Stand, Speak, Act:
Using the Theory of Planned Behavior to evaluate a sexual assault bystander intervention campaign on a tri-campus university

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A dissertation

submitted in partial fulfillment of the

requirements for the degree of

Doctor of Philosophy

University of Washington

2019

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Program Authorized to Offer Degree:

Communication

University of Washington

Abstract

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In response to alarmingly high rates of sexual assault on college campuses, the U.S. government has called on universities to help prevent sexual assault through various programs, trainings, and campaigns. Bystander intervention campaigns, which focus on educating young adults on how to react and intervene when witnessing sexual violence, have been implemented on many university campuses across the country. Because this approach is currently the most widely utilized sexual assault prevention strategy, it is important to assess its effectiveness through theory-based research. Grounded in the theory of planned behavior (TPB), which considers the role of efficacy, intent, and perceived control in behavior change, this dissertation evaluates a bystander intervention campaign implemented across a multi-sited university.

An online survey was distributed to students (N=678) at each of the University of Washington's (UW) three campuses: Seattle, Bothell, and Tacoma. Statistical analyses revealed

five key findings: 1) there is an important difference between bystander efficacy and bystander intent; 2) formal exposure to bystander intervention does result in higher student bystander efficacy and intent; 3) student perceptions of their perceived control behaviors is associated with their bystander efficacy and intent; 4) age may be a conflicting influence in how students intend to perform bystander behaviors; and 5) bystander intervention type does not explain any variance in student bystander efficacy or intent scores across campuses, suggesting bystander campus interventions should be tailored differently to better reach their respective campuses. Based on these findings, implications and recommendations are offered to improve bystander intervention campaigns on college campuses nationwide, including tailored suggestions for how each UW campus site can implement programs that are grounded in theory and research.

Keywords: bystander intervention, sexual assault, health campaigns, theory of planned behavior

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Acknowledgments

This dissertation would not be what it is today without the unending guidance and support from my committee members. I am forever thankful for the ways in which they spent time with this topic and these words, helping it to become the best version it could be. To my advisor, Dr. Carmen Gonzalez: THANK YOU. That phase feels too small to embody how truly grateful I am for the ways in which you pushed me, encouraged me, and always believed in me. Thank you for believing in this work from day one. You gave so much of your valuable time and energy to me and I want to say thank you from the bottom of my heart. I hope I can believe in people like you believed in me. To Dr. Nancy Rivenburgh: Your careful attention to detail and time spent pushing me to ask the larger questions was invaluable. Thank you for the time you spent giving me edits that pushed this work to become better. To Dr. Jody Early: Thank you for joining my committee with enthusiasm right from the beginning, and for always being willing to offer me words of encouragement. Your belief in me and this work meant the world. To Dr. Andrea Stone: You are so much more than "just my GSR." Spending time in your office and talking statistics over coffee were some of the highlights of this process. You are an incredible teacher, and I cannot thank you enough for the way in which you invested yourself in this dissertation! To all my favorite people in CMU 340-N: Anna, Sam, Matthew, Lauren, and Polly – thank you for being the best individuals I could have ever hoped to share an office with over the years. It truly takes a village to finish your PhD, and I'm so thankful over the years in 340-N, you were a part of mine. Finally, to Dr. Peter Moe: thank you for seeing through my facade and telling me, "It sounds like you need to stop thinking and just start writing." That kick in the hallway gave me the push to actually make this dissertation a reality.

Dedication

This dissertation is dedicated to my village: to the people who reminded me of who I was, during all the times when I got lost throughout this process. You believed I could do this, and because of you, I did. Thank you for loving me, believing in me, supporting me, and so much more. It truly made all the difference. And because I want the world to know of your goodness, you must be named too: Mom, Dad, Matthew, Aaron, Rebecca, Olivia, Anna, Nick and Hannah, Serrah and Robbie, and my "Girls Weekend" women. *Thank you*.

Chapter I: Introduction and Rationale

Sexual assault is a critical problem on college campuses across the United States (Gidycz, Orchowski & Berkowitz, 2011; Mohler-Kuo, Dowdall, Koss, & Wechsler, 2004). In the United States, approximately 1 in 5 women will be raped during their time in college (Kreps et al., 2007; Moylan & Javorka, 2018). It is also suggested that incidence rates may actually be greater than our current statistics suggest, as many women do not report their assault to police or authority figures (Department of Justice, 2014). In addition, sexual assault disproportionately affects women; women are almost eighteen times more likely to be raped than men (CDC, 2010).

In response to alarmingly high incidence rates, the U.S. has implemented measures to reduce sexual assault on university campuses (Henrick, 2013). For example, VAWA is a federal law in the U.S. that was first passed in 1994 by Congress in an effort to protect women from intimate partner violence and address different forms of violence against women in the U.S. as a federal response (Modi, Palmer, & Armstrong, 2014). VAWA must be reauthorized every five years, and currently is under revision by Congress in 2019. Recently, U.S. president Barack Obama called particular importance to the reduction of sexual assault on university campuses, recommending universities to meet minimum standards for accountability, reporting, and transparency of sexual assault and rape on college campuses (Bednarchik, 2016). Through the encouragement of the Violence Against Women Act (VAWA) and Title IX, U.S. universities have begun implementing assault prevention programs nationwide (see Vladutiu, Martin, & Macy, 2010).

Assault prevention programs that are implemented on university campuses most often come in the form of health communication campaigns. For decades, health campaigns have been implemented on university campuses in an effort to create attitude, intention, or behavior

changes among college students related to a variety of health issues ranging from nutrition to disease prevention to safety. In particular, health campaigns that are informed by theory have been found to have positive effects in changing college student health behaviors (see Dupain & Lombardi, 2014; Glassman, Reindl, & Whewell, 2011; Glider, Midyett, & Mills-Novoa, 2001; Shropshire, Brent-Hotchkiss, & Andrews, 2013). The most effective campaigns address a health issue in such a way that makes health-related information salient for college students, thus influencing behavior change (Freudenberg et al., 2013). Young adults overall have been found to have poor health habits and behaviors and college students in particular often are difficult to reach with health messaging because of their lack of interest in health topics and their busy schedules. For these reasons, making health information more salient for university students through health communication campaigns is key.

Bystander intervention is one particular type of health campaign that has been implemented on more than 100 U.S. university campuses (Green Dot, 2019). The bystander intervention approach is an important step in the direction of sexual assault education and prevention, as it focuses on educating young adults on how to react while experiencing or witnessing potential situations of sexual violence. The goal of the bystander approach is to educate individuals in a way that will ultimately prevent an assault from occurring. Bystander intervention emerged when researchers began to realize that other students were often nearby when risks for sexual assault were present (Burn, 2009). This created a need for health communication campaigns that target the potential bystander, rather than a survivor or perpetrator (Banyard, Plante, & Moynihan, 2004; Berkowitz, 2002). Successful bystander intervention campaigns can offer three key benefits: 1) new community norms can be created to prevent sexual assault if bystanders begin to step into the situations; 2) shared responsibility can

be increased if others watch a bystander take action; and 3) bystander campaigns share the focus and responsibility of preventing sexual assault to all people, not just men (Burn, 2009).

Central to the notion of bystander intervention is an application of the Theory of Planned Behavior (TPB). This theory provides insight into making sense of how individuals perform bystander behaviors - specifically evaluating the role of efficacy and intent in deciding to become a bystander. In particular, the TPB consists of "the individual's *intention* to perform a given behavior" (Ajzen, 1991, p. 181). Within the TPB, intentions are assumed to grasp the factors which motivate and influence a behavior. The TPB posits that the stronger an individual's intention is to engage with a behavior, the more likely they will perform the behavior. Bystander intervention is an attempt to prevent sexual assault by encouraging individuals to intervene. At its core, a person's efficacy (i.e., how much they believe they can perform a bystander behavior), their intent (i.e., if they plan to actually perform bystander behaviors in the future), and their perceived control (i.e., if they believe that they can actually have control over changing an outcome) guide the principles of bystander intervention, and are also central to the TPB, making it an apt theory to understand bystander intervention.

This dissertation contributes to the current conversation of sexual assault prevention by evaluating one university's implementation of a bystander intervention campaign across its three campuses. Past studies have evaluated bystander intervention campaigns with more homogenous study populations and have not explicitly focused on the role of efficacy and intent (see Coker et al., 2016; Coker et al., 2011). The current study extends past research by evaluating bystander intervention campaigns on a diverse and multi-site university campus. It also considers the role of efficacy and intent separately when identifying what might encourage college students to perform bystander behaviors.

The University of Washington (UW) in Seattle, Washington serves as a particularly unique study site because bystander intervention campaigns have been implemented since 2010 across multiple campuses in multiple cities—UW Seattle, UW Bothell, and UW Tacoma. However, to date there has been no formal evaluation of the effectiveness of bystander intervention on any of those campuses, which makes it a useful site of inquiry for the current study. In addition, after interviewing program administrators at each campus, it was discovered that each campus implements their bystander intervention program differently. In particular, UW Seattle implements bystander intervention in a more traditional programming format (i.e., follows the methods in the bystander intervention campaign *Green Dot*), while customizing some materials to match their student population demographics better. Conversely, UW Bothell follows the core aspects of bystander intervention implementation, but have never utilized a formal bystander intervention campaign (such as *Green Dot*). Administrators at UW Bothell have attempted to tailor their campaign materials to fit their specific university campus needs and interests more. Finally, while UW Tacoma does not formally implement any bystander intervention campaigns, they do expose students the bystander intervention campaign *Green Dot* by asking the UW Seattle *Green Dot* staff to come to UW Tacoma once or twice every few years to hold a training on their campus.

Since its implementation at UW Seattle, bystander intervention has focused on providing trainings to students who volunteer their time to learn, compared to UW Bothell who requires bystander intervention training to all freshman and transfer students, or UW Tacoma who does not present bystander intervention or require any presentation or training to students. At UW Seattle, faculty and staff volunteers are trained on how to encourage students to become bystanders on campus, following the model proposed in the *Green Dot* campaign, where an

individual should be a "green dot" on campus. Being a student "green dot" means committing to perform bystander intervention when needed, as well as volunteer time to train and educate other students on bystander methods. Conversely, at UW Bothell, staff are trained in bystander intervention and the campus requires all first year and transfer students to participate in a 45-minute presentation during their orientation. UW Bothell also provides bystander wellness prevention presentations throughout the year and holds poster campaigns at various points through the year that address topics of gender-based violence, placing posters around the key areas of campus during the duration of the campaign. Again, UW Tacoma does not offer any required bystander intervention programming, however, they occasionally (i.e., every few years) have a staff member from UW Seattle come to UW Tacoma for a single day training, when requested by someone from the UW Tacoma, usually a staff or administrator. Table 1 depicts the different ways in which the three campuses implement some form of bystander intervention campaign methods:

Table 1.
University of Washington Campus Bystander Intervention Methods

	Seattle	*Bothell*	*Tacoma*
Bystander Intervention Method			
Student Trainings	Not required - 1 hour overview training once quarter offered or 3 hour training offered (60 students max at each training)	Required - training for first years & transfer students	No - however UW Seattle does come down to offer 1 hour trainings by request only
Poster Campaigns	No	Yes	No
Staff/Faculty Trainings	Not required - 2 hour overview training offered 2-3 times per quarter 1 hour overview for departments offered	Not required - various trainings offered throughout the year	No
Staff Support for Bystander Intervention	Yes - 2 stff and 1 student; various faculty volunteers each year (~5 to 15 faculty)	Yes - 1 paid staff member; steering committee for sexual assault prevention	No
University Funding for Bystander Intervention	Volunteer faulty and staff are sent to Green Dot national training each year	Yes - paid staff positions to implement trainings at orientation	No

Traditionally, studies evaluating bystander intervention measure its success by comparing universities to one another (see Coker et al., 2016; Coker et al., 2014). Focusing on UW allows

for a comprehensive evaluation of one university, while providing insight into how different campus size and demographics may influence student learning and information retention. In particular, having one campus which rarely implements bystander intervention (i.e., UW Tacoma) provides an even more diverse breadth of perspectives, locations, and training methods on bystander intervention, but having all housed under the umbrella of a single university.

Findings from the evaluation of this inquiry site offer important implications for the successes and challenges of bystander intervention campaigns for universities overall, as well as the UW specifically. These findings also provide key suggestions for how to best target and tailor bystander intervention campaigns on university campuses with different student backgrounds. This dissertation responds to growing concerns about sexual assault on college campuses by evaluating the most prominent approach used for sexual assault prevention in university settings. The goal of this research is to identify what specific components of bystander intervention campaigns can be targeted and tailored in order to maximize their effectiveness. Through quantitative methods, specifically online surveys of college students across the University of Washington's three campuses, this research study: identifies key aspects that influence a student's bystander efficacy, considers constructs that hinder a student's intentions to perform bystander behaviors in the future, and offers key recommendations for what are the best practices to communicate and tailor bystander intervention campaigns to be most effective in the future. The following discussion outlines the main purpose and contributions of each chapter in the dissertation.

Chapter Two reviews literature on how bystander intervention campaigns have been designed, implemented, and evaluated. Specifically, this chapter highlights how and why health campaigns are used and how they are used on university campuses. It also describes the various

approaches that have been implemented to create sexual assault prevention campaigns. It particularly details how bystander intervention has become the prominent approach utilized in health communication campaigns and presents the most current bystander intervention sexual assault prevention campaigns to date. Finally, this chapter ends by discussing how theory is applied in health campaigns and describes the theoretical framework for this study – the Theory of Planned Behavior. After, the research questions for this study will be presented.

Chapter Three describes the methods used throughout data collection, along with an explanation for why these methods are best suited to evaluate bystander intervention campaigns. Specifically, this chapter describes the research study site in detail, offering a brief history of the site and all three campus sites within it. Then, the data collection procedures and survey development are provided, discussing the various questions participants were asked to understand their exposure and interaction with the bystander intervention campaign on their campus. After, the survey participants are described, and the measures utilized for data analysis provided, highlighting key variables used in the analyses. Finally, the chapter ends with specific discussion of the data analysis utilized for the study, leading to the findings uncovered.

Chapter Four reports the findings of this study in order to explain the association between bystander intervention exposure and: bystander efficacy, intent to engage in bystander behavior, and knowledge of bystander behavior. This chapter is organized according to the study's research questions. First, campus differences in bystander efficacy and intent when not considering formal bystander intervention exposure are reported. Then, analyses of how personal control, control strategy, perceived bystander exposure, and formal bystander exposure are related to bystander efficacy and intent are presented. Associations between formal exposure and bystander efficacy and intent are also compared across study sites. Finally, the chapter ends by

presenting the results evaluating how formal bystander exposure affects student knowledge of bystander resources, when compared across campus sites. These results are then together evaluated and discussed in five specific themes, presented in the next chapter.

Chapter Five provides a review of the study findings, focusing on five emergent themes that resulted from the findings which particularly warrant a full discussion. This chapter provides discussion of: 1) how evaluating bystander efficacy separately from bystander intent can add value to a bystander intervention campaign; 2) if formal exposure to bystander intervention really makes a difference for students overall; 3) how student perceptions of their own bystander abilities can influence their actual bystander performance; 4) the conflicting influence of age in a student's performance of bystander behaviors; and 5) if various campus site affiliations (and therefore bystander intervention methods) actually produce different bystander performance results in their students.

Chapter Six provides implications and recommendations for the University of Washington and other universities to evaluate and enhance their own bystander intervention programs. This chapter discusses how bystander intervention programming can and should target student bystander efficacy and intent in their content. It also discusses how future bystander intervention trainings and campaigns should consider the role of student perceptions of their bystander intervention abilities, as well as the current level of personal control they feel they have in performing bystander behaviors. This chapter then moves to discussing how bystander interventions should be tailored by campus, specifically providing recommendations for how the University of Washington as a whole, and how each campus site specifically, can apply findings from this study to improve the effectiveness of their specific bystander intervention campaigns.

Finally, Chapter Seven offers final conclusions for this study. It discusses limitations of the study and offers directions for future research. It specifically addresses evaluating rape myth acceptance and its influence on bystander intervention behaviors in future studies, the importance of including stakeholder voices in the creation of future bystander intervention campaigns, and the potential drawbacks that may occur by training students to be active bystanders in potentially harmful situations.

Chapter II: Literature Review

In order to evaluate bystander intervention, we must first understand how this prevention approach was created. This literature review begins with a description of health communication campaigns, describing why they are implemented on university campuses, and providing background on their evaluations and effectiveness. Then, a more specific discussion of how sexual assault has been evaluated through health campaigns will be given. Finally, the history and implementation of bystander intervention will be presented, situating this dissertation work in the larger research discussion of bystander intervention. This chapter will end by presenting an overview of the current study and detailing the research questions guiding this dissertation.

Health Campaigns

Researchers have been able to reach communities and influence behavior change through the implementation of health campaigns. Public health campaigns often focus on prevention, with the goal of impacting a change in behavior among individuals or groups of people (Hornick, 2002). In particular, public health campaigns often are designed as "resource-intensive interventions to achieve large effects" (DiClemente, Salazar, & Crosby, 2013, p.188), meaning that in order to significantly impact behavior change, most public health campaigns need large amounts of funding and extensive resource materials. The effectiveness of any given health campaign often depends upon the specific behavior that is being promoted (Snyder, Hamilton, Mitchell, Kiwanuka-Tondo, & Fleming-Milici, 2004) and how much change is reported in that behavior (Snyder, 2007). Public health campaigns can address almost any health-related topic (e.g., anti-smoking, cancer screening, highway safety), but all utilize communication as the tool and vehicle to influence behavior change and outcomes (Hornick, 2002).

Communication in Health Campaigns

In general, traditional health campaigns are directed at particular populations for a certain period of time, hoping to achieve a specific goal, and often use communication strategies (Rogers & Storey, 1987; Snyder, 2001; Snyder, 2007). For example, health communication campaigns have addressed physical inactivity (Renger, Steinfelt, & Lazarus, 2002), seat belt use (Robertson, Kelley, O'Neil, Wixsom, Eiswirth, & Haddon, 1974), skin cancer prevention (Montague, Borland, & Sinclair, 2001), tobacco use (Farrelly, Niederdeppe, & Yarsevich, 2003), and more. These interventions often result in healthier behaviors in participants, or at minimum, provide feedback for designing more effective strategies for research to encourage individuals to make healthier decisions.

In a health campaign, communication often plays an important role, particularly in terms of messaging, message medium, and tailoring to specific audiences. By creating messaging that is adaptable to target three different groups (i.e., general audience, targeted audience, individual audience), a single public health campaign can reach multiple audiences and influence systematic behavior change. For example, an individual may read a message to get their flu shot on a bus campaign in their town (general audience), which will present the idea of flu shot vaccination to them. But if that same individual is able to see a flyer offering the flu shot in their neighborhood (targeted audience), they are more likely to think about going to get vaccinated because the message addressed their neighborhood identity, as well as offered vaccination options in their neighborhood. Finally, if that individual receives a letter from their employer telling them that every employee will receive a free flu vaccination on a specific date, the individual is even more likely to receive their flu shot because their campaign message was personally tailored to that individual's place of employment and removed many barriers to

access the flu shot. Behavior change is thus more achievable when multiple communication processes and modalities are engaged.

The goal of health communication campaigns overall, typically is some form of health behavior change. Some scholars have argued that health campaigns can have unintended effects in their target populations, including boomerang effects, dissonance, and desensitization (Cho & Salmon, 2007). Furthermore, health communication campaigns may have a tendency to focus on wealthy or dominant populations, rather than evaluating how best to reach marginalized populations (Dutta-Bergman, 2004; Hadi, 2001). Overall, however, health communication campaigns can yield small and short-term effects, as well as influence both individual and community-level behavior change (Dutta-Bergman, 2005; Snyder, 2002).

Health Communication Campaigns & University Campuses

For decades, health campaigns have been implemented on university campuses in an effort to create attitude, intention, or behavior changes for college students. In particular, theory-based health campaigns have been found to have positive effects in changing college student health behaviors, most notably in efforts to decrease binge drinking (see DeJong, 2002; Glider, Midyett, & Mills-Novoa, 2001; Gomberg, Schneider, & DeJong, 2001), reduce tobacco use (see Black, Loftus, Chatterjee, & Babrow, 1993; Borders, Xu, Bacchi, Cohen, & SoRelle-Miner, 2005; Glassman, Reindl, & Whewell, 2011), increase flu vaccinations (see Roberts et al., 1996; Shropshire, Brent-Hotchkiss, & Andrews, 2013), and decrease sexual assault and violence (see Dupain & Lombardi, 2014; Potter, 2012; Potter, Moynihan, Stapleton, & Banyard, 2009).

Such campaigns engage a broad range of communication channels; however, the most frequently utilized formats are: posters, social media, general media, and trainings. For example, Potter et al. (2009) evaluated a bystander intervention poster campaign where student actors

modeled positive bystander behaviors and found that those who had seen the poster campaign reported higher knowledge of bystander behaviors than those who had not. This suggests that students can gain health knowledge from poster campaigns in general. In Zhang, Brackbill, Yang, and Centola (2015)'s work, they found that utilizing social media for a health campaign promoting increased physical activity resulted in improved physical activity for their participants. Specifically, they found that participants were influenced most to increase their physical activity when they interacted with anonymous online peers in the social media campaign, rather than just reading a social media promotion message. Overall, they found certain aspects of a social media campaign to be particularly helpful in promoting physical activity for their participants. University-based health campaigns are often effective because they address a health issue in a way that communicates tailored information and targets behavior change and as such can be particularly salient for college students (Freudenberg, Manzo, Mongiello, Jones, Boeri, & Lamberson, 2013). University students can have poor health habits during their educational years and they can be difficult to reach with health campaigns because of their lack of interest in health topics or because of their busy schedules. For these reasons, health campaigns often target university students in order to improve their health behaviors, and also leverage their interpersonal peer networks.

There has been much research which has explicitly evaluated university health campaigns and their effectiveness to change a college student's health behavior. In particular, there have been campaigns implemented which have served to gather baseline evaluations of a particular health issue or issues at a university. For example, Abbot, Policastro, Bruhn, Schaffner, and Byrd-Bredbenner (2012) evaluated which food safety information is most likely to be effective for a message to impact a college student, finding that tailored messages that fit the needs of a

specific audience are particularly useful in creating positive food safety outcomes. They suggest creating food safety information that specifically targets young adults, not the general public, and tailoring that information on multi-platform message outlets – such as traditional and social media message approaches – in order to have a food campaign be most effective for university students. In another study, Roberts et al. (1996) evaluated the effects of a 3-day mass vaccination campaign on a university campus where they specifically evaluated nonvaccinated students who had seen the vaccination campaign. For their study, they merged vaccination and student data in order to discover that the vaccination rate for students returning to their university campus was 93%, but lower vaccination rates occurred in older students, those living off campus, married students, and graduate or non-degree students. Through their analysis, they found that vaccination rates for previously unvaccinated students who had seen the vaccination campaign was much higher than originally thought, indicating that mass vaccination campaigns on university campuses have the potential to be quite successful. Shropshire, Brent-Hotchkiss, and Andrews (2013) also evaluated flu vaccinations on university campuses, but they looked at how mass media campaigns can increase vaccination, finding that the main page of a university website is the most utilized media by students and could have a strong influence on their decision to get vaccinated. All of these research studies provide some type of evaluation for health campaign effectiveness or design, contributing to a baseline understanding of how college students interact with health campaigns.

Past studies have also explicitly tested various campaigns in order to identify their overall effectiveness in tailored behavior change. These health campaigns are often created and evaluated by researchers in an effort to pinpoint key aspects of a campaign that may influence college student behavior about a particular health topic. In one example, White, Kolble, Carlson,

and Lipson (2005) tested the impact of their crafted message campaign on hand hygiene, finding that students exposed to their campaign increased their knowledge of hand washing and sanitizer use benefits, as well as had higher rates of hand washing overall. In particular, they found that the use of memorable messages, informed by the Diffusion of Innovations Theory, influenced student behavior change the most when it was combined with also giving students free hand sanitizer, allowing for the memorable message to be followed by a possible action. Additionally, Thompson, Heley, and Oster-Aaland (2013), evaluated a student created campaign to reduce high-risk drinking on their university campus, finding that only particular aspects of their campaign were effective in the reduction of alcohol consumption. Online and interactive materials increased student exposure to their educational website which increased student self-efficacy to reduce alcohol intake. Another topic of focus in more recent years for health campaigns is that of sexual assault prevention. Various attempts at creating effective sexual assault prevention campaigns have occurred, often finding mixed results in campaign effectiveness outcomes.

Health Communication Campaigns & Sexual Assault

There have been a variety of sexual assault prevention campaigns created in efforts to influence behavior change among college students. There are campaigns which focus on men educating men about their power in sexual situations, such as Masters (2010) who performed a content analysis and identified numerous online campaigns that target sexual assault prevention. Masters (2010) found that of all the sexual assault prevention campaigns she analyzed, there were four key themes utilized to communicate to men specifically that their power in sexual situations can prevent sexual assault. First, she found campaigns often framed their communication messages in terms of masculinity and male sexuality, advocating for the

masculinity of males to be a primary reason that they should prevent sexual assault. Second, she found campaign messaging to 'other the rapist', by encouraging men to take responsibility for preventing rape by specifically stopping other men or "potential rapists" from committing sexual assault. Third, she found messaging related to "real men don't rape," where she looked at one campaign in particular – 'My Strength is Not for Hurting' – which communicates to men that they have the most strength and power when they are not performing sexual assault behaviors. Finally, she found that some campaigns targeted men by encouraging them to embrace their femininity, and therefore, prevent sexual assault by enacting less masculine behavior.

In addition to these communication messages found in sexual assault prevention campaigns, there are also sexual assault prevention campaigns that flip social norms and scripts to make an individual stop and think about their behavior. Specifically, the Make Your Move (2018) campaign was created as a poster campaign to prevent the increase of sexual assault occurring in Missoula, Montana. For this campaign, posters were created with part of the text containing traditional rape scripts, but with the second half of the text flipping those social norms or scripts to encourage sexual assault prevention. For example, one poster reads: "I could tell she was asking for it … to stop. So I stepped in and told my buddy that was no way to treat a lady. And he backed off." Here, traditional social norms and rape scripts were utilized, but then flipped in order to encourage individuals to prevent sexual assault in their daily interactions and community.

Along with social norms and scripts, there are health campaigns to prevent sexual assault which encourage men to see themselves as allies to women who can prevent assault (Berkowitz, 2002). In his work, Berkowitz (2002) argues for all-male sexual assault prevention programs, in order to create more targeted messaging which only focuses on males, providing men with a

more comfortable and less defensive environment. For his campaign, Berkowitz (2002) presents messaging for men in a workshop format where they learn to see themselves as allies to women and also learn to see themselves as key members who should do their part to prevent sexual assault.

Bystander Intervention

Sexual assault campaigns often utilize the bystander intervention approach as a prevention method. Bystander intervention is the idea that individuals can be trained so that when they are audience members in a situation, they can become bystanders who intervene to prevent sexual assault (Banyard et al., 2009; Burn, 2009). For example, Potter, Moynihan, Stapleton, and Banyard (2009) implemented a poster campaign on a midsized public northeastern university in order to evaluate if viewing the poster campaign increased student efficacy to engage in prosocial bystander behaviors in potential situations of sexual assault. They found that students who were exposed to the poster campaign reported increased efficacy when compared to students who had not seen the campaign. Evaluating student efficacy to perform a particular health behavior has been studied throughout various research studies (Langhinrichsen-Rohling et al., 2011; Potter & Stapleton, 2012). As part of a larger study, Potter and Stapleton (2012) evaluated the role of efficacy for college-aged students in the U.S. military exposed to a large-scale sexual assault prevention bystander intervention social marketing campaign, “Know Your Power.” They found that those who had been exposed to the campaign had increased bystander efficacy scores compared to those who had not been exposed. Efficacy was evaluated in order to understand if students would take the responsibility individually for sexual and relationship violence prevention, and not just rely on their community. Additionally, Langhinrichsen-Rohling et al. (2011) evaluated if exposure to their rape prevention program,

"The Men's Program," resulted in increased bystander efficacy for college men specifically. They found that their program resulted in significant increased bystander efficacy, as was self-reported by their participants. Langhinrichsen-Rohling et al. (2011) were particularly interested in evaluating the role of efficacy in male college student behavior, because they were interested in understanding if their prevention program could target and change individual bystander behaviors and not just community efficacy or community bystander behaviors. This dissertation will also contribute to the scholarly discussion of efficacy, as it evaluates student efficacy in performing bystander behaviors in potential situations of sexual assault.

Bystander intervention has the potential to be a successful approach to sexual assault prevention on university campuses. While it has been implemented by over 100 colleges and universities (Green Dot, 2019), the effectiveness of bystander intervention is an area of focus that is largely understudied. Many universities value the bystander approach, because it encourages all members of a community to take responsibility, which is a message the Centers for Disease Control and Prevention (CDC) has recommended as a public health approach to reduce sexual violence and highlight prevention strategies (CDC, 2004). There have been some studies which find bystander intervention to be a particularly effective means to reduce sexual assault and violence on university campuses (see Banyard et al., 2007; Coker et al., 2014; Potter et al., 2009), but more work needs to be done in order to understand its effectiveness fully. Effectiveness for bystander intervention means an increased willingness for an individual to take action in a situation of potential sexual violence, as well as often reducing their rape myth acceptance (i.e., the beliefs thought to support and perpetuate male sexual violence against women) (Burn, 2009). In contribution to this body of research, this dissertation will examine bystander intervention approaches on a tri-campus university.

Bystander intervention is a relatively new campaign method used in health research. This approach started when scholars began to realize that "bystanders were often present during the pre-assault phase where markers of sexual assault risk are present" (Burn, 2009, p. 779). The realization that bystanders were present during these situations began a movement in research to focus sexual assault prevention programming on the bystander rather than the survivor or potential rapist (Banyard, Plante, & Moynihan, 2004; Berkowitz, 2002). Burn (2009) found that when the bystander approach is implemented effectively, it can have some key benefits. First, by being willing to get involved, bystanders can help create new community norms to prevent sexual assault. A second benefit is an increased sense of responsibility of other bystanders to intervene when they watch a participating bystander. A third benefit is that using a bystander focused campaign removes much of the defensiveness that was found when prevention campaigns focused specifically on men, since bystander campaigns are meant to focus on entire communities and approach individuals as allies rather than potential victims or potential rapists. Other bystander interventions have evaluated if the bystander approach should be targeted to gender specific or group specific members, making the community approach less valued (see Foubert, 2000). For example, females may respond to a bystander situation differently than males, because they may feel less safe to step up in the situation depending on the location or for a multitude of other factors.

