies should develop and test a scale on risk reduction strategies related to sexual violence to effectively capture the use of such strategies.

Conclusion

In conclusion, study findings reveal the preliminary efficacy of the *Be a Watch Dawg* campaign on prosocial intervening behavior and alcohol use among college students. Findings make a significant contribution to the literature on sexual violence prevention. The campaign's focus on the bystander model while also addressing alcohol's role in sexual violence is an innovative approach to reduce the risk of sexual violence among college students. Further, findings support social media marketing as a promising strategy in intervention development to address sexual violence prevention among college students. This campaign encouraged members of the UGA community to intervene when necessary, monitor their alcohol use so they are more likely to notice sexual violence risk situations, and create a plan in advance of going out to reduce the risk of sexual violence. It is hoped that the *Be a Watch Dawg* campaign inspired the campus community to step in and intervene if someone needs help. Not only would this help to reduce sexual violence, but also make college a safer place for students. We are all responsible for stepping in to reduce the risk of sexual violence. As the *Be a Watch Dawg* campaign slogan said best, "We are all responsible to take action against sexual violence."

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APPENDIX A
PHASE I FOCUS GROUP CONSENT AND RECRUITMENT FORMS

**UNIVERSITY OF GEORGIA
CONSENT FORM**

Informing a College-wide Sexual Violence Prevention Campaign

Dear Respondent:

I am a graduate student under the direction of Dr. Jessica Muilenburg in the Department of Health Promotion and Behavior at The University of Georgia. I invite you to participate in a research study entitled “Informing a College-wide Sexual Violence Prevention Campaign.”

The purpose of this study is to inform a sexual violence prevention campaign at the University of Georgia. In order to participate, you must be 18 years of age or older, currently residing in the United States or a US territory, be an undergraduate student at UGA and have the ability to read and write in English.

Your participation will involve completing this focus group. The focus group should take no longer than 75 minutes. Your involvement in the study is voluntary, and you may choose not to participate or to stop at any time without penalty or loss of benefits to which you are otherwise entitled. If you decide to stop or withdraw from the study, the information/data collected from or

about you up to the point of your withdrawal will be kept as part of the study and may continue to be analyzed.

As an incentive for your participation you will receive a \$15 gift card to the UGA bookstore.

You will be asked to sign your name to signify receipt of the giftcard, and your name will be provided to the UGA Health Center's business office to record gift card dispersal. However, your name will not be connected to your data in any way.

Your privacy is very important to us. Even though the investigator will emphasize to all participants that comments made during the focus group sessions should be kept confidential, it is possible that participants may repeat comments outside of the group at some time in the future.

Your responses are confidential and your contact information will NOT be collected following your participating in the focus group. There are no personal identifiers attached to this information. The focus group will be recorded and will be transcribed within 2 months.

Transcripts will not contain any identifiers. Once the transcription is complete, the recording will be destroyed. The results of the research study may be published, but your name or any identifying information will not be used. In fact, the published results will be presented in summary form only.

The purpose is to understand your perspective and preferences to help create a social media campaign on sexual assault prevention and awareness here at UGA. These questions are about your preferences as a college student at UGA. There may be some minimal risks or discomforts associated with this research. They include embarrassment from disclosing opinions to other students involved in the focus group; however, respondents' answers will never be linked

directly to them, and the research staff will never know their identity.

If you have any questions about this research project, please feel free to call Dr. Jessica Muilenburg at (706) 542-4365 or e-mail to ilm@uga.edu. Questions or concerns about your rights as a research participant should be directed to The Chairperson, University of Georgia Institutional Review Board; telephone (706) 542-3199; email address irb@uga.edu.

Thank you for your consideration! Please keep this letter for your records.

Research Subject's Consent to Participate in Research:

To voluntarily agree to take part in this study, you must sign on the line below. Your signature below indicates that you have read or had read to you this entire consent form, and have had all of your questions answered.

Name of Researcher

Signature

Date

Name of Participant

Signature

Date

Please sign both copies, keep one and return one to the researcher.

Recruitment Script

On behalf of Anne Marie Schipani, a PhD student at the University of Georgia's Department of Health Promotion and Behavior under the direction of Dr. Jessica Muilenburg, I invite you to participate in a study entitled "Informing a College-wide Sexual Violence Prevention Campaign." Participation in this study involves participating in a 75-minute focus group. We are attempting to organize 2-3 focus groups of students to learn students' social media and health messaging preferences to inform a social media campaign at the University of Georgia. We would greatly appreciate your help in this endeavor.

Here are a few things you need to know about this research study:

- You are being asked to participate in a 75-minute focus group. You will be asked questions about your experiences as a UGA student, student health behaviors, your social media preferences, and your opinions on possible campaign names and health messages. The focus group will be audio-recorded and will take place on the Health Sciences Campus in Wright Hall.
- You must be 18 years or older currently residing in the United States and a current undergraduate student at UGA in order to participate.
- While there are no direct benefits to participating, the findings from this project will inform the development of a social media campaign on sexual violence prevention here at UGA.
- There are very minimal risks involved in participating in this study.
- Participation is completely voluntary. In exchange for participation, students will receive a \$15 gift card to the UGA bookstore.

