Spring 2018

Understanding Self-Reported Sexual Violence Perpetration: Correlates and Prevention Participation

Jacqueline F. Klatt
University of New Hampshire, Durham, jfk2002@wildcats.unh.edu

Follow this and additional works at: https://scholars.unh.edu/honors

Part of the Social Psychology Commons

Recommended Citation
Honors Theses and Capstones. 384.
https://scholars.unh.edu/honors/384

This Senior Honors Thesis is brought to you for free and open access by the Student Scholarship at University of New Hampshire Scholars' Repository. It has been accepted for inclusion in Honors Theses and Capstones by an authorized administrator of University of New Hampshire Scholars' Repository. For more information, please contact nicole.hentz@unh.edu.
Understanding Self-Reported Sexual Violence Perpetration: Correlates and Prevention Participation

Abstract
Bystander prevention programs seek to educate individuals on the nature of sexual violence and increase bystander efficacy. This study seeks to evaluate the effectiveness of the Bringing in the Bystander (BITB) prevention program through self-reports of perpetration behaviors as well as risk factors associated with perpetration. The bystander prevention program was implemented on a rural mid-sized public university and first-year students were surveyed three times at separate time points (2 weeks, 5 months, and 12 months) after the program conclusion. Results from a correlational and logistic regression analysis show that endorsement of violent peer norms, rape myth acceptance, and rape proclivity of self were all significant correlates of perpetration. The results also indicated that endorsement of coercive peer norms was a predictor of recent perpetration. There were no significant differences in self-reported recent perpetration between the control and treatment group. However, recent perpetration rates did decrease for the treatment group, which means BITB is on the right track to ending sexual violence on college campuses.

Keywords
perpetration, bystander program, bystander prevention, sexual violence, sexual assault, college students

Subject Categories
Psychology | Social Psychology

This senior honors thesis is available at University of New Hampshire Scholars' Repository: https://scholars.unh.edu/honors/384
UNDERSTANDING SELF-REPORTED SEXUAL VIOLENCE PERPETRATION:
CORRELATES AND PREVENTION PARTICIPATION

Jacqueline Klatt

University of New Hampshire

jfk2002@wildcats.unh.edu
Abstract

Bystander prevention programs seek to educate individuals on the nature of sexual violence and increase bystander efficacy. This study seeks to evaluate the effectiveness of the Bringing in the Bystander (BITB) prevention program through self-reports of perpetration behaviors as well as risk factors associated with perpetration. The bystander prevention program was implemented on a rural mid-sized public university and first-year students were surveyed three times at separate time points (2 weeks, 5 months, and 12 months) after the program conclusion. Results from a correlational and logistic regression analysis show that endorsement of violent peer norms, rape myth acceptance, and rape proclivity of self were all significant correlates of perpetration. The results also indicated that endorsement of coercive peer norms was a predictor of recent perpetration. There were no significant differences in self-reported recent perpetration between the control and treatment group. However, recent perpetration rates did decrease for the treatment group, which means BITB is on the right track to ending sexual violence on college campuses.

Keywords: perpetration, bystander program, bystander prevention, sexual violence, sexual assault, college students.
Understanding self-reported sexual violence perpetration: Correlates and prevention participation

Overall, about one in eight students report sexual violence during their time in college (Campbell et al., 2017). Women are most at risk when it comes to sexually violent crimes, with about one-fifth to one-fourth experiencing an attempted or completed rape during their college careers (Fisher, Cullen, & Turner, 2000). Men, on the other hand, are more commonly perpetrators with about 7.9% of college men reporting they have committed rape at least once while attending college (Swartout et al., 2015). Another study cites about one-third of college men as engaging in sexual violence at least once during their college career (Abbey, McAuslan, Zawacki, Clinton, & Buck, 2001). Bystander programs are becoming more prevalent on college campuses in order to address the ongoing problem of sexual violence. These programs seek to educate students on positive bystander actions and encourage them to intervene in sexual assault situations to reduce risk factors and promote positive social norms. The current study seeks to examine both the correlates of sexual violence perpetration among first year college students, and whether these reports are lower among students who took part in the Bringing in the Bystander prevention program (BITB).