There is still much work to be done to understand the full effectiveness of bystander intervention (Burn, 2009), because while some findings have revealed promising results, there are still questions that researchers do not know on how to best train individuals about bystander intervention. Particularly at the start of bystander intervention research, scholars had a tendency to focus on individual level behavior change only (e.g., Berkowitz, 2002) or focus on male

interventions only (Foubert, 2000). Past research has evaluated bystander intervention training, focusing exclusively on its effectiveness for men (e.g., Berkowitz, 2002; DeKeseredy, Schwartz, & Alvi, 2000; Foubert, 2000). In these studies, the bystander approach has been used to create more empathy in fraternity men to take action during a sexually violent situation, utilized bystander intervention to focus specifically on individual level behavior change in sexually violent situations, and focus on targeting "profeminist men … to tilt the balance against male aggression" (DeKeseredy, Schwartz, & Alvi, 2000, p. 918). However, in more recent years, there has been a push to utilize bystander intervention for all individuals, regardless of sex, and evaluate change at the individual *and* community level (Banyard, Plante, & Moynihan, 2005). In particular the intervention teaches bystanders how to act during situations that may involve sexual violence, doing so from a model which offers all community members a specific role in which they are to identify and adopt prevention methods to stop their community problem of sexual violence (Banyard, Plante, & Moynihan, 2005). One of the primary goals of the bystander approach is to persuade an individual to see their role as directly influential and powerful to creating change in their community, and the individual has the ability to identify when and how to make changes in their community.

Much of this research has been championed by Banyard (see Banyard, 2008; Banyard, Moynihan, & Crossman, 2009; Banyard, Moynihan, & Plante, 2007; Banyard, Plante, & Moynihan, 2004; Banyard, Plante, & Moynihan, 2005), who evaluates the effectiveness of bystander intervention at the community level on university campuses. In particular, Banyard et al. first argued for the continued need to uncover how bystander intervention can influence community norms (Banyard, Plante, & Moynihan, 2004). In both Banyard, Plante, and Moynihan (2004) and Banyard, Plante, and Moynihan (2005), they synthesize research focusing

on community psychology and community change in order to outline areas of focus for sexual violence prevention in future work. They recommend increasing community receptivity to prevention messages by decreasing resistance to prevention messages so that communities, like college campuses, can increase their community members taking active roles to prevent sexual violence.

Building upon these ideas of community importance, Banyard, Moynihan, and Plante (2007) then created and evaluated a sexual violence prevention program that was based on a community of responsibility model for undergraduate students. In this study, they evaluated the influence of this model in "teaching men and women how to intervene safely and effectively in cases of sexual violence before, during, and after incidents with strangers, acquaintances, or friends" (p. 463). Overall, Banyard et al. (2007) found positive results for their program, finding that students in their treatment conditions showed improved bystander attitudes, knowledge, and behaviors when compared to the control group. They found this community approach was positive for both men and women.

Along with creating a new community-based sexual violence prevention program, Banyard also discusses various benefits and problems that come from the measures used to investigate bystander behavior. In Banyard (2008), she found that many of the measurements used for bystander intervention evaluation (i.e., bystander attitudes, bystander behaviors) are good, however, they are often limited by their lack of diverse sample populations. Banyard (2008) goes on to highlight, however, that these measurements are still important for research investigating sexual assault prevention.

Building upon her previous work, Banyard, Moynihan, and Crossman (2009) evaluate their bystander intervention program again, however, for this study they focused on the effects of

their program among a group of student leaders who had high levels of awareness of their campus community problems. These student leaders (resident advisors) were exposed to the bystander intervention program and evaluated by survey questionnaires immediately after viewing the program. It was found that, overall, their bystander intervention program was successful in increasing student empowerment to be a bystander in the future, even though they were students with already increased empowerment being student leaders.

Overall, Banyard's generally successful findings (i.e., increase in bystander efficacy) have been found throughout her studies and have contributed in large part to the bystander intervention research we have today. Banyard's findings have not been found by all researchers, however, as there are some studies which indicate the bystander approach may only work for particular groups of individuals rather than entire communities (see Gidycz, Warkentin, Orchowski, & Edwards, 2011).

There are currently three prominent bystander intervention programs being implemented on university campuses across the U.S.: "The Men's Program" (Foubert, 2005), a curriculum designed for males alone with a sexual assault and peer education focus; the "White Ribbon Campaign" (Kaufman, 2001), a campaign led by men for men to educate on sexual assault prevalence in college; and "The Green Dot Campaign" (Coker et al., 2014), a sexual assault prevention campaign that applies bystander intervention methods and targets all individuals. It is important to note that all of these programs primarily focus on male to female relationships, often targeting just men in their messaging and prevention efforts. Next, each of these bystander intervention campaigns will be detailed, highlighting how they have been evaluated in past research studies.

The Men's Program

The Men's Program was created by John Foubert and is described as a "workshop for college men that educates participants about what a rape feels like, how to help a woman recover from a rape experience, how to intervene as a bystander if they observe a situation that could turn into rape, and to make the participants less likely to commit sexual assault themselves" (Men's Program, 2019). In particular, the Men's Program combines a victim empathy approach with bystander intervention training in an all-male format in order to reduce sexual assaults caused by men (Foubert, 2000). The program is built on Belief System Theory, which suggests that in order to produce attitude change that lasts, interventions must maintain people's existing self-conceptions when they are designed (Foubert & Newberry, 2006). The Men's Program particularly "attempts to influence men by appealing to beliefs they are shown to have been about being potential helpers … [so] men as people can provide thoughtful support to female survivors who seek their assistance after surviving rape" (Foubert & Newberry, 2006, p. 134). This program attempts to decrease the acceptance of rape myths (i.e., the beliefs thought to support and perpetuate male sexual violence against women) (Payne, Lonsway, & Fitzgerald, 1999) in men in order to increase their empathy for rape survivors.

This program has been evaluated by a few studies (Foubert, 2000; Foubert & Marriott, 1997; Langhinrichesen-Rohling et al., 2011), usually finding that men who participate in the program have less incidents and less severe sexual assault incidents overall (Foubert et al., 2007). In particular, Langhinrichesen-Rohling et al. (2011) found that men who participated in The Men's Program were found to decrease their self-reported rape myth acceptance, increase their willingness to help as a bystander, and increase their own perceived bystander efficacy. In Foubert & Marriott's (1997) study, they only focused on the program's effect on rape myth acceptance, finding that men who participated in the program did decrease their rape myth

acceptance. The focus on this study's rape myth acceptance might have been due to the program being still in its development stage, rather than its current version. Overall, however, both studies found positive effects for men who participated in The Men's Program.

White Ribbon Campaign

The White Ribbon campaign is a men-only campaign which "asks men to wear white ribbons as a sign of their pledge to never commit, condone or remain silent about violence against women and girls" (White Ribbon Campaign, 2019). The campaign was started in Canada in 1991, with the primary goal of encouraging men to evaluate their behaviors and attitudes in order to challenge other men and their violence against women (Kaufman, 2001), by wearing a white ribbon and participating in a week-long campaign (DeKeseredy, Schwartz, & Alvi, 2000). To date, there were not found to be any studies which directly evaluate the effectiveness of the White Ribbon Campaign. However, there are numerous research studies which discuss the influence that the campaign can have on university campuses. For example, Lee, Caruso, Goins, and Southerland (2003) describe how the White Ribbon Campaign is an excellent daily campaign that can be used on a college campus to influence a large number of students, because it is able to influence those students in a short amount of time. The White Ribbon Campaign encourages male students to wear white ribbons as a pledge to never participate in violence against women and reach out to other students to promote their message through personal recruitment and setting up their campaign in a prominent location on campus. Berkowitz (2002) notes how an earlier version of the White Ribbon Campaign has been found to successfully change attitudes of men, based on viewing video of a male rape survivor sharing his story. Berkowitz also highlights how empathy induction programs, like the White Ribbon Campaign,

are a particularly helpful program approach to fostering men's responsibility for preventing sexual assault in the future.

The Green Dot Campaign

The Green Dot was developed by Dorothy J. Edwards in 2007, with a focus on bystander training in order to engage students in ways that decrease sexual violence through empowerment and active engagement with peers (Coker et al., 2014). Specifically, Green Dot is influenced by previous research utilizing diffusion of innovation (i.e., the belief that innovation is communicated through certain channels over time among the members of a social system) and previous research utilizing bystander intervention (i.e., the belief that an individual must overcome audience inhibition, social influence, and diffusion of responsibility before taking action in a situation) (Coker et al., 2011). The goal of Green Dot is to increase bystander intervention through increased bystander efficacy in situations of potential sexual violence, as well as decrease rape myth acceptance.

Evaluations of Green Dot have found that students exposed to the training reported lower rape myth acceptance scores and increased bystander behavior and efficacy when compared to students who did not interact with Green Dot (Coker et al., 2011; Coker et al., 2014). Coker et al. (2014) also found that campuses which implemented Green Dot had lower rates of violence victimization and perpetration (i.e., particularly lower rates of sexual harassment and stalking), compared to those who did not implement it. Finally, a third study evaluating Green Dot at high schools throughout the state of Kentucky found an increase in active bystander behaviors and a decrease in rates of violence and perpetration over time (Cook-Craig, Coker, Clear, et al., 2014). Next, some of these theories will be presented.

Theoretical Framework

Theory-based approaches are important to both developing and evaluating the effectiveness of health communication campaigns that target complex behaviors (Hornik & Yanovitzky, 2003; Rice & Atkin, 2001). There are a wide variety of theories that can be used to create and evaluate health campaigns, and some of the prominent frameworks include: Health Belief Model, Social Cognitive Theory, Extended Parallel Processing Model, and Theory of Planned Behavior (TPB) (Lederman, Kreps, & Roberto, 2017). In regard to health campaigns that focus on behavior change specifically, Wang (2009) argues that the TPB can "provide a more detailed theoretical explanation and more precise practical guidance regarding behavioral prediction" (p. 426). In this dissertation, the TPB will be the primary framework used to evaluate a bystander intervention campaign at a multi-campus university.

TPB is an extension of the Reasoned Action Theory (Ajzen & Fishbein, 1980) and consists of "the individual's *intention* to perform a given behavior" (Ajzen, 1991, p. 181). TPB posits that the strength of an individual's intent to engage in a behavior, the more likely that individual will be to actually perform that behavior. There are many components which comprise TPB, such as intentions, behavioral beliefs, normative beliefs, and control beliefs (Ajzen, 2002). Intentions are "assumed to capture the motivational factors that influence behavior" (Ajzen, 1991, p. 181), behavioral beliefs are thought to be "beliefs about the likely consequences or other attributes of the behavior" (Ajzen, 2002, p. 665), normative beliefs are the relative normative expectations of other people, and control beliefs are "the presence of factors that may further or hinder performance of the behavior" (Ajzen, 2002, p. 665). Although these components together can be measured to understand an individual's intention to perform a behavior, scholars can choose to focus on one of these components and their role in behavior change.

For example, Yee, Lwin and Lau (2019) found that the TPB was best complemented with interpersonal communication theory, in order to evaluate various interpersonal constructs in their study of parenting practices on child food consumption. Yee et al. (2019) administered a door to door survey to children in Singapore, asking them questions about how their active and restrictive parental guidance of their food consumption, their own attitudes towards consuming fruits and vegetables, their perceived norms and perceived behavioral control towards consuming fruits and vegetables, and also their intent to consume fruits and vegetables overall. By asking these questions, the researchers integrated the interpersonal concepts (i.e., active parental guidance, restrictive parental guidance) with the variables in TPB in order to predict child consumption of fruits and vegetables. Overall, Yee et al. (2019) found that active parental guidance was positively associated with all of the various constructs they utilized from the TPB.

Pulerwitz et al. (2019) utilized only the component of social norms, or normative belief, in their study of adolescent sexual and reproductive health in order to build upon the notion of social norms in TPB and create an additional framework for their own study. In particular, Pulerwitz et al. (2019) looked at the role of social norms as they influence adolescent sexual health. Specifically, they propose a conceptual framework that focuses on addressing social norms for adolescents, arguing that the intersection of various norms (e.g., gender, social, institutional, individual) is where the power to change health outcomes results from.

As shown through these studies, aspects of the TPB can be examined independently, and for this dissertation, I will be focusing on specific constructs from TPB (i.e., intent, efficacy, control behaviors) to evaluate the impact of bystander intervention campaigns. Next, the specific constructs of the TPB that will be utilized in this study will be detailed, highlighting how they can impact an individual's behavior change outcomes.

Intent

Banyard, Moynihan and Crossman (2009) suggest that TPB is a needed addition to bystander intervention research, as it encourages the evaluation of "external norms that may either support or discourage target behavior" (p. 450). In regards to bystander intervention, TPB helps to understand how an individual's intention to perform a bystander behavior may correlate to their actual behavior in becoming a bystander in a situation. In particular, Ajzen (1991) argues that intentions are central to TPB and "intentions are assumed to capture the motivational factors that influence a behavior; they are indications of how hard people are willing to try, of how much effort they are planning to exert, in order to perform the behavior" (p. 181). Ajzen notes, that in general, the stronger an individual intends to engage in a particular behavior, the more likely they will actually perform that behavior. Ajzen (1991) highlights that behavioral outcomes – or performing various behaviors – depends on an individual's intentions (i.e., motivation) and ability (i.e., behavioral control).

In past studies of bystander intervention, many scholars have only evaluated the bystander efficacy of an individual, measuring their prosocial attitudes. For example, Exner and Cummings (2011) evaluated undergraduate student bystander attitudes by asking them to complete a survey which looked at their bystander efficacy, readiness to change [behaviors], and barriers to intervention. Taking their findings, they argued that there is need for gender-specific prevention programming about sexual assault prevention, but only mentioned that the programming should address bystander attitudes about self-efficacy and potential barriers to bystander intervention. At times only evaluating bystander efficacy, some research has also chosen to focus on the role of the community in influencing bystander attitudes. As will be discussed in more detail below, Banyard (2011) argues that ecological models can suggest

"important community-level variables, such as campus size or cultural values, that may influence the degree of helping, and may, in some instances, be leverage points for creating change" (p. 216) in bystander intervention situations. Here, Banyard (2011) particularly argues for researchers to focus on evaluating community factors that may influence an individual's bystander behaviors.

Finally, some research has focused on the willingness of an individual to help in a situation compared to the likelihood that she or he will sexually assault someone in the future. In their study looking exclusively at college men, Foubert, Brosi and Bannon (2011) found that college men who view pornography are much less likely to intervene in bystander situations, and also are more likely to believe rape myths and have an increased intent to rape. Foubert et al. (2011) specifically evaluated how willing a student would be to help as a bystander, their bystander efficacy, and their likelihood of raping an individual. They argue that pornography can play a large role in an individual's bystander behaviors, highlighting how pornography viewing affects bystander willingness overall.

In short, many bystander intervention studies do not explicitly address how an individual's intent to perform an action may be connected to their actual action or behavior. Rather, they focus on an individual's bystander efficacy, rape proclivity, willingness to perform a behavior, or a combination of all of these. However, TPB argues that efficacy and intent are separate constructs that can lead to an individual's behavioral achievement. Intent indicates how much effort an individual is *planning* to offer in order to perform a bystander behavior, while efficacy is an individual's belief in whether *they have the ability* to perform bystander behavior. In order to illustrate the difference between these two constructs, consider the following example: There are two individuals who have equally strong intentions to learn how to play the

piano, and both try to do so. The person who is confident (i.e., self-efficacy) that she can become an expert in this activity is more likely to preserver than the person who doubts her ability to play. In this example, both individuals have intentions to learn to play the piano, but only the individual who had *both* intentions and efficacy ended with the behavioral outcome of learning to play the piano. Intentions alone do not always achieve a behavioral outcome. Conversely, belief in one's ability to play the piano but having no intention to practice playing does not necessarily achieve the desired behavioral outcome either. Looking at both constructs together, but as separate construct influences, helps to provide a more wholistic view of factors contributing to an individual's behavioral outcome – or their ability to actually learn how to play the piano. According to TPB, evaluating efficacy *and* intent can be more directly used to predict various behavioral achievements (Ajzen, 1991). As can be seen through this example, applying TPB to bystander intervention for sexual assault can be an important contribution to evaluating an individual's intention and likelihood of stepping in during a potentially dangerous situation.

Efficacy

In addition to measuring the intent of an individual to perform bystander behavior, efficacy – or an individual's belief in whether they have the ability to perform bystander behavior – is also a key aspect to this study. For the purpose of bystander intervention, efficacy can be thought of as self-efficacy, which argues that an individual's perception of her or his capabilities affects how she or he actually behaves in a situation, how much motivation she or he may have to act, and also displays an individual's emotions during a particularly taxing situation (Bandura, 1977). The study of self-efficacy has been applied to a wide variety of topics related to psychosocial functioning. Bandura, Adams, Hardy and Howells (1980) have evaluated self-efficacy as it relates to phobia. In their study, they recruited participants via newspaper

advertisements who identified as being adversely affected by snake phobias. Then, they asked participants to perform a variety of tasks relating to behavioral avoidance and fear arousal. Participants were given a pre-test and post-test to measure their self-efficacy, finding that those who were in the treatment conditions had increased strength in their self-efficacy relating to their ability to cope with their fear arousal.

Schunk (1991) discusses how self-efficacy relates to academic motivation for students in classroom settings. He argues that most research evaluating self-efficacy and academic motivation evaluates the role of self-efficacy and personal variables for an individual, like goal setting or information processing. Furthermore, Schunk (1991) argues that self-efficacy research highlights its utility for predicting motivational outcomes, and future research should continue to address the role of self-efficacy as it influences motivations and behavioral outcomes.

Finally, O'Leary (1985) evaluates how self-efficacy can influence various aspects of health behavior. Specifically, O'Leary (1985) reviewed numerous health articles to find that self-efficacy can help individuals cease smoking in relapse situations, finding that increased self-efficacy was significantly associated with a decrease in smoking at follow up appointments. Additionally, perceived self-efficacy was found to influence those who experience pain, finding that those with increased self-efficacy were able to cope with their pain better and tolerate their pain longer than those with lower self-efficacy. O'Leary (1985) also reviews studies on self-efficacy as it relates to: eating disorders, cardiac rehabilitation, and medical regimens. Overall, O'Leary (1985) argues that, taken as a whole, research shows that an individual's self-efficacy is often positively related to a decrease in smoking, increase in pain management or tolerance, management of eating to overcome eating disorders, increase recovery from cardiac trauma, and

increase an individual's adherence to medical regimens. As can be seen, self-efficacy has been found to influence a wide variety of health and psychosocial topics.

The application of self-efficacy to bystander intervention is an important theoretical construct, as it allows for an evaluation of an individual's belief in performing a bystander behavior. Arguably, if an individual does not believe she or he can perform a bystander behavior, she or he will not benefit from a bystander intervention. In a university setting, research has evaluated self-efficacy in many different ways, such as through the evaluation of grade achievement by university students (Thompson, Oberle, & Lilley, 2011), its ability to reduce an individual's alcohol consumption (Kraus et al., 2012), and specifically bystander efficacy for sexual assault prevention by fraternity men (Foubert, Brosi, & Bannon, 2011).

Thompson, Oberle, and Lilley (2011) evaluated self-efficacy in sorority and fraternity students, finding that students who were involved in Greek life had higher self-efficacy than non-Greek students, and Greek students exerted more effort to outperform non-Greek students in their academics. In their study, student self-efficacy was evaluated through a post-test survey, given to students after reading an article which they were told would be difficult. After reading the article, students were given a survey asking them a series of questions relating to their self-efficacy. From their findings, Thompson, Oberle, and Lilley (2011) argue that self-efficacy is key for Greek students in their academic effort, however, it does not necessarily lead to an improved academic performance.

Additionally, Kraus et al. (2012) evaluated prominent psychometric questionnaires that were designed to asses young adults' drinking self-efficacy, particularly in relation to alcohol reduction strategies. Kraus et al. (2012) found many of the psychometrics to be reliable, and also noted that women tend to report higher self-efficacy to use alcohol reduction strategies than men.

They also found that the level of an individual's self-efficacy in that moment did not seem to influence their binge drinking status overall. Kraus et al. (2012) argue for the importance of self-efficacy in influencing behavior change, particularly as it is related to an individual's future behaviors and ability to employ drinking reduction strategies.

For bystander intervention, efficacy is "one's perceived competence in helpfully responding to sexual assault risk" (Katz & Moore, 2013, p. 1056). Bystander education programs have found improved self-efficacy to be a primary outcome in their work. Katz and Moore (2013) conducted a meta-analysis that focused exclusively on bystander education programs for college students, evaluating studies that contained effect sizes based on comparisons between treatment and control conditions. In their study, they conducted six different meta-analyses in total, focusing on each different outcome found in bystander intervention programs: bystander efficacy, rape-supportive attitudes, intent to help, rape proclivity, outcomes associated with rape/sexual assault, and bystander helping behaviors. In their study, Katz and Moore (2013) found that half of their studies analyzed (12 studies total) included an evaluation of bystander efficacy, with moderate effects sizes observed for bystander efficacy across the studies. Overall, they found that bystander efficacy and intent to help others had the largest effects sizes (at moderate effect) of all of the six possible bystander outcomes. As can be seen in Katz and Moore's (2013) meta-analysis, efficacy is one of the key components found in the study of sexual assault prevention methods on university campuses, and it is one that is foundational to the understanding of why an individual may or may not perform bystander behavior in the future.

Perceived Control

Another key aspect of the TPB is the role of perceived control for an individual and how it influences her or his behavioral actions. In short, perceived control is the "perception that one

can take action to get desired outcomes" (Wrosch, Schulz, & Heckhausen, 2002; see also National Institute of Health, 2008). In particular, with the TPB, the notion of perceived control is comprised of two components: personal control and control strategy. Personal control is the belief that someone has the ability to act and achieve their desired outcome, while control strategy is someone's orientation or intent towards taking action in order to solve an outcome.

Perceived control has been utilized in a variety of studies evaluating health topics. Bobak, Pikhart, Hertzman, Rose, and Marmot (1998) evaluated how perceived control related to self-rated overall health for Russian citizens. They found that poor health status in Russia was significantly related to a lack of perceived control felt by its citizens, along with dysfunctional social structures and socioeconomic deprivation. In another study, Bailis, Segall, Mahon, Chipperfield and Dunn (2001) argue that the amount of perceived control an individual feels they have over life events is what underlies most of the social inequality in health. Specifically, they used data from the National Population Health Survey of Canada to evaluate if perceived control accounts for socioeconomic differences in self-rated health status, as well as in performance of health-related behaviors. They found that perceived control did account for socioeconomic differences in self-report health status for individuals. As mentioned previously, Yee et al. (2019) evaluated how perceived control influenced fruit and vegetable consumption for adolescents, finding an association between adolescents having perceived control (and also active parental guidance), with their fruit and vegetable consumption. For the purpose of bystander intervention, perceived control is an important aspect to evaluate in this study because it is one that has not been explicitly evaluated in previous bystander intervention research.

Understanding the role of perceived control – both personal control and control strategy – is important to uncovering aspects that may influence individuals to perform or not perform

bystander behaviors. Perceived control is central to the TPB, and it is also key to this study's evaluation of bystander intervention and bystander behaviors. TPB overall has been used to evaluate bystander intervention in past research. Abbot and Cameron (2014) utilized the TPB to measure indirect effects for bystander intervention behaviors of adolescents with intergroup contact. Specifically, they measured adolescent bystander intervention behaviors when they were exposed to: in-group bias, intergroup anxiety, empathy, and cultural openness. Overall, they found that intergroup contact on bystander intentions that were assertive had an indirect effect also on empathy, cultural openness, and in-group bias.

Additionally, Stueve et al. (2006) reviews how the TPB has been applied to the study of student bystander actions in relation to school violence. They highlight that TPB has revealed students often fail to notify adults about violence occurring for a variety of reasons, some of which being the influence of social norms and the student's lack of belief in their own reporting or the adult's belief in their reporting. Both Abbot and Cameron (2014) and Stueve et al. (2006) show the important role the TPB has contributed to the study of bystander behaviors. Next, an overview of the current study will be provided, highlighting its goals and approach to bystander intervention evaluation.

Study Context

The small, yet promising body of research on bystander intervention begs the question of its applicability to multiple universities across the U.S. This dissertation will contribute to a much needed evaluation of bystander intervention at the UW, which is a university that has a markedly different student population, geographic location, and style of implementation than institutions evaluated in extant research studies.

It is important to study bystander intervention at the UW for a variety of reasons. First, bystander intervention has never been evaluated at the UW since its implementation in 2010, on any of its campuses. It is imperative to uncover if this program is effective on UW campuses, if funds should continue to be spent on this program, or if another program may be a better fit. Second, by studying bystander intervention, this dissertation will contribute to needed scholarship evaluating the program's effectiveness, or lack thereof, at universities in the U.S. Finally, evaluating bystander intervention at UW is important because all campus locations will directly benefit from the findings of this dissertation. Conducting this evaluation can potentially contribute to adjustments and new program tailoring for UW Seattle, Bothell, and Tacoma, which holds great benefits for each of the campuses and for UW as a whole. With these contributions in mind, this study evaluates bystander intervention at each campus of the University of Washington, and also considers how bystander intervention affects the University of Washington as a whole. Additionally, this study will evaluate specific aspects of bystander intervention, noting its influence on student bystander behaviors, specifically evaluating: bystander efficacy, bystander intent, and perceived bystander behaviors. In order to evaluate these constructs and contribute to the larger scholarship on bystander intervention, this study examines a set of twelve research questions.

Research Questions

In order to evaluate how bystander intervention is implemented, understood, and retained on the University of Washington campuses, the aims of this dissertation are threefold:

Aim 1: Evaluate how students at the University of Washington learn about bystander intervention

Aim 2: Evaluate how students at the University of Washington perform bystander behaviors to help prevent sexual assault

Aim 3: Evaluate how students at the University of Washington intend to be a bystander in the future

To address these aims, this research study employed quantitative methods, using surveys to examine twelve research questions. As previously described, all three UW campuses implement bystander intervention in different variations, so it would make sense that each campus would differ from one another since they implement different training programs, provide different resources, and have different student populations. Therefore, the first research question examines differences between the UW campuses:

RQ1: How do the three UW campuses (i.e., Seattle, Bothell, Tacoma) differ from one another on students' bystander efficacy and intent when not considering formal bystander intervention exposure?

As discussed, *bystander efficacy* is central in predicting if an individual will actually act as a bystander. Thus, the next set of research questions evaluate how *bystander efficacy* might be impacted by a variety of constructs. Basic campus differences are not the only factors which may influence student interaction with their bystander intervention campaigns on campus. Before evaluating how campaign exposure influences students at the UW, it is important to look at three constructs. These perceived behavioral constructs come from the Theory of Planned Behavior and may influence how an individual makes a behavioral decision for an outcome – or in this case – becomes a bystander. TPB suggests that perception and control can be key factors in an individual's decision to make a behavior change. Therefore, the next three research questions

evaluate the constructs of *personal control*, *control strategy*, and *perceived exposure,* as they relate to bystander efficacy:

RQ2: What is the association between **personal control** and UW college students' **bystander efficacy** to perform bystander behavior?

RQ3: What is the association between **control strategies** and UW college students' **bystander efficacy** to perform bystander behavior?

RQ4: What is the association between **perceived bystander intervention exposure** and UW college students' **bystander efficacy** to perform bystander behavior?

Since bystander intervention has yet to be evaluated at the UW, the next two research questions examine if the current bystander intervention implementation at the university is influencing students to have greater bystander efficacy and become bystanders in the future, and how such associations differ by campus:

RQ5: What is the association between **formal bystander intervention exposure** and UW college students' **bystander efficacy** to perform bystander behavior?

RQ6: How does the association between **formal bystander intervention exposure** and UW college students' **bystander efficacy** differ by **campus** (i.e., Seattle, Bothell, Tacoma)?

In addition to bystander efficacy, the role of *intent* is also central in predicting if an individual will actually act as a bystander. Thus, the next set of research questions mirror the previous ones, but with a focus on intent rather than efficacy:

RQ7: What is the association between **personal control** and UW college students' **intent** to perform bystander behavior?

RQ8: What is the association between **control strategies** and UW college students' **intent** to perform bystander behavior?

RQ9: What is the association between **perceived bystander intervention exposure** and UW college students' **intent** to perform bystander behavior?

RQ10: What is the association between **formal bystander intervention exposure** and UW college students' **intent** to perform bystander behavior?

RQ11: How does the association between **formal bystander intervention exposure** and UW college students' **intent** to perform bystander behavior differ by **campus** (i.e., Seattle, Bothell, Tacoma)?

In addition to influencing efficacy and intent, bystander intervention campaigns can also help bridge students' access to important resources. The final research question examines how exposure to formal bystander intervention affects a student's knowledge of the bystander resources around them:

RQ12: What is the association between **formal bystander intervention exposure** and UW college students' **knowledge of bystander resources** by **campus** (i.e., Seattle, Bothell, Tacoma)?

Chapter III: Research Methodology

This quantitative study sought to understand and evaluate the effectiveness of bystander intervention programs that have been implemented at a tri-campus university. Specifically, this study evaluated how bystander intervention program exposure is associated with student self-efficacy to perform bystander behaviors, student intent to perform bystander behaviors, student knowledge of bystander intervention resources, and whether there is a difference in student bystander behaviors by campus exposure. Students at all three campuses were recruited to complete an online survey, which was tailored as needed, to each location. The Institutional Review Board of the University of Washington approved the survey used in this study to assess bystander intervention behaviors, efficacy, intent, exposure, and rape myth acceptance (IRB Protocol #00005189). This chapter describes the study methodology, including: the study setting; the study procedures including instrumentation; variables and measures. Finally, this chapter closes by sharing the data analysis conducted for this dissertation.

Study Site

The University of Washington (UW) was founded in 1861 and is one of the oldest universities in the state of Washington. The UW is comprised of three campus sites, with one campus site located in the neighborhood of University District, about 15 minutes from downtown Seattle. The other two campus sites of the university were formed in 1990 and started out as extension branches of the main campus site, targeting the residence of two other regions –Bothell and Tacoma. These three campuses of the UW are comprised of very different student populations. Next, a brief profile of each campus site will be shared. It is important to highlight the differences among the campuses because these differences are key to how and why each campus site may learn, understand, and perform bystander intervention behaviors differently. For

this dissertation, time was spent at each campus site and relationships were built with key administrative stakeholders at each location. Additionally, data collection was tailored to each campus site, allowing questions and selection options to utilize "campus site specific language" in order to more effectively capture the knowledge and understanding of bystander intervention on each of the three UW campus sites.

UW Seattle

Figure 1. *University of Washington - Seattle "W" on main campus*

The University of Washington - Seattle campus site is the largest of all the UW campuses and is considered the "main campus" of the university. The UW Seattle campus was founded in 1861 and as of 2018, had a total undergraduate population of 30,553 students. With the largest enrollment, the Seattle campus receives the most funding for various student programming. Demographically, most students at UW Seattle live within the city of Seattle and do not commute far to get to campus. There are very few transfer students to this main campus, and most students are within the age range of 18 to 24 years old. On this campus, many undergraduate students have access to bystander intervention trainings and resources, as well as peer health educators, victim advocates, a university Title IX coordinator, and a counseling center on the campus itself - usually free of cost. UW Seattle has been implementing the

bystander intervention program “Green Dot,” described in Chapter Two, on its campus since 2010. However, because “Green Dot” training has not been a requirement for students to attend, many UW Seattle undergraduate students may not have heard or learned of bystander intervention during their four years at UW Seattle. A full table showing the comparisons between campuses can be found in Table 2 at the end of this section.