Please email Anne Marie at Annemarie.schipani25@uga.edu if you are interested in participating in this study. You will be contacted shortly thereafter to organize the focus group time and dates.

Thank you so much for your time and attention!

Recruitment Email

Dear students:

On behalf of Anne Marie Schipani, a PhD student at the University of Georgia's Department of Health Promotion and Behavior under the direction of Dr. Jessica Muilenburg, I invite you to participate in a study entitled "Informing a College-wide Sexual Violence Prevention Campaign." Participation in this study involves participating in a focus group. We are attempting to organize 2-3 focus groups of students to learn students' social media and health messaging preferences to inform a social media marketing campaign at the University of Georgia. We would greatly appreciate your help in this endeavor.

Principal Investigator:

Dr. Jessica Muilenburg

Department of Health Promotion and Behavior

jlm@uga.edu

131 Wright Hall, Health Sciences Campus

University of Georgia

Athens, GA 30602

Phone: (706) 542-4365

Here are a few things you need to know about this research study:

- You are being asked to participate in a 75-minute focus group. You will be asked questions about your experiences as a UGA student, student health behaviors, your social media preferences, and your opinions on possible campaign names and health messages.

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- There are very minimal risks involved in participating in this study.
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Please email Anne Marie at Annemarie.schipani25@uga.edu if you are interested in participating in this study. You will be contacted shortly thereafter to organize the focus group time and dates.

Thank you so much for your time and attention!

APPENDIX B
FOCUS GROUP DATA COLLECTION MATERIALS

Phase I: Focus Group Protocol

Informing a College-wide Sexual Violence Prevention Campaign

Focus Group Protocol

Instructions for Focus Group Moderators

Before the focus group:

- When participants enter the room, hand each participant a copy of the consent form.
 - Moderator reviews consent form with participants as a group. Participants must sign the consent form in order to participate in the focus group.
 - **Collect signed consent forms before starting the focus group.**
 - Ask for permission to turn on the recorder.
 - For purposes of the tape recorder:
 - o Make sure students provide verbal consent to participate in the study.
 - o Make sure students provide verbal consent to be recorded.
 - Give participants a copy of the consent form to take home.
-

Good morning/afternoon/evening,

My name is _____ and I will be conducting this focus group with you. I will ask about your experiences as a UGA student, student health behaviors, and your social media preferences. The personal information that you provide will be kept strictly confidential and your identity will remain confidential. **You do not have to answer any questions that you are uncomfortable answering and you are welcome to withdraw from the study at any time and without penalty.**

The purpose is to understand your perspective and preferences in order to help create a social media campaign on sexual assault prevention and awareness here at UGA. All of these questions are about your preferences as a college student at UGA.

Do you have any questions about the study before we begin?

START AUDIO

Moderator Name, Full Date

Campus Health Information

1. Let's start off by describing your day-to-day life as a student at UGA.
 - a. Specifically, what social or extracurricular activities are you involved in?
 - i. Prompts: Greek life, on-campus organizations, what you do for fun?
2. What kinds of health information have you seen around campus?
 - a. What health information, if any, have you seen on UGA's website, social media accounts, or received via email?
3. Have you seen any information at UGA on sexual assault? Other common terms for sexual assault include sexual violence, rape, dating violence, sex without consent, forced sex, or intimate partner violence (IPV)?
 - a. Do you remember what you saw?
 - b. Do you think UGA does a good job of providing health information on sexual assault?
 - i. *If they answer, ask them to explain why they said yes/no.*

Bystander Beliefs

4. Has there ever been a time when you intervened in a specific situation where you thought there was a possibility that someone may or may not be in danger?
5. Has there ever been a time when someone (either a friend or someone you don't necessarily know) "intervened" in something that you were doing or saying that bothered them?
6. Explain the situations on how you or another person "intervened," how it made you feel, what the other person said back to the intervener, etc.

Now we are going to talk through a few hypothetical scenarios.

7. Three girls are walking to a bar late at night when a strange man begins to follow them. When they see that they are being followed, they pick up their pace and come across a large group of people near a bench, so they sit on the bench and the man stops, looks at them, and continues to walk by them. After he's out of sight, one of the girls turns to her friend and says, "If you weren't wearing that outfit, he wouldn't have followed us."
 - a. Does this type of conversation and/or behavior bother you?
 - i. If yes, why?
 - ii. If no, why not?
 - b. Let's say the girl's comment bothered you. What would you do?
 - c. What would stop you, if anything, from doing something or saying something about it?
8. A girl and her partner are in her dorm room and begin to fool around. Her partner is about to take her pants off, when the girl says, "Wait, I don't think we should do this. I don't want to." Her partner says, "But baby, I was really in the mood!" and continues to take off the girl's pants and force herself onto her.
 - a. Does this type of conversation and/or behavior bother you?
 - i. If yes, why?
 - ii. If no, why not?
9. You are at a party with some friends. In the corner of the room, you notice that a guy has pinned a girl against a wall and appears to be forcing her to kiss him. You remember the girl from one of your classes. The girl appears to be uncomfortable, but the guy is holding her by her arms and she cannot get away.
 - a. Does this situation bother you?
 - i. If yes, why?
 - ii. If no, why not?
 - b. Let's say this situation bothered you. What could you do to get the guy to stop? (e.g., create a distraction, change the subject, confront him directly)
 - c. What would stop you from doing something or saying something about it?
 - d. Does your decision to do or say something about it depend on your relationship with the guy you are intervening with? (e.g. friend, stranger, acquaintance or classmate, roommate, friend of a friend, relative)
 - e. Do your opinions of what might happen depend on your relationship with the guy you are intervening with?