Perpetration is defined as actively committing sexual violence against another. Perpetration is at the very core of the issue of sexual violence. Four risk factors are associated with an increased chance of engaging in perpetration behaviors. The first and biggest factor is biological sex. Studies show that men are more at risk to become perpetrators (Abbey & McAulsan, 2004; Campbell et al., 2017; Fabiano, Perkins, Berkowitz, Linkenbach, & Stark, 2003; Gidyz, Orc Orchowski, & Berkowitz, 2011). Men
tend to underestimate the importance of consent to a woman, which causes miscommunication problems between the two sexes when a sexual situation has the potential to ensue (Fabiano et al., 2003). The second factor is previous perpetration (Abbey & McAulsen, 2004; Campbell et al., 2017). Repeat perpetration is very common and repeat offenders are the majority of people who are prosecuted for sexually violent acts. Thirdly, individual incapacitation due to alcohol or drugs also contributes to perpetration (Abbey et al., 2001; Neal & Edwards, 2017). A fourth somewhat under-researched factor in perpetration is childhood sexual abuse. Studies have shown that men with a history of sexual abuse by an adult figure during childhood are more likely to become perpetrators later in life (Casey et al., 2017; Classen, Palesh, & Aggarwal, 2005).

Prior research also highlights a number of attitudinal factors that can put a student at risk to engage in perpetration behaviors. Peer norms have been shown to play a role in perpetration behavior in prior research where results indicated that men whose peers vocally advocate sexual violence against women, are more likely to be sexually abusive (Schwartz, DeKeseredy, Tait, & Alvi, 2001). These men who had sexually violent peers are more at risk to also engage in sexual violence due to their contact with coercive peers. Findings from a more recent study also indicated that students who believed their peers endorsed rape were more likely to increase their perpetration behaviors during college (Thompson, Kingree, Zinzow, & Swartout, 2015). In another study by Malamuth (1989b), results suggested that those with a greater attraction to sexual violence are more at risk to become sexual aggressors. These risk factors are very important in understanding what kind of student is most at risk to
commit sexual violence, and in turn to provide the necessary education that makes these acts less reinforcing.

It is evident that sexual violence is an ongoing issue that must be addressed within university offices. It is also clear that universities have begun to gain awareness of this problem and have started providing resources to combat sexual violence on campus (Armstrong, Hamilton, & Sweeney, 2006). Bystander awareness courses are starting to rise in importance within many college campuses in order to combat the serious issue of sexual assault. The goal of these courses is to provide education to increase an individual’s confidence to intervene in sexually violent situations. Bystander efficacy is extremely important in this education because the more people who intervene in potentially violent sexual situations, the more likely it is that sexual violence rates continue to decrease (Armstrong et al., 2006). There are a number of different programs that exist today surrounding bystander awareness education, all with variable outcomes regarding bystander behavior. A bystander is typically defined as a person who is present during a sexual violence situation and has the opportunity to either help or to do nothing. Bystanders are extremely important in the battle against sexual violence. By teaching students how to be a proactive bystander in these situations, there is a chance to stop violence in its tracks and increase sexual assault education.

Currently, studies centering around the Green Dot bystander program make up most of the literature on the effect of bystander programs on sexual violence rates. The aim of Green Dot is to train college students to be proactive bystanders through a motivational speech by campus leaders followed by small-interactive group sessions centering on proactive bystander roles. In a study surrounding Green Dot, results
indicated that perpetration rates were lower at college campuses where the Green Dot program was implemented versus campuses where no bystander prevention programming was available (Coker, A. L., Fisher, B. S., Bush, H. M., Swan, S. C., Williams, C. M., Clear, E. R., & DeGue, S., 2015). Another study also indicated that students in this program reported lower rape myth acceptance scores and greater bystander efficacy (Coker, A. L., Cook-Craig, P. G., Williams, C. M., Fisher, B. S., Clear, E. R., Garcia, L. S., & Hegge, L. M., 2011).

Another program, the InterACT sexual assault prevention program, is implemented in mixed gendered settings amongst college students. In this program, an interactive performance is given to raise awareness of sexual assault. In an evaluation of this program, results indicated that in both men and women, the performance increased participants' beliefs about the effectiveness of bystander interventions and also increased perceptions about the likelihood to intervene (Ahrens, Rich, & Ullman, 2011; Storer et al., 2016). The advantage of the InterACT program is that participants have the change to practice actually intervening in a safe, nurturing, and supervised environment.

The TakeCARE bystander program is a program implemented within the college student population. This course is slightly different as it is a video, which is implemented individually to students in supervised computer lab settings. The video is 25 minutes long and is designed to help prevent sexual violence through a condensed bystander education. The program has encouraging results including more positive bystander attitudes towards friends and greater bystander efficacy compared with those who did not receive the program (Jouriles et al., 2016). The utilization of a video program means
there is no training of facilitators and the shortness of the program is desirable for busy college students.

The RealConsent program takes the video course one step further with an entirely web-based program, which means there is zero in-person attendance. Participants include only college males who are sent email links to the course. The program itself consists of a 3-hour interactive web module covering a wide range of topics including consent, sexual violence, and bystander education. Results from this program indicated the male students who participated in the online RealConsent course were more likely to intervene in sexual violence situations as well as engaged in less sexual assault perpetration behaviors compared to the control group (Salazar, L.F., Vivolo-Kantor, A., Hardin, J., & Berkowitz, A., 2014).