UW Bothell

Figure 2. *University of Washington - Bothell “W” on its campus*

UW-Bothell is the second largest campus site, although only slightly larger than UW-Tacoma, having an undergraduate population of 5,175 students. UW-Bothell is located in the city of Bothell, which is about a 25-minute drive north from downtown Seattle. UW-Bothell was founded in 1990 in an attempt by UW-Seattle to reach out and serve other residents in Washington state’s Puget Sound region. UW-Bothell primarily serves two counties north of Seattle, North King and Snohomish, but there are students who commute to UW-Bothell from outside of those regions. The campus of UW-Bothell is shared with another college and is a fully accredited 4-year campus. In recent years, UW-Bothell has renovated their buildings to be more modern and updated with advanced technology, even winning architecture awards in the early 2000s.

UW-Bothell is known for being a commuter campus, however, there is one residence hall located on campus. Similar to UW Seattle, the undergraduate students at UW-Bothell are primarily between the ages of 18 to 23 years old. On this campus, undergraduate students are required to receive an hour-long bystander intervention training, a custom training program developed through the joint efforts of the Orientation Programs and the Recreation and Wellness departments on campus. Additionally, students at UW-Bothell have access to bystander intervention resources, as well as an on-campus Advocate. If a student is willing to commute to UW-Seattle, the student has access to the university Title IX coordinator.

UW Tacoma

Figure 3. *University of Washington - Tacoma "W" on its campus*

UW-Tacoma is the smallest of the three UW campus sites, with an undergraduate student population of 4,402 students. UW-Tacoma is located in the city of Tacoma, which is about an hour drive south of downtown Seattle. UW-Tacoma was founded at the same time as UW-Bothell in 1990 and was started when local Tacoma business leaders and legislators petitioned to open a public university in Tacoma in an effort to reduce the wide education gap between Pierce County (which is the county directly south of King County and Seattle) and King County. UW-Tacoma primarily serves Pierce County, which is comprised of many smaller rural towns.

Almost all of UW-Tacoma students commute to the campus, and most of its student body does not live in the city of Tacoma, but rather commutes from a smaller town. Since 2006, UW-Tacoma has become both an accredited 4-year institution and a primary source of degree acquisition for Pierce County residents, who still dramatically lag behind King County residents in education attainment.

UW-Tacoma's student profile is distinct from UW Bothell and UW Seattle in that its average student population commutes further distances (around 30 minutes one way) and is primarily comprised of single, full time working parents who are taking classes in order to complete a previously started degree. On this campus, undergraduate students do not have access to any bystander intervention trainings or prevention programs and resources. There are no victim or support advocates at UW-Tacoma, however, the Associate Director of Student Engagement recently decided to take a more active role in sharing sexual assault resources via posters in campus bathrooms, in an attempt to address a lack of resources and support for students. When I interviewed key stakeholders at UW-Tacoma, it was shared that students who experience sexual assault, rape, or would like to learn more about bystander intervention can drive up to the UW-Seattle campus and take advantage of the trainings, Victim Advocate, and Title IX coordinator there. Additionally, if UW-Tacoma students would like to report an incident that occurred on campus, they can report to the Tacoma Police Department and also drive up to Seattle to report to the University of Washington Seattle Police Department, since UW-Tacoma does not have a university police department. In short, because of a lack of funds and administrative support, UW-Tacoma relies on the resources and trainings of UW-Seattle to be shared with their students. Table 2 summarizes the comparisons across campuses:

Table 2
University of Washington Campus Comparisons

	Seattle	*Bothell*	*Tacoma*
Demographics			
Total Undergraduate Population	30,553	5,175	4,402
% Transfer Students	6%	15%	64%
Mean Student Age	20 years	22 years	24 years
Student Bystander Programs & Resources			
Student Trainings	No - available on request	Yes - required at orientation	No
Poster Campaign	No	Yes	No
Staff/Faculty Trainings	Yes - offered but not required	Yes - offered but not required	No
Staff Support for Bystander Intervention	Yes (2 staff, 1 student)	Yes (1 staff)	No
University Funding for Bystander Intervention	No	Yes	No
Peer Educators on Bystander Intervention	Yes	Yes	No
Victim Advocate	Yes	Yes	No
Campus Police	Yes	Yes	No
Title IX Coordinator on Campus	Yes	Yes	No

Data Collection Procedures

Recruitment

Participants were recruited from the University of Washington during the fall (September to December) of 2018. In order to participate in the study, participants needed to be UW students and at least 18 years of age. For all campus sites, students were recruited from a variety of courses offered during the fall 2018 quarter, primarily targeting recruitment from large lecture classes in the Department of Communication, School of Public Health, Mathematics, Business, Women's Studies, Art, and Computer Science. Individual instructors were emailed a description of the study, asked if they would be willing to share the study with their classes, and were provided with a link for students to access the study online. At the discretion of individual instructors, extra credit may have been offered to students in return for their participation in the survey.

For both the Bothell and Tacoma campus sites, classroom recruitment was supplemented by additional methods. At UW Bothell, participants were emailed an announcement about the survey from their Associated Student Club (i.e., ASUWB) president. For Tacoma, participants

were notified about the survey in two additional ways. First, the study was posted on a UW Tacoma specific research study platform, SONA, where students at the campus can participate in any study approved on the SONA site for "research credit." This study was approved by the UW Tacoma SONA research coordinator and students were allowed to participate in the survey for 1 "research credit." Second, UW Tacoma students were recruited through various UW Tacoma-specific advertisements: TV announcements, Twitter and Instagram posts with the survey link, and an all campus email with the survey listed as a campus opportunity.

All participants who completed the survey were provided the option of entering into a drawing in order to win one of 5 gift cards valued at $50 each. Those who wished to participate in the study were directed to an online survey, hosted by Qualtrics, an online survey-hosting site.

Survey Design

A pilot survey was administered in the summer of 2018 to test various measures and comprehension of the survey. The pilot survey included 87 participants who were students enrolled at the University of Washington Seattle campus. Nine participants were excluded from data analysis because they either did not explicitly consent to participate in the study or they did not answer past the third question and their surveys were deemed incomplete. Therefore, 78 participants remained in this pilot survey sample. The pilot survey allowed for fine tuning of wording, survey flow, and testing for variable multicollinearity (i.e., where one predictor in a regression model can be predicted linearly from another predictor variable or variables). In particular, an agreement analysis was conducted to evaluate the validity of the gender-neutral IRMA scale, as well as comparison analysis was conducted to ensure the variables 'Intent' and 'Efficacy' did not result in multicollinearity. Results from the pilot survey indicated positive

results, allowing for a full survey to be administered to all students by ascertaining reliability and validity from the pilot survey.

The survey began by presenting a consent form for the participant to read and check, "Yes, I agree to participate in this survey" or "No, I do not agree to participate in this survey." Participants who selected "No, I do not agree to participate in this survey" were exited from the survey and no data was collected. For those who gave consent, they were asked a series of demographic questions (e.g., gender, sexual orientation, ethnicity, year in school, gender, age, major). After completing these demographic questions, they were asked to indicate which UW campus site they attended (i.e., Seattle, Bothell, Tacoma). Based on their selection, participants were then presented a survey tailored to their campus site. Specifically, display logic was used throughout the survey in order to ask questions that were campus specific (e.g., Did you attend orientation at UW Bothell this year?) and used campus-specific language (e.g., "Have you attended a Green Dot training?" vs. "Have you attended a bystander intervention training"?).

After selecting which campus site the participant was affiliated with, a series of questions evaluating exposure to bystander intervention programs while attending their campus were asked (i.e., Have you ever had any exposure to bystander intervention on your campus? Bystander intervention is recognizing a potentially harmful situation or interaction and choosing to respond in a way that could positively influence or change the outcome). Participants were asked questions related to both formal and informal bystander intervention programs, trainings, and presentations. After, participants were asked a series of questions about their perceived level of exposure, intent, personal control, and control strategy to perform bystander behaviors in future situations.

Following these questions, participants were presented campus site-specific questions that evaluated participant memory and knowledge levels of various campus bystander related questions and programs that are being implemented at the campus. These questions were created with campus stakeholders and a list of these campus site-specific questions can be found in Appendix A.

After answering their campus site-specific questions, participants were presented bystander efficacy scale (BES) questions, which asked them to rank their confidence in performing a bystander action in a variety of bystander situations. The BES scale is composed of 14 different bystander action items and is detailed in the 'Measures' discussion below. Finally, participants were presented a series of questions evaluating their rape myth acceptance, specifically utilizing a new gender-neutral scale based on the Illinois Rape Myth Acceptance Scale (IRMAS) - short form.

Once participants completed these survey questions, they were seamlessly linked to an additional Qualtrics survey which asked participants the following: 1) would they like to be contacted for a follow up interview; 2) were they receiving extra credit for taking the survey, and if so, to include their name and instructor's name; 3) if they would like to enter their name into a drawing for a gift card. Participant data was not associated with the survey data, so participants were able to enter their names for the gift card drawing and provide their name for class extra credit, but not have that data be connected to their survey data. All survey data was anonymous. A full survey outline, including survey questions, can be found in Appendix B.

Survey Participants

A survey was administered in the fall of 2018 (from September to December) to students on each of the three University of Washington campuses. The survey included 752 participants

who were students enrolled at any of the University of Washington campuses. After data cleaning,[1] the final dataset used for analysis contains 678 participants. First, a description of all survey participant characteristics will be shared, followed by each campus site's specific descriptive statistics.

The survey sample predominantly included female (*n*=475; 70%) and heterosexual (*n*=602; 89%) participants. Campus site was largest for Seattle, with 52% attending the Seattle campus (*n*=351), followed by 32% attending the Tacoma campus (*n*=218), and 16% attending the Bothell campus (*n*=109). Participants identified as seniors (*n*=273; 40%), juniors (*n*=196; 29%), sophomores (*n*=91; 13%), first years (*n*=69; 10%), fifth year seniors (*n*=17; 3%), and other (*n*=31; 5%). Participants identified their ethnicity as Asian (*n*=293; 43%), White (*n*=238; 35%), Hispanic/Latino (*n*=63; 9%), African American/Black (*n*=32; 5%), Other (*n*=29; 4%), Middle Eastern (*n*=13, 2%), Native Hawaiian/Pacific Islander (*n*=7; 1%), and American Indian/Alaskan Native (*n*=2, 0%). Participants ranged in age from 18 to 31+ years (*M*=21.5; *SD*=3.27). Participants reported predominantly to not be religious (*n*=396; 58%), not live on campus (*n*=540; 80%), and were not a member of a fraternity or sorority if that was offered on their campus (*n*=463; 68%). A full list of descriptive statistics for all survey participants' demographic characteristics (i.e., age, sex, sexual orientation, year in school, etc.), as well as participant demographic data by campus are provided in Table 3:

[1]Seventy-four participants were excluded from data analysis because they either did not consent to participate in the study or they did not answer the survey past the third question and were deemed incomplete surveys.

Table 3

Demographic Characteristics of Survey Participants (N=678)

	Total Participants (*N*=678)		Seattle Campus (*N*=351)		Bothell Campus (*N*=109)		Tacoma Campus (*N*=218)	
Demographic Characteristics	%	*n*	%	*n*	%	*n*	%	*n*
Gender								
Female	70%	475	68%	238	72%	79	72%	158
Male	29%	195	32%	111	25%	27	26%	57
Transgender	1%	4	0%	1	1%	1	1%	2
Do not identify as any of the above	1%	4	0%	1	2%	2	0%	1
Missing	-	-	-	-	-	-	-	-
Ethnicity								
Asian	43%	293	50%	174	43%	47	33%	72
White	35%	238	34%	118	28%	30	41%	90
Hispanic/Latino	9%	63	7%	23	13%	14	12%	26
African American/Black	5%	32	3%	12	6%	6	6%	14
Middle Eastern	2%	13	2%	6	5%	5	1%	2
Native Hawaiian/Pacific Islander	1%	7	1%	3	1%	1	1%	3
American Indian/Alaskan Native	0%	2	0%	1	0%	0	0%	1
Other	4%	29	4%	13	6%	6	5%	10
Missing	0%	1	0%	1	-	-	-	-
Sexual Orientation								
Straight	89%	602	92%	323	88%	96	84%	183
Gay or Lesbian	2%	15	2%	6	5%	5	2%	4
Bisexual	7%	48	5%	17	6%	7	11%	24
Do not identify as any of the above	2%	12	1%	4	1%	1	3%	7
Missing	0%	1	0%	1	-	-	-	-
Age								
18 years	10%	71	5%	16	22%	24	14%	31
19 years	15%	99	11%	38	26%	28	15%	33
20 years	18%	123	24%	83	13%	14	12%	26
21 years	26%	177	37%	129	15%	16	15%	32
22 years	10%	68	13%	45	5%	5	8%	18
23 years	5%	33	5%	16	6%	6	5%	11
24 years	2%	12	1%	5	1%	1	3%	6
25 years	2%	11	0%	1	3%	3	3%	7
26 years	2%	14	1%	4	2%	2	4%	8
27 years	1%	6	0%	1	3%	3	1%	2
28 years	1%	4	0%	0	0%	0	2%	4
29 years	2%	16	1%	2	4%	4	5%	10
30 years	0%	3	0%	0	1%	1	1%	2
31+ years	5%	37	2%	7	2%	2	13%	28
Missing	1%	4	1%	4	-	-	-	-
Year in School								
First Year	10%	69	2%	7	28%	30	15%	32
Sophomore	13%	91	11%	38	14%	15	17%	38
Junior	29%	196	30%	104	22%	24	31%	68
Senior	40%	273	53%	186	31%	34	24%	53
5th Year Senior	3%	17	3%	9	4%	4	2%	4
Other	5%	31	2%	7	1%	1	11%	23
Missing	0%	1	0%	0	1%	1	-	-
Greek Life Member								
Yes	12%	83	23%	80	3%	3	0%	0
No	68%	463	77%	269	64%	70	57%	124
There are no sororities or fraternities on this campus	19%	127	-	-	31%	34	43%	93
Missing	1%	5	1%	2	2%	2	0%	1

Live on Campus								
Yes	20%	136	28%	99	9%	10	12%	27
No	80%	540	72%	251	90%	98	88%	191
Missing	0%	2	0%	1	1%	1	-	-
Transfer Student								
Yes	33%	224	24%	85	27%	29	50%	110
No	67%	451	75%	264	72%	79	50%	108
Missing	0%	3	1%	2	1%	1	-	-
Academic College								
Arts	1%	7	0%	1	0%	0	3%	6
Built Environments	0%	2	0%	1	0%	0	0%	1
Business	8%	56	1%	4	10%	11	19%	41
Education	2%	12	0%	1	9%	10	0%	1
Engineering	2%	15	2%	7	5%	5	1%	3
Environment	1%	4	1%	3	0%	0	0%	1
Humanities	2%	11	2%	8	0%	0	1%	3
Information School	1%	9	2%	6	0%	0	1%	3
Medicine	0%	1	0%	1	0%	0	0%	0
Natural Science	21%	141	9%	32	34%	37	33%	72
Nursing	0%	2	0%	1	0%	0	0%	1
Public Health	7%	49	5%	18	25%	27	2%	4
Social Science	46%	311	72%	251	5%	5	25%	55
Social Work	1%	4	0%	0	0%	0	2%	4
Undeclared	6%	42	3%	11	10%	11	9%	20
Missing	2%	12	2%	6	3%	3	1%	3
Religious Affiliation								
Yes	41%	278	39%	138	42%	46	43%	94
No	58%	396	60%	212	56%	61	56%	123
Missing	1%	4	0%	1	2%	2	0%	1
Formal Exposure to Bystander Intervention								
Yes	18%	122	27%	95	15%	16	5%	11
No	81%	552	72%	254	84%	92	94%	206
Missing	1%	4	1%	2	1%	1	0%	1
Time From Exposure to Formal Bystander Intervention								
Less than 1 week ago	4%	5	2%	2	13%	2	9%	1
1-2 weeks ago	2%	3	3%	3	0%	0	0%	0
3-4 weeks ago	0%	0	0%	0	0%	0	0%	0
1 month ago	7%	8	5%	5	6%	1	18%	2
2 months ago	3%	4	1%	1	19%	3	0%	0
3-6 months ago	15%	18	19%	18	0%	0	0%	0
7-11 months ago	10%	12	13%	12	0%	0	0%	0
1 year ago	25%	31	28%	27	6%	1	27%	3
2 years ago	15%	18	15%	14	19%	3	9%	1
3 years ago	2%	3	2%	2	6%	1	0%	0
4 or more years ago	1%	1	1%	1	0%	0	0%	0
Missing	16%	19	11%	10	31%	5	36%	4
Attended Orientation (Bothell campus only)								
Yes	-	-	-	-	41%	45	-	-
No	-	-	-	-	58%	63	-	-
Missing	-	-	-	-	1%	1	-	-
Total IRMA Score (max=110)								
0-21	26%	174	23%	79	24%	26	32%	69
22-32	34%	229	33%	117	35%	38	34%	74
33-42	19%	131	20%	70	20%	22	18%	39
43-52	11%	75	10%	36	16%	18	10%	21
53-62	2%	13	2%	6	2%	2	2%	5
63-72	0%	0	0%	0	0%	0	0%	0
73-82	0%	0	0%	0	0%	0	0%	0
83-92	0%	1	0%	1	0%	0	0%	0
93-110	0%	0	0%	0	0%	0	0%	0
Missing	8%	55	12%	42	3%	3	4%	10
IRMA Subscale Score Average								
She Asked For It (min=6; max=30)	-	11	-	11	-	11.1	-	10
He Didn't Mean To (min=6; max=30)	-	12	-	12	-	12.9	-	12
It Wasn't Really Rape (min=5; max=25)	-	7	-	7	-	6.6	-	6.5
She Lied (min=5; max=25)	-	10	-	10	-	10	-	10

Measures

This dissertation evaluated many different variables for analysis. Variables were chosen based on various theoretical conceptualizations about undergraduate bystander intervention programs, knowledge retention, and bystander efficacy. Next, the variables used in this analysis are grouped by categories. First, the category will be explained, followed by the variable and a description of how it was measured.

Bystander Intervention Exposure

The variables under this category measure an individual's exposure to any mechanism of a bystander intervention campaign. Bystander intervention exposure can vary by type and frequency.

Formal exposure. Formal exposure is used as a primary independent variable in the study analyses. The variable identifies if a participant has had any exposure to bystander intervention programs on their university campus. Participants were evaluated on their exposure to their UW campus bystander intervention training. Specifically, they were asked, "Have you ever had any exposure to [Green Dot or] bystander intervention on your campus? Bystander intervention is recognizing a potentially harmful situation or interaction and choosing to respond in a way that could positively influence or change the outcome." Formal exposure is a binary variable, with 'yes' or 'no' as the response options.

Perceived level of exposure. Perceived level of exposure is a primary independent variable in the study analyses. The variable identifies the extent to which the participant perceives their amount of exposure to bystander intervention programs on their university campus. Specifically, participants were asked, "Thinking about the types of bystander intervention experiences you said you've been exposed to, if you rate your total exposure to

bystander intervention experiences on a scale of 1 to 5, with 1 being 'very little' and 5 being 'very great,' *how much exposure do you feel like you've had overall to bystander intervention*? Perceived level of exposure is evaluated on a 5-point likert scale, from 'very little' to 'very great.' Higher scores indicate more perceived exposure to bystander intervention by a participant. All participants were asked this question, regardless if they had indicated that they had received prior formal exposure or not.

Time from Exposure. Time from exposure is a secondary independent variable in the study analyses. The variable is the length of time from formal exposure to UW campus bystander intervention programs. Participants who selected 'yes' to receiving formal bystander intervention exposure were asked "How long ago did you see, hear, or participate in the bystander intervention activities you selected in the previous question?" There were 11 response categories, with the categories being 'Less than 1 week ago,' '1-2 weeks ago,' '3-4 weeks ago,' '1 month ago,' '2 months ago,' '3-6 months ago,' '7-11 months ago, '1 year ago,' '2 years ago,' '3 years ago,' and '4 or more years ago.' Time from exposure was treated as a nominal variable in the analysis, where the categories were collapsed into one dichotomous variable as time from exposure being within the past year ago or one year or more.

Bystander Behaviors

The variables under this category all involve variables used in this study relating to participant bystander behaviors. Bystander behaviors relate to a participant's efficacy, control, and intentions.

Personal Control. Personal control is a primary independent variable in the study analyses. The variable is the personal control a participant feels she or he has in knowing what to do in a bystander intervention situation. In particular, this variable comes from the Theory of

Planned Behavior. For this variable, participants were asked, "On a scale of 1 to 5, with 1 being 'not confident at all' and 5 being 'very confident,' how confident are you *that you would know what to do* to positively change the outcome if you saw a potentially harmful situation or interaction?" Personal control is evaluated on a 5-point likert scale, from 'not confident at all' to 'very confident.' Higher scores indicate more personal control in knowing what to do in a bystander intervention situation by a participant.

Control Strategy. Control strategy is a primary independent variable in the study analyses and is the control strategy that a participant feels she or he will have to perform in bystander situations. Control strategy is a second control variable which comes from the Theory of Planned Behavior. In particular, this variable indicates the control of action, or intentions, of a participant to perform bystander behaviors in the future. For this variable, participants were asked, "On a scale of 1 to 5, with 1 being 'not confident at all' and 5 being 'very confident,' how confident are you *that you would do something* to positively change the outcome if you saw a potentially harmful situation or interaction?" Control strategy is evaluated on a 5-point likert scale, from 'not confident at all' to 'very confident.' Higher scores indicate a higher control strategy (or intent) in actually doing something in a bystander intervention situation by a participant. There was a concern that this variable would have multicollinearity with the variable, *personal control*. Initial analysis using the pilot survey data suggested that they were discrete measurements. Specifically, after conducting an agreement analysis, there was found to be a 59% agreement between the two variables. Therefore, both variables were kept for the final analysis.

Bystander Efficacy Scale (BES). Bystander Efficacy Scale (BES) is a primary dependent variable in the study analyses. This variable is the total bystander efficacy score for a participant, with scores ranging from 0 to 100 and is evaluated using the Bystander Efficacy

Scale (BES). A modified BES was developed by Banyard, Plante, and Moynihan (2005), and is a set of 14 items relating to bystander behavior. The 14-item scale is based on past work by LaPlant and Banyard (2002) and has been validated by Banyard, Plante and Moynihan (2005) and has a Cronbach's alpha at .87 (M=20.55, SD=14.19). Participants were asked to indicate their confidence, on a scale of 0 ("can't do") to 100 ("very certain can do"), in performing 14 bystander behaviors. For example, participants were asked to rate their degree of confidence for some of the following: "Express my discomfort if someone says that rape victims are to blame for being raped," "Ask a friend if they need to be walked home from a party," and "Do something to help a very drunk person who is being brought upstairs to a bedroom by a group of people at a party." Scores were calculated by taking the average of the 14 items to create one BES score. Higher scores indicate greater perceived bystander ability to perform bystander behaviors.

Intent. Intent is a primary dependent variable in the study analyses. Intent is the self-reported likelihood a participant will perform bystander behavior in a future bystander intervention situation. First, participants were asked, "On a scale of 1 to 5, where 1 means 'not at all likely' and 5 means 'extremely likely,' how likely is it that you would act if you were in each of the scenarios below." The two scenarios were: 'You are at a party or public location and you see a very drunk person being taken to another room by a group of individuals' and 'You are at a party or public location and think your friend may need to be walked home.' Second, participants were asked, "On a scale of 1 to 5, where 1 means 'not at all likely' and 5 means 'extremely likely,' how likely is it that you will actually be in each of the scenarios below." The two scenarios were: 'You need to step in to say or do something when at a party or public location and you see a very drunk person being taken to another room by a group of individuals' and

'You are at a party and ask your friend if they need to be walked home.' Intent is evaluated on a 5-point likert scale, from 'not at all likely' to 'extremely likely.'

Scores were created by taking the sum of the questions to create one comprehensive intent measure. Higher scores indicate greater intent to perform a bystander behavior in a bystander intervention situation by a participant. Four items comprised in two questions were used to create one overall *Intent* variable in order to adequately capture a participant's intent to become a bystander. Past research that has evaluated bystander intent often evaluate intent by asking how often an individual plans to act in a bystander situation in the future (see Ahrens, Rich, & Ullman, 2011; Banyard, Plante, & Moynihan, 2004). This study asked participants if they plan to act in future bystander situations, but also if they believe they will even be in those situations. This study argues that asking both the likelihood of *being in* and *acting in* bystander situations creates a more well-rounded understanding of a participant's intent to become a bystander in the future.

Bystander Characteristics

The variables under this category measure an individual's characteristics that may influence their action of being a bystander.

Age. Age is a control variable in the study analyses and is the age of the participant. Specifically, participants were asked, "What is your age?" Response options ranged from '18 years' to '31+ years.'

Gender. Gender is a control variable in the study analyses and is the gender of the participant. Specifically, participants were asked, "How do you describe yourself (check one)?" There were four categories of selection, with the categories being 'Female,' 'Male,' 'Transgender,' and 'Do not identify as any of the above.' Gender was evaluated in three ways: 1)

with all four response categories; 2) with three response categories (i.e., 'Female,' 'Male,' and 'Other') where the categories of 'Transgender' and 'Do not identify as any of the above' were collapsed into one variable – 'Other' – because of their extremely small cell counts; and 3) as a binary variable (i.e., 'Female' and 'Male) where the categories of 'Transgender' and 'Do not identify as any of the above' were removed from analysis.

It was decided to exclude 'Transgender' and 'Do not identify as any of the above' from analysis in order to create one binary variable of gender containing the categories of 'Female' and 'Male.' Due to the very small number of students who identified as 'Transgender' or 'Do not identify as any of the above,' these participants were excluded from some of the statistical tests requiring a minimum cell count of six or more. In the future, a similar study that focuses on this issue from a transgender perspective is warranted.

Gender-neutral IRMAS Scale. The gender-neutral IRMAS scale is a secondary independent variable in the study analyses. This variable is the total rape myth acceptance score for a participant and is evaluated using an updated new scale based on the Illinois Rape Myth Acceptance scale (IRMAS-SF). IRMAS was created and validated by Payne, Lonsway and Fitzgerald (1999), and it was a revision of the original rape myth acceptance scale (RMAS) created by Burt (1980). The scale has a Cronbach's alpha at .83 (M=32.90, SD=11.36).

For this study, original IRMA-SF scale was adapted to include gender neutral language and then pilot tested the adapted scale. A description of this pilot test and validation can be found in the 'Variable and Measure Validation' section of this dissertation. For example, participants were asked, "If someone is raped while they are drunk, that person is at least somewhat responsible for letting things get out of hand," "A lot of times, people who say they were raped agreed to have sex and then regret it," and "A lot of times, people who claim they were raped

have emotional problems." Participants ranked the 22-IRMAS-GN items on a scale from 1 to 5, with 1 being 'strongly disagree' and 5 being 'strong agree.' Higher scores on IRMAS-GN indicates a stronger belief about various rape myths. Important to note, is that 78 participants were asked 17 IRMAS-GN questions, or 3 subscales, instead of 22 questions and 4 subscales. Data reported for this variable will include a total IRMA score for all participants. However, 78 will have a total score based on 3 subscales instead of 4 subscales.

This gender-neutral IRMA scale (IRMAS-GN) was pilot tested and after conducting an agreement analysis, there was found to be an 85% agreement between participant responses for the scale. Therefore, IRMAS-GN was kept for the final analysis and this early validation suggests that it may be a good scale to be used to evaluate rape myth acceptance in the future. Piloting a gender-neutral IRMA scale allowed for a different type of engagement with its rape myth acceptance scenarios, not forcing participants to only evaluate rape myth acceptance from a heteronormative perspective. Although this scale is an important contribution to sexual assault research, it is still a pilot scale that needs to be researched in greater depth to claim full validation. IRMAS-GN was not included in any primary analyses, as it was not the focus of this research study and did not guide any key research questions. Rather, IRMAS-GN was used in secondary analyses to see how it influenced student bystander behaviors – specifically bystander efficacy and bystander intent.

Campus Characteristics

The variables under this category measure the characteristics that are specific to each campus.

Campus Intervention Type. Campus intervention type is a stratified variable in the study analysis and is the UW campus where the participant is currently enrolled, suggesting the

type of bystander intervention that the participant would be exposed to. Specifically, participants were asked, "What UW campus do you attend?" Participants could select 'Seattle,' 'Bothell,' or 'Tacoma.' The campus site that an individual attends indicates the type of bystander intervention programming they have access to. For example, UW Seattle students may have attended a training or seen a poster, UW Bothell students may have attended orientation and heard a lecture, and UW Tacoma students may have no interaction with formal bystander intervention. In short, this variable comprises the constellation of bystander-related materials, messages, or interventions that the campus site staff and administrators intentionally implemented on their campus.

Education Resource Questions. This is a primary dependent variable in the study analysis and is tailored to each UW campus and is a set of questions evaluating the knowledge retention and bystander intervention engagement by the participant of bystander intervention educational resources they received in their formal exposure to bystander intervention at their campus training(s). These campus site-specific content questions were created with the key stakeholder administration at each university campus site. The questions asked for each campus site are described below:

Seattle. The Seattle campus participants were asked two questions: "Do you think your Green Dot training represented your personal identity and community" and "What do you remember that you liked about your Green Dot training that represented your personal identity or community?"

Bothell. The Bothell campus participants were asked two questions: "What resources have you ever, or currently, utilize from the UW Bothell campus? Check all that apply" and

"What resources have you ever, or currently, utilize from the surrounding Bothell or King County community? Check all that apply."

Tacoma. The Tacoma campus participants were asked two questions: "Have you ever received any sexual assault resources (i.e., a flyer of information) from any bathroom on the University of Washington Tacoma campus" and "Have you used for yourself, or referred to someone else, any of the sexual assault resources provided to you on those bathroom flyers? Check all the resources that you have used and/or referred to someone else."

Participants who ranked higher on resource questions indicate that they have more knowledge retention of bystander resources on their campus site and surrounding community. A list of resource questions and response options by campus site can be found in Appendix A.

Measure Validation

A new measure was developed in this study, creating and testing a gender-neutral IRMA-SF scale. This new gender-neutral IRMA scale (IRMAS-GN) was not included in any primary analyses for this study, as it was not within the scope of this study and did not guide any of the research questions. However, it is acknowledged that rape myth acceptance is a measure that has been utilized in other bystander intervention research, therefore, the measure (IRMAS-GN) was used in secondary analyses (reported in Chapter 6), in order to see how rape myth acceptance influenced student bystander efficacy and intent. Measure validation is important to include in this study, as IRMAS-GN is a new scale, developed to exclude the heteronormative language found in the traditional IRMA scale, which may not apply to all students at the UW. I was interested in piloting the creation and evaluation of this scale, testing its validity for use in later secondary analyses.