- f. Do your opinions of what might happen depend on your relationship with the girl you are trying to help?
10. You are at a bar and witness a guy friend escorting a girl out to his car. The girl is noticeably drunk and stumbling (needs help walking) and as your friend walks by you, he winks and says, “I’m gonna get laid tonight.”
- a. Does this situation bother you?
 - i. If Yes, why?
 - ii. If no, why not?
 - b. Let’s say this situation bothered you. What could you do to get the guy to stop? (e.g. create a distraction, change the subject, confront directly)
 - c. What would stop you from doing something or saying something about it?
 - d. Does your decision to do or say something about it depend on your relationship with the guy you are intervening with? (e.g. friend, stranger, acquaintance or classmate, roommate, friend of a friend, relative)
 - e. Do your opinions of what might happen depend on your relationship with the guy you are intervening with?
 - f. Do your opinions of what might happen depend on your relationship with the girl you are trying to help?
11. If a UGA student appears to be in danger of being sexually assaulted, who do you believe is the most responsible for preventing it from happening?
- a. Prompts: Friends? Peers? Campus officials? Police or law enforcement?
12. What information, if any, have you received from UGA or a UGA affiliated organization about how to respond in situation where sexual assault might occur?

Message Testing

Script: Next, we’d like you to take a look at some example social media messages and hashtags about sexual assault. Please take a moment to evaluate the messages or hashtags.

- Watch Your Dawgs and Be a WatchDawg.
This campaign is based on UGA's WatchDawgs sexual violence prevention program. WatchDawgs is a sexual violence prevention bystander program run by the UGA Health Center's Health Promotion team.
 - #BeAWatchDawg
 - #ImAWatchDawg
 - #WatchDawgNation
- Join the Circle: Take Action Against Sexual Assault and join the circle of 6!
- Watch Your Dawgs and Join the Circle of 6!
This campaign is based on WatchDawgs and the Circle of Six, an app that allows users to indicate up to 6 people they trust and want to contact when they are in danger of experiencing sexual violence. These 6 appear on the app and as icons and users can send texts, drop a pin, or call the 6 when they are in danger.
 - #BeASix
 - #JointheCircleDawgs
- It's On Us To Watch Out For Our Dawgs
This campaign is based on UGA's WatchDawgs program and the White House's It's on Us campaign, a national sexual violence prevention campaign that calls for people to take pledges to: RECOGNIZE that non-consensual sex is sexual assault; IDENTIFY situations in which sexual assault may occur; INTERVENE in situations where consent has not or cannot be given; and to CREATE an environment in which sexual assault is unacceptable and survivors are supported. You might have seen a lot of celebrities taking part in this campaign.
 - #ItsOnUsDawgs

[Ask questions below for each campaign]

- What is your initial reaction to this message?
- Does it attract your attention?
- What do you like about the message?
- What do you dislike about it?
- Did you understand the content of the message?
- Do you think this message is memorable?
 - Why?
- Do you think it would be an effective message?
- What do you think when you see the hashtag?
- What do you think would make it a better message for college students?
- Any other thoughts about this message?

If you had to pick a favorite message, which one would you pick?

What is your least favorite?

Conclusion

Script: Well that wraps up all the questions I have for you today. It's been an enjoyable discussion and it was great to hear your thoughts.

1. Is there anything you would like to add to today's discussion?
2. Are there any questions I can answer?

END AUDIO

Thank students for their time and cooperation.

APPENDIX C

PHASE I CROSS-SECTIONAL SURVEY ITEMS

Bystander Behaviors Scale – Modified

Intent to help friends:

1. I would stop and check in with a friend who looked very intoxicated when they were being taken upstairs at a party or home with someone they just met.
2. If I saw a friend grabbing or pushing their partner, I would say something to them.
3. If I saw a friend taking a very intoxicated person up to their room, I would say something and ask what they were doing.
4. I would tell a friend if I thought their drink may have been spiked with a drug.
5. I see a man talking to a female friend. I can see she was uncomfortable. I would ask her if she was okay or try to start a conversation with her.
6. If I heard sounds of yelling and fighting coming from a friend's dorm room or other residence walls, I would knock on the door to see if everything was okay.
7. I would call 911 because of suspicion that a friend had been drugged.
8. I would call 911 or authorities if I heard sounds of yelling and fighting.
9. I would make sure a friend didn't leave an intoxicated friend behind at a party.
10. If a friend had too much to drink, I would ask them if they need to be walked home from the party.
11. I would walk a friend home from a party when they had too much to drink.