The Men’s Project bystander program was also implemented among college males. This program challenges norms of sexual violence and promotes positive intervention techniques through a 1.5 hour in-person program. Results from this program indicated that the participants are less likely to exhibit perpetration behavior after participation in the program and that those who participated in the program found sexual assault behavior less reinforcing (Gidyz et al., 2011). The Men’s Project shows a positive change in behavior, which indicates active action on the part of the participant.

The current study seeks to examine the effect of the Bringing in the Bystander prevention program on self-reports of perpetration. This course navigates participants through “discussions on how community members can play prevention roles as bystanders when they observe risky situations before and during acts of sexual and relationship violence and later if someone should disclose that she or he had been a
victim of sexual or relationship violence” (Moyihan et al., 2015, p. 115). This program is administered in single gendered settings, but without emphasis on gender norms. The program has been thoroughly researched in a number of different settings. Prior studies surrounding this program indicated that the most common outcome is an increase in bystander efficacy (Cares et al., 2014; Moynihan et al., 2015; Banyard, Moynihan, & Plante, 2007; Moynihan, Banyard, Arnold, Eckstein, & Stapleton, 2011). Two studies specifically cite that the program benefits both men and women using potential bystander roles versus victim and perpetrator roles (Banyard et al., 2007; Moynihan, Banyard, Arnold, Eckstein, & Stapleton, 2010). The program was also shown to be effective among student leaders who already possessed significant education on sexual violence before the program began (Banyard, Moynihan, & Crossman, 2009). This indicates that the program goes a step beyond basic bystander intervention and has the potential to provide more intermediate education on sexual violence. Studies evaluating the program also indicated that there are no negative associations made about sexual violence after program completion (Moynihan et al., 2011; Moynihan et al., 2010).

All of these bystander prevention programs indicated very positive results in the long-term battle of ending sexual violence on college campuses. The results of many studies indicated that bystander prevention courses increase participants bystander efficacy, which means an individual’s confidence to effectively intervene in a sexual violence situation (Cares et al., 2014; Elias-Lambert & Black, 2016; Jouriles et al., 2016; Kleinsasser, Jouriles, McDonald, & Rosenfield, 2015, Salazar et al., 2014). Bystander programs also report that their programs made a positive impact on their participants willingness to help in sexual violence situations. Another very important goal within
these programs is not only to increase prevention of violence, but also to discourage negative community norms related to sexual violence (Storer, Casey, Herrenkohl, 2016). It is also important to note that most bystander prevention programs include education to help teach students on what it means to be a bystander and how to recognize potentially violent situations. According to Latané and Darley (1969), some of the most important first steps in taking a proactive bystander stance is interpreting the situation as violent and then deciding if there is a responsibility to act. These courses help aid bystanders in identifying sexual violence and encourage a responsibility of proactive intervention. There has also been research to support that bystander prevention courses may decrease the reinforcing factors of sexually violent behavior or perpetration behaviors (Gidyz et al, 2011; Salazar et al., 2014). This means that bystander programs have both attitudinal and behavioral goals associated with their education.

Many studies surrounding the outcomes of bystander prevention programs are focused on the attitudinal change of participants (Elias-Lambert, 2016; Foubert et al., 2010; Ahrens et al., 2011; Katz et al., 2011). Although measuring changed attitudes regarding sexual violence is important, measuring behavioral change shows how proactive a bystander program is when it comes to the actions of individuals. Studies that do measure behavioral outcomes tend to focus on bystander actions and not perpetrator actions. The current study is different because it instead examines behavioral change in measurements of perpetration, which has only been done in the research of a few programs (Salazar et al., 2014; Gidyz et al., 2011). BITB also attempts challenge gender norms in regards to sexual violence. According to Armstrong
et al. (2006), “some individual characteristics that may contribute to the likelihood of a sexual violence situation occurring are not explicitly gendered” (p. 494). This program acknowledges the gender-neutral role of the proactive bystander. The program focuses on the role men and women play as potential bystanders without framing them as potential perpetrators or victims.

Continuous testing of BITB and other bystander prevention programs allows researchers build upon and improve programs so that they have the largest positive impact among communities as possible. College campuses continue to struggle with rates of sexual violence, and this research indicates that perfecting these bystander programs may help alleviate the problem. The BITB program has previously shown positive results in bystander efficacy, but what about the behavioral changes (Cares et al., 2014; Moynihan et al., 2015)? This question is what the current study seeks to understand through multiple testing periods on participants of the BITB programming.