For these reasons, I created a version of IRMA-SF, where I transformed the original scale items to include gender neutral language, rather than heteronormative language. I developed the items for the IRMAS-GN by taking into account the items in the current IRMAS short form. As such, I took the 22-item IRMAS short form and changed any gendered pronoun (e.g., she, girls, her, male) to a gender-neutral pronoun (e.g., person, them, people) for all 22-items. It was determined that any gender-neutral pronoun replacement must still convey the same person/people pronoun as in the original scale, just without a gender direction. Thus, the IRMAS-GN mirrors the IRMAS short form, but with gender neutral pronouns in the items. A side by side comparison of IRMAS and IRMAS-GN can be found in Appendix C.

To validate the structure of the IRMAS-GN measure, an agreement analysis was performed. First, participants (N=5) were administered the IRMAS-GN scale. After two weeks, the same participants were administered IRMAS. Specifically, after conducting an agreement analysis, there was found to be an 85% agreement between participant responses for each scale. Therefore, IRMAS-GN was kept for the final analysis and this early analysis validation suggests that it may be a good scale to be used to evaluate rape myth acceptance in the future.

Data Analysis

A variety of analyses were used to answer the research questions of this dissertation. Next, the data analysis plan will be described. This section is organized by type of analysis, and brief descriptions noting the variables used and type of data analysis conducted are presented. All analyses were estimated using the R program (R, 2018).

For RQ 1, differences in student bystander efficacy and intent among the three UW campus sites when not considering formal bystander intervention exposure were evaluated. Specifically, two ANOVA analyses utilizing campus location (IV) and efficacy and intent (DV)

were used to look at these campus differences when not considering formal bystander intervention exposure.

Next, a set of analyses were conducted to evaluate the association between UW student perceived behaviors (i.e., personal control, control strategy, perceived level of exposure) and their bystander efficacy. All analyses were conducted utilizing Pearson's bivariate correlation. For RQ 2, the association between UW student personal control (IV) and their bystander efficacy (DV) was evaluated. For RQ 3, the association between UW student control strategies (IV) and bystander efficacy (DV) was evaluated. Finally, for RQ4, the association between UW student perceived level of exposure (IV) and efficacy (DV) was evaluated. All research questions in this set of analyses were evaluated using Pearson's bivariate correlation analysis.

For RQ 5 and 10, the association between formal bystander intervention exposure and UW student bystander efficacy and intent to perform bystander behaviors in the future were evaluated. Specifically, for RQ5, the association between formal bystander intervention exposure (IV) and UW student bystander efficacy (DV) was evaluated. For RQ 10, the association between formal bystander intervention exposure (IV) and UW student intent to perform bystander behaviors in the future (DV) was evaluated. Both research questions were evaluated using independent group t-test analyses.

The same set of analyses utilized for RQ 2, 3, and 4 were also utilized for RQ 7, 8 and 9. Specifically, a set of analyses were conducted to evaluate the association between UW student perceived behaviors (i.e., personal control, control strategy, perceived level of exposure) and their intent to perform bystander behaviors in the future. All analyses were conducted utilizing Pearson's correlation. For RQ 7, the association between UW student personal control (IV) and their intent (DV) was evaluated. For RQ 8, the association between UW student control

strategies (IV) and intent (DV) was evaluated. Finally, for RQ 9, the association between UW student perceived level of exposure (IV) and intent (DV) was evaluated. All research questions in this set of analyses were evaluated using Pearson's bivariate correlation analysis.

For RQ 6, 11, and 12, the differences by campus site in the association between formal bystander intervention exposure and UW student bystander efficacy, intent to perform bystander behaviors in the future, and knowledge of campus site resources was evaluated. Specifically, for RQ 6, the differences by campus site in formal bystander intervention exposure was evaluated using a multi-level regression analysis, with the variables: formal bystander exposure, perceived bystander exposure, personal control, and control strategy (IV), efficacy (DV), age, and gender (control). For RQ 11, the same multi-level regression analysis was applied, but intent was the dependent variable in the analysis. For RQ 12, the same multi-level regression analysis was applied, but knowledge of campus site resources was the dependent variable in the analysis.

Chapter IV: Results

To better contextualize the main study findings, this chapter begins by comparing student reports of bystander efficacy and intent across the three study sites (i.e., UW Seattle, UW Bothell, UW Tacoma). Comparing student bystander efficacy and intent across the campuses is an important step before considering the role of bystander intervention campaigns at each site, because each campus site implements different training programs, provides different resources, and has different student populations. Exploring if students have bystander efficacy and intent, and if those two constructs are different from one another, is key to then understand how to best approach bystander intervention campaign creation or tailoring for each campus site. For example, if students at a particular campus site report higher levels of bystander efficacy, a tailored campaign would specifically target intent in its materials and presentation, spending more time focusing on increasing student bystander intent since those particular students already were higher in bystander efficacy. Being able to identify the areas or constructs students need greater time with and information about will help create more effectively tailored campaigns overall.

Two ANOVA analyses were used to identify any significant differences between the study sites and students' bystander efficacy and intent. A variety of key constructs (i.e., perceived level of exposure, personal control, control strategy) were evaluated by using correlation tests, which measured the relationship between the key constructs and a student's reported efficacy and intent. After evaluating the differences between campus sites without considering exposure, an independent sample t-test was used to identify any significant differences in efficacy and intent between those who had been formally exposed to bystander intervention and those who had not.

Additional analyses were conducted to evaluate if campus intervention type explained any difference in student bystander efficacy and intent, particularly when considering that each site implements their bystander intervention programming differently. A multilevel regression analysis was conducted in order to evaluate what difference, if any, there is between students' formal bystander intervention exposure and their bystander efficacy when comparing across the study sites. A second multilevel regression analysis was conducted to evaluate what difference, if any, there is between students' formal bystander intervention exposure and their bystander intent, when comparing across the campus sites. A final multilevel regression analysis was conducted to evaluate any differences between UW students' knowledge of bystander resources and their campus intervention type. The results of these analyses are reported in the following sections.

Campus Differences Not Considering Formal Exposure

RQ1 asks, "How do the three UW campuses differ from one another on students' bystander efficacy and intent when not considering formal bystander intervention exposure?" Two analyses were conducted to address this question. First, a one-way ANOVA evaluated differences in *student bystander efficacy* by *site*. As a reminder, bystander efficacy is a composite score of multiple questions participants answered on the BES scale. Higher BES scores indicate a higher bystander efficacy for an individual. There is a statistically significant difference between campus intervention type group means and bystander efficacy ($F(2, 618)=4.84$, $p\leq.01$). In order to evaluate that difference further, a post hoc comparison using the Tukey HSD test was conducted and indicated that the mean score for the Seattle campus was statistically different than the Tacoma campus ($M=4.4$, $p\leq.01$), meaning that the students at each campus site have statistically different bystander efficacy score means even before considering the role of formal exposure to bystander intervention. However, the mean bystander efficacy

scores for students at UW Bothell do not statistically differ from student scores at UW Seattle and UW Tacoma. When not considering formal exposure to bystander intervention, UW Bothell student bystander efficacy scores are not different from UW Seattle or UW Tacoma, but UW Tacoma students have higher mean bystander efficacy scores compared to UW Seattle students. Table 4 displays the group means for both bystander efficacy and intent for all campus sites:

Table 4

Campus Group Means for Bystander Efficacy and Intent: RQ1

Campus	Efficacy		Intent	
	M	*SD*	*M*	*SD*
Seattle	73.64	15.08	13.56	3.90
Bothell	76.06	17.32	14.16	3.41
Tacoma	78.02	16.10	13.55	4.10

Note. N = 678 undergraduate students within 3 campuses

Second, a one-way ANOVA evaluated if there was any difference in student intent to perform bystander behaviors by study site, when not considering formal bystander intervention exposure. As a reminder, intent was measured as a combined score of two questions, where participants rated their likelihood of *being in* a bystander situation in the future and the likelihood of *acting in* bystander situations in the future. Higher intent scores indicate a greater intent to perform bystander behaviors in the future. Table 4, above, displays the group means for both bystander efficacy and intent for all campuses.

There is no statistically significant difference between campus intervention type group means and intent to perform a bystander behavior ($F(2, 651)=0.92$, $p=0.40$). The three campus sites are not particularly different from one another in their students' intentions to perform bystander behaviors in the future when not considering previous formal exposure to bystander intervention.

It was important to evaluate if the UW campus sites differed from one another overall before evaluating their differences related to bystander intervention exposure. Interestingly, only UW Seattle and Tacoma were found to be statistically different from one another, even though all campuses have unique student populations, resources, and programming. When not considering formal bystander intervention exposure, it appears that the UW Bothell campus does not differ distinctly from the other two campus sites.

Personal Control and Bystander Efficacy

Along with looking at overall campus site differences, it was also important to evaluate how key constructs in bystander intervention may have an influence on student bystander efficacy. Next, the first key construct will be presented and its relationship to student bystander efficacy described. The Theory of Planned Behavior states that perceived behaviors, one of which is personal control, can greatly influence an individual's bystander efficacy. Personal control is the amount of personal control an individual feels she or he has in knowing what to do in a bystander situation. With this potential influence in mind, RQ2 asks, "What is the association between personal control and UW college students' bystander efficacy to perform bystander behavior?" To answer this, a Pearson correlation test was conducted in order to evaluate the relationship between personal control and student bystander efficacy. Personal control was positively and significantly related to student bystander efficacy (r=.47; $p\leq$.001). This means that personal control significantly moves with bystander efficacy. For example, if a student has higher personal control, their bystander efficacy would be higher as well. When a student's personal control lowers, their bystander efficacy would lower as well. While the correlation between student bystander efficacy scores and their personal control was statistically significant, the actual relationship was found to be moderately strong, meaning the two variables

move together, but only with moderate strength. See Table 5 for a full description of this relationship. Overall, personal control has a moderately strong relationship to bystander efficacy.

Control Strategy and Bystander Efficacy

In addition to personal control, The Theory of Planned Behavior also states that the perceived behavior known as control strategy can be another key influence on an individual's bystander efficacy and therefore the performance of bystander behavior. Control strategy is defined as the amount of control strategy that an individual feels she or he will have to perform in bystander situations. Understanding this, RQ3asks, "What is the association between control strategies and UW college students' bystander efficacy to perform bystander behavior?". To answer this, a Pearson correlation test was conducted. Control strategy was positively and significantly related to student bystander efficacy (r=.33; $p\leq$.001). This means that control strategy significantly moves with bystander efficacy. For example, if a student has higher control strategy, their bystander efficacy would be higher as well. When a student's control strategy lowers, their bystander efficacy would lower as well. While the correlation between UW student bystander efficacy scores and their control strategy was statistically significant, the actual relationship is moderately strong, meaning the two variables move together, but only with moderate strength. See Table 5 for a full description of this relationship. Overall, control strategy has a moderately strong relationship to bystander efficacy. Finally, the last key construct, perceived bystander exposure, will be presented next and its relationship to student bystander efficacy detailed.

Perceived Bystander Exposure and Bystander Efficacy

How a student perceives their own exposure level (as opposed to the type of exposure) to bystander intervention is important to understand, as well as how that perception may influence

how they perform their bystander efficacy. Perceived exposure is defined as the extent to which an individual perceives their own amount of exposure to bystander intervention programs. RQ4 asks, "What is the association between perceived bystander intervention exposure and UW college students' bystander efficacy to perform bystander behavior?" To answer this, a Pearson correlation test was conducted. Perceived bystander intervention exposure was positively and significantly related to student bystander efficacy (r=.10; p≤.01). While the findings for a correlation between UW student bystander efficacy scores and their perceived bystander intervention exposure were statistically significant, the actual relationship is weak. This means that although it was found that student bystander efficacy is associated with perceived bystander intervention exposure (i.e., the variables move together), that relationship – or movement of the variables together is lower. See Table 5 for a full description of this relationship. Overall, perceived bystander intervention exposure has a weak relationship to bystander efficacy.

Table 5
Descriptive Statistics and Zero-Order Correlations for BES

Measure	*N*	*M*	*(SD)*	1.
Outcomes				
1. Bystander Efficacy Scale (BES)	621.00	75.53	(15.93)	--
Predictors				
2. Perceived Level of Exposure	657.00	1.86	(1.04)	.10 **
3. Personal Control	649.00	3.26	(1.06)	.47 ***
4. Control Strategy	649.00	3.74	(1.57)	.33 ***

Note. N = 678 undergraduate students within 3 campuses; Pearson's r reported; N=the completed cases for each variable.
* $p < .05$, ** $p < .01$, *** $p < .001$.

Formal Bystander Exposure and Bystander Efficacy

Since bystander intervention has not yet been evaluated at any of the study sites, it was important to determine if formal exposure to bystander intervention influenced student bystander efficacy. Formal exposure is defined as having any exposure to bystander intervention programs. RQ5 asks, "What is the association between formal bystander intervention exposure and UW college students' bystander efficacy to perform bystander behavior?" To answer this question, an

independent sample t-test was conducted in order to evaluate what differences, if any, there were between college students' *formal bystander exposure* and their *bystander efficacy (BES).* Findings reveal a significant difference in bystander efficacy between those who had received formal bystander exposure (M=77, SD=16) and those who had not received formal bystander exposure (M=75, SD=16); $t(600)= -100$, $p \leq .001$. Compared to those who had no previous exposure, students who had participated in a bystander intervention training previously reported higher mean beliefs (i.e., efficacy) in themselves to perform bystander behaviors in the future.

This finding suggests that formal exposure to bystander intervention does result in higher student bystander efficacy overall. However, each UW campus site implements their bystander intervention programming differently. Therefore, it is important to also evaluate how formal bystander intervention exposure influences bystander efficacy by campus site.

Formal Bystander Exposure and Efficacy by Campus Site

It is important to evaluate if and how campus intervention type may influence formal bystander intervention exposure and bystander efficacy. RQ6 asks, "How does the association between formal bystander intervention exposure and UW college students' bystander efficacy differ by campus?" In order to respond to this question, a multi-level regression analysis was conducted, utilizing campus location for level analysis. First, an unconditional (i.e., no predictors) model was estimated with bystander efficacy scores (BES) as the outcome, in order to establish the intraclass correlation coefficient (ICC). The ICC "ranges from 0 if the grouping conveys no information to 1 if all members of a group are identical" (Gelman & Hill, 2006, p. 258). The unconditional model estimated was:

$$\textit{Bystander Efficacy Score}_{ij} = \boldsymbol{\beta}_{0j} + r_{ij}$$

$$\boldsymbol{\beta}_{0j} = Y_{00} + u_{0j}$$

Where i = 1, …, 678 participants and j = 1, …, 3 campus sites. This model specification shows that the intercept is allowed to vary for each campus. In this unconditional model (i.e., a model with no covariates), the intercept ($\boldsymbol{\beta}_{0j}$) represents the mean bystander efficacy score within campus j. For a participant i, within campus site j, her score will be equal to the overall mean score (Y_{00}), plus a random component for campus site j (u_{0j}), plus a random component for participant i (r_{ij}). The variance of the distribution of $\boldsymbol{\beta}_{0j}$ terms represents the campus-level variation, while the remaining variance represents the participant-level variation.

Next, the full model was estimated. The outcome remains the same, but six new participant-level predictors were added as specified:

$$\textit{Bystander Efficacy Score}_{ij} = \boldsymbol{\beta}_{0j} + \boldsymbol{\beta}_1 * \textit{formalexposure} + \boldsymbol{\beta}_2 * \textit{perceivedlevelofexposure} + \boldsymbol{\beta}_3 * \textit{personalcontrol} + \boldsymbol{\beta}_4 * \textit{controlstrategy} + \boldsymbol{\beta}_5 * \textit{age} + \boldsymbol{\beta}_6 * \textit{gender} + r_{ij}$$

$$\boldsymbol{\beta}_{0j} = Y_{00} + u_{0j}$$

Where i = 1, …, 678 participants and j = 1, …, 3 campus sites. Both models were estimated using the R program (R, 2018).

Descriptive Statistics. In Table 6, unadjusted descriptive statistics are reported. The correlations indicate that bystander efficacy scores are positively and significantly related to all predictor variables and all predictors are significantly related to bystander efficacy scores:

Table 6

Descriptive Statistics and Zero-Order Correlations for Continuous Variables for BES Outcome

Measure	*N*	*M*	*(SD)*	1.	2.	3.	4
Outcomes							
1. Bystander Efficacy Scale (BES)	621.00	75.53	(15.93)	--			
Predictors							
2. Perceived Level of Exposure	657.00	1.86	(1.04)	.11 **	--		
3. Personal Control	649.00	3.26	(1.06)	.47 ***	.24 ***	--	
4. Control Strategy	649.00	3.74	(1.57)	.33 ***	.06	.40 ***	--
5. Age	674.00	21.50	(3.27)	.18 ***	-.03	.13 ***	.07 *

Descriptive Statistics for Categorical Variables: Regression 1

Measure	*N*	*Mean for Outcome*
6. Formal Expsoure		
Yes	122.00	75.00
No	556.00	77.00
7. Gender (1=female)		
Female	475.00	76.00
Male	195.00	73.00

Note. N = 678 undergraduate students within 3 campuses; dummy coded variables are noted; Pearson's r reported; N=the completed cases for each
* $p < .05$, ** $p < .01$, *** $p < .001$.

The results from the unconditional model indicate that the ICC is 0.01, meaning that campus intervention type accounts for/explains 1% of the variance in student bystander efficacy scores (BES). This means that only 1% of the differences found in student bystander efficacy scores can be explained by them having received different bystander intervention programs. Results from the full model can be found in Table 7:

Table 7

Multilevel Model Results for BES Outcome

Fixed Effects	M0 (Intercept-Only)					M1 (Main Effects)					M2 (Main Effects)				
	Coeff	*(SE)*	*t*	*(df)*	*p*	*Coeff*	*(SE)*	*t*	*(df)*	*p*	*Coeff*	*(SE)*	*t*	*(df)*	*p*
Intercept	75.81	(1.14)	66.50	(3)	***	36.65	(4.08)	8.99	(331)	***	22.64	(14.89)	1.52	(104)	
Formal Exposure (1=exposed)						-0.94	(1.63)	-0.58	(344)		--	--	--	--	
Perceived Level of Exposure						0.23	(0.59)	0.39	(607)		1.11	(1.40)	0.79	(104)	
Personal Control						5.79	(0.59)	9.80	(604)	***	1.50	(1.77)	0.85	(104)	
Control Strategy						1.63	(0.38)	4.27	(598)	***	7.61	(1.93)	3.94	(104)	***
Age						0.53	(0.17)	3.12	(492)	**	0.54	(0.65)	0.82	(104)	
Gender (1=female)						2.99	(1.23)	2.43	(606)	*	4.13	(2.85)	1.45	(104)	
Time from Exposure (1=one year ago or more)						--	--	--	--		1.95	(2.77)	0.70	(104)	
Random Effects	*Var*					*Var*					*Var*				
Intercept															
Campus Intervention Type	2.55					0.06					0.00				
Residual	250.52					187.55					173.00				
Model Information															
No. Params Est	1					7					7				
Deviance (-2LL)	5196					4900					831				
BIC	5215					4958					873				

Note. $N = 678$ university students within 3 campuses; Variables dummy coded are noted; R lme4 package used to estimate models; Maximum Likelihood estimates shown.

* $p < .05$, ** $p < .01$, *** $p < .001$.

Student personal control, control strategy, age, and gender were all significant predictors of bystander efficacy scores. Model results indicate that for every one unit increase in perceived knowledge of bystander behaviors, a student will receive 5.79 points higher in their bystander efficacy score ($p \leq .001$). Additionally, for every one unit increase in control strategy, a student will have a higher bystander efficacy score by 1.63 points ($p \leq .001$). Additionally, for every year a student is older, they will increase their bystander efficacy score by 0.53 points ($p \leq .01$). Finally, female students were found to have an increase in their bystander efficacy score of 2.97 ($p \leq .01$) when compared to male students. Perceived level of exposure and formal exposure to bystander intervention do not appear to influence student bystander efficacy scores.

An additional analysis was conducted in order to evaluate if time from formal exposure had an effect on the model for those who had been exposed. Therefore, an additional analysis was run on a subset of the data, looking at those who have been exposed only, and time from exposure was added to the model. The outcome remains the same, but the additional new participant-level predictor was added to be:

$$\textit{Bystander Efficacy Score}_{ij} = \boldsymbol{\beta}_{0j} + \boldsymbol{\beta}_1 * \textit{perceivedlevelofexposure} + \boldsymbol{\beta}_2 * \textit{personalcontrol} + \boldsymbol{\beta}_3 * \textit{controlstrategy} + \boldsymbol{\beta}_4 * \textit{age} + \boldsymbol{\beta}_5 * \textit{gender} + \boldsymbol{\beta}_6 * \textit{timefromexposure} + r_{ij}$$

$$\boldsymbol{\beta}_{0j} = Y_{00} + u_{0j}$$

Where i = 1, …, 122 participants and j = 1, …, 3 campus sites. The results for this analysis found that after adding time from exposure to the model for those who had received formal exposure, student control strategy was the only significant predictor of bystander efficacy scores. Model results indicate that for every one unit increase in a student's control strategy, their bystander efficacy score be higher by 7.61 points ($p < .001$). These results indicate that, for those who have been exposed to bystander intervention, time from exposure plays a significant role in a student's

control strategy to perform a bystander behavior and their overall subsequent bystander efficacy score. In short, as a student gets older and their time from exposure increases, they have higher efficacy to perform bystander behaviors.

Personal Control and Intent

Past research has shown that bystander efficacy is a key component in an individual performing bystander behaviors in the future. Another key component is an individual's intent to perform bystander behaviors. The Theory of Planned Behavior identifies personal control as being a key construct that may influence an individual's overall intent. Therefore, RQ7 asks, "What is the association between personal control and UW college students' intent to perform bystander behavior?" A Pearson correlation test was conducted in order to evaluate the relationship between personal control and student intent. Personal control was positively and significantly related to student intent (r=.26; $p\leq$.001). While the findings for a correlation between UW student intent to perform bystander behaviors in the future and their personal control was statistically significant, the actual relationship is fairly weak. See Table 8 for a full description of this relationship. Overall, personal control has a weak relationship to student intent.

Control Strategy and Intent

To understand the potential role control strategy may play in an individual's intentions to perform bystander behaviors, RQ8 asks, "What is the association between control strategies and UW college students' intent to perform bystander behavior?" A Pearson correlation test was conducted in order to evaluate the relationship between control strategy and student intent. Control strategy was positively and significantly related to student intent (r=.25; $p\leq$.001). While the findings for a correlation between UW student intent to perform bystander behaviors in the

future and their control strategy was statistically significant, the actual relationship is fairly weak. See Table 8 for a full description of this relationship. Overall, control strategy has a fairly weak relationship to student intent.

Perceived Bystander Intervention Exposure and Intent

In addition to the perceived behaviors of personal control and control strategy, how a student perceives her or his own exposure levels to bystander intervention is important to uncover, particularly in how that perception may influence engagement with their own bystander intent. In order to capture student perceptions of their own bystander intervention exposure, and how it may relate to their bystander intent, RQ9 asks, "What is the association between perceived bystander intervention exposure and UW college students' intent to perform bystander behavior?"

A Pearson correlation test was conducted in order to evaluate the relationship between perceived bystander intervention exposure and student intent. Perceived bystander intervention exposure was positively and significantly related to student intent (r=.20; $p\leq$.001). While the findings for a correlation between UW student intent to perform bystander behaviors in the future and their perceived bystander intervention exposure was statistically significant, the actual relationship is fairly weak. See Table 8 for a full description of this relationship. Overall, perceived bystander intervention exposure has a weak relationship to student intent.

Table 8

Descriptive Statistics and Zero-Order Correlations for Intent

Measure	*N*	*M*	*(SD)*	1.
Outcomes				
1. Intent	654.00	13.70	(3.89)	--
Predictors				
2. Perceived Level of Exposure	657.00	1.86	(1.04)	.20 ***
3. Personal Control	649.00	3.26	(1.06)	.26 ***
4. Control Strategy	649.00	3.74	(1.57)	.25 ***

Note. N = 678 undergraduate students within 3 campuses; Pearson's r reported; N=the completed cases for each variable.
* $p < .05$, ** $p < .01$, *** $p < .001$.

Formal Exposure and Intent

Since bystander intervention has yet to be evaluated at the UW, it was important to evaluate if formal bystander intervention, overall, influenced both student bystander efficacy and student intent to perform bystander behaviors. In order to evaluate if formal exposure to bystander intervention influences student bystander intent, RQ10 asks, "What is the association between formal bystander intervention exposure and UW college students' intent to perform bystander behavior?" An independent sample t-test was conducted in order to evaluate what differences, if any, there were between college students' *formal bystander exposure* and their *intent* to perform bystander behaviors in a situation.

There was a significant difference in intent to become a bystander between those who had received formal bystander exposure (M=15, SD=3.5) and those who had not received formal bystander exposure (M=13, SD=3.9); $t(700)= -90$, $p \leq .001$. It was found that when compared to those who had no previous exposure, college students who participated in bystander intervention training had higher mean intent to perform bystander behaviors in the future. It was also found that formal exposure to bystander intervention does produce higher student intent scores for those exposed compared to those who were not exposed. However, each UW campus implements their bystander intervention programs differently, making it important to also evaluate how formal bystander intervention exposure influences student intent by campus site.

Formal Exposure and Intent by Campus Site

RQ11 asks, "How does the association between formal bystander intervention exposure and UW college students' intent to perform bystander behavior differ by campus?" In order to evaluate this question, a multi-level regression analysis was conducted, utilizing campus site location for level analysis. First, an unconditional (i.e., no predictors) model was estimated with

student intent as the outcome, in order to establish the intraclass correlation coefficient (ICC). The ICC "ranges from 0 if the grouping conveys no information to 1 if all members of a group are identical" (Gelman & Hill, 2006, p. 258). The unconditional model estimated was:

$$Intent\ Score_{ij} = \boldsymbol{\beta}_{0j} + r_{ij}$$

$$\boldsymbol{\beta}_{0j} = Y_{00} + u_{0j}$$

Where i = 1, …, 678 participants and j = 1, …, 3 campus sites. This model specification shows that the intercept is allowed to vary for each campus site. In this unconditional model (i.e., a model with no covariates), the intercept ($\boldsymbol{\beta}_{0j}$) represents the mean intent score within campus site j. For a participant i, within campus site j, his score will be equal to the overall mean score (Y_{00}), plus a random component for campus site j (u_{0j}), plus a random component for participant i (r_{ij}). The variance of the distribution of $\boldsymbol{\beta}_{0j}$ terms represents the campus-level variation, while the remaining variance represents the participant-level variation.

Next, the full model was estimated. The outcome remains the same, but six new participant-level predictors were added as specified:

$$Intent\ Score_{ij} = \boldsymbol{\beta}_{0j} + \boldsymbol{\beta}_1 * formalexposure + \boldsymbol{\beta}_2 * perceivedlevelofexposure + \boldsymbol{\beta}_3 * personalcontrol + \boldsymbol{\beta}_4 * controlstrategy + \boldsymbol{\beta}_5 * age + \boldsymbol{\beta}_6 * gender + r_{ij}$$

$$\boldsymbol{\beta}_{0j} = Y_{00} + u_{0j}$$

Where i = 1, …, 678 participants and j = 1, …, 3 campus sites. Both models were estimated using the R program (R, 2018).

Descriptive Statistics. In Table 9, I report the unadjusted descriptive statistics for this data. The correlations indicate that bystander intent is positively and significantly related to all predictors, except age, which indicates a negative relationship suggesting that as a student gets

older, their correlation with intent to perform bystander behaviors lowers. However, this was not a significant correlation.

Table 9

Descriptive Statistics and Zero-Order Correlations for Continuous Variables for Intent Outcome

Measure	*N*	*M*	*(SD)*	1.	2.	3.	4
Outcomes							
1. Intent	654.00	13.70	(3.89)	--			
Predictors							
2. Perceived Level of Exposure	657.00	1.86	(1.04)	.21 ***	--		
3. Personal Control	649.00	3.26	(1.06)	.26 ***	.23 ***	--	
4. Control Strategy	649.00	3.74	(1.57)	.26 ***	.06	.40 ***	--
5. Age	674.00	21.50	(3.27)	-.05	-.03	.13 ***	.07 *
Descriptive Statistics for Categorical Variables: Regression 2							
Measure	*N*	*Mean for Outcome*					
6. Formal Expsoure							
Yes	122.00	15.00					
No	556.00	13.00					
7. Gender (1=female)							
Female	475.00	14.00					
Male	195.00	13.00					

Note. N = 678 undergraduate students within 3 campuses; dummy coded variables are noted; Pearson's r reported; N=the completed cases for each variable.
* $p < .05$, ** $p < .01$, *** $p < .001$.

The results from the unconditional model indicate that the ICC is 0.0, meaning that campus intervention type accounts for/explains 0% of the variance in student intent scores. This means that 0% of the differences found in student intent scores can be explained by them having received different bystander intervention programs. Results from the full model can be found in Table 10:

Table 10

Multilevel Model Results for Intent Outcome

Fixed Effects	M0 (Intercept-Only)					M1 (Main Effects)					M2 (Main Effects)				
	Coeff	*(SE)*	*t*	*(df)*	*p*	*Coeff*	*(SE)*	*t*	*(df)*	*p*	*Coeff*	*(SE)*	*t*	*(df)*	*p*
Intercept	13.70	(0.15)	90.10	(654)	***	10.55	(1.06)	9.93	(632)	***	18.87	(3.42)	5.50	(102)	***
Formal Exposure (1=exposure)						0.43	(0.41)	1.03	(632)		--	(0.30)	--	--	
Perceived Level of Exposure						0.55	(0.15)	3.61	(632)	***	0.53	(0.39)	1.79	(107)	
Personal Control						0.61	(0.15)	3.98	(632)	***	0.35	(0.41)	0.91	(10)	
Control Strategy						0.43	(0.10)	4.32	(632)	***	0.71	(0.15)	1.72	(107)	
Age						-0.10	(0.04)	-2.12	(632)	*	-0.49	(0.61)	-3.32	(109)	**
Gender (1=female)						0.73	(0.32)	2.31	(632)	*	-0.34	(0.60)	-0.55	(107)	
Time from Exposure (1=one year ago or more)						--	--	--	--		0.89	(0.62)	1.48	(108)	
Random Effects	*Var*					*Var*					*Var*				
Intercept															
Campus Intervention Type	0.00					0.00					1.33				
Residual	15.10					13.10					8.43				
Model Information															
No. Params Est	1					7					7				
Deviance (-2LL)	3632					3419					551				
BIC	3652					3477					594				

Note. N = 678 university students within 3 campuses; Variables dummy coded are noted; R lme4 package used to estimate models; Maximum Likelihood estimates shown.