Intent to help strangers:

12. I would stop and check in with a stranger who looked very intoxicated when they were being taken upstairs at a party or home with someone they just met.
13. If I saw a stranger grabbing or pushing their partner, I would say something to them.
14. If I saw a stranger taking a very intoxicated person up to their room, I would say something and ask what they were doing.
15. I would tell a stranger if I thought their drink may have been spiked with a drug.
16. I see a man talking to a female stranger. I can see she was uncomfortable. I would ask her if she was okay or try to start a conversation with her.
17. If I heard sounds of yelling and fighting coming from a stranger's dorm room or other residence walls, I would knock on the door to see if everything was okay.
18. I would call 911 because of suspicion that a stranger had been drugged.
19. I would make sure a stranger didn't leave an intoxicated friend behind at a party.

20. If a stranger had too much to drink, I would ask them if they need to be walked home from the party.
21. I would walk a stranger home from a party when they had too much to drink.

From:

Banyard, V. L., Moynihan, M. M., Cares, A. C., & Warner, R. (2014). How do we know if it works? Measuring outcomes in bystander-focused abuse prevention on campuses.

Psychology of Violence, 4(1), 101.

APPENDIX D

PHASE III PRE-POST SURVEY RECRUITMENT EMAILS

Pre-Campaign Recruitment Email

Hello,

My name is Anne Marie Schipani and I am a PhD student at the University of Georgia. Under the direction of Dr. Jessica Muilenburg (jlm@uga.edu), I invite you to participate in a research study at the University of Georgia. We are attempting to collect responses on a research survey and would greatly appreciate your help in this endeavor. The purpose of this study is to gather data examining students' attitudes and experiences on campus sexual assault, and risk and protective behaviors among college students at the University of Georgia.

Here are a few things you need to know about this research survey:

- There are very minimal risks involved in taking this survey. Some questions may seem very personal or be upsetting, but participants may skip any questions that they do not want to answer.
- Data from this survey will be analyzed in order to examine trends in the population. Individual answers or answer sets will not be examined.
- Participation is completely voluntary.
- The survey will ask participants to click a second separate survey to enter their email addresses to distribute incentives, \$5 electronic Amazon gift cards. Participants may also enter their email address in this survey a second time if they agree to be re-contacted to complete a follow-up survey in 2-3 months.

In order to participate in this research survey, you must be 18 years of age or older and an undergraduate student at the University of Georgia. The survey takes approximately 15-20 minutes and can be accessed through the URL listed below.

[Insert Qualtrics Live URL Link]

Thank you so much for your time!

Sincerely,

Anne Marie Schipani

Department of Health Promotion and Behavior

Annemarie.schipani25@uga.edu

241E Wright Hall, Health Sciences Campus

University of Georgia

Athens, GA 30602

Post-Campaign Recruitment Email: Cross-sectional sample

Hello,

My name is Anne Marie Schipani and I am a PhD student at the University of Georgia. Under the direction of Dr. Jessica Muilenburg (jlm@uga.edu), I invite you to participate in a research study at the University of Georgia. We are attempting to collect responses on a research survey and would greatly appreciate your help in this endeavor. The purpose of this study is to gather data examining students' attitudes and experiences on campus sexual assault, and risk and protective behaviors among college students at the University of Georgia.

Here are a few things you need to know about this research survey:

- There are very minimal risks involved in taking this survey. Some questions may seem very personal or be upsetting, but participants may skip any questions that they do not want to answer.
- Data from this survey will be analyzed in order to examine trends in the population. Individual answers or answer sets will not be examined.
- Participation is completely voluntary.
- The survey will ask participants to click a second separate survey to enter their email addresses to distribute incentives, \$5 electronic Amazon gift cards.

In order to participate in this research survey, you must be between 18-24 years of age or older and an undergraduate student at the University of Georgia. The survey takes approximately 15-20 minutes and can be accessed through the URL listed below.

[Insert Qualtrics Live URL Link]

Thank you so much for your time!

Sincerely,

Anne Marie Schipani

Department of Health Promotion and Behavior

Annemarie.schipani25@uga.edu

241E Wright Hall, Health Sciences Campus

University of Georgia

Athens, GA 30602

Post-Campaign Recruitment Email: Cohort Subsample

You are receiving this email because you completed a survey a couple of months ago and agreed to be re-contacted to complete a second survey. Find out more about the survey below and click the link to participate. Thanks for your participation!

Hello,

Again, my name is Anne Marie Schipani and I am a PhD student at the University of Georgia. Under the direction of Dr. Jessica Muilenburg (jlm@uga.edu), I invite you to participate in a research study at the University of Georgia. We are attempting to collect responses on a research survey and would greatly appreciate your help in this endeavor. The purpose of this study is to gather data examining students' attitudes and experiences on campus sexual assault, and risk and protective behaviors among college students at the University of Georgia.

Here are a few things you need to know about this research survey:

- There are very minimal risks involved in taking this survey. Some questions may seem very personal or be upsetting, but participants may skip any questions that they do not want to answer.
- Data from this survey will be analyzed in order to examine trends in the population. Individual answers or answer sets will not be examined.
- Participation is completely voluntary.
- The survey will ask participants to click a second separate survey to enter their email addresses to distribute incentives, \$5 electronic Amazon gift cards.