This study aims to examine behavior correlates of perpetration as well as investigation of the outcomes in the Bringing in the Bystander program. Our first hypothesis states that if students self-report recent perpetration, then these students will have higher levels of attitudinal risk factors and will also report lifetime perpetration behavior. This means that students who report recent perpetration are more likely to already have a lifetime proclivity for sexual violence as well as more behaviors associated with perpetration. The next hypothesis states that if students receive the bystander prevention program, then they will report less perpetration behaviors one year after the program than students in the control group. Our hope in this is that the
BITB program may be a contributing factor to reduced perpetration behaviors among participants.

**Method**

This study is based on secondary analyses of data collected several years ago for a CDC funded evaluation of a bystander focused prevention program on two college campuses. Data used in the current analyses were drawn from one campus.

**Participants**

Three cohorts of first-year college students were recruited for the study with a total number of 550 participants. The campus is a public New England school in a rural and residential setting with a mid-sized campus population. Qualified participants include first-year students between the ages of 18-24 and untrained as domestic violence advocates. The average age was 18.15 (SD= .391). Participants were randomly assigned to program or control group. The sample was evenly distributed between men (54.4%) and women (45.5%), participants currently in a romantic relationship (40.9%) and participants not currently in a romantic relationship (59.1%), participants in intramurals (46.5%) and participants not in intramurals (53.5%), and participants in student organizations (51.8%) and participants not in student organizations (48.2%). Participants more frequently reported not being members of a performing arts group (92.7%) and not being involved in fraternity or sorority life (94.7%). 37.5% reported father’s education as college undergraduate. Race was not collected because the campus had limited racial diversity and there were concerns that question would be potentially identifying.

**Measures**
Sexual Experiences Survey (Koss et al., 2007)

The Sexual Experiences Survey was used to measure perpetration in sexual violence encounters. It is a 10-question survey in which participants respond to statements in regards to potential perpetration behavior. Each statement describes a behaviorally specific form of sexual violence, without labeling it that way, and asks if the participant has engaged in that behavior. For example, participants were asked rate identification with such statements as “I put my penis (men only) or I put my fingers or objects (all respondents) into someone’s butt without their consent by: a. telling lies, threatening to end the relationship, threatening to spread rumors about them, making promises about the future I knew were untrue, or continually verbally pressuring them after they said they didn’t want to, b. showing displeasure, criticizing their sexuality or attractiveness, getting angry but not using physical force after they said they didn’t want to, c. taking advantage when they were too drunk or out of it to stop what was happening, d. threatening to physically harm them or someone close to them, and e. using force, for example holding them down with my body weight, pinning their arms, or having a weapon.” For each type of act participants were asked how many times they had done this. Two time frames were used in the current data. At time 2 in the study, two weeks after the prevention program, participants were asked if they ever perpetrated each of the behaviors at any point in their lives. At follow-up time points 3 (5 months after the prevention program) and 4 (one year after the program), participants were asked about these perpetration behaviors “since the last time you took this survey.” Seven subscales were identified in regards to sexual experiences: (1) unwanted fondling or removal of clothing, (2) oral rape, (3) vaginal rape, (4) anal rape, (5) attempted oral rape, (6)
attempted vaginal rape, and (7) attempted anal rape. Table 1 presents the percentage of the sample that reported each of these behaviors for different time points.

*Readiness to Help Scale (Banyard, Moynihan, Cares, & Warner, 2014)*

The Readiness to Help Scale was adapted for this study to include 2 subscales of pre-contemplation or “no awareness” and contemplation or “responsibility.” Participants were asked to indicate level of agreement for certain statements ranging from “strongly disagree” to “strongly agree.” The pre-contemplation scale was a 12-item subscale, which measured participants awareness of the issue (mean= 2.52, S.D.= 0.67, range= 3.92). On this subscale participants were asked to rate agreement on statements such as “I don’t think there is much I can do about intimate partner abuse on campus” or “doing something about sexual abuse is solely the job of a rape crisis center.” Higher scores indicated greater denial of sexual assault and relationship abuse as problems on campus. The contemplation scale was a 9-item subscale, which measured taking responsibility for the issue amongst participants (mean= 2.72, S.D.= 0.81, range= 4). For example, on the subscale for taking responsibility participants were asked to rate statements such as “I think I can do something about sexual abuse” or “I am planning to learn more about the problem of sexual abuse on campus.” Higher scores on this scale indicated greater sense of responsibility for prevention.

*Illinois Rape Myth Acceptance Scale- Short Form (Payne, Lonsway, & Fitzgerald, 1999)*

This established scale was used to measure participants endorsement of rape myths (mean= 1.64, S.D.= 0.52, range= 3). The original 20-item scale was adapted to 17-items and respondents were asked to rate statements from “not at all agree” to “very much agree.” Statements included myths such as “a lot of women lead a man on and then cry
rape” or “many women secretly desire to be raped.” A high score on this scale indicates a greater endorsement for rape myths.