* $p < .05$, ** $p < .01$, *** $p < .001$.

All variables were significant predictors of student intent to become a bystander, except for formal exposure to bystander intervention and gender. Model results indicate that for every one unit increase in perceived level of exposure to bystander intervention, there is a 0.55 increase in student intent to perform bystander behaviors ($p \leq .001$). For every one unit increase in personal control, a student will increase their intent to perform bystander behaviors by 0.61 ($p \leq .001$). For every one unit increase in control strategy, a student will increase their intent to perform bystander behaviors by 0.43 ($p \leq .001$). Additionally, for every year a student increases in age, their intent to perform bystander behaviors lowers by 0.10 ($p \leq .05$). Finally, female students increase their intent to perform bystander behaviors in the future by .73 points ($p \leq .05$), when compared to male students. Interestingly, formal exposure to bystander intervention does not appear to influence student intent to perform bystander behaviors. In short, students will have higher intent to perform bystander behaviors in the future with every one unit increase in their *perceived level of exposure* to bystander intervention (a 0.54 intent score increase), *personal control* of bystander behaviors (a 0.58 intent score increase), and *control strategy* to perform a bystander behavior (a 0.44 intent score increase). Additionally, for every year a student gets older, their intent to perform bystander behaviors in the future will lower by .10 points and female students increase their intent to perform bystander behaviors by .73 points when compared to male students.

An additional analysis was conducted in order to evaluate if time from formal exposure had an effect on the model for those who had been exposed and their intent to perform bystander behaviors. Therefore, an additional analysis was run on a subset of the data, looking at those who have been exposed only, and time from exposure was added to the model. The outcome remains the same, but the additional new participant-level predictor was added to be:

$$Intent\ Score_{ij} = \boldsymbol{\beta}_{0j} + \boldsymbol{\beta}_1 * perceivedlevelofexposure + \boldsymbol{\beta}_2 * personalcontrol + \boldsymbol{\beta}_3 * controlstrategy + \boldsymbol{\beta}_4 * age + \boldsymbol{\beta}_5 * gender + \boldsymbol{\beta}_6 * timefromexposure + r_{ij}$$

$$\boldsymbol{\beta}_{0j} = Y_{00} + u_{0j}$$

Where i = 1, …, 122 participants and j = 1, …, 3 campus sites. The results for this analysis found that after adding time from exposure to the model for those who had received formal exposure, age was the only predictor of student intent to perform bystander behaviors. Model results indicate that for every one year increase in a student's age, their intent to perform a bystander behavior will lower by 0.49 points ($p \leq .01$). These results indicate that, for those who have been exposed to bystander intervention, time from exposure plays a significant role in a student's age and their overall subsequent intent to perform bystander behaviors. In short, as a student gets older and their time from exposure increases, their intent to perform bystander behaviors lowers.

Formal Exposure and Knowledge of Resources by Campus Site

Evaluating student bystander efficacy and intent is important in understanding how students may or may not intend to perform bystander behavior in the future. Another important aspect to evaluate is the way in which formal exposure to bystander intervention may affect students' knowledge of the bystander resources around them. Therefore, RQ12 asks, "What is the association between formal bystander intervention exposure and UW college students' knowledge of bystander resources by campus?" In order to evaluate this question, a logistic multi-level regression analysis was conducted, utilizing campus location for level analysis. First, an unconditional (i.e., no predictors) model was estimated with student knowledge of bystander resources as the outcome, in order to establish the intraclass correlation coefficient (ICC). The ICC "ranges from 0 if the grouping conveys no information to 1 if all members of a group are identical" (Gelman & Hill, 2006, p. 258). The unconditional model estimated was:

$$Knowledge\ of\ Bystander\ Resources_{ij} = \boldsymbol{\beta}_{0j} + r_{ij}$$

$$\boldsymbol{\beta}_{0j} = Y_{00} + u_{0j}$$

Where i = 1, …, 678 participants and j = 1, …, 3 campus sites. This model specification shows that the intercept is allowed to vary for each campus site. In this unconditional model (i.e., a model with no covariates), the intercept ($\boldsymbol{\beta}_{0j}$) represents the mean knowledge bystander resources score within campus site j. For a participant i, within campus site j, her score will be equal to the overall mean score (Y_{00}), plus a random component for campus site j (u_{0j}), plus a random component for participant i (r_{ij}). The variance of the distribution of $\boldsymbol{\beta}_{0j}$ terms represents the campus-level variation, while the remaining variance represents the participant-level variation.

Next, the full model was estimated. The outcome remains the same, but six new participant-level predictors were added as specified:

$$Knowledge\ of\ Bystander\ Resources_{ij} = \boldsymbol{\beta}_{0j} + \boldsymbol{\beta}_1 * formalexposure + \boldsymbol{\beta}_2 * perceivedlevelofexposure + \boldsymbol{\beta}_3 * personalcontrol + \boldsymbol{\beta}_4 * controlstrategy + \boldsymbol{\beta}_5 * age + \boldsymbol{\beta}_6 * gender + r_{ij}$$

$$\boldsymbol{\beta}_{0j} = Y_{00} + u_{0j}$$

Where i = 1, …, 678 participants and j = 1, …, 3 campus sites. Both models were estimated using the R program (R, 2018).

Descriptive Statistics. In Table 11, I report the unadjusted descriptive statistics for this data. The correlations indicate that knowledge of bystander resources is positively related to all predictors, except age, suggesting that as a student gets older, their relationship to knowledge of bystander resources lowers. Perceived level of exposure is the only predictor that is significantly related to knowledge of bystander resources.

Table 11

Descriptive Statistics and Zero-Order Correlations for Continuous Variables for Knowledge of Bystander Resources Outcome

Measure	*N*	*M*	*(SD)*	1.	2.	3.	4
Outcomes							
1. Knowledge of Bystander Resources	676.00	0.28	(0.45)	--			
Predictors							
2. Perceived Level of Exposure	657.00	1.86	(1.04)	.23 ***	--		
3. Personal Control	649.00	3.26	(1.06)	.09	.23 ***	--	
4. Control Strategy	649.00	3.74	(1.57)	.03	.06	.40 ***	--
5. Age	674.00	21.50	(3.27)	-.07	-.03	.14 ***	.07 *

Descriptive Statistics for Categorical Variables: Regression 3

Measure	*N*	*Mean for Outcome*
6. Formal Expsoure		
Yes	122.00	0.50
No	556.00	0.23
7. Gender (1=female)		
Female	475.00	0.31
Male	195.00	0.21

Note. N = 678 undergraduate students within 3 campuses; dummy coded variables are noted; Pearson's r reported; N=the completed cases for each variable.

* $p < .05$, ** $p < .01$, *** $p < .001$.

The results from the unconditional model indicate that the ICC is 0.027, meaning that campus intervention type accounts for/explains 2.7% of the variance in student knowledge of bystander resources. This means that only 2.7% of the differences in student knowledge of bystander resources can be explained by students having received different bystander intervention programs. Results from the full model can be found in Table 12:

Table 12

Multilevel Model Results for Knowledge of Bystander Resources Outcome

Fixed Effects	M0 (Intercept-Only)					M1 (Main Effects)					M2 (Main Effects)				
	Coeff	*(SE)*	*z*	*(df)*	*p*	*Coeff*	*(SE)*	*z*	*(df)*	*p*	*Coeff*	*(SE)*	*z*	*(df)*	*p*
Intercept	-1.08	(0.21)	-5.26	(675)	***	-1.59	(0.80)	-2.00	(626)	*	-3.56	(2.66)	-1.34	(103)	
Formal Exposure (1=exposure)						0.94	(0.25)	3.76	(626)	***	--	--	1.80	--	
Perceived Level of Exposure						0.36	(0.10)	3.71	(626)	***	0.39	(0.28)	-0.29	(103)	
Personal Control						0.10	(0.11)	0.94	(626)		-0.08	(0.29)	0.20	(103)	
Control Strategy						-0.06	(0.09)	-0.61	(626)		0.06	(0.11)	0.84	(103)	
Age						-0.05	(0.03)	-1.48	(626)		0.09	(0.44)	0.95	(103)	
Gender (1=female)						0.69	(0.22)	3.16	(626)	**	0.42	(0.43)	0.32	(103)	
Time from Exposure (1=one year ago or more)						--	--	--	--		0.14	(0.43)	0.30	(103)	
Random Effects	*Var*					*Var*					*Var*				
Intercept															
Campus Intervention Type	0.09					0.22					0.33				
Model Information															
No. Params Est	1					7					7				
Deviance (-2LL)	796					696					147				
BIC	809					747					184				

Note. N = 678 university students within 3 campuses; Variables dummy coded are noted; R nlme package used to estimate models; logit estimates shown.

* $p < .05$, ** $p < .01$, *** $p < .001$.

The variables that were significant predictors of student knowledge of student resources were: formal exposure, perceived level of exposure, and gender. Model results indicate that moving from non-exposure to formal bystander intervention exposure, the odds of increasing knowledge of student resources is 0.94 ($p \leq .001$). In short, when students are exposed to formal bystander intervention, the probability of student knowledge of bystander resources is 72%, holding all other variables constant. Additionally, for every one unit increase in perceived level of bystander intervention exposure, the odds of increasing knowledge of student bystander resources is 0.36 ($p \leq .001$). Stated differently, for every one unit increase in perceived level of bystander intervention exposure, the probability of a student having knowledge of bystander resources is 58%, holding all other variables constant. Finally, the model results also indicate that when compared to male students, the odds of female students increasing their knowledge of student resources is 0.69 ($p \leq .01$). In short, the probability of female students knowing about student resources is 67%, when compared to male students. Overall, it was found that the probability of students having knowledge of bystander intervention resources increases 72% for students with *formal exposure* to bystander intervention when compared to students with no exposure, increases 67% for *female students* when compared to male students, and increases 58% for every one unit increase in *perceived exposure* to bystander intervention.

An additional analysis was conducted in order to evaluate if time from formal exposure had an effect on the model for those who had been exposed and their knowledge of bystander resources. Therefore, an additional analysis was run on a subset of the data, looking at those who have been exposed only, and time from exposure was added to the model. The outcome remains the same, but the additional new participant-level predictor was added to be:

$$\textit{Knowledge of Bystander Resources}_{ij} = \boldsymbol{\beta}_{0j} + \boldsymbol{\beta}_1 * \textit{perceivedlevelofexposure} + \boldsymbol{\beta}_2 * \textit{personalcontrol} + \boldsymbol{\beta}_3 * \textit{controlstrategy} + \boldsymbol{\beta}_4 * \textit{age} + \boldsymbol{\beta}_5 * \textit{gender} + \boldsymbol{\beta}_6 * \textit{timefromexposure} + r_{ij}$$

$$\boldsymbol{\beta}_{0j} = Y_{00} + u_{0j}$$

Where i = 1, …, 122 participants and j = 1, …, 3 campus sites. The results for this analysis found that after adding time from exposure to the model for those who had received formal exposure, there were no significant predictors of student knowledge of bystander resources. These results indicate that time from exposure may not predict students' knowledge of bystander resources by campus site.

Chapter V: Discussion

Summary and Discussion of Findings

Making bystander intervention programs more effective is important, as these programs often serve as the primary prevention method for sexual assault on university campuses. This study serves as a first contribution to the UW's understanding of their program, its reach, and effectiveness. Additionally, findings contribute to current bystander intervention scholarship by applying key constructs – such as the role of personal control, control strategy, efficacy, and intent – and evaluating them as separate influences on an individual's bystander behavior. This study is also unique in its exploration of the difference in bystander efficacy and bystander intent, highlighting how important it is to separate these constructs in future research. Analyses revealed a significant difference between students who receive formal bystander intervention exposure and those who do not receive exposure, finding that students who received exposure reported higher bystander efficacy and intent to perform bystander behaviors in the future. This finding aligns with past research on bystander intervention, which typically finds exposure to formal bystander intervention resulting in increased bystander efficacy (see Coker et al., 2016; Coker et al., 2014). Interestingly, this exposure difference is not explained by campus intervention type, meaning that although each UW campus implements different forms of bystander intervention, there does not seem to be a difference in student efficacy or intent because of their campus and corresponding specific campus training.

When not considering exposure, UW Bothell does not appear to be significantly different from UW Seattle or UW Tacoma. However, UW Seattle and UW Tacoma significantly differ from one another in their bystander efficacy, indicating that the students at the two campuses have different bystander efficacy, even without formal bystander intervention exposure.

Additionally, results indicate that formal exposure to bystander intervention, perceived level of exposure to bystander intervention, and gender significantly increase students' knowledge of bystander resources on their campus, with campus intervention type explaining 2.7% of the variance in knowledge of bystander resources.

In the discussion to follow, main study findings are summarized and interpreted according to five themes. First, the importance of distinguishing between bystander efficacy and intent will be discussed. Then, a discussion of formal bystander exposure influence and student perceptions of their bystander behaviors will be presented. Next, age will be discussed specifically in relation to its influence on overall student bystander efficacy and intent. Finally, the findings will end by presenting what difference campus intervention type may make in student bystander behaviors overall.

Bystander Efficacy vs Bystander Intent

Current bystander intervention research has not primarily separated bystander efficacy from bystander intent. For example, Coker et al. (2014), who created one of the most widely utilized bystander intervention campaigns (e.g., Green Dot), evaluates her study by combining bystander efficacy and intentions, viewing them both as one outcome. Furthermore, Banyard, Moynihan, and Plante (2007), who were one of the first to evaluate bystander efficacy, also note how efficacy and intent are important factors in evaluating a student's likelihood of acting in a bystander situation, however, they do not separate intent from efficacy explicitly. Rather, they evaluate an individual's bystander attitudes (i.e., how likely would they be to engage in that behavior in general), bystander behaviors (i.e., if they actually engaged with that behavior in general), and bystander efficacy (i.e., their confidence to perform a behavior). Banyard, Moynihan, and Plante (2007) do not ask directly how likely students would be to act in a

situation in the future, or how that student intends to be a bystander in future situations. Although these studies mention the importance of bystander intent and bystander efficacy, they do not evaluate the two concepts separately from one another.

This study contributes to this efficacy/intent question by explicitly evaluating bystander efficacy separate from bystander intent. It was found through multiple analyses that there is a distinct difference in student bystander efficacy and their intent to perform a bystander behavior. Bystander efficacy is operationalized as the total bystander efficacy score for a student, or their total score of confidence in performing bystander behaviors in the future. These findings reveal that when separately evaluated, students' perception of their exposure, personal control, and control strategy is correlated to their actual bystander efficacy (RQ2-4) *and* their intent to perform bystander behaviors (RQ7-9). Intent is operationalized as the total likelihood a participant intends to perform bystander behaviors in the future. These findings show the importance of understanding bystander efficacy and intent separately, as they both were associated with an individual's bystander behaviors (i.e., perception of exposure, personal control, and control strategy) differently. These correlations are stronger with a student's overall bystander efficacy, more than their overall intent, suggesting that researchers can evaluate the two constructs separately, but targeting bystander efficacy may be more beneficial when creating bystander intervention programming and campaigns. Understanding that bystander efficacy and intent are separate constructs, however, and are positively associated with multiple perceptions of an individual's bystander behavior means that targeting bystander efficacy and intent should be central when creating prevention campaigns. By understanding that there is a difference between these two constructs, university staff and administrators can better tailor their health communication campaigns and trainings to address efficacy and intent separately, encouraging

students to think about both their confidence in their own abilities to perform a bystander action *and* their intent to perform an action in the future.

For example, if a student is reading a poster educating them about bystander intervention, the poster could have text explicitly discussing how capable that student is to stand up against sexual harassment they see on public transit (efficacy), and then also have an image depicting that individual making plans to notice their surroundings and plan to say something on public transit that coming month (intent). In that single poster, both bystander efficacy and intent are addressed for its consumer. As noted previously, targeted messaging is key for successful behavior change (DiClemente, Salazar, & Crosby, 2013). Creating messaging in health communication campaigns that target not only the population, but also includes targeted messages about bystander intent and efficacy, this study finds, is important for effective bystander intervention performance. Future research should build on these initial findings in order to continue evaluating the differences between bystander efficacy and intent so researchers can best implement sexual assault prevention campaigns on university campuses.

Furthermore, this study also explicitly looked at the construct of intent from a more well-rounded perspective, acknowledging that there can be a difference between an individual intending *to act* and intending *to be in* a bystander situation in the future. By evaluating intent in this way, this study's findings are able to capture a larger picture of a student's intentions in being a bystander in the future and campaigns should also highlight this difference in their messaging and word choice when describing bystander intent to students. This dual approach to looking at an individual's intentions is different from past literature; this study looks at intent from the perspective of intent for action and intent for being involved in a situation to begin with. Providing more nuance to understanding intent and how an individual may make decisions

(consciously or unconsciously) has important implications for bystander intervention research. Mainly, this study is a first of its kind to begin to conceptualize intent as multiple aspects that contribute to one larger intent to perform bystander behavior. This nuance is important to highlight, as it may guide researchers better in their bystander intervention program information that addresses student intent and encourages them to intend to be a bystander in the future. Chapter six will discuss these implications for the University of Washington in greater detail, providing insights into campus specific health communication campaign tailoring for the future.

Exposure to Bystander Intervention Matters

Although exposure to a health communication campaign does not always produce positive results, this study found a significant difference between students who were exposed to bystander intervention compared to those who were not exposed. Exposure is operationalized as a student identifying they had received any exposure to bystander intervention programs on their campus. It was found that students who had been exposed to bystander intervention, overall, reported higher bystander efficacy (RQ5) and bystander intent (RQ10) scores. For bystander efficacy scores specifically, there was a two-point difference between those who had been exposed and those who had no exposure to bystander intervention. Considering that student bystander efficacy was measured on a scale of 0 to 100 points, the difference of two bystander efficacy points may not seem like much. However, this does mean that a student who interacted with any bystander intervention programming at UW had more confidence in being a bystander and actually intended to be a bystander in the future more than those who did not have any interaction. Although there was a difference in confidence (efficacy) and likelihood of performing bystander behaviors (intent) between those exposed and those not, that difference was small. Additionally, it would be reasonable to assume that university staff and administrators

would desire for their bystander intervention program impact between those exposed and those not exposed to be much bigger, indicating that their programs are highly effective in encouraging students to act as bystanders to prevent sexual assault in the future, rather than just slightly effective (i.e., encouraging students to be bystanders by just two-points of a difference). However, finding a difference overall does show that exposure to some sort of formal bystander intervention programming on the UW campuses *is* making a difference in students' actual bystander efficacy and it is important to continue providing some kind of bystander intervention programming or training in the future.

Before this current study, the University of Washington had yet to evaluate their bystander intervention programs on any of their campus sites since implementation in 2010. This study is the first to evaluate if the current program is making a difference for students. Previous research on bystander intervention has shown that implementing the bystander approach – particularly that of Green Dot – should generally produce higher student bystander efficacy and bystander behaviors (Banyard, Moynihan, & Crossman, 2009; Coker et al., 2011). It was found, for the first time at the University of Washington, that exposure to formal bystander intervention programming is increasing student bystander efficacy. This means that students who have interacted with any of their UW bystander intervention trainings have a higher confidence in being a bystander in the future. This is a positive finding for UW, because it shows that students who interact with their bystander intervention programs are changing their potential bystander behavior and hopefully, contributing to sexual assault prevention on their campuses overall. However, it also appears that the effect of exposure at the UW may not be as strong as found in previous studies. Implications from this finding suggest that future research should evaluate ways to make exposure to bystander intervention even more effective for students - particularly

when it comes to their knowledge of bystander resources and engagement with the bystander programming and campaigns. Chapter Six will highlight some ways the UW can make their bystander interventions more effective for students in the future.

Student Perceptions can Impact Bystander Behaviors

For bystander efficacy and intent, formal exposure to bystander intervention made a difference for students who had been exposed, compared to those who had not, but it was found that how students *perceived* aspects of bystander intervention – such as their perceived exposure, their own personal control, and their control strategy – that was what mattered even more in their efficacy and intent scores (RQ2-4 & RQ7-9). For example, it was found that for every one unit increase in personal control, students were found to score 5.79 points higher in bystander efficacy and for every one unit increase in control strategy, students will have higher efficacy scores by 1.64 points. This means, that the greater a student perceived they had some sort of personal control of their bystander behaviors, their actual bystander efficacy score increased by roughly 6 points. Personal control is the belief that someone has the ability to act and achieve their desired outcome. This means that student perception of their ability to achieve their desired outcome in a bystander intervention situation – or their control in the situation – resulted in a 6-point increase in their actual bystander efficacy. This is a big increase, considering that bystander efficacy can be a score anywhere from 0 to 100 points. Having this large of an increase means that a student will have their actual bystander efficacy increase from 30 points to 36 points, or 55 points to 61 points. That increase is significant and can really move a student from potentially being a bystander to having even more efficacy to actually being a bystander. In short, the amount of bystander intervention messages that encourage students in their personal control during a bystander intervention situation, the higher their actual bystander efficacy will be (or at

least six points higher it will be), and the greater they may believe they can participate as a bystander to prevent sexual assault in the future.

Findings also suggest perceptions of control can influence intentions to be a bystander in the future. As discussed, in this study personal control is operationalized as the extent to which a student feels confident in knowing what to do to change the outcome of a potentially harmful situation. Similarly, control strategy is operationalized as the extent to which a student feels confident they would actually do something to positively change the outcome of a potentially harmful situation. Perceived control, both personal control (RQ7) and control strategy (RQ8), were found to influence a student's intentions to be a bystander in the future. This means that if a student attends a bystander intervention training which teaches them how to create a strategy to de-escalate a potentially violent situation (targets personal control), and then encourages them to think about times they can be observant as a bystander and take initiative (targets control strategy), that bystander intervention program can more effectively target student perceived control and influence their overall future intentions to be a bystander. Additionally, if that campaign program also targets the student's perceived exposure to bystander intervention, they will be potentially even more effective. Perceived exposure is operationalized as how much exposure a student feels like they have experienced when considering all the types of bystander intervention experiences they may have had to date. By learning basic ways that students may be engaging with bystander intervention methods already (e.g., classroom instruction, lectures on campus, peer discussions), a bystander intervention campaign can address students by acknowledging sources they already may perceive to be outlets for learning and then frame their discussion in ways that acknowledge the level of exposure students may already believe they are bringing to the table. These perceptions are important to target and leverage in future bystander

intervention campaigns, and Chapter Six will provide some suggestions for how to do this at the UW specifically.

According to the Theory of Planned Behavior, "individuals form intentions to engage in specific behaviors by taking into account how much control we have over these behaviors" (Ajzen, 1988; Manstead & Van Eekelen, 1998, p. 1375). For example, some individuals may feel like they have less control in a situation if they have a history of sexual harassment or discrimination in various social situations. According to the TPB, this perceived lack of control could affect an individual's willingness to perform any bystander behaviors because of their past experiences. None of the models evaluated found formal exposure (i.e., exposure to Green Dot campaign elements) to influence any student's bystander efficacy scores or intention to perform a bystander behavior, except for student knowledge of bystander resources. Rather, findings indicate that all student perception variables (i.e., perceived exposure, personal control, and control strategy) yielded higher bystander efficacy scores and increased intent to perform bystander behavior. Having formal exposure to bystander intervention is important, as previous results indicated, however, an individual's perceived control (Ajzen, 2002) appears to have an even greater impact on their efficacy and intent.

One reason for this result may be because students value their perceived control in a situation, and that control (or lack thereof), influences their decision making more than researchers and university administrators may realize. For example, if a student does not feel like they know how to control a situation while on public transit to stop a stranger's sexual harassment because they fear for their own safety, that lack of perceived control may lower their belief that they can be a bystander in the moment and influence their intentions to be less of a bystander overall in the future. By not addressing perceived control in bystander intervention

campaigns, these campaigns may be missing a key construct that limits individuals from stepping in and performing bystander behaviors to prevent sexual assault in both big and small ways. Studies should continue to look at perceived control in the future, evaluating how control interacts with intent and efficacy in greater depth, allowing a more detailed look at the various aspects that influence an individual's bystander behaviors.

The Conflicting Influence of Age

A particularly surprising finding is the conflicting influence of age on a student's future bystander behaviors. For every year a student gets older, findings indicate that their intentions to perform bystander behaviors will likely lower, but confidence (i.e., efficacy) in their abilities to perform bystander behaviors will be higher. This contradictory finding is puzzling, because it illuminates perhaps a deeper separation between bystander efficacy and bystander intent than previously understood. Past research on bystander intervention has found that as more time passes from exposure to the intervention program, the less effects are seen in bystander behaviors (Banyard, Moynihan, & Plante, 2007). These results are in a similar vein, finding more specifically that as students get older, their intent to perform bystander intervention behaviors lowers. Furthermore, efficacy and intent are not predicted to change in the same way – meaning that as students get older and move towards graduation, they may feel more confident in performing bystander behaviors but have less intentions to do so. The implications of having greater confidence in their abilities but also having a lack of intention to utilize those abilities could influence bystander intervention programs and trainings in the future and is something future research should explore in more depth.

Age also influenced intentions to perform bystander behaviors most for students who had received previous exposure to bystander intervention (RQ6 & RQ11). For exposed students, it

was found that for every year they got older, their intentions to perform bystander behaviors lowers by .49 points, meaning that as they age, their intent is decreasing. This is troubling, understanding that as students become older and become more familiar with their campus and college life, their intentions to become a bystander actually become less, when as researchers, we would hope it would become higher as they become examples of behaviors and norms for new students.

Although it can be argued that age only lowers intent slightly (about half of a point in future intentions, with intention being measured on a seven-point scale) as a student gets older, this finding is particularly important to highlight because of the larger implications it can provide to staff and administrators when creating bystander intervention programming. In this study, there is not much age variation, as the majority of students were traditional college students. In this light, there is not much deviation moving from one age to another since age is traditionally confined to a small college student age range. What is particularly important to highlight, however, is that as a student is getting older, they are traditionally moving through their college experience. Although the age of a first year at 18 years may not be that different from a 21-year-old senior, the amount of time spent at the university and engagement with university experience, knowledge, and behaviors is traditionally very different between an 18 year old (who traditionally would be a first year) and a 21 year old (who would typically be a senior in college). In this light, it is important to highlight the lowering of intent to perform bystander behaviors as students move from being 18 years old (first years) to 19 years old (sophomores) to 20 years old (juniors) to 21 years old (seniors), because it appears that as students become more familiar with their campus, become leaders on their campus, and spend more time engaging with their campus – they actually intend to perform bystander behaviors less. This suggests that staff and

administrators at the UW need to consider that a "one size fits all" bystander training or programming effort may not actually address deeper issues in how students engage with bystander behaviors. Namely, they may need to target younger students differently than older students, particularly highlighting to older students, who are juniors and seniors, the importance of being a bystander even when they are the "older" students on campus. There is ample room for future research to investigate this difference further, as well as uncover why UW students have a difference in age, and also how to better create intervention materials that address this difference. A few recommendations for this type of targeting and programming considerations will be offered in Chapter Six.

Campus Intervention Type: Do the Different Programs Matter?

This study evaluated three different campus sites that were comprised of the same university. One each of these campus sites, the student demographics were different, as well as the level of bystander intervention training and programs that were offered. Specifically, UW Bothell offered the most bystander intervention training, requiring all students to attend a one-hour mandatory training on the topic at orientation. UW Seattle offered four 45-minute trainings on the topic throughout the year, where any student could volunteer to attend as desired. UW Tacoma did not offer any formal bystander intervention trainings or programs, however, over the last four years, they did invite UW Seattle to facilitate two trainings on their campus for students who were interested in attending. With this background knowledge, it can be seen that at the program level, each UW campus implements bystander training differently. Furthermore, looking at Appendix D and E, it can be seen how the characteristics and engagement with the campus intervention type differs.

Findings revealed that campus intervention type and their different bystander intervention programs explained only 1% of the variance in bystander efficacy scores, and none of the variance in their scores for intention to perform bystander behaviors in the future (RQ6, RQ11-12). When not considering formal exposure to bystander intervention at all (RQ1), only UW Seattle and Tacoma differed from one another in their baseline bystander efficacy scores. Specifically, UW Tacoma students had a higher mean bystander efficacy score than Seattle students. These findings do not explain why UW Tacoma students have higher mean bystander efficacy scores compared to UW Seattle students, but they may indicate that the ways in which UW Seattle currently implements bystander intervention may not be reaching its student population as intended. Comparatively, UW Tacoma may be communicating sexual assault prevention programming to their students through unofficial channels in a way that resonates with their students and inadvertently results in higher bystander efficacy. Additionally, being a smaller campus, UW Tacoma may have had higher student bystander efficacy because their students may feel more safe, confident, or have ownership over their campus. A student may have higher bystander efficacy, and even intentions to perform bystander behaviors, if they feel like they are co-owners of the space, safety, and social norms of their campus community. Being such, UW Tacoma may naturally encourage students to feel a greater sense of safety on their campus because of its small campus size, potentially providing greater opportunity to know most to all of its community members and allow students to recognize when a situation or individual may be out of place or unsafe in that community.

One would assume that for campuses like UW Bothell, who intentionally and strategically implement bystander intervention trainings at a large scale, their students would report higher bystander efficacy and intent. Instead, findings indicate that there is no significant

difference between the campuses. When considering how different the campuses are to begin with in their intervention programming methods and resources overall, it is surprising that there is not a significant difference between them, with or without considering exposure. Previous bystander intervention research has continuously found that there should be a difference in students who are exposed to bystander intervention on their campus, compared to students who are not (Banyard, Moynihan, & Plante, 2007; Coker et al., 2011). Research has also shown that campuses which implement bystander intervention programs should show a difference when compared to campuses that do not (Coker et al., 2014). UW Tacoma does not have any formal bystander intervention programming or training, yet it was found that those students have higher bystander efficacy scores compared to UW Seattle, and UW Bothell is not significantly different from Tacoma or Seattle. Both UW Bothell and Seattle make a concerted effort at various levels to train students on bystander intervention, yet those trainings do not result in higher bystander efficacy and intent when compared to Tacoma who does not offer formal programming. Possible explanations highlight the important role of communication in sexual assault prevention campaigns.

For example, only 5% of participants from UW Seattle reported seeing a bystander intervention poster, and only 12% of UW Bothell students reported seeing posters. UW Tacoma, however, reported 36% seeing bystander intervention posters. This small example shows how campus characteristics may explain some of the differences displayed through these findings. While UW Tacoma does not implement formal bystander intervention campaigns, these students tended to report higher efficacy scores and reported seeing more bystander intervention-related information via posters around their campus. Perhaps it is the way in which UW Tacoma communicates information to its students (e.g., smaller campus allowing for an easier spread of

information; placing poster information in more accessible areas) that explains some of the differences found in these results, rather than the campus intervention type itself. Having the opportunity to access information (via posters, flyers, etc.) that uses bystander language and encourages students to intervene may reinforce bystander efficacy. For example, if a student walks across campus every day and consistently sees a poster that describes *how* to take action when witnessing sexual harassment in public transportation, that student may start to feel more confident that she can and will intervene as appropriate. Comparatively, if a student is never exposed to such messaging, they may not be able to identify moments of potential sexual violence or may not know how to intervene. Here, interaction or engagement with bystander intervention exposure could be key.