In order to participate in this research survey, you must be between 18-24 years of age or older and an undergraduate student at the University of Georgia. The survey takes approximately 15-20 minutes and can be accessed through the URL listed below.

[Insert Qualtrics Live URL Link]

Once again, thank you so much for your time!

Sincerely,

Anne Marie Schipani

Department of Health Promotion and Behavior

Annemarie.schipani25@uga.edu

241E Wright Hall, Health Sciences Campus

University of Georgia

Athens, GA 30602

APPENDIX E
PRE- AND POST- CAMPAIGN SURVEYS

Revised Alcohol Expectancies Questionnaire (George et al., 1995)

Answer choices for all questions include:

Strongly Disagree; Moderately Disagree; Slightly Disagree; Slightly Agree; Moderately Agree;
Strongly Agree

1. Drinking makes me feel warm and flushed.
2. Alcohol lowers muscle tension in my body.
3. A few drinks make me feel less shy.
4. Alcohol helps me to fall asleep more easily.
5. I feel powerful when I drink; as if I can really make other people do as I want.
6. I'm more clumsy after a few drinks.
7. I am more romantic when I drink.
8. Drinking makes the future seem brighter to me.
9. If I have had a couple of drinks, it is easier for me to tell someone off.
- *10. I can't act as quickly when I've been drinking.*
11. Alcohol can act as an anesthetic for me, that is, it can stop pain.
12. I often feel sexier after I've had a few drinks.

13. Drinking makes me feel good.
14. Alcohol makes me careless about my actions.
15. Some alcohol has a pleasant, cleansing, tingly taste to me.
- *16. Drinking makes me more aggressive.*
17. Alcohol seems like magic to me.
18. Alcohol makes it hard for me to concentrate.
19. I'm a better lover after a few drinks.
20. When I'm drinking, it is easier to open up and express my feelings.
21. Drinking adds a certain warmth and friendliness to social occasions for me.
22. If I'm feeling tied down or frustrated, a few drinks make me feel better.
- *23. I can't think as quickly after I drink.*
24. Having a few drinks is a nice way for me to celebrate special occasions.
25. Alcohol makes me worry less.
- *26. Drinking makes me less efficient.*
27. Drinking is pleasurable because it's enjoyable for me to join in with people who are enjoying themselves.
28. After a few drinks, I am more sexually responsive, that is, more in the mood for sex.
29. I feel more physically coordinated after I drink.
- *30. I'm more likely to say embarrassing things after drinking.*
31. I enjoy having sex more if I've had some alcohol.
- *32. I'm more likely to get into an argument if I've had some alcohol.*
33. Alcohol makes me less worried about doing things well.
34. Alcohol helps me sleep better.

35. Drinking gives me more confidence in myself.

36. Alcohol makes me more irresponsible.

37. After a few drinks it is easier for me to pick a fight.

38. A few drinks make it easier for me to talk to people.

39. If I have a couple of drinks, it is easier to express my feelings.

40. Alcohol makes me more interesting.

Weekly Drinking and Heavy Episodic Drinking (National Institute on Alcohol Abuse and Alcoholism, 2003)

1. During the last 12 months, how often did you usually have any kind of drink containing alcohol? **By a drink we mean half an ounce of absolute alcohol (e.g. a 12 ounce can or glass of beer or cooler, a 5 ounce glass of wine, or a drink containing 1 shot of liquor).** Choose only one.

- Every day
- 5 to 6 times a week
- 3 to 4 times a week
- Twice a week
- Once a week
- 2 to 3 times a month
- Once a month
- 3 to 11 times in the past year
- 1 or 2 times in the past year

(IF RESPONDENT GIVES ANY OF THE ABOVE RESPONSES, GO TO QUESTION 2)

- I did not drink any alcohol in the past year, but I did drink in the past
(GO TO QUESTION 1A)
- I never drank any alcohol in my life
(GO TO QUESTION 1B)

1A. During your lifetime, what is the maximum number of drinks containing alcohol that you drank within a 24-hour period? (Asked here only of those who did not drink any alcohol during the past 12 months)

- 36 drinks or more
- 24 to 35 drinks
- 18 to 23 drinks
- 12 to 17 drinks
- 8 to 11 drinks
- 5 to 7 drinks

- 4 drinks
- 3 drinks
- 2 drinks
- 1 drink

1B. So you have never had a drink containing alcohol in your entire life. (Asked only of those who say they never drank alcohol in their lives)

- Yes, I never drank. (DONE WITH ALCOHOL QUESTIONS)
- No, I did drink (GO BACK TO QUESTION 1 AND REPEAT)

2. During the last 12 months, how many alcoholic drinks did you have on a typical day when you drank alcohol?

- 25 or more drinks
- 19 to 24 drinks
- 16 to 18 drinks
- 12 to 15 drinks
- 9 to 11 drinks
- 7 to 8 drinks
- 5 to 6 drinks
- 3 to 4 drinks
- 2 drinks
- 1 drink

3. During the last 12 months, how often did you have 5 or more (males) or 4 or more (females) drinks containing any kind of alcohol in within a two-hour period? That would be the equivalent of at least 5 (4) 12-ounce cans or bottles of beer, 5 (4) five ounce glasses of wine, 5 (4) drinks each containing one shot of liquor or spirits. Choose only one:

- Every day
- 5 to 6 days a week
- 3 to 4 days a week
- Two days a week
- One day a week

- 2 to 3 days a month
- One day a month
- 3 to 11 days in the past year
- 1 or 2 days in the past year

NIDA modified Alcohol, Smoking, and Substance Involvement Screening Test
(NMASSIST) (National Institute on Drug Abuse, 2012)

In the last 30 DAYS, on how many days did you use cigarettes?