*Attraction to Sexual Violence Scale (Malamuth, 1989a)*

The Attraction to Sexual Violence Scale was used to measure participants rape proclivity. This is a 6-item scale broken up into subscales of rape proclivity of self, which measures self-reports of individual attraction to sexual violence, and rape proclivity of others, which measures self-reports of peer attraction to sexual violence. In the rape proclivity of others subscale, participants were asked questions such as “what percentage of males do you think would find rape sexually arousing?” or “what percentage of females do you think would find forcing someone to do something sexual that they didn’t want to do sexual arousing?” Participants were asked to answer questions on an 11-point scale ranging from 0% to 100% (mean= 2.83, S.D.= 1.27, range= 7). For rape proclivity of self, participants were asked questions such as “if you could be assured that no one would know and that you could in no way be punished for engaging in the following acts (rape), how likely, if at all, would you be to commit such acts?” Participants were asked to answer questions on a 5-point likert scale ranging from “not at all likely” to “very likely” (mean= 1.17, S.D.= 0.49, range= 4).

*Peer Norms Scale (Schwartz et al., 2001)*

The Peer Norms Scale was modified in this study and used to measure a participant’s views of what their peers think about using coercion in relationships. This 8-item scale addressed behaviors relating to physical violence and verbal or emotional violence. Participants were asked to answer “yes” or “no” to questions such as “did any of your friends ever tell you that it is alright for someone to hit their date or partner in certain
situations?” or “did any of your friends ever tell you that you should respond to your date’s or partner’s challenges to your authority by insulting them or putting them down?” The first demonstrates physical violence and the latter verbal or emotional violence. For the current study, we used a score representing the full scale. Higher scores indicated greater perceptions of peer norms that support the use of coercion (mean= 0.09, S.D.= 0.17, range= 0-1).

Procedure

Students were recruited via flyers in campus buildings, class and e-mail announcements, and resident advisors as well as tables outside the dining halls. Participants were recruited for the study on a voluntary basis and randomly assigned to either the experimental group (received program) or the control group (did not receive program). The experimental group received the Bringing in the Bystander Program™, which was in 4.5 hour multi-session format consisting of two opposite gender co-facilitators in single gendered groups. Discussions were led about the roles of bystanders in sexual violence prevention. For more information regarding the Bringing in the Bystander program, see Banyard et al. (2007), Cares et al. (2014), and Moynihan et al. (2015). The BITB program was administered 2 weeks after pretest for the experimental group. Posttests were administered 2 weeks, 5 months, and 12 months after the program for both groups using paper surveys. Posttests were administered via online surveys, except for cohort 1 where surveys were administered in-person. After cohort 1, the majority of participants expressed preference for online surveys, so the rest were administered in an online format. Between the 5-month posttest and the 12-month posttest, the entire campus was exposed to the Know Your Power Bystander
Social Marketing Campaign for 6 weeks via posters and flyers displayed around campus. The campaign detailed stereotypical college scenarios and encouraged positive behaviors in a number of situations including sexual violence.

Participants were given $10.00 for each survey completed, with participants attending the BITB in-person program rewarded an additional $40.00. Participants in cohort 2 and 3 who completed the 5-month and 12-month follow-ups were put in a raffle to win multiple $50.00 gift cards. In addition, participants who took all four surveys were entered in a lottery for a $150.00 Best Buy gift card.

Results

The first hypothesis was that self-reported recent perpetration (measured at time 3 and time 4) would be related to higher levels of attitudinal risk factors measured at time 1 and to reported lifetime perpetration measured at time 2. Pearson correlations were calculated to determine the potential relationships between recent perpetration behavior, lifetime perpetration behavior, rape myth acceptance, denial of the sexual violence problem, readiness to change and taking responsibility, endorsement of peer norms, rape proclivity of self, and rape proclivity of others (see Table 2).

Based on the results of this study there was a significant relationship of recent perpetration and lifetime perpetration behaviors. This means reporting lifetime perpetration behaviors were related to recent perpetration. Students who reported greater rape myth acceptance were also more likely to report recent perpetration. Further, endorsement of violent peer norms was also associated with a greater likelihood for recent perpetration. A negative significant relationship was also found between recent perpetration and a readiness to change or taking responsibility. This
means that as students reported taking greater responsibility to end sexual violence, they tended to report less recent perpetration. The study also indicated that student who reported greater lifetime perpetration behaviors were also more likely to report endorsement in violent peer norms. Lastly, students with higher scores on lifetime perpetration were more likely to also report greater rape proclivity of self.

A logistic regression analysis was computed to predict recent sexual assault perpetration from previous perpetration behavior, endorsement of rape myths, readiness to change by taking responsibility of actions, and acceptance of peer norms (see Table 3). The analysis was statistically significant (chi square= 15.70, p < .05 with df = 4).