In short, understanding a campus' characteristics might help a researcher study and implement bystander intervention more effectively than simply assuming a particular type of bystander intervention approach is best. Rather, it is the implementation of a bystander intervention approach that complements and enhances the current campus characteristics that may make a bystander intervention program most successful over time. Additionally, the different campus demographics of UW Seattle, Bothell, and Tacoma suggest that students may interact with their provided programs differently because of their backgrounds. For example, although the median age of UW Tacoma participants was 21 years, the student body of that campus often involves students who may be older (i.e., 31+ years) and/or parents. The way an older student or parent may interact with their campus could influence the entire student body by creating a culture of bystander action or a lack thereof. For example, if a campus has a large amount of older adults, some of which may be parents, the campus life and activities may be influenced differently by that population. That campus may offer more programs for entire

families, rather than tailored programs towards young adults. There may be more of a culture of individuals stepping in to help or notify if something is wrong, because they have more life experiences which could have given them the confidence to ask or offer help, compared to a young adult who may have left home for the first time. The differences in student age and life experiences could contribute to very different campus cultures, which in turn, could create different levels of engagement with student programs or perhaps even being more willing to engage as a bystander in various situations. While the role of campus characteristics was outside of the scope of the current work, future research should consider how identity characteristics impact campaign reception and perceptions of bystander behavior in general. By doing so, interventions could be more acutely targeted and perhaps yield greater effects.

Although the student population characteristics of Tacoma could be an influencing factor in these findings, it seems more likely that it is the way in which bystander intervention campaigns are presented or communicated at UW Seattle and Bothell that is influencing these results. UW Tacoma does not offer any formal bystander intervention training, but their staff and administrators do rely on poster campaigns to promote various health topics around their campus. UW Bothell requires a presentation to all students about bystander intervention during their day long orientation. UW Seattle offers various presentations as requested by student groups. Considering these differences, it seems that the format of intensive communication programming may not actually result in the best knowledge retention for students, as UW Tacoma utilizes the least amount of information load in their communication, yet their students seem to have the highest bystander behavior differences. There is much room to discuss what the implications may be for UW, and its specific campus sites, in light of these findings. The

following chapter will highlight various reasons campus intervention type may have produced different outcomes for UW than has been found in previous research.

Chapter VI: Implications & Recommendations

This section discusses three themes, offering key implications for both the University of Washington and other universities, discussing: 1) how bystander intervention programming can, and should, target student efficacy and intent; 2) how and why universities should consider the perceptions of bystander behavioral control in their bystander intervention trainings; and 3) why bystander interventions should be tailored to campus-specific characteristics. These themes provide room for rich discussion as they connect to past research and theoretical conceptualizations about bystander intervention programming. They also offer key implications for college campuses (and the University of Washington in particular) as bystander intervention programs continue to be implemented.

Bystander Programming Should Target Student Efficacy & Intent

To date, much research on bystander intervention has evaluated student bystander efficacy and intent together, often discussing a student's intent to perform a bystander behavior as the same as a student's belief that they can perform that behavior (see Coker et al., 2014). The current study found that, for University of Washington students, there is a difference in students' belief that they can perform a bystander behavior (i.e., efficacy) and their intentions to perform a behavior in the future. In general, it was found that students have higher bystander efficacy, but lower bystander intentions. Additionally, older students had higher bystander efficacy than younger students, but their intent to perform bystander behaviors was lower. One reason for this may have been because the measure for 'intent' has less variability (i.e., scores could range between 4 and 20) than the measure for bystander efficacy (i.e., scores could range between 0 and 100). This variability difference may have contributed to stronger bystander efficacy correlation scores.

By understanding that there is a difference between these two constructs, university staff and administrators can begin to create bystander intervention trainings and programs that target them separately. Instead of addressing bystander efficacy and intent as one, or targeting one construct alone, bystander intervention programs can be created in a way that first addresses a student's belief in their abilities to perform a bystander behavior. Separating the two constructs by identifying and defining them separately will help students see that there are multiple stages in the bystander process, and although their intent to perform a bystander behavior may be there, their efficacy may not, or vice versa. If university staff or administrators understand prior to a training that their students may need more training focused on bystander intent, because their students have low scores relating to bystander intention, they can create training materials that highlight this concept specifically, ensuring that their students are receiving training materials about topics and constructs they need the most.

Conflating a student's bystander efficacy with their bystander intent in an intervention training ignores how students may be stronger or more capable in one construct compared to the other. It assumes that all students are approaching a bystander training from a similar starting point and assumes that if a student simply believes they can perform a bystander behavior, then they actually intend to perform that behavior in the future. This study argues that that may not be the case, as it was found that for those who have been exposed to formal intervention, their intent to perform bystander behaviors actually lowered with age.

Bystander trainings have the potential to be even more effective if they acknowledge this difference and target key factors which contribute to bystander efficacy and intent separately. For example, the University of Washington could create a training that addresses a student's belief in their abilities to perform a bystander behavior, and then conduct follow up trainings throughout

the years that targets that same student's intent to perform the behavior. This could look like creating a first-year bystander intervention program that is specifically targeting a new first year's (or 18 to 19 year old) bystander efficacy. Then, with each subsequent year at the university, the training program adapts to the student's age by incorporating more intentional training on bystander intentions, adjusting the training materials to match the university year, age, and life experiences of the student. By doing this, the intervention would first help establish a student's bystander efficacy, but then reinforce that efficacy over the course of their time at the university, specifically encouraging bystander intentions in campaigns and trainings for juniors and seniors, since this study found that as a student increases their age, their bystander intentions lower. Targeting intent separately from efficacy will enable staff and administrators to tackle this issue with more precision to create greater success in the future.

Bystander Trainings Should Consider Perceptions & Control

A second key implication that can be drawn from this study is that bystander intervention programs and trainings should target students' *perceptions* of their bystander behaviors and control, not just expose them to educational material about bystander behaviors. The results from this study found that a student's perception of his or her bystander abilities, such as their perceived exposure to bystander intervention, personal control, and control strategy significantly impact a student's actual bystander efficacy and intent. This finding suggests that targeting a student's perception of bystander behaviors directly impacts their actual efficacy and intent to become a bystander. The University of Washington programming can and should target this distinction.

Although this study found that exposing students to bystander intervention is important and does result in higher student overall efficacy and intent when compared to students who do

not receive exposure to bystander intervention training, a larger implication that can be drawn from this study's findings is how a student's perception of their own reality of their bystander abilities, whether real or not, influences their personal control and their control strategies, which in turn influence how they perform bystander behaviors. Bystander intervention at the University of Washington can leverage these student perceptions, tailoring programs to their students that start from the level of perceived control at which a student already operates. For example, if staff is able to survey their students prior to a training, they can discover if students already have a high perception of exposure to bystander intervention or perception of their own beliefs in being able to perform bystander behaviors. If so, staff can tailor their training to be less of an introduction to bystander behaviors (i.e., taking an 'exposure only' approach), and instead utilize language and examples that leverage a student's perception of how much control they have in performing bystander behaviors. This may look like approaching a training by articulating to students that they already bring a background of bystander intervention to the table, but this particular training will teach them how to utilize that previous exposure on the specific UW campus.

Personal control is how much control a student feels they have in knowing what to do in a bystander intervention situation. If staff and administrators poll their students prior to a training and discover half of the students have high personal control in their ability to perform bystander behaviors, while the second half have low personal control, they can tailor their training in order to address each student group differently. They can specifically split the group into two small groups, leveraging the high personal control of one group to offer them even more specific tips on how to utilize their bystander behaviors and abilities, and then they can provide the low personal control group with more support, basic knowledge, and resources to encourage them to

take more control in situations in order to perform bystander behaviors. Acknowledging a student's perception of their bystander behaviors and control allows staff and administrators to build a training that highlights existing student, rather than assuming they have no exposure or control at all.

Bystander Interventions Should be Tailored by Campus

The third key implication that can be illuminated from this study's findings relates to the various campuses that comprise the University of Washington. The results from this study found that, surprisingly, campus intervention type explained little to no difference in what influences a UW student's bystander efficacy and intent. Although all three campuses make up the entire student body of the University of Washington, each campus operates with its own student population, training programs, and characteristics. The implications that can be drawn from this finding are twofold.

First, it suggests that the University of Washington needs to find different ways to train their students on bystander intervention. Training on each campus needs to change in order to really influence their student populations specifically. Only then might each campus have more impactful and effective bystander intervention results. Second, it is suggested that particular aspects of each campus' student population be targeted more directly as staff and administrators create their bystander intervention training, in order to produce more effective results.

It was found that the age of a student influences their bystander efficacy and intent. It was also found that as a student gets older, they will have higher bystander efficacy, but have lower intent to become a bystander. Each UW campus has different student ages that comprise their campus demographics. Bystander intervention campaigns at UW should target age differently, based on these demographics. For example, UW Tacoma could tailor their trainings to highlight

bystander intent more, as their student population is older and often progresses through their college years at a different pace than traditional undergraduate students. Furthermore, UW Seattle could create segmented population trainings, tailoring their training to address bystander efficacy more when training first years, compared to when they are training seniors. Additionally, the UW campuses should remember to target their student age populations differently, but also continuously, every year in order to get the best bystander efficacy and intent results from their students.

Tailoring the ways in which information is presented in trainings to match a campus student population is important. This study conducted secondary analyses that were not the primary focus of this dissertation, which found there are particular rape myth subscales that are believed more greatly by different student populations. It was found that the rape myth subscales of "He Didn't Mean To" and "She Asked for It" were the greatest believed rape myths. Bystander intervention trainings in the future can tailor their material and information to target these rape myths directly, particularly focusing on the rape myths that provide the greatest resistance to their students performing bystander behaviors. Targeting particular aspects of a campus student population and tailoring information to those needs has the potential to make a large impact on the effectiveness of a bystander intervention training. Next, specific recommendations about what components might be addressed to create a tailored training for each campus will be shared. After, a campus profile reports will be given, in efforts to direct future UW bystander intervention training creation in ways that are grounded in this study's findings and implications.

Recommendations

Past research on health campaigns have found that communication is the key tool and vehicle that is used to influence behavior change and outcomes for adults and students alike (Hornick, 2002). Often, it has been found that a successful health campaign creates communication that is intended for a mass audience, and then specific messaging is created for targeted groups with formats and language that will most effectively reach individuals within those target groups (DiClemente, Salazar, & Crosby, 2013). With this past scholarship in mind, recommendations are provided for each of the UW campus sites. All campus sites of the UW have clearly been communicating to their mass or general student bodies. What these recommendations will highlight, is the next step each campus site should take in their bystander intervention programs – mainly – to begin creating bystander intervention programs that reach targeted student populations and are tailored to specific needs within their student bodies. Past research has shown that tailoring programs to meet specific needs of individuals can produce very positive results (see Thompson, Heley, and Oster-Aaland, 2013; White, Kolble, Carlson, & Lipson, 2005) in behavior change. This level of tailoring is important for the next phase of bystander intervention programming at UW.

The following section builds on the results from this study to offer a few direct recommendations for each of UW's three campus sites. First, a summary of recommendations for how to best target each campus site in the future will be shared. Campus site demographic data, including campus numbers, rape myth acceptance, and bystander efficacy scores can be found in Appendix E. After, a "campus report" is given for each campus (found in Appendix F), which takes the recommendations from this study and translates the information into a two-page report to be given to key stakeholders and campus staff. Producing a "campus report" can allow key stakeholders, campus staff, students, and the general public to more easily interpret and

understand the key findings and recommendations from this study and highlights in a single document, summarizing the recommended changes, which are tailored to each campus site. Each UW campus is a different size and has students from very different backgrounds. Some of the findings in this study may be as a result of these campus characteristics, such as student population age, commuting distances of students, and physical landscape or size of the campuses. For example, UW Tacoma may have resulted in higher bystander efficacy scores because they feel more control on their campus, since it is significantly smaller than Seattle and the way in which ownership, control, or community is felt may be different. Additionally, both UW Bothell and Tacoma have large commuter student populations, and the communities those students are commuting from may be also be providing programming on bystander intervention, which could have influenced their overall bystander intervention engagement, efficacy, or knowledge. It is considerations such as these which are offered and presented for each UW campus below, suggesting specific recommendations that each campus can implement in order to better tailor their bystander intervention programs to their diverse campus characteristics in the future.

UW Seattle

Recommendation Suggestions. Based on study findings, it is recommended that UW Seattle offer more group trainings, particularly trainings that are customized for specific group characteristics. It was found that most participants heard about bystander intervention from either a training and/or presentation. Additionally, participants noted that they wanted to see more trainings or presentations that addressed issues relating to identity and wanted to attend more bystander intervention groups and trainings that were tailored to their specific identities. A recommendation for UW Seattle is to create bystander intervention trainings that do two things.

First, the training can become a tailored training group, such as trainings specifically for LGBTQ+ students, female students only, or international students. Second, the training can hold characteristics of an interactive training model, but also take shape like a presentation. Most participants had participated in a shorter bystander intervention presentation, rather than attended a longer format training. Structuring trainings to be more like presentations in the future may encourage more students to attend and learn about bystander intervention. Past health communication scholarship has found that various forms of interactive educational models can be an effective format to convey health information (see Thompson, Heley, and Oster-Aaland, 2013). For UW Seattle specifically, tailoring their trainings to meet their students' more specific needs and format styles can be a tangible next step for administrators and staff to take when creating new bystander intervention training programs on campus.

Another recommendation for UW Seattle staff and administrators, is to find ways to partner with current campus faculty and instructors in order to give training on how to present bystander intervention in their classrooms and incorporate it into their curriculum. It was found that around 40 participants had received bystander intervention training from an academic class or a professor talking about it during their course. Leveraging the faculty who are already incorporating bystander intervention topics into their class teaching, as well as training more faculty to do so, will enable small presentations and discussions of bystander intervention to be shared across the university. Implementing a "train so then you can train others" approach can enable bystander intervention to operate in a greater capacity, but without the sole responsibility for its operation to remain on the shoulders of those in charge of health and wellness at the university.

UW Bothell

Recommendation Suggestions. It is recommended that UW Bothell consider changing their approach in presenting information about bystander intervention to their students. It is extremely promising that UW Bothell's staff and administration have made bystander intervention a priority for their campus by requiring bystander intervention training at their orientation. Additionally, it is very promising that every student, no matter when they come to the university, must attend an orientation, ensuring that all students are at least exposed to initial concepts of bystander intervention. However, covering all topics of bystander intervention during an already busy orientation day, usually lasting for five or more hours, may not be the best platform for students to really listen, absorb, and learn about bystander intervention. Presenting this information at orientation may feel like a "fire hose" approach of learning for students - with information coming too much and too quickly for them to fully retain it all. It is recommended that UW Bothell look into alternative methods of presentation for their bystander intervention trainings.

For example, it might be useful for UW Bothell to test to see if concentrated poster campaigns or intensive 40-minute trainings after orientation, during the first few weeks of a quarter, might be a better approach for students to retain the information they are given. It was found that of all UW Bothell participants in this study, only 15% said that they had received formal exposure to bystander intervention, even though all students would have had to come in contact with bystander intervention previously because they would have already attended orientation. Clearly, there may be a disconnect from hearing about bystander intervention in orientation and actually identifying knowledge about bystander intervention or behaviors in other situations. Creating formats, like a specific intensive bystander intervention training, may be

more effective in knowledge retention of bystander intervention training for UW Bothell students.

UW Tacoma

Recommendation Suggestions. Based on these findings, there are two key recommendations for UW Tacoma. First, it is recommended that UW Tacoma implement their own trainings and programs for their students, rather than relying on UW Seattle staff to administer them. It is very clear that UW Tacoma students are utilizing campus resources and greatly benefiting from the information and resources presented by their campus. The staff and administrators at UW Tacoma know their students best, and it seems apparent that this care for their students has translated well to student resource use. By creating small bystander intervention trainings and implementing small programming efforts, UW Tacoma can reach students with bystander intervention information in ways that students already are seeking and appreciate. Additionally, small efforts – like their sexual assault prevention bathroom flyer – seem to be making a big impact for students. Continuing to provide information like this in the form of flyers in accessible locations seems to be a good outlet for UW Tacoma students to learn information and find resources.

Another recommendation for UW Tacoma is to leverage the community resources around them more intentionally, as well as build more connections with the Tacoma and greater Pierce County communities. This study found that students are seeking out resources in the Tacoma community, as well as the greater communities around them. Taking advantage of these community resources and tying them into the programs and trainings offered on the campus can enable UW Tacoma to offer educational trainings and programs in a way that provides students resources but does not require the university to spend additional funding for it. Many of the UW

Tacoma students are older, commuting adults. Having a smaller campus size that is also comprised of students who primarily commute results in a very specific student population who has a greater chance of learning from resources and utilizing resources in both their university and living communities. Finding ways to connect these students to resources in their own communities with which they may already be familiar can help build a better bridge to access and shared resources for a student population that currently does not have any funding or required resources for their assault prevention.

Campus Reports

In order to summarize the recommendations described above for each campus, two-page campus reports have been created for each campus in order to visually display the information above for key stakeholders and students. In Appendix F, the campus reports for UW Seattle, Bothell, and Tacoma are provided.

Chapter VII: Conclusions

This study contributes to scholarship evaluating bystander intervention by evaluating bystander intervention methods implemented at one tri-campus university study site in the Pacific Northwest of the United States. Continuing to interrogate the effectiveness of bystander intervention programs is important as more universities continue to implement violence prevention methods on their campuses in the future. Although this study has many strengths and implications for future bystander intervention programming at the University of Washington, as well as suggestions for bystander intervention research in focusing on specific theoretical constructs (i.e., efficacy and intent) in greater depth in future program evaluations, there are some limitations to the current study.

Limitations

Although this research contributes interesting and new insights to the current understanding of bystander intervention research and training, there are some key limitations to note. This study utilized a survey with cross-sectional data that was collected at one point in time. As such, the findings cannot discuss or infer cause or change from one variable to another, or how one variable may be influencing another variable. Future research can and should evaluate these study's findings in a longitudinal and causal manner. By conducting a longitudinal study, research will be able to better identify how students may change their bystander behaviors over the course of their entire college career, as well as identify potential barriers to student engagement with bystander intervention throughout a longer period of their life. Additionally, being able to identify what particular constructs may be directly causing bystander behavior, or perhaps impeding it, can more effectively guide future bystander intervention design. By evaluating both the causality and longitudinal bystander behaviors of students, research would be

able to recommend specific design choices to universities across the U.S. that would encourage bystander behaviors and help to mitigate sexual violence. In addition to study design, there are three key limitations to this research that will be discussed next.

Incorporation of Student Voices

This study was an evaluation of bystander intervention programs on a tri-campus university, evaluating the programs through survey methods distributed to students on each campus of the university. Evaluating student interaction with bystander intervention programs quantitatively provides rich data for analysis on the exposure level, influence, and overall effectiveness of bystander intervention programs. What these methods do not include, however, is direct student voices. Incorporating student voices, ideas, and opinions is important for future research in this area. Specifically, interviewing students to better illuminate and provider greater context for key findings can considerably enhance our research understanding of why exposure may or may not be influencing students in a particular way.

For example, in this study, interviewing could have been employed to learn in greater depth – hearing from the students on each campus site themselves –why UW Bothell does not seem to show a statistically significant difference in student efficacy or intentions compared to UW Tacoma or UW Seattle, even though UW Bothell is the only campus site to require some form of training on bystander intervention. Interviewing UW Bothell students could uncover why their orientation format may or may not be encouraging the retention of bystander intervention information. Furthermore, by including student voices along with a quantitative evaluation of student interaction with bystander intervention, researchers will be able to more specifically tailor programs to each university, generating ideas and suggestions from students in partnership with larger quantitative findings. Including direct student voices was not a part of

this current study, however, it is acknowledged how influential and important it is to include student perspectives in future studies.

Exploring the Drawbacks to Being a Bystander

There are considerations to the realities of what it means to be a bystander in a potentially dangerous situation which were not included in this study. For example, previous research has noted that although the bystander intervention approach has become popular on university campuses, some of those bystander intervention campaigns do not consider the full extent of what it means for a student or community to engage in sexual assault prevention (McMahon & Banyard, 2012). In particular, McMahon and Banyard (2012) note that "many bystander programs are teaching community members how to intervene without first assisting them to identify the full range of opportunities when they can intervene" (p. 3). It can also be argued that some programs may not be spending time educating their students on how to be a bystander safely. With this in mind, the knowledge of how the University of Washington educates their students on how to be a bystander safely is limited. Future work on this topic should interrogate the ethical considerations that are embedded into the ways in which the UW educates on bystander intervention – mainly – are they teaching multiple methods for intervention and are they discussing safety in multiple ways.

Additionally, it is acknowledged that fear of safety, as well as experiences with sexual harassment or discrimination may have affected a participant's response to rating their own bystander efficacy and bystander intent. Although much of the past research detailed in Chapter Two does not include the role of fear or past sexual harassment or discrimination when considering bystander efficacy and intent in bystander intervention situations, and these constructs could play a key role in an individual's bystander actions. Future research could and

should investigate this further, in order to understand if fear has a role or influences any other bystander behavior variables.

Broadening the Understanding of Intent

This study may also have been limited by its construction of the intent variable. First, the intent variable had a score range of 4 to 20 points, which is significantly smaller in score variability than the variable of 'bystander efficacy,' which had a score range of 0 to 100 points. Comparing bystander efficacy to bystander intent may explain why the scores for intent seemed to have weaker correlations to other predictor variables, because of its score range, compared to bystander efficacy. Additionally, the smaller variability range may also explain some of the other findings for the intent variable.

Second, evaluating intent to perform bystander behaviors as both an individual's intent to be in and intent to act in a bystander intervention situation, this study may have limited participant responses. For example, some students may have felt like they would intend to act in a bystander situation, but that they never intend to be in such a situation, therefore, producing lower intent scores than might be accurate. It was found that as a student increases in age, their intent to perform bystander behaviors lowers. However, another explanation may be that as a student gets older, they are no longer being put in situations that require bystander intervention in the way research currently discusses it (e.g., attending a party, seeing a friend drunk). Rather than inferring that those students have lower intentions overall, they may actually just not see themselves in such circumstances. Future research should continue to investigate the role of intent to evaluate the difference between *acting in* a situation, as well as *being in* a situation.

Future Research

Considering Campus Characteristics in Greater Depth

There will always be other possible explanations to consider when conducting a research study or program evaluation. For this dissertation in particular, there were other campus characteristics and aspects that could have been considered to help illuminate these findings with greater depth. Part of this study's discussion explored some of these campus characteristics, highlighting the various avenues that a researcher should consider when conducting evaluations of bystander intervention. For example, it was discussed how the campus demographics could influence student engagement with their bystander intervention type. Each campus of the UW is different in student background and makeup. UW Tacoma in particular had an older student population who also, in general, commuted from longer distances than the other campuses. These two aspects of the campus profile could have influenced how students engaged with the campus resources around them. It is possible that a student body who is older, primary bread winners for their families, or are parents who commute – utilize resources on their campus and in their own communities more or differently.

Additionally, these campus characteristics might make students be more willing to be a bystander in the first place if their life experiences already encourage them to be do as parents. Future research should continue to explore how each of these types of campus characteristics affect our understanding of student engagement with bystander intervention programs, but also how we evaluate those programs for effectiveness overall. There may be more influences on a student's overall bystander engagement than simply what is a part of their formal campus exposure. More bystander intervention research needs to include these campus characteristics as alternative explanations for findings, as well as alternative avenues that may contribute to an individual's overall understanding of bystander intervention.

Rape Myth Acceptance as a Consideration

A student's rape myth acceptance is an important possible consideration when conducting bystander intervention research. It is suggested that future research explore the impact or influence of rape myth acceptance on a student's engagement with bystander intervention programs, as well as its possible influence on their future bystander behaviors. Although it was not the primary focus of this dissertation, after running secondary analyses looking at the correlation between a student's rape myth acceptance score and their bystander efficacy and intent, it was found that a student's rape myth acceptance score was negatively correlated with both efficacy and intent.

Specifically, it was found that there was a moderately negative correlation between a student's rape myth acceptance score and their bystander efficacy (r=-.36, $p\leq$.001) and a small to moderate negative correlation between their rape myth acceptance score and their intent to perform bystander behaviors in the future (r=-.24, $p\leq$.001). This finding suggests that a student's rape myth acceptance score may be negatively influencing both their bystander efficacy and bystander intentions in future situations. Future research should investigate the role of rape myth acceptance further, specifically evaluating its potential influence on a student's performance of bystander intervention behaviors.

Including Campus Stakeholders in the Discussion

Over the course of four months, both before and during the data collection for this study, I built relationships with key stakeholders at each UW campus site. In total, I spent forty hours at each campus site, meeting and interviewing key stakeholders in campus administration, attended trainings and orientations, attended bystander and sexual assault prevention committee meetings, observed students on each campus, interviewed students about their experiences on their campus, and walked around to get a sense of each campus' landscape. From the time spent on each

campus, I was able to build a clearer picture of the distinctions between the campuses, as well as build relationships with key stakeholders that allowed me access to survey students on each campus more effectively, as well as provide insight into the correct language to use in the study survey in order to make sure this dissertation was employing the same language about bystander intervention as students use on their campus.

It was extremely important for this research to include the key stakeholders from each campus site in the development of the survey distributed to students, understanding the current bystander intervention programs occurring on each campus, and how each campus interacted with one another on the topic in general. Spending time with key stakeholders gave me greater insight into how bystander intervention is actually implemented on each campus. I cannot emphasize of the importance of collaborating and including campus stakeholders into current and future research about bystander intervention on university campuses enough. Future research should take this experience to heart, and work to include the voices of both students and stakeholders throughout the research process – particularly when evaluating the effectiveness of prevention programs and campaigns on university campuses in the future.

Concluding Thoughts

Bystander intervention is a sexual assault prevention method that is widely utilized on college campuses across the U.S. Finding ways to continue to improve this prevention method is important – there is still much research that needs to be conducted in order to most effectively communicate about bystander intervention, present bystander intervention information, and tailor bystander intervention campaigns to students. This study contributes to this need, furthering our understanding of bystander efficacy and intent as constructs, highlighting key bystander intervention components that can be tailored in order to streamline campaign messages, and

offering recommendations from how the University of Washington can better implement bystander intervention on their campuses. Traditionally, bystander intervention research has compared bystander intervention programs across different universities. This study contributes an interesting perspective of evaluating multiple bystander intervention programs on different campuses of one single university. Furthermore, this study explicitly looked at the constructs of bystander efficacy and intent as separate, providing additional nuance to our current understanding of factors that influence decision-making processes.

Although a small difference, findings did reveal a statistically significant difference between students who had been formally exposed to bystander intervention campaigns and those who had not. This finding is particularly important to highlight, as it parallels past research which has found that bystander intervention campaigns can make a difference in bystander efficacy, intent, and actions. Much research must still be done to continue to uncover the best constructs, methods, and approaches to inform effective bystander campaigns. Sexual assault is a problem that continues to permeate the university experience for many students. By bridging research and practice, this study provides actionable recommendations to improve bystander intervention campaigns. This and future work can contribute evidence-based research to help prevent sexual violence on college campuses.

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Appendix A. Campus Specific Bystander Resource Questions

Seattle

1. Do you think your Green Dot training represented your personal identity and community?
    - Yes
    - No
2. What do you remember that you liked about your Green Dot training that represented your personal identity or community?
    - [textbox entry]
3. What would you want to be different about Green Dot trainings in the future, in order to better represent your personal identity or community?
    - [textbox entry]

Bothell

1. What resources have you ever, or currently, utilize from the UW Bothell campus? Check all that apply:
    - Victim Advocate and Educator
    - Counseling Center
    - SAVE student club
    - Faculty/staff support
    - Other: [textbox entry]
2. What resources have you ever, or currently, utilize from the surrounding Bothell or King County community? Check all that apply:
    - King County Sexual Assault Resource Center
    - API Chaya
    - New Beginnings
    - Northwest Network of Bi, Trans, Lesbian and Gay Survivors of Abuse
    - Refugee Women's Alliance
    - ReWA
    - Other: [textbox entry]

Tacoma

1. Have you ever received any sexual assault resources (i.e., a flyer of information) from any bathroom on the University of Washington Tacoma campus?
    - Yes
    - No
2. Have you used for yourself, or referred someone else, any of the sexual assault resources provided to you on those bathroom flyers? Check all the resources that you have used and/or referred to someone else:
    - UW Tacoma Victim Advocate
    - Safe Campus
    - Student Counseling Services
    - YWCA of Pierce County
    - Rebuilding Hope! Sexual Assault Center for Pierce County
    - Tacoma General Hospital
    - Crystal Judson Family Justice Center
    - UW Tacoma University Complaint Investigation Resolution Office (UCIRO)

- UW Tacoma Human Resources
- UW Tacoma Safety and Security
- Tacoma Police Department

Appendix B. Survey to Participants

Consent

[Consent From text provided]

- Yes, I consent to participate in this survey
- No, I do not consent to participate in this survey

  *Skip logic: Skip to end of survey if No is selected

Demographics

1. Have you taken this survey on bystander intervention on the University of Washington campuses previously?
   - Yes
   - No

     *Skip logic: If Yes is selected, skip to end of survey
2. How do you describe yourself (check one)?
   - Female
   - Male
   - Transgender
   - Do not identify as any of the above
3. Do you think of yourself as (please check all that apply):
   - Gay or Lesbian
   - Bisexual
   - Straight
   - Do not identify as any of the above
4. What is your age?
   - [drop down list option from 18 years to 31+ years]
5. What is your ethnicity?
   - Hispanic/Latino
   - Middle Eastern
   - American Indian/Alaskan Native
   - Native Hawaiian/Pacific Islander
   - Asian
   - African American (Black)
   - White
   - Other
6. Are you currently a part of a fraternity or sorority on campus?
   - Yes
   - No
   - There are no fraternities or sororities on this campus
7. During a month period, how often do you attend some sort of party on or near the UW campus? A party in this instance is considered a gathering of 5 or more people.
   - [drop down # list here from 0 to 20+]
8. Do you currently live on campus?
   - Yes
   - No
9. Are you a transfer student?
   - Yes
   - No
10. What is your year in school (i.e., academic standing)?