- Never Used
- Use, but not in the past month
- 1-2
- 3-5
- 6-9
- 10-19
- 20-29
- All 30

In the last 30 DAYS, on how many days did you use smokeless tobacco?

- Never Used
- Use, but not in the past month
- 1-2
- 3-5
- 6-9
- 10-19
- 20-29
- All 30

In the last 30 DAYS, on how many days did you use alcohol (beer, wine, liquor)?

- Never Used
- Use, but not in the past month
- 1-2
- 3-5
- 6-9
- 10-19
- 20-29
- All 30

In the last 30 days, on how many days did you use Rohypnol (roofies), GHB, or Liquid X
(intentional use)?

- Never Used
- Use, but not in the past month
- 1-2
- 3-5
- 6-9
- 10-19
- 20-29
- All 30

In the last 30 days, on how many days did you use Marijuana (cannabis, weed, pot, grass, hash, THC, etc.)?

- Never Used
- Use, but not in the past month
- 1-2
- 3-5
- 6-9
- 10-19
- 20-29
- All 30

In the last 30 days, on how many days did you use Cocaine (coke, crack, speedballs, etc.)?

- Never Used
- Use, but not in the past month
- 1-2
- 3-5
- 6-9
- 10-19
- 20-29
- All 30

In the last 30 days, on how many days did you use Amphetamine-type stimulants (speed, meth, crank, diet pills, bath salts, etc.)?

- Never Used
- Use, but not in the past month
- 1-2
- 3-5
- 6-9

- 10-19
- 20-29
- All 30

In the last 30 days, on how many days did you use Inhalants (nitrous, “poppers,” glue, petrol, paint thinner, nail polish remover)?

- Never Used
- Use, but not in the past month
- 1-2
- 3-5
- 6-9
- 10-19
- 20-29
- All 30

In the last 30 days, on how many days did you use Sedatives or sleeping pills (Valium, Xanax, Ativan, etc.)?

- Never Used
- Use, but not in the past month
- 1-2
- 3-5
- 6-9
- 10-19
- 20-29
- All 30

In the last 30 days, on how many days did you use Hallucinogens (ecstasy, Molly, LSD, acid, mushrooms, Special K, tussin/syrup, etc.)?

- Never Used
- Use, but not in the past month
- 1-2
- 3-5
- 6-9
- 10-19
- 20-29
- All 30

In the last 30 days, on how many days did you use Opioids (heroin, morphine, methadone, codeine, OxyContin, etc.)?

- Never Used
- Use, but not in the past month
- 1-2
- 3-5
- 6-9
- 10-19
- 20-29
- All 30

In the last 30 days, on how many days did you use A.D.H.D medication without a prescription (Adderall, Ritalin, Vyvanse, Focalin, etc.)?

- Never Used
- Use, but not in the past month
- 1-2
- 3-5
- 6-9
- 10-19
- 20-29
- All 30

In the last 30 days, on how many days did you use, other drugs not listed (Please indicate):

- Never Used
- Use, but not in the past month
- 1-2
- 3-5
- 6-9
- 10-19
- 20-29
- All 30

In the past 30 DAYS, did you drive after drinking any alcohol at all?

- No
- Yes
- I don't drive
- I don't drink
- I don't drink and drive

In the past 30 DAYS, did you drive after having 5 OR MORE DRINKS?

- No
- Yes
- I don't drive
- I don't drink
- I don't drink and drive

The last time you partied/socialized, how many HOURS did you drink alcohol? State your estimate below [FILL IN THE BLANK]:

The last time you "partied"/socialized, how many alcoholic DRINKS did you have? State your estimate below [FILL IN THE BLANK]:

1 DRINK =

1 BEER (12 OUNCES)

1 WINE COOLER (12 OUNCES)

1 GLASS OF WINE (5 OUNCES)

1 SHOT OF LIQUOR (1 to 1.5 OUNCES)

1 MALT BEVERAGE (12 OUNCES) – e.g., Mike's Hard Lemonade, Smirnoff Ice

1 MIXED DRINK (1 to 1.5 OUNCES of LIQUOR)

Thinking back over the LAST THIRTY DAYS, how many times, if any, have you had FIVE OR MORE ALCHOHOLIC DRINKS in one sitting?

- None
- 1 time
- 2 times
- 3 times
- 5 times
- 6 times
- 7 times
- 8 times
- 9 or more times

The Cage Questionnaire (Ewing, 1984)

Have you ever felt you should cut down on your drinking?

- Yes
- No

Have people annoyed you by criticizing your drinking?

- Yes
- No

Have you ever felt bad or guilty about your drinking?