Nagelkerke’s $R^2$ of 0.27 indicated a relationship between predictor and outcome variables. Peer norms was the only attitude variable that ($p = 0.024$) made a significant contribution to recent perpetration behavior when all variables were entered. Previous perpetration behavior was marginally significant ($p = 0.052$). Endorsement of rape myths and readiness to change were not significant. Exp(B) value indicates that when previous perpetration behavior is present the odds of more perpetration is 3 times as large and therefore students are 3 times more likely to be perpetrators. Exp(B) value also indicated that as students increase their endorsement of exposure to peer norms in support of coercion the odds ratio is 29 times as large and therefore students are 29 times more likely to be perpetrators of some form of sexual violence.

The second hypothesis was that students who were in the treatment group and received the prevention program would show less recent perpetration one year after the program than students in the control group. A logistic regression, controlling for lifetime
perpetration, was computed (see Table 4). The analysis was statistically significant (chi square= 6.14, p < .05 with df = 2). Nagelkerke’s $R^2$ of 0.11 indicated a relationship between predictor and outcome variables. The treatment group was not a significant predictor of less perpetration behavior ($p= 0.09$). Although it is not significant, exp($B$) value indicated that the odds of perpetration in the prevention program were lower than the control group (Exp($B$)= 0.92).

**Discussion**

We hypothesized that students who self-reported recent perpetration, would have higher levels of attitudinal risk factors and will also report lifetime perpetration behaviors. We observed that a significant number of risk factors, including lifetime perpetration, were present in those individuals who reported recent perpetration. Lifetime perpetration behaviors were positively correlated with recent perpetration. This means that if students perpetrated before the bystander program, they were more likely to continue perpetration behaviors after the program as well. This finding is consistent with other studies that have identified prior perpetration as a risk factor for recent perpetration (Abbey & McAulsen, 2004; Campbell et al., 2017). These students are very important in our understanding of bystander intervention. Targeting lifetime perpetrators for bystander education may boost the effectiveness of the program because these lifetime perpetrators are those who are most likely to perpetrate again. If repeat offenders can learn enough from the bystander programs to change their behaviors, the effectiveness of these programs would be a very helpful step in ending campus sexual violence. In contrast, there was a negative correlation between taking responsibility for the sexual violence problem and recent perpetration. This means that if students are ready and
willing to take responsibility to fight sexual violence, they are less likely to be perpetrators. These types of students should be targeted not to change their behaviors but reinforce them. If they already have the inclination of responsibility, this has the potential to switch from an attitude to a behavior through positive and reinforcing bystander prevention education.

Our findings also indicated that students who have a greater rape myth acceptance were more likely to be recent perpetrators. This shows that a lack of sexual violence education may have a negative impact on perpetration. Students who believe in common myths associated with sexual violence are more at risk to exhibit perpetration behaviors, but this may be because they are not aware what they are doing is sexual perpetration. Students need to realize what their behaviors mean and how to respond to potentially violent situations before any real action can be taken (Latané & Darley, 1969). Another finding in the current study indicated that lifetime perpetration is positively correlated with greater rape proclivity to self. A greater attraction to sexual violence means students are more likely to be perpetrators, which is a finding that can help us greater improve bystander programs. There is a need to change these students’ attitudes in regards to the attractiveness of sexual violence. Prior studies of bystander programs have shown that decreasing the reinforcing attitudes associated with sexual violence is an achievable outcome of bystander prevention programming (Gidyz et al., 2011).

Students place a great deal of value on the opinions of their peers, which is perhaps the most significant and consistent finding in our study (Malamuth, 1989b; Schwartz et al., 2001; Thompson et al., 2015). We found that endorsement of violent
peer norms is associated with both lifetime and recent perpetration. Students who believe that their peers support coercion, are more likely to exhibit it themselves through perpetration behaviors. Our study also indicates that endorsement of violent peer norms is a predictor of recent perpetration. This is consistent with a study by Schwartz et al. (2001), which found that men whose peers vocally advise violent sexual abuse were more likely to be sexually abusive themselves. The current study has a new level of understanding when it comes to the endorsement of violent peer norms. Endorsement of violent peer norms does not mean that if their peers are violent, they are violent as is shown in the study by Schwartz et al (2001). It means that if they perceive violence amongst their friends, they are more likely to also be violent. The power of peer opinions and beliefs is extremely evident in this study. Just a perception of the attitudes of peers is enough to predict perpetration among students and significantly increase the risk of students to exhibit perpetration behaviors.