- First year
- Sophomore
- Junior
- Senior
- 5th year Senior
- Other

11. What is your major?
    - [text box entry]
12. Do you have a religious preference?
    - Yes
    - No

    *Display logic: if Yes is selected, show Q13
13. What your religious preference?
    - [textbox entry]
14. Have you ever had any bystander trainings?
    - Yes
    - No
15. What UW campus do you attend?
    - Seattle
    - Bothell
    - Tacoma

*Skip logic: if Seattle is selected, show Q16
If Bothell is selected, show Q20
If Tacoma is selected, show Q25

Exposure to Bystander Intervention Questions - Seattle

16. Have you ever had any exposure to Green Dot or bystander intervention on your campus? Bystander intervention is recognizing a potentially harmful situation or interaction and choosing to respond in a way that could positively influence or change the outcome.
    - Yes
    - No

    *Display logic: If Yes is selected, show Q17 & Q18
17. Which of the following Green Dot or bystander intervention activities have you participated in on your university campus? Check all that apply:
    - Seen a poster
    - Listened to a Presentation
    - Attended a Training
    - Other (please specify): [text box entry]
18. How long ago did you see, hear, or participate in the bystander intervention activities you selected in the previous question?
    - Less than 1 week ago
    - 1-2 weeks ago
    - 3-4 weeks ago
    - 1 month ago
    - 2 months ago
    - 3-6 months ago
    - 7-11 months ago
    - 1 year ago
    - 2 years ago
    - 3 years ago

- 4 or more years ago

19. In addition to what you may have previously selected, which of the following ***informal*** Green Dot or bystander intervention activities have you participated in on your university campus? Check all that apply:
    - Attended a campus event about Green Dot or bystander intervention
    - Took a class about Green Dot or bystander intervention
    - Took an academic class that included teaching about Green Dot or bystander intervention
    - Had any form of interpersonal communication (e.g., a conversation with a friend) about Green Dot or bystander intervention
    - Other (please specify): [textbox entry]
    - I have not seen, heard, or participated in any informal Green Dot or bystander intervention activities on campus

Exposure to Bystander Intervention Questions - Bothell

20. Have you ever had any exposure to bystander intervention on your campus? Bystander intervention is recognizing a potentially harmful situation or interaction and choosing to respond in a way that could positively influence or change the outcome.
    - Yes
    - No

    *Display logic: If Yes is selected, show Q21 & Q22
21. Which of the following bystander intervention activities have you participated in on your university campus? Check all that apply:
    - Seen a Poster
    - Listened to a Presentation
    - Attended a Training
    - Heard about it at Orientation
    - Other (please specify): [textbox entry]
22. How long ago did you see, hear, or participate in the bystander intervention activities you selected in the previous question?
    - Less than 1 week ago
    - 1-2 weeks ago
    - 3-4 weeks ago
    - 1 month ago
    - 2 months ago
    - 3-6 months ago
    - 7-11 months ago
    - 1 year ago
    - 2 years ago
    - 3 years ago
    - 4 or more years ago
23. Did you attend orientation this year?
    - Yes
    - No
24. In addition to what you may have previously selected, which of the following **informal** bystander intervention activities have you participated in on your university campus? Check all that apply:
    - Attended a campus event about bystander intervention
    - Took a class about bystander intervention
    - Took an academic class that included teaching about bystander intervention
    - Had any form of interpersonal communication (e.g., a conversation with a friend) about bystander intervention

- Other (please specify): [textbox entry]
- I have not seen, heard, or participated in any informal bystander intervention activities on campus

Exposure to Bystander Intervention Questions - Tacoma

25. Have you ever had any exposure to Green Dot or bystander intervention on your campus? Bystander intervention is recognizing a potentially harmful situation or interaction and choosing to respond in a way that could positively influence or change the outcome.
    - Yes
    - No

    *Display logic: If Yes is selected, show Q26 & Q27
26. Which of the following Green Dot or bystander intervention activities have you participated in on your university campus? Check all that apply:
    - Seen a Poster
    - Listened to a Presentation
    - Attended a Training
    - Attended a Campus Event
    - Other (please specify): [textbox entry]
27. How long ago did you see, hear, or participate in the bystander intervention activities you selected in the previous question?
    - Less than 1 week ago
    - 1-2 weeks ago
    - 3-4 weeks ago
    - 1 month ago
    - 2 months ago
    - 3-6 months ago
    - 7-11 months ago
    - 1 year ago
    - 2 years ago
    - 3 years ago
    - 4 or more years ago
28. In addition to what you may have previously selected, which of the following **informal** Green Dot or bystander intervention activities have you participated in on your university campus? Check all that apply:
    - Attended a campus event about bystander intervention
    - Took a class about bystander intervention
    - Took an academic class that included teaching about bystander intervention
    - Had any form of interpersonal communication (e.g., a conversation with a friend) about bystander intervention
    - Taken a sexual assault flyer from any campus bathroom
    - Other (please specify): [textbox entry]
    - I have not seen, heard, or participated in any informal bystander intervention activities on campus

Perceived Level of Exposure

29. Thinking about the types of bystander intervention experiences you said you've been exposed to, if you rate your total exposure to bystander intervention experiences on a scale of 1 to 5, with 1 being 'very little' and 5 being 'very great,' ***how much exposure to you feel like you've had overall to bystander intervention?***

- [likert scale of 1 to 5, with 1 being 'very little,' 2 being 'little,' 3 being 'neutral,' 4 being 'great,' 5 being 'very great']

Control Questions

This survey is now going to ask you questions about college life and behaviors. Please read the following questions and answer them with the knowledge that this survey would like to better understand how college students participate in social settings, parties, and off-campus behaviors.

30. During the past 30 days, how many days did you have 5 or more alcoholic drinks at the same occasion? By 'occasion,' we mean at the same time or within a couple of hours of each other
- [drop down list of 0 to 15+]

31. Of those occasions, how many of those drinks were **at a party?** A party is any gathering of 5 or more people.
- [drop down list of 0 to 15+]

Intent Questions

On a scale from 1 to 5, where 1 means 'not at all likely' and 5 means 'extremely likely,' how likely is it that you would act if you were in each of the scenarios below?

32. You are at a party or public location and you see a very drunk person being taken to another room by a group of individuals
    - [scale options on a 1 to 5 likert scale]
33. You are at a party or public location and think your friend may need to be walked home
    - [scale options on a 1 to 5 likert scale]

On a scale from 1 to 5, where 1 means 'not at all likely' and 5 means 'extremely likely,' how likely is it that you will actually be in each of the scenarios below:

34. You need to step in to say or do something when at a party or public location and you see a very drunk person being taken to another room by a group of individuals
    - [scale options on a 1 to 5 likert scale]
35. You are at a party and ask your friend if they need to be walked home
    - [scale options on a 1 to 5 likert scale]

Control Questions

36. Do you agree with the statement, "If someone doesn't physically resist sex - even if protesting verbally - it can't be considered rape."
    - Yes
    - No
37. During the past 30 days, on how many days did you have 5 or more cigarettes on the same occasion? By 'occasion,' we mean at the same time or within a couple of hours of each other.
    - [drop down list from 0 to 15+]
38. Of those occasions, on how many of those cigarettes were **at a party**? A party is any gathering of 5 or more people.
    - [drop down list from 0 to 15+]

Perceived Confidence in Action (Intent) Question

39. On a scale of 1 to 5, with 1 being 'not confident at all' and 5 being 'very confident,' how confident are you *that you would do something* to positively change the outcome if you saw a potentially harmful situation or interaction?
    - [likert scale of 1 to 5, with 1 being 'not confident at all,' 2 being 'slightly confident,' 3 being 'somewhat confident,' 4 being 'moderately confident,' 5 being 'very confident']

Perceived Level of Knowledge (Efficacy) Question

40. On a scale of 1 to 5, with 1 being 'not confident at all' and 5 being 'very confident,' how confident are you *that you would know what to do* to positively change the outcome if you saw a potentially harmful situation or interaction?
    - [likert scale of 1 to 5, with 1 being 'not confident at all,' 2 being 'slightly confident,' 3 being 'somewhat confident,' 4 being 'moderately confident,' 5 being 'very confident']

Bystander Resource Questions - Seattle (display if 'Seattle' was selected in Q15)

41. What is Green Dot?
    - A behavior or action that expresses tolerance of violence and contributes to someone else's safety
    - A behavior or action that expresses intolerance of violence and contributes to someone else's safety
    - A person who makes a decision to stop someone else's actions from occuring when it has the potential to harm a community
    - A term used on the University of Washington campus to describe a program for students to learn about college behaviors and norms
42. What are the 3 D's that were discussed at Green Dot trainings?
    - Direct, Distract, Delegate
    - Distract, Describe, Delegate
    - Distraught, Demanding, Demeaning
    - Direct, Digest, Delegate
43. Do you think your Green Dot training represented your personal identity and community?
    - Yes
    - No

      *Display logic: If Yes is selected, show Q44
44. What do you remember that you liked about your Green Dot training that represented your personal identity or community?
    - [textbox entry]
45. What would you want to be different about Green Dot trainings in the future, in order to better represent your personal identity or community?
    - [textbox entry]

Bystander Resource Questions - Bothell (display if 'Bothell' was selected in Q15)

46. Please describe the members in your household (check all that apply):
    - Child or Children
    - Roommate(s)
    - Parent(s)
    - Grandparent(s)
    - Extended Family
    - Partner(s)
    - Other: [textbox entry]
47. What resources have you ever, or currently, utilize from the UW Bothell campus? Check all that apply:

- Victim Advocate and Educator
- Counseling Center
- SAVE student club
- Faculty/staff support
- Other: [textbox entry]

48. What resources have you ever, or currently, utilize from the surrounding Bothell or King County community? Check all that apply:
    - King County Sexual Assault Resource Center
    - API Chaya
    - New Beginnings
    - Northwest Network of Bi, Trans, Lesbian and Gay Survivors of Abuse
    - Refugee Women's Alliance
    - ReWA
    - Other: [textbox entry]

Bystander Resource Questions - Tacoma (display if 'Tacoma' was selected in Q15)

49. What is Green Dot?
    - A behavior or action that expresses tolerance of violence and contributes to someone else's safety
    - A behavior or action that expresses intolerance of violence and contributes to someone else's safety
    - A person who makes a decision to stop someone else's actions from occuring when it has the potential to harm a community
    - A term used on the University of Washington campus to describe a program for students to learn about college behaviors and norms
50. Have you ever received any sexual assault resources (i.e., a flyer of information) from any bathroom on the University of Washington Tacoma campus?
    - Yes
    - No

    *Display Logic: If Yes is selected, show Q51
51. Have you used for yourself, or referred someone else, any of the sexual assault resources provided to you on those bathroom flyers? Check all the resources that you have used and/or referred to someone else:
    - UW Tacoma Victim Advocate
    - Safe Campus
    - Student Counseling Services
    - YWCA of Pierce County
    - Rebuilding Hope! Sexual Assault Center for Pierce County
    - Tacoma General Hospital
    - Crystal Judson Family Justice Center
    - UW Tacoma University Complaint Investigation Resolution Office (UCIRO)
    - UW Tacoma Human Resources
    - UW Tacoma Safety and Security
    - Tacoma Police Department
52. Please rank the type of resources you would like to be given information to:
    - Women's Healthcare resources in Tacoma
    - Community Specific Counseling and Care resources (i.e., Asian Pacific Islander, Latinx, LGBTQ community sources)
    - Community Resources in Puyallup
    - Community Resources in Lakewood

- Community Resources in South King County

Bystander Efficacy Scale

Please read each of the following behaviors. Indicate how confident you are that you can do the behavior by sliding the bar on the scale. Rate your degree of confidence by recording a number from 0 (can't do it) to 100 (very certain) using the scales given below:

[scale: 0 (can't do), 10 (quite uncertain), 20, 30, 40, 50 (moderately certain), 60, 70 80, 90, 100 (very certain)]

1. Express my discomfort if someone makes a joke about a woman's body.
2. Express my discomfort if someone says that rape victims are to blame for being raped.
3. Call for help (i.e., call 911) if I hear someone in my dorm yelling "help".
4. Talk to a friend who I suspect is in an abusive relationship.
5. Get help and resources for a friend who tells me they have been raped.
6. Able to ask a stranger who looks very upset at a party if they are okay or need help.
7. Ask a friend if they need to be walked home from a party.
8. Ask a stranger if they need to be walked home from a party.
9. Speak up in class if a professor is providing misinformation about sexual assault.
10. Criticize a friend who tells me that they had sex with someone who was passed out or who didn't give consent.
11. Do something to help a very drunk person who is being brought upstairs to a bedroom by a group of people at a party.
12. Do something if I see a woman surrounded by a group of men at a party who looks very uncomfortable.
13. Get help if I hear of an abusive relationship in my dorm or apartment.
14. Tell an RA or other campus authority about information I have that might help in a sexual assault case even if pressured by my peers to stay silent.

GN IRMA Scale - short form

Please answer the following questions from 1 (strongly agree) to 5 (strongly disagree):

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

15. A rape probably doesn't happen if someone doesn't have any bruises or marks.
16. If the accused "rapist" doesn't have a weapon, you can't really call it rape.
17. If doesn't doesn't say "no," they can't claim rape.
18. A lot of times, people who say they were raped agreed to have sex and then regret it.
19. Rape accusations are often used as a way of getting back at people.
20. A lot of times, people who say they were raped often led the person on and then had regrets.
21. A lot of times, people who claim they were raped have emotional problems.
22. People who are caught cheating on their partners sometimes claim it was rape.

End of Survey

Appendix C. IRMAS and IRMAS-GN Item Comparison

IRMAS	Item Subscale	IRMAS-GN
If a girl is raped while she is drunk, she is at least somewhat responsible for letting things get out of hand.	Subscale 1: She asked for it	If someone is raped while they are drunk, that person is at least somewhat responsible for letting things get out of hand.
When girls go to parties wearing slutty clothes, they are asking for trouble.	Subscale 1: She asked for it	When someone goes to parties wearing slutty clothes, they are asking for trouble.
If a girl goes to a room alone with a guy at a party, it is her own fault if she is raped.	Subscale 1: She asked for it	If someone goes to a room alone with another person at a party, it is that person's own fault if they are raped.
If a girl acts like a slut, eventually she is going to get into trouble.	Subscale 1: She asked for it	If someone acts like a slut, eventually they are going to get into trouble.
When girls get raped, it's often because the way they said "no" was unclear.	Subscale 1: She asked for it	When someone gets raped, it's often because the way they said "no" was unclear.
If a girl initiates kissing or hooking up, she should not be surprised if a guy assumes that she wants to have sex.	Subscale 1: She asked for it	If someone initiates kissing or hooking up, they should not be surprised if it is assumed that they want to have sex.
When guys rape, it is usually because of their strong desire for sex.	Subscale 2: He didn't mean to	When people rape, it is usually because of their strong desire for sex.
Guys don't usually intend to force sex on a girl, but sometimes they get too sexually carried away.	Subscale 2: He didn't mean to	People don't usually intend to force sex on someone, but sometimes they get too sexually carried away.
Rape happens when a guy's sex drive goes out of control.	Subscale 2: He didn't mean to	Rape happens when a person's sex drive goes out of control.
If a guy is drunk, he might rape someone unintentionally.	Subscale 2: He didn't mean to	If someone is drunk, they might rape someone unintentionally.

It shouldn't be considered rape if a guy is drunk and didn't realize what he was doing.	Subscale 2: He didn't mean to	It shouldn't be considered rape if someone is drunk and didn't realize what they are doing.
If both people are drunk, it can't be rape.	Subscale 2: He didn't mean to	If both people are drunk, it can't be rape.
If a girl doesn't physically resist sex—even if protesting verbally—it can't be considered rape.	Subscale 3: It wasn't really rape	If someone doesn't physically resist sex—even if protesting verbally—it can't be considered rape.
If a girl doesn't physically fight back, you can't really say it was rape.	Subscale 3: It wasn't really rape	If someone doesn't physically fight back, you can't really say it was rape.
A rape probably doesn't happen if a girl doesn't have any bruises or marks.	Subscale 3: It wasn't really rape	A rape probably doesn't happen if someone doesn't have any bruises or marks.
If the accused "rapist" doesn't have a weapon, you can't really call it rape.	Subscale 3: It wasn't really rape	If the accused "rapist" doesn't have a weapon, you can't really call it rape.
If a girl doesn't say "no," she can't claim rape.	Subscale 3: It wasn't really rape	If doesn't doesn't say "no," they can't claim rape.
A lot of times, girls who say they were raped agreed to have sex and then regret it.	Subscale 4: She lied	A lot of times, people who say they were raped agreed to have sex and then regret it.
Rape accusations are often used as a way of getting back at guys.	Subscale 4: She lied	Rape accusations are often used as a way of getting back at people.
A lot of times, girls who say they were raped often led the guy on and then had regrets.	Subscale 4: She lied	A lot of times, people who say they were raped often led the person on and then had regrets.
A lot of times, girls who claim they were raped have emotional problems.	Subscale 4: She lied	A lot of times, people who claim they were raped have emotional problems.
Girls who are caught cheating on their boyfriends sometimes claim it was rape.	Subscale 4: She lied	People who are caught cheating on their partners sometimes claim it was rape.

Appendix D. University of Washington Campus Demographics

Table 13
UW Campus Demographics

Popuation	Seattle	Bothell	Tacoma
Total Undergraduate Population	30,553	5,175	4,402
White	42.70%	40.30%	50%
Asian	30.60%	35.10%	24.00%
Female	53.30%	47.40%	51.20%
Live on Campus	18%	5%	6%
Transfer Student	6%	14.50%	64%

Note. All data is for undergraduate population only

Appendix E. Campus Specific Survey Data

UW Seattle

Campus Characteristics Data

In this study, students from the Seattle campus comprised 51% of the total study participants. The overall characteristics for the Seattle campus are 53.3% of the students being female, 30.6% as Asian, and the mean age is 20 years old. In this study, the Seattle campus participants were 68% female, 50% Asian, and 37% were 22 years old. In particular, 27% of the students had received some type of formal exposure to bystander intervention and most of their exposure had occurred one year prior. The Seattle campus offers voluntary staff and faculty trainings about bystander intervention, have two staff members who, as a part of their job, are paid to support bystander intervention, and students have access to peer educators on bystander intervention, a victim advocate, campus police, and a Title IX Coordinator on campus.

Programs & Resources Utilized by Students

In this study, it was found that UW Seattle who had formal exposure to bystander intervention received that exposure in particular ways. For the types of bystander exposure and programming attended by participants on the UW Seattle campus, most participants had listened to a presentation on bystander intervention (44%) or seen a poster (5%). Informally, participants had attended some form of campus event that discussed bystander intervention (29%), had bystander intervention discussed in a class (30%), and had some form of discussion with a friend about bystander intervention previously (41%).

Interestingly, participants perceived that they had received exposure more than they actually reported having exposure. Specifically, participants perceived that they 'very confident' that they had been exposed to bystander intervention (12%), 'moderately confident' (27%), 'somewhat confident' (38%), 'slightly confident' (17%), and 'not at all confident' (8%). Participants where were able to indicate that they were formally exposed to bystander intervention was 27 percent, compared to those who said they did not have exposure (73%). When asked specifically about bystander trainings and resources discussed within them, participants acknowledged that they enjoyed when bystander intervention trainings were tailored to their community, most notably mentioned was when it was tailored to their Greek community. However, students articulated wanting more bystander intervention trainings, since many were unsure what bystander intervention or Green Dot was or felt like their training was too long ago for the concepts to remain salient for them.

IRMA Scores

It was found that UW Seattle students did not vary significantly in their IRMA scores from the other campuses. In general, all campuses had IRMA scores in the range of 0-42 points. For IRMA, the lower the score, the better. The lower an individual's IRMA score is, that suggests fewer rape myths believed by that person. 33% of UW Seattle students had an IRMA score between 22-32 points, out of a total of 110 points. In general, these numbers of rape myth

acceptance appear low, with a score of 22 out of 110 points. However, these numbers are still troubling, because a student having a mean IRMA score of 22 points is still high considering the questions that a participant was asked to rank. For example, one question asks the participant to rank on a scale of 1 to 5, with 1 being strongly agree to 5 being strongly disagree: "When someone goes to parties wearing slutty clothes, they are asking for trouble" or "If both people are drunk, it can't be rape." It would be ideal for a participant to rank all statements like these with low numbers, however, that is not the case. Understanding that UW Seattle students believe some salient rape myths may be a good place to first start discussion - then move on to discussions of bystander intervention. Across all campuses, the two strongest rape myth categories believed were the myths of: 'She asked for it [rape]' and 'He Didn't Mean To [rape].' Starting from a place that addresses these two rape myths is a good beginning for UW Seattle staff and administrators who are creating new bystander intervention trainings and programs.

Bystander Efficacy Scores

Participants on the Seattle campus were found to have the lowest bystander efficacy scores. In particular, UW Seattle participants had a mean bystander efficacy score of 74 points, with their lowest score at 12 points and their highest score at 100 points. Most participants had a bystander efficacy score in the range of 65-85 points. For bystander efficacy scores, the higher the number, the more an individual believes she or he has the confidence to perform bystander behaviors. Since bystander efficacy scores are out of 100 points, UW Seattle participants are slightly above the average, which is a promising number, but one that should be able to be at 100 points. In short, UW Seattle students are not the worst in their bystander efficacy scores, however, they do not rate that much higher than a score of 50 points, which is the very middle of confidence in an individual's abilities to be a bystander. With more targeted bystander intervention methods, it is hoped that UW Seattle students would rate their confidence, or bystander efficacy, at a score of 90 to 100 points. Having a range of 65 to 85-point confidence in their own bystander behaviors leaves quite a bit of room for a bystander to be in a situation, but simply do nothing to act in it.

Intent Scores

Participants on the Seattle campus were found to have the lowest overall intent scores; however, they were only slightly lower in scores than UW Tacoma. In particular, UW Seattle participants had a mean bystander intent score of 13.6 points (out of 20 points), with a range of scores between 2 and 20 points. Most participants had an intent score in the range of 12-16 points. For intent scores, the higher the number, the more an individual believes she or he intends to perform bystander behaviors in the future. In short, UW Seattle students are slightly above average in their mean intent scores, however their highest intent score was 12 points (13.3%) and that score is closer to average than it is to a high intent to perform bystander behaviors (i.e., a score closer to 20 points).

Perceived Control Scores

Seattle campus participants were primarily 'Somewhat confident' in their personal control to believe that they would know what to do in order to perform bystander behaviors in

the future. Specifically, they were found to be 'Somewhat confident' (38.7%), 'Moderately confident' (27.4%), 'Slightly confident' (17.3%), 'Very confident' (11.8%), and 'Not confident at all' (5.4%). Finding that participants are somewhat confident to moderately confident in their personal control in believing that they would know what to do to perform bystander behaviors is promising. However, these data suggest there is still work to be done in order to move students from 'Somewhat confident' to 'Very confident' in their personal control beliefs. Additionally, the campuses were not different from one another in their personal control - all campuses had the majority of students rate their personal control to be 'Somewhat confident' to 'Moderately confident' most.

Seattle campus participants had similar control strategy scores. Control strategy scores indicate how much a participant intends to take action to perform bystander behaviors in the future. Specifically, the control strategy scores for Seattle participants were 'Moderately confident' (33.5%), 'Somewhat confident' (27.4%), 'Very confident' (23.5%), 'Slightly confident' (11.6%), and 'Not confident at all' (4%).

Recommendation Suggestions

Based on these findings, it is recommended that UW Seattle offer more group trainings, particularly trainings that are tailored to specific group characteristics. It was found that most participants heard about bystander intervention from either a training and/or presentation. Additionally, participants noted that they wanted to see more trainings or presentations that addressed more issues related to their identity. UW Seattle participants wanted to attend more bystander intervention groups and trainings that were tailored to their specific identities. A recommendation for UW Seattle, is to create bystander intervention trainings that do two things. First, the training could become a tailored training group, such as trainings specifically for LGBTQ+ students, female students only, or international students. Second, the training could hold characteristics of an interactive training model, but also take shape like a presentation. Most participants had participated in a bystander intervention presentation, rather than attend a training, which tend to be longer in format. Structuring trainings to be more like presentations in the future may encourage more students to attend and learn about bystander intervention.

Another recommendation for UW Seattle staff and administrators, is to find ways to partner with current campus faculty and instructors in order to give them training on how to present bystander intervention in their classrooms and curriculum. It was found that around 40 participants had received bystander intervention training from an academic class or a professor talking about it during their course. Leveraging the faculty who are already incorporating bystander intervention topics into their class teaching, as well as training more faculty to do so, will enable small presentations and discussions of bystander intervention to be shared across the university. Implementing a "train so then you can train others" approach can enable bystander intervention to operate in a greater capacity, but without the sole responsibility for its operation to remain on the shoulders of those in charge of health and wellness at the university.

UW Bothell

Campus Characteristics Data

In this study, students from the Bothell campus comprised 16% of the total study participants. The overall characteristics for the Bothell campus are 72% of the students being female, 43% as Asian, and the mean age is 22 years old. In particular, 15% of the students had received some type of formal exposure to bystander intervention and most of their exposure had occurred either two months (19%) or two years prior (19%). Furthermore, 41% of participants said that they had attended orientation at UW Bothell during the past year. The Bothell campus offers voluntary staff and faculty trainings about bystander intervention, have one staff member who, as a part of their job, are paid to support bystander intervention, have a required one-hour training on bystander intervention during orientation for all students, and students have access to peer educators on bystander intervention, a victim advocate, campus police, and a Title IX Coordinator on campus.

Programs & Resources Utilized by Students

In this study, it was found that UW Bothell who had formal exposure to bystander intervention received that exposure in particular ways. For the types of bystander exposure and programming attended by participants on the UW Bothell campus, most participants had heard about it at orientation (88%), while a few had learned about it by seeing a poster (12%). Informally, participants had attended some form of campus event that discussed bystander intervention (25%), had bystander intervention discussed in a class (23%), and had some form of discussion with a friend about bystander intervention previously (52%).

Interestingly, participants perceived that they had received *less* exposure than they actually reported having with formal exposure. Specifically, participants perceived that they 'very confident' that they had been exposed to bystander intervention (2%), 'moderately confident' (10%), 'somewhat confident' (26%), 'slightly confident' (18%), and 'not at all confident' (44%). Participants who were able to indicate that they were formally exposed to bystander intervention was 15 percent, compared to those who said they did not have exposure (84%). When asked specifically about what resources participants utilize on the UW Bothell campus, they indicated the Counseling Center (27%) and faculty support (47%) where the two resources utilized the most. Finally, participants also reported utilizing specific resources in the greater Bothell community. They reported to using the King County Sexual Assault Resource Center (17%) and Refugee Women's Alliance (13%) most out of all other resources.

IRMA Scores

It was found that UW Bothell students did not vary significantly in their IRMA scores from the other campuses. In general, all campuses had IRMA scores in the range of 0 to 42 points. For IRMA, the lower the score, the better. The lower an individual's IRMA score is, that suggests fewer rape myths believed by that person. 35% of UW Bothell students had an IRMA score between 22-32 points, out of a total of 110 points. In general, these numbers of rape myth acceptance appear low, with a score of 22 out of 110 points. However, these numbers are still troubling, because a student having a mean IRMA score of 22 points is still high considering the questions that a participant was asked to rank. For example, one question asks the participant to rank on a scale of 1 to 5, with 1 being strongly agree to 5 being strongly disagree: "When someone goes to parties wearing slutty clothes, they are asking for trouble" or "If both people are drunk, it can't be rape." It would be ideal for a participant to rank all statements like these with

low numbers, however, that is not the case. Understanding that UW Seattle students believe some salient rape myths may be a good place to first start discussion - then move on to discussions of bystander intervention. Across all campuses, the two strongest rape myth categories believed were the myths of: 'She asked for it [rape]' and 'He Didn't Mean To [rape].' Starting from a place that addresses these two rape myths is a good beginning for UW Seattle staff and administrators who are creating new bystander intervention trainings and programs.

Bystander Efficacy Scores

Participants on the Bothell campus were found to have a mean bystander efficacy score that was in the middle of those for UW Seattle and UW Tacoma students. In particular, UW Bothell participants had a mean bystander efficacy score of 76 points, with their lowest score at 19 points and their highest score at 100 points. Most participants had a bystander efficacy score in the range of 63-90 points. For bystander efficacy scores, the higher the number, the more an individual believes she or he has the confidence to perform bystander behaviors. Since bystander efficacy scores are out of 100 points, UW Bothell participants are above the average, which is a promising number, but one that should be able to be at 100 points.

Intent Scores

Participants on the Bothell campus were found to have the highest overall intent scores compared to all other campuses. In particular, UW Bothell participants had a mean bystander intent score of 14.2 points (out of 20 points), with a range of scores between 4 and 20 points. Most participants had an intent score in the range of 12-16 points. For intent scores, the higher the number, the more an individual believes she or he intends to perform bystander behaviors in the future. In short, UW Bothell students are above average in their mean intent scores, with their highest intent score being 16 points (16.7%), signaling the most positive intentions to perform bystander behaviors when compared to all other campuses.

Perceived Control Scores

Bothell campus participants were primarily 'Somewhat confident' in their personal control to believe that they would know what to do in order to perform bystander behaviors in the future. Specifically, they were found to be 'Somewhat confident' (42.6%), 'Moderately confident' (25%), 'Slightly confident' (17.6%), 'Very confident' (11.1%), and 'Not confident at all' (3.7%). Finding that participants are predominantly somewhat confident to moderately confident in their personal control in believing that they would know what to do to perform bystander behaviors is promising. However, these data suggest there is still work to be done in order to move students from 'Moderately confident' to 'Very confident' in their personal control beliefs. Additionally, the campuses were not different from one another in their personal control - all campuses had the majority of students rate their personal control to be 'Somewhat confident' to 'Moderately confident' most.

Bothell campus participants had similar control strategy scores. Control strategy scores indicate how much a participant intends to take action to perform bystander behaviors in the future. Specifically, the control strategy scores for Bothell participants were 'Moderately confident' (38.9%), 'Very confident' (23.1%), 'Somewhat confident' (23.1%), 'Slightly

confident' (12%), and 'Not confident at all' (2.8%). These scores are fairly similar to those of the other campuses, however, Bothell does have the highest control strategy score of 38.9% of participants being 'Moderately confident,' when compared to Seattle (33.5%) and Tacoma (31.6%) campuses.

Recommendation Suggestions

Based on these findings, it is recommended that UW Bothell consider changing their approach in presenting information about bystander intervention to their students. It is extremely promising that UW Bothell's staff and administration have made bystander intervention a priority for their campus by requiring bystander intervention training at their orientation. Additionally, it is very promising that every student - no matter when you come to the university - must attend an orientation, ensuring that all students are at least exposed to initial concepts of bystander intervention. However, covering all topics of bystander intervention during an already busy orientation day, usually lasting for five or more hours, may not be the best platform for students to really listen, absorb, and learn about bystander intervention. Presenting this information at orientation may feel like a "fire hose" approach of learning for students - with information coming too much and too quickly for them to fully absorb it all. It is recommended that UW Bothell look into alternative methods of presentation for their bystander intervention trainings.