- Yes
- No

Have you ever had a drink first thing in the morning to steady your nerves or to get rid of a hangover (eye opener)?

- Yes
- No

Drinking Norms Rating Form (Baer et al., 1991)

How many alcoholic DRINKS do you think the typical student at your college had the last time he/she “partied”/socialized? State your estimate below [fill in the blank]:

In the LAST 30 DAYS, what PERCENT of students at your college do you think used alcohol (beer, wine, liquor)? State your estimate below [fill in the blank]:

Reactions to Offensive Language & Behavior Scale (Kilmartin et al., 1999; Loh et al., 2005)

Other Comforts Subscale:

Instructions to Respondents:

Please indicate how comfortable you think the AVERAGE STUDENT AT YOUR COLLEGE feels about each of the following situations.

While talking with a friend about a woman the friend likes, the friend says, “I took her out for dinner and a movie and we didn’t even hook up.”

- Not at all comfortable
- Uncomfortable
- Somewhat uncomfortable
- Neutral
- Somewhat comfortable
- Comfortable
- Extremely comfortable

The student’s roommate says, “Michelle is such a bitch, she wouldn’t event tell me what I missed in class this morning.”

- Not at all comfortable
- Uncomfortable
- Somewhat uncomfortable
- Neutral
- Somewhat comfortable
- Comfortable
- Extremely comfortable

The student is getting ready to go on a date when a friend walks in with a bottle of tequila. The friend says, “If you give her a couple of shots of this, she’ll loosen up.”

- Not at all comfortable
- Uncomfortable
- Somewhat uncomfortable
- Neutral
- Somewhat comfortable
- Comfortable
- Extremely comfortable

The student asks a male friend about a woman in class. The friend says, “She’s hot, but she’s a slut.”

- Not at all comfortable
- Uncomfortable
- Somewhat uncomfortable
- Neutral
- Somewhat comfortable
- Comfortable
- Extremely comfortable

The student is walking to class when a friend brags, “I hooked up for the last four weekend.”

- Not at all comfortable
- Uncomfortable
- Somewhat uncomfortable
- Neutral
- Somewhat comfortable
- Comfortable
- Extremely comfortable

The student walks into his/her room and the student’s roommates are watching porn.

- Not at all comfortable
- Uncomfortable
- Somewhat uncomfortable
- Neutral
- Somewhat comfortable
- Comfortable
- Extremely comfortable

The student's roommate is telling him/her about relationship problems he's having with his girlfriend. The student's friend says that, "If she wasn't so good in bed, I would have dumped her a long time ago."

- Not at all comfortable
- Uncomfortable
- Somewhat uncomfortable
- Neutral
- Somewhat comfortable
- Comfortable
- Extremely comfortable

The student is outside and a friend tells him/her, "She wants me", just after a pretty woman walks by.

- Not at all comfortable
- Uncomfortable
- Somewhat uncomfortable
- Neutral
- Somewhat comfortable
- Comfortable
- Extremely comfortable

Other Behavior Subscale:

Instructions to Respondents:

Based on the scale provided, indicate how often you believe the AVERAGE STUDENT AT YOUR COLLEGE engages in the following INTERVENING behaviors. By INTERVENE we mean helping someone who is in danger by asking if everything is okay, creating a diversion, directly addressing the issue or calling 911; expressing disapproval for offending remarks or behavior; stopping a person from doing something harmful to themselves or to another person; etc.

A student indicates displeasure when he/she hears a sexist comment.

- Never
- Rarely
- Occasionally
- Sometimes
- Frequently
- Usually
- Always

When a student witnesses a situations in which it looks like a woman will end up being taken advantage of, they intervene.

- Never
- Rarely
- Occasionally
- Sometimes
- Frequently
- Usually
- Always

When a student hear a group of men using language that is derogatory toward women (e.g., whore, bitch) he/she indicates his or her displeasure.

- Never
- Rarely
- Occasionally
- Sometimes
- Frequently
- Usually
- Always

When a student sees a man hitting on a woman who appears to be extremely intoxicated, he/she intervenes.

- Never
- Rarely
- Occasionally
- Sometimes

- Frequently
- Usually
- Always

When a student sees a man being verbally abusive toward a woman, he/she intervenes.

- Never
- Rarely
- Occasionally
- Sometimes
- Frequently
- Usually
- Always

When a student sees a man being physically abusive toward a woman, he/she intervenes.