Our study also aimed to understand the effects of the Bringing in the Bystander prevention program. We predicted that students who receive the prevention program would be less likely to report perpetration behaviors one year after the program than students who did not receive the prevention program. Unfortunately, our findings indicated that there was not a significant difference of recent perpetration between the control and treatment groups. This is in contrast to prior research, which found that bystander programs did have a significant effect in decreased perpetration behaviors (Salazar et al., 2014; Gidyz et al., 2011). Although our effects were not significant, it is important to note that self-reports of perpetration did decrease for the treatment group. It is encouraging that we are moving in the right direction with these programs. It is
important to note that our sample size was small for detecting program effects on behaviors like perpetration that occur at low levels.

The results from the current research indicated that bystander programs have the opportunity to make a real impact on college campus sexual violence rates. Bystander programs may be more effective if they emphasize peer norms within their education. Students are heavily influenced by their peers and their perceptions of their peer’s beliefs. Peer norms is a large predictor and risk factor in potential perpetration. The Green Dot bystander programming utilizes a motivational speaker within the program, which may be the perfect opportunity to acknowledge the strong influence of peer norms (Coker et al., 2011; Coker at al., 2015). The program could use respected peers within the population age group as the speakers. This way there is greater likelihood for endorsement of proactive and positive peer norms. BITB may be able to utilize this idea with their program facilitators. Facilitators of the program may be more effective if they were known peers within that college population such as a fraternity president or a member of an executive board within another student organization. Results show that Bringing in the Bystander is on the right track, but small changes reflecting the current study may yield more encouraging results. Continual testing of all bystander prevention programs only adds to our understanding of what tactics work and what do not. Improving these bystander programs will aid in ending sexual violence on college campuses.

For future research, BITB could be implemented on more diverse campuses. No two college campuses have the same culture or diversity. The more campuses that are tested, the more the program can be fine-tuned for widespread effects. Prior studies
have also begun to explore the sexual abuse histories as a risk-factor for perpetration and this has room for expansion (Casey et al., 2017; Classen et al., 2005). Future programs could target individuals with such a history for the program. They would learn what happened to them is not okay and how to stop it from happening to other people. By narrowing in on this population for bystander education, the risk of people with sexual abuse histories becoming perpetrators decreases. Lastly, this study focused on perpetration behaviors effected by the program and these risk factors, but victimization plays a role as well. Another study may focus on how the BITB program effects victimization. Does it increase due to a greater understanding of what sexual violence entails? Does it decrease because more people have the knowledge and confidence to intervene in potentially violent situations?

The findings of this study do have certain limitations as well. The sample size was quite small and decreased at each time point. A greater sample size may have yielded more precise results, especially in regards to the program effects. The sample itself was also lacking in diversity. The campus which BITB was implemented on was not racially diverse. Race data was not collected because it would have been potentially identifying. The results from this study reflect a sample of individuals of mostly a Caucasian race. Therefore, race effects were not studied where differences may have been present. However, the data showed no significant gender differences. The current study was also done among a first-year college student population. First-year students may have less sexually violent experiences than those who have attended university for a longer time period. This means caution must be taken in generalizing our results to all college students.
While there are limitations, the results of this study indicated that researchers are on the right track with bystander prevention programs. The study also confirms previous findings on risk factors of perpetration, which can aid in bystander program education plans. Bringing in the Bystander is a continually advancing program, where research can always add to our growing knowledge of effective prevention. This study is one step closer to the long-term goal of ending sexual violence on college campuses.
References


### Tables

Table 1

**Sexual Violence Behaviors at Differing Time-points**

<table>
<thead>
<tr>
<th>Sexual Violence Behavior</th>
<th>Time-point</th>
<th>Lifetime (n= 291)</th>
<th>Recent (5 months) (n= 217)</th>
<th>Recent (12 months) (n= 173)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Fondled/Removed Clothes without Consent</td>
<td></td>
<td>13.40%</td>
<td>6.30%</td>
<td>7.70%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(n= 44)</td>
<td>(n= 16)</td>
<td>(n= 15)</td>
</tr>
<tr>
<td>2. Oral Rape</td>
<td></td>
<td>6.80%</td>
<td>3.10%</td>
<td>4.50%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(n= 22)</td>
<td>(n= 8)</td>
<td>(n= 9)</td>
</tr>
<tr>
<td>3. Vaginal Rape</td>
<td></td>
<td>3.60%</td>
<td>2.50%</td>
<td>4.90%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(n= 11)</td>
<td>(n= 6)</td>
<td>(n= 9)</td>
</tr>
<tr>
<td>4. Anal Rape</td>
<td></td>
<td>3.30%</td>
<td>2.10%</td>
<td>2.80%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(n= 10)</td>
<td>(n= 5)</td>
<td>(n= 5)</td>
</tr>
<tr>
<td>5. Attempted Oral Rape</td>
<td></td>
<td>3.70%</td>
<td>4.40%</td>
<td>4.00%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(n= 12)</td>
<td>(n= 11)</td>
<td>(n= 8)</td>
</tr>
<tr>
<td>6. Attempted Vaginal Rape</td>
<td></td>
<td>3.20%</td>
<td>3.30%</td>
<td>5.40%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(n= 10)</td>
<td>(n= 8)</td>
<td>(n= 10)</td>
</tr>
<tr>
<td>7. Attempted Anal Rape</td>
<td></td>
<td>2.30%</td>
<td>1.70%</td>
<td>2.70%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(n= 7)</td>
<td>(n= 4)</td>
<td>(n= 5)</td>
</tr>
</tbody>
</table>