For example, it might be useful for UW Bothell to test to see if concentrated poster campaigns or intensive 40-minute trainings after orientation, during the first few weeks of a quarter, might be a better approach for students to retain the information they are given. It was found that UW Bothell participants in this study only 15% said that they had received formal exposure to bystander intervention, even though all students would have come in contact with bystander intervention because they would have attended orientation previously. Clearly, there may be a disconnect from hearing about bystander intervention in orientation and actually identifying knowledge about bystander intervention or behaviors in other situations. Creating formats, like a specific intensive bystander intervention training, may be more effective in knowledge retention of bystander intervention training for students.

UW Tacoma

Campus Characteristics Data

In this study, students from the Tacoma campus comprised 32% of the total study participants. In this study, the Tacoma campus participants were 72% female, 33% Asian, and 30% were 18-19 years old. In particular, 5% of the students had received some type of formal exposure to bystander intervention and most of their exposure had occurred one year prior. The Tacoma campus offers one staff member who has a small percentage of their job time allot to work on sexual assault prevention overall, not necessarily bystander intervention. There are no campus specific bystander intervention programs or resources for students, however, on occasion some staff members from UW Seattle may come down and offer trainings to UW Tacoma students, if requested.

Programs & Resources Utilized by Students

Since UW Tacoma does not offer any distinct resources or programs for bystander intervention, it was a surprise that 5% of students indicated that they had received some formal type of bystander intervention exposure. When prompted, it was found that UW Tacoma who had formal exposure had received that exposure primarily by seeing a poster (36%), with a few participants indicating that they had received an email from a supervisor or student government advisor (18%), and one participant indicated hearing about it in their Psychology 101 class. For the most part, participants indicated that they received informal bystander exposure in two ways: taking a class that included teaching on bystander intervention in it (58%) and through taking a sexual assault prevention flyer from the campus bathrooms (75%).

Participants' perceived level of exposure to bystander intervention pretty well matched their actual reported level of exposure. Specifically, participants perceived that they 'very confident' that they had been exposed to bystander intervention (1%), 'moderately confident' (3%), 'somewhat confident' (18%), 'slightly confident' (22%), and 'not at all confident' (56%). Participants who were able to indicate that they were formally exposed to bystander intervention was 5 percent, compared to those who said they did not have exposure (95%). When asked specifically about bystander trainings and resources utilized by students, 62% said that they had taken a sexual assault prevention flyer from a campus bathroom. SafeCampus (33%) and the Counseling Center (29%) were indicated to be the most utilized campus resources for these participants.

IRMA Scores

It was found that UW Tacoma students did not vary significantly in their IRMA scores from the other campuses. In general, all campuses had IRMA scores in the range of 0-42 points. For IRMA, the lower the score, the better. The lower an individual's IRMA score is, that suggests fewer rape myths believed by that person. 34% of UW Bothell students had an IRMA score between 22-32 points, out of a total of 110 points. In general, these numbers of rape myth acceptance appear low, with a score of 22 out of 110 points. However, these numbers are still troubling, because a student having a mean IRMA score of 22 points is still high considering the questions that a participant was asked to rank. For example, one question asks the participant to rank on a scale of 1 to 5, with 1 being strongly agree to 5 being strongly disagree: "When someone goes to parties wearing slutty clothes, they are asking for trouble" or "If both people are drunk, it can't be rape." It would be ideal for a participant to rank all statements like these with low numbers, however, that is not the case. Understanding that UW Tacoma students believe some salient rape myths may be a good place to first start discussion - then move on to discussions of bystander intervention. Across all campuses, the two strongest rape myth categories believed were the myths of: 'She asked for it [rape]' and 'He Didn't Mean To [rape].' Starting from a place that addresses these two rape myths is a good beginning for UW Tacoma staff and administrators who are creating new bystander intervention trainings and programs.

Bystander Efficacy Scores

Participants on the Tacoma campus were found to have the highest bystander efficacy scores. In particular, UW Tacoma participants had a mean bystander efficacy score of 78 points, with their lowest score at 32 points and their highest score at 100 points. Most participants had a

bystander efficacy score in the range of 66-91 points. For bystander efficacy scores, the higher the number, the more an individual believes she or he has the confidence to perform bystander behaviors. Since bystander efficacy scores are out of 100 points, UW Tacoma participants are above the average, which is a promising number, but one that should be able to be at 100 points. With more targeted bystander intervention methods, it is hoped that UW Tacoma students would rate their confidence, or bystander efficacy, at a score of 90 to 100 points, particularly because their bystander efficacy scores are already fairly high for having no bystander intervention at all.

Intent Scores

Participants on the Tacoma campus were found to have the second highest overall intent scores; however, they were only slightly higher than the Seattle campus. In particular, UW Tacoma participants had a mean bystander intent score of 13.7 points (out of 20 points), with a range of scores between 2 and 20 points. Most participants had an intent score in the range of 12-16 points. For intent scores, the higher the number, the more an individual believes she or he intends to perform bystander behaviors in the future. In short, UW Tacoma students are above average in their mean intent scores, with their highest intent score being 14 points (14.4%), signaling the most positive intentions to perform bystander behaviors when compared to all other campuses.

Perceived Control Scores

Tacoma campus participants were primarily 'Somewhat confident' in their personal control to believe that they would know what to do in order to perform bystander behaviors in the future. Specifically, they were found to be 'Somewhat confident' (33.3%), 'Moderately confident' (55%), 'Slightly confident' (18.3%), 'Very confident' (17.4%), and 'Not confident at all' (5.2%). Finding that participants are predominantly somewhat confident to moderately confident in their personal control in believing that they would know what to do to perform bystander behaviors is promising. However, these data suggest there is still work to be done in order to move students from 'Moderately confident' to 'Very confident' in their personal control beliefs. Additionally, the campuses were not different from one another in their personal control - all campuses had the majority of students rate their personal control to be 'Somewhat confident' to 'Moderately confident' most.

Tacoma campus participants had similar control strategy scores. Control strategy scores indicate how much a participant intends to take action to perform bystander behaviors in the future. Specifically, the control strategy scores for Tacoma participants were 'Moderately confident' (32.1%), 'Very confident' (31.6%), 'Somewhat confident' (24.5%), 'Slightly confident' (10.8%), and 'Not confident at all' (0.9%). These scores are fairly similar to those of the other campuses, however, Bothell does have the lowest control strategy score of 32.1% of participants being 'Moderately confident,' when compared to Seattle (33.5%) and Bothell (38.9%) campuses.

Recommendation Suggestions

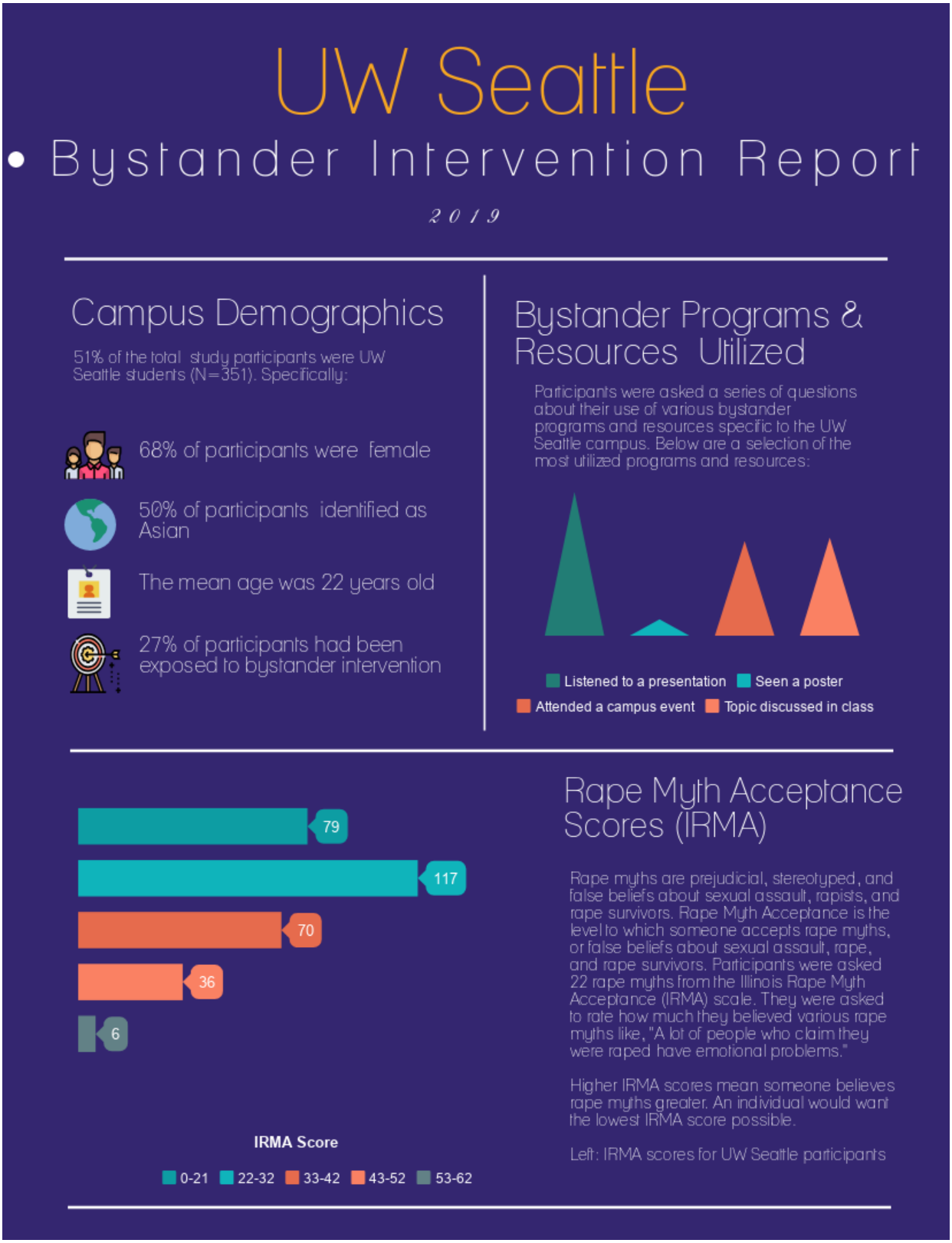
Based on these findings, there are two key recommendations for UW Tacoma. First, it is recommended that UW Tacoma implement their own trainings and programs for their students,

rather than relying on UW Seattle staff to administer them. It is very clear that UW Tacoma students are utilizing campus resources and greatly benefiting from the information and resources presented by their campus. The staff and administrators at UW Tacoma know their students best, and it seems apparent that this care for their students has translated well to student resource use. By creating small bystander intervention trainings and implementing small programming efforts, UW Tacoma can reach students with bystander intervention information in ways that students already are seeking and appreciate. Additionally, small efforts -- like their sexual assault prevention bathroom flyer -- seem to be making a big impact for students. Continuing to provide information like this in the form of flyers in accessible locations seems to be a good outlet for UW Tacoma students to learn information and find resources.

Another recommendation for UW Tacoma is to more intentionally leverage the community resources around them, as well as build more connections with the Tacoma and greater Pierce County communities. This study found that students are seeking out resources in the Tacoma community, as well as the greater communities around them. Taking advantage of these community resources and tying them into the programs and trainings offered on the campus can enable UW Tacoma to offer educational trainings and programs in a way that provides students resources but does not require the university to spend additional funding for it. Many of the UW Tacoma students are older, commuting adults. Finding ways to connect these students to resources they may already be familiar with in their own communities to their university campus can help build a better bridge to access and shared resources for a student population that currently does not have any funding or required resources for their assault prevention.

Appendix F. Campus Reports

UW Seattle



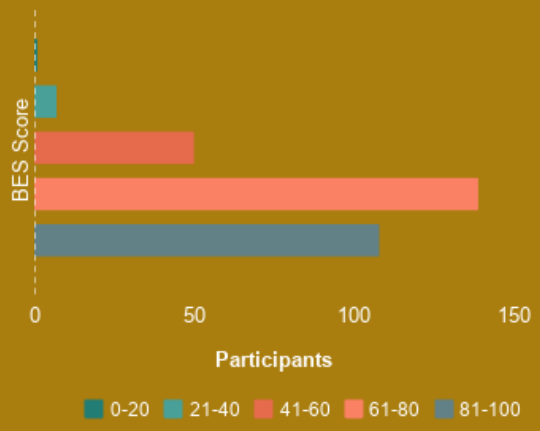
Bystander Efficacy Scores

Bystander efficacy is the perceived belief someone has that she or he can perform bystander behaviors in a situation.

Participants were given 14 questions relating to bystander behaviors, then asked to indicate on a scale of 1 ("can't do it") to 100 ("very certain can do it") how confident they felt performing that behavior. Scores were calculated by taking the average of all 14 questions.

Participants were asked to rate their confidence for questions like: "Do something to help a very drunk person who is being brought upstairs to a bedroom by a group of people at a party" or "As a friend if they need to be walked home from a party."

UW Seattle BES Scores



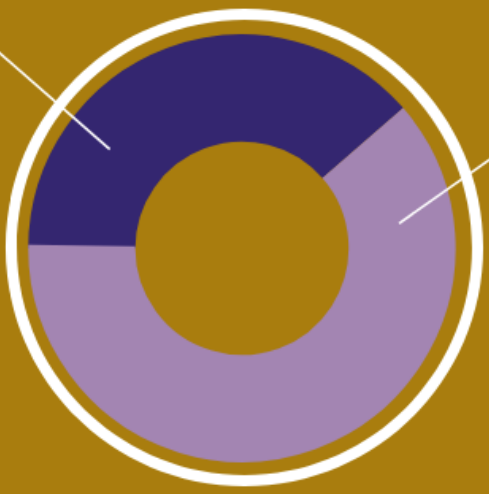
Reminder: An individual would want the highest bystander efficacy score, indicating they feel very confident to perform any bystander behavior

Key Recommendations

Partner with Current Bystander Efforts

Participants shared that they were already participating in bystander programs or presentations given by campus faculty and instructors.

Staff and administrators can partner with current instructors and faculty to create a "train so you can train" approach, enabling smaller presentations and discussions of bystander intervention to be facilitated across campus in new spaces and current spaces that already implement bystander intervention efforts



Offer more group trainings, and tailor them!

Participants shared that they particularly enjoyed group trainings, especially when those trainings were tailored to a common group theme or identity - like female students only trainings or international students group trainings.

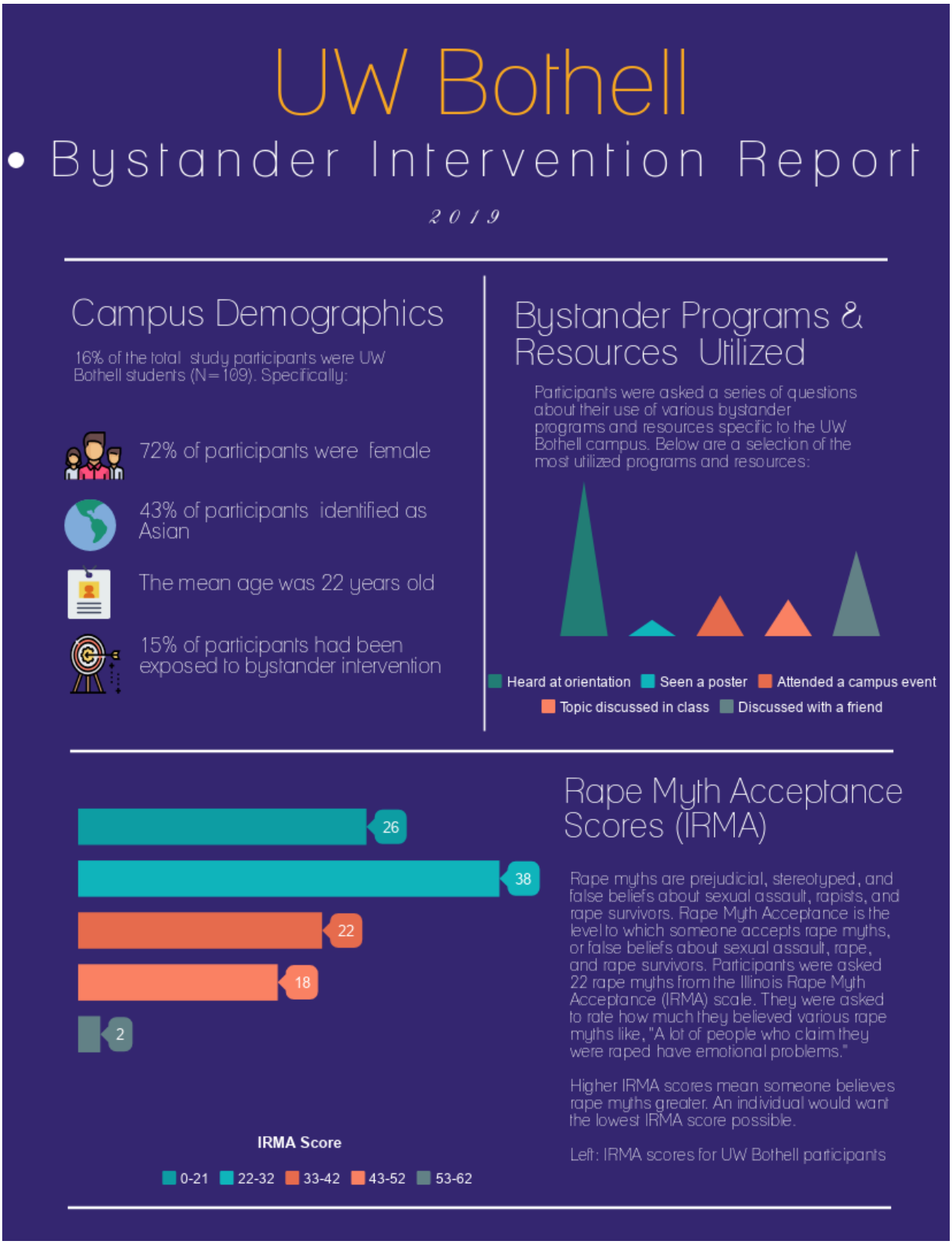
Participants also enjoyed a presentation format for more than a "training" or interactive model. Finding ways to incorporate characteristics of a interactive model into a presentation model can help students attend these trainings more

Source:

Beth J. Bollinger Dissertation Data

University of Washington
Department of Communication
Data Collected: 2018
Report Published: 2019

UW Bothell

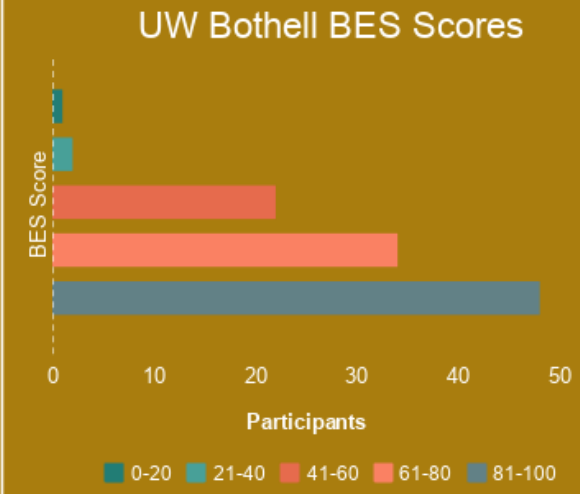

UW Bothell
Bystander Intervention Report
2019
Campus Demographics
16% of the total study participants were UW Bothell students (N=109). Specifically:
72% of participants were female
43% of participants identified as Asian
The mean age was 22 years old
15% of participants had been exposed to bystander intervention
Bystander Programs & Resources Utilized
Participants were asked a series of questions about their use of various bystander programs and resources specific to the UW Bothell campus. Below are a selection of the most utilized programs and resources:
Heard at orientation
Seen a poster
Attended a campus event
Topic discussed in class
Discussed with a friend
26
38
22
18
2
IRMA Score
0-21
22-32
33-42
43-52
53-62
Rape Myth Acceptance Scores (IRMA)
Rape myths are prejudicial, stereotyped, and false beliefs about sexual assault, rapists, and rape survivors. Rape Myth Acceptance is the level to which someone accepts rape myths, or false beliefs about sexual assault, rape, and rape survivors. Participants were asked 22 rape myths from the Illinois Rape Myth Acceptance (IRMA) scale. They were asked to rate how much they believed various rape myths like, "A lot of people who claim they were raped have emotional problems."
Higher IRMA scores mean someone believes rape myths greater. An individual would want the lowest IRMA score possible.
Left: IRMA scores for UW Bothell participants

Bystander Efficacy Scores

Bystander efficacy is the perceived belief someone has that she or he can perform bystander behaviors in a situation.

Participants were given 14 questions relating to bystander behaviors, then asked to indicate on a scale of 1 ('can't do it') to 100 ('very certain can do it') how confident they felt performing that behavior. Scores were calculated by taking the average of all 14 questions.

Participants were asked to rate their confidence for questions like: "Do something to help a very drunk person who is being brought upstairs to a bedroom by a group of people at a party" or "As a friend if they need to be walked home from a party."



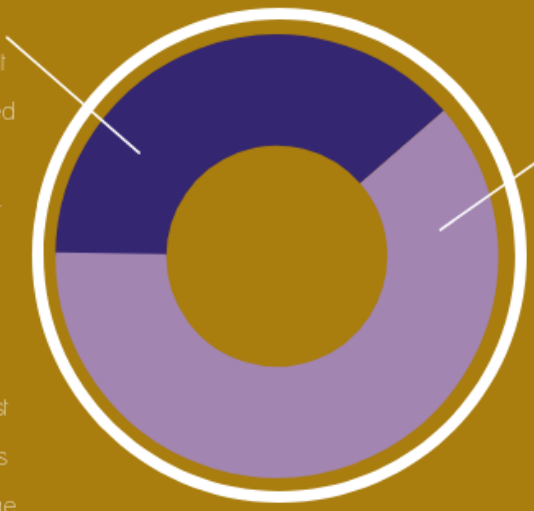
Reminder: An individual would want the highest bystander efficacy score, indicating they feel very confident to perform any bystander behavior

Key Recommendations

Change the presentation format

Participants were found to not remember much bystander intervention material presented to them at orientation - presumably because students are already on overload with information that week

It is recommended that staff and administrators change their presentation format to move from an "orientation only" model to dispersed information throughout the first week or quarter of classes. Integrating poster campaigns or short interactive trainings may allow students to engage with concepts more fully than they are able at orientation



Adding alternate presentation options

Participants shared that bystander intervention information was most salient when given to them in a format other than presentation style at orientation. Sharing about bystander intervention at orientation is still important, but adding alternate presentation formats can reach more students' information learning styles

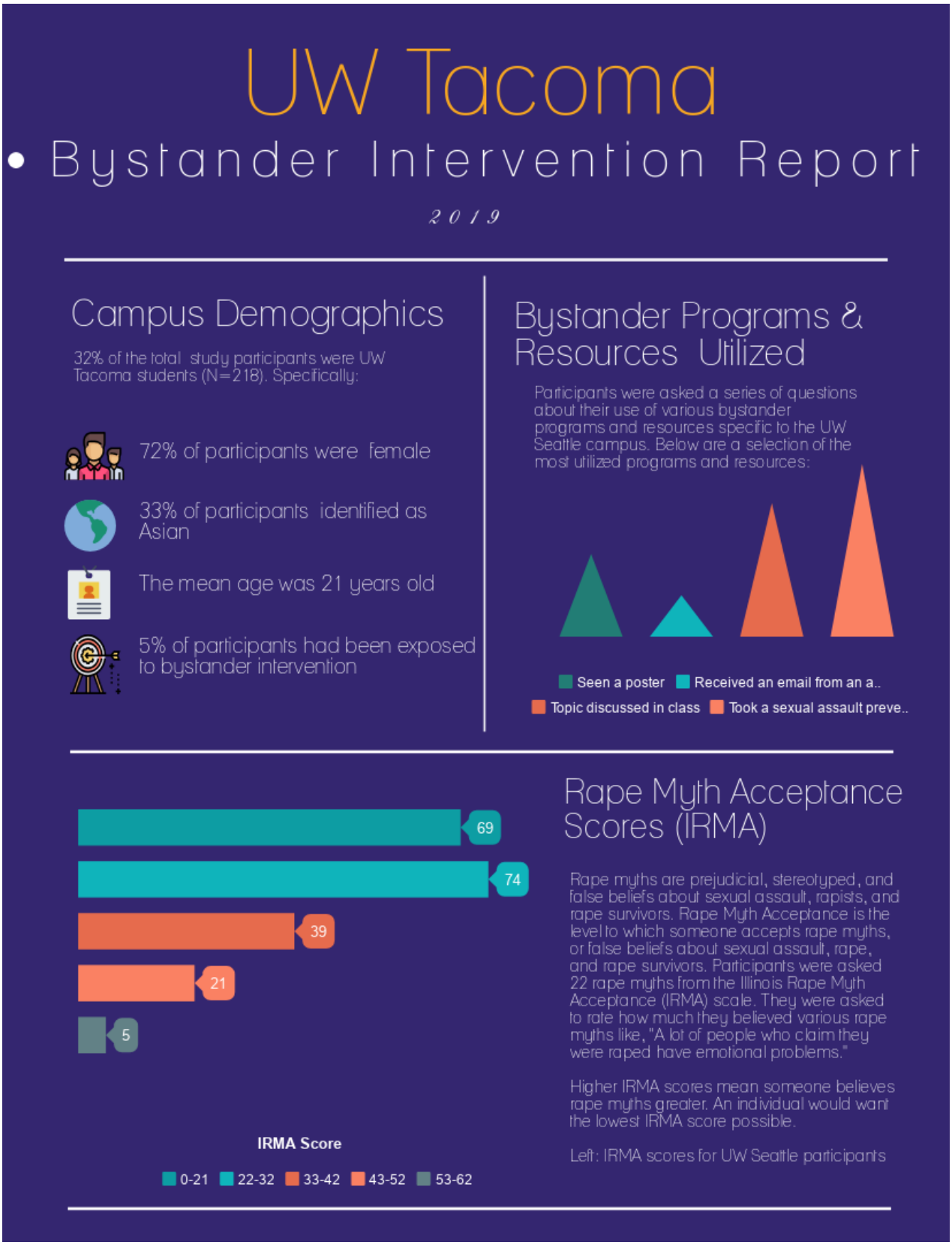
Reaching out to classes that currently discuss bystander intervention may be a good alternate information presentation format

Source:

Beth J. Bollinger Dissertation Data

University of Washington
Department of Communication
Data Collected: 2018
Report Published: 2019

UW Tacoma

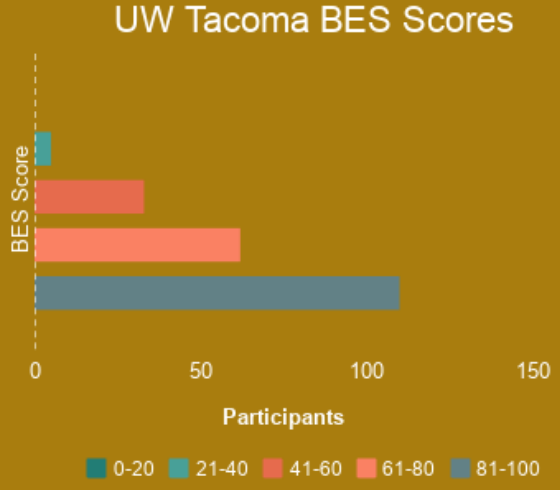

UW Tacoma
• Bystander Intervention Report
2019
Campus Demographics
32% of the total study participants were UW Tacoma students (N=218). Specifically:
72% of participants were female
33% of participants identified as Asian
The mean age was 21 years old
5% of participants had been exposed to bystander intervention
Bystander Programs & Resources Utilized
Participants were asked a series of questions about their use of various bystander programs and resources specific to the UW Seattle campus. Below are a selection of the most utilized programs and resources:
Seen a poster
Received an email from an a..
Topic discussed in class
Took a sexual assault preve..
69
74
39
21
5
IRMA Score
0-21
22-32
33-42
43-52
53-62
Rape Myth Acceptance Scores (IRMA)
Rape myths are prejudicial, stereotyped, and false beliefs about sexual assault, rapists, and rape survivors. Rape Myth Acceptance is the level to which someone accepts rape myths, or false beliefs about sexual assault, rape, and rape survivors. Participants were asked 22 rape myths from the Illinois Rape Myth Acceptance (IRMA) scale. They were asked to rate how much they believed various rape myths like, "A lot of people who claim they were raped have emotional problems."
Higher IRMA scores mean someone believes rape myths greater. An individual would want the lowest IRMA score possible.
Left: IRMA scores for UW Seattle participants

Bystander Efficacy Scores

Bystander efficacy is the perceived belief someone has that she or he can perform bystander behaviors in a situation.

Participants were given 14 questions relating to bystander behaviors, then asked to indicate on a scale of 1 ('can't do it') to 100 ('very certain can do it') how confident they felt performing that behavior. Scores were calculated by taking the average of all 14 questions.

Participants were asked to rate their confidence for questions like: "Do something to help a very drunk person who is being brought upstairs to a bedroom by a group of people at a party" or "As a friend if they need to be walked home from a party."



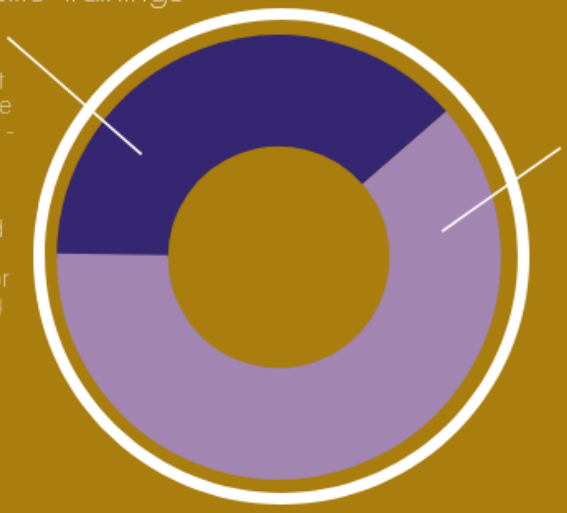
Reminder: An individual would want the highest bystander efficacy score, indicating they feel very confident to perform any bystander behavior

Key Recommendations

Create UW-T specific trainings and programs

Participants indicated that their most utilized resource was a UW-T created one - the sexual assault prevention flyers in the bathrooms on campus. Clearly, students respond well to tailored programs and resources created for them, by their community

Staff and administrators should create small bystander intervention trainings and small programs - like the flyer - to better reach their students in ways they desire, as well as being potentially very effective too



Leverage the greater Pierce County resources

Participants shared that they are desiring to be connected to resources within Tacoma and the greater Pierce County area

Staff and administrators should work on building relationships with these surrounding community resources, tying them into the programs and trainings offered to UW-T students. This can allow for more resource options, but not necessarily increase resource-related costs

Source:

Beth J. Bollinger Dissertation Data

University of Washington
Department of Communication
Data Collected: 2018
Report Published: 2019