- Never
- Rarely
- Occasionally
- Sometimes
- Frequently
- Usually
- Always

Bystander Attitudes and Behavior Scale (Banyard, 2008)

On a scale from 1 to 5, how likely are you to do each of the following?					
	Not at all likely (1)	Somewhat unlikely (2)	Moderately likely (3)	Somewhat likely (4)	Extremely likely (5)
Ask a friend who seems upset if he or she is okay or needs help					
Ask an acquaintance who seems upset if he or she is okay or needs help					
Make sure I leave the party with the same people I came with					
Walk a friend who has had too much to drink home from a party					
Watch my drinks and my friends' drinks at parties					
Talk to the friends of a drunk person to make sure they don't leave their drunk friend behind at a party					
I obtain verbal consent before engaging in sexual behavior					
I speak up against racist jokes					
When I hear a sexist comment, I indicate my displeasure					
If I see someone at a party who has had too much to drink, I ask him or her if he or she needs to be walked home so he or she can go to sleep					

Intent to Help Scale (Banyard, 2008; Banyard et al., 2014)

Intent to Help Friends: Short Scale

Please read the following list of behaviors and check how likely YOU ARE to engage in these behaviors using the following scale:

	Not at all likely (1)	Somewhat unlikely (2)	Moderately likely (3)	Somewhat likely (4)	Extremely likely (5)
I approach someone I know if I thought they were in an abusive relationship and let them know I'm here to help.					
I let someone who I suspect has been sexually assaulted know I'm available for help and support.					
I ask someone who seems upset if they are okay or need help.					
If someone said they had an unwanted sexual experience but don't call it rape, I express concern or offer to help					
I express concern to someone I know who has unexplained bruises that may be signs of abuse in relationship.					
I stop and check in on someone who looks intoxicated when they are being taken upstairs at party.					
I see a guy talking to a woman I know. He is sitting close to her and by look on her face I can see she is uncomfortable. I ask her if she is okay or try to start a conversation with her.					
I see someone I know and their partner. They are in a heated argument. The partner has their fist clenched around the arm of the person I know and the person I know looks upset. I ask if everything is okay.					
If the partner of someone I know is shoving or yelling at them I ask the person being shoved or yelled at if they need help.					
I tell someone I know if I think their drink was spiked with a drug.					

Intent to Help Strangers: Short Scale

Please read the following list of behaviors and check how likely YOU ARE to engage in these behaviors using the following scale:

	Not at all likely (1)	Somewhat unlikely (2)	Moderately likely (3)	Somewhat likely (4)	Extremely likely (5)
I talk with people I don't know about sexual abuse and intimate partner abuse as issues for our community					
I talk with people I don't know about going to					

parties together and staying together and leaving together

I talk with people I don't know about watching each others' drinks

I talk with people I don't know about what makes a relationship abusive and what the warning signs might be

I express concern to someone I don't know if I see their partner exhibiting very jealous behavior and trying to control them

I share information or resources about sexual assault or intimate partner abuse with someone I don't know

I approach someone I don't know if I thought they were in an abusive relationship and let them know that I'm here to help

I let someone I don't know who I suspect has been sexually assaulted know that I'm available for help and support

Bystander Behavior Scale (Banyard, 2008; Banyard et al., 2014)

Directions: Now please read the list below and circle **Y** (for yes) or **N** (for no) for all the items indicating behaviors you have actually engaged in IN THE LAST 2 MONTHS. If you have not been in a situation like that in the past two months, circle “no opportunity.”

I encouraged others to learn more and get involved in preventing sexual or intimate partner violence/abuse.

- No opportunity
- Y
- N

I talked with a friend about sexual and/or intimate partner violence as an issue for our community.

- No opportunity
- Y
- N

I talked with a friend about what makes a relationship abusive and what warning signs might be.

- No opportunity
- Y
- N

If a friend said they had an unwanted sexual experience but they don't call it 'rape' I expressed concern and/or offered to help.

- No opportunity
- Y
- N

I approached a friend if I thought they were in an abusive relationship and let them know that I was there to help.

- No opportunity
- Y
- N

I let a friend I suspect had been sexually assaulted know that I was available for help and support.

- No opportunity
- Y
- N

I supported a friend who wanted to report sexual assault or intimate partner violence/abuse that happened to them even if others could get in trouble.

- No opportunity
- Y
- N

If I saw a friend taking a very intoxicated person up to their room, I said something and asked what the friend was doing.

- No opportunity
- Y
- N

I confronted a friend who made excuses for abusive behavior by others.

- No opportunity
- Y
- N

I expressed disagreement with a friend who said having sex with someone who is passed out or very intoxicated is okay.

- No opportunity
- Y
- N

If I saw a friend grabbing or pushing their partner, I said something to them.

- No opportunity
- Y
- N

If I heard a friend insulting their partner, I said something to them.

- No opportunity
- Y
- N

I heard a friend talking about forcing someone to have sex with them, spoke up against it and expressed concern for the person who was forced.

- No opportunity
- Y
- N

I heard a friend talking about using physical force with their partner, spoke up against it and expressed concern for their partner.

- No opportunity
- Y
- N

I walked a friend home from a party when they had too much to drink.

- No opportunity
- Y
- N

I went with a friend to talk with someone (community resource, police, crisis center, etc.) about an unwanted sexual experience or intimate partner violence/abuse.

- No opportunity
- Y
- N

I called 911 or authorities when a friend needed help because of being hurt sexually or physically.

- No opportunity
- Y
- N

I made sure a friend didn't leave an intoxicated friend behind at a party.

- No opportunity
- Y
- N

I called a crisis center or community resource for help when a friend told me they experience sexual or intimate partner violence/abuse.

- No opportunity
- Y
- N

When I heard that a friend was accused of sexual abuse or intimate partner violence/abuse, I came forward with what I knew rather than keeping silent.

- No opportunity
- Y
- N