*Note.* Report of sexual violence behaviors at times 2, 3, and 4.
Table 2

**Perpetration Correlates (N= 394)**

<table>
<thead>
<tr>
<th>Attitudes</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Recent Perpetration</td>
<td>-</td>
<td>0.29**</td>
<td>0.24*</td>
<td>0.05</td>
<td>-0.25*</td>
<td>0.24*</td>
<td>0.02</td>
<td>0.07</td>
</tr>
<tr>
<td>(n= 80)</td>
<td>(n= 94)</td>
<td>(n= 94)</td>
<td>(n= 94)</td>
<td>(n= 94)</td>
<td>(n= 88)</td>
<td>(n= 94)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Lifetime Perpetration</td>
<td>-</td>
<td>0.12</td>
<td>0.03</td>
<td>-0.03</td>
<td>0.18**</td>
<td>0.20**</td>
<td>0.05</td>
<td></td>
</tr>
<tr>
<td>(n= 229)</td>
<td>(n= 229)</td>
<td>(n= 228)</td>
<td>(n= 228)</td>
<td>(n= 218)</td>
<td>(n= 229)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Rape Myth Acceptance</td>
<td>-</td>
<td>0.24***</td>
<td>-0.06</td>
<td>0.10*</td>
<td>0.17*</td>
<td>0.37***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(n= 390)</td>
<td>(n= 387)</td>
<td>(n= 389)</td>
<td>(n= 375)</td>
<td>(n= 391)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Denial of SV Problem</td>
<td>-</td>
<td>-0.33***</td>
<td>-0.02</td>
<td>0.07</td>
<td>0.06</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(n= 387)</td>
<td>(n= 389)</td>
<td>(n= 373)</td>
<td>(n= 389)</td>
<td>(n= 389)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Taking Responsibility</td>
<td>-</td>
<td>-0.06</td>
<td>-0.08</td>
<td>0.04</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(n= 386)</td>
<td>(n= 370)</td>
<td>(n= 386)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Peer Norms Endorsement</td>
<td>-</td>
<td></td>
<td>0.05</td>
<td>0.13*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(n= 373)</td>
<td>(n= 388)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Rape Proclivity of Self</td>
<td>-</td>
<td></td>
<td></td>
<td>0.20*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(n= 374)</td>
<td></td>
<td></td>
<td></td>
<td>(n= 374)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Rape Proclivity of Others</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note. Report of Pearson correlation (r) in the relationships of 8 variables.*

*p < .05

** p < .01

*** p < .001
Table 3

*Predictors of Recent Sexual Violence (N= 80)*

<table>
<thead>
<tr>
<th>Predictors</th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>df</th>
<th>Sig.</th>
<th>Exp(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lifetime Perpetration</td>
<td>1.20</td>
<td>0.62</td>
<td>3.80</td>
<td>1</td>
<td>0.05</td>
<td>3.32</td>
</tr>
<tr>
<td>Rape Myth Acceptance</td>
<td>0.40</td>
<td>0.47</td>
<td>0.70</td>
<td>1</td>
<td>0.40</td>
<td>1.48</td>
</tr>
<tr>
<td>Readiness to Change</td>
<td>-0.56</td>
<td>0.37</td>
<td>2.24</td>
<td>1</td>
<td>0.13</td>
<td>0.57</td>
</tr>
<tr>
<td>Peer Norms Endorsement</td>
<td>3.38</td>
<td>1.50</td>
<td>5.12</td>
<td>1</td>
<td>.024</td>
<td>29.45</td>
</tr>
</tbody>
</table>

*Note.* Regression output
Table 4

*Predictors of Prevention Program Group (N= 80)*

<table>
<thead>
<tr>
<th>Predictors</th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>df</th>
<th>Sig.</th>
<th>Exp(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lifetime Perpetration</td>
<td>1.41</td>
<td>0.57</td>
<td>6.18</td>
<td>1</td>
<td>0.01</td>
<td>4.11</td>
</tr>
<tr>
<td>Treatment Group</td>
<td>-0.09</td>
<td>0.57</td>
<td>0.02</td>
<td>1</td>
<td>0.88</td>
<td>0.92</td>
</tr>
</tbody>
</table>

*Note.* Regression output