

Exploring the Role of Race and Gender on Perceived Bystander Ability and Intent: Findings Before and After Exposure to an Online Training Program to Prevent Sexual Assault on Campus

Violence Against Women

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Abstract

The current study explores the significance of race and gender on bystander attitudes before and after an online bystander intervention program to prevent sexual assault. A diverse sample of 750 college students participated in an online intervention and participants' perceived bystander intervention ability and intent were assessed. The interaction of participant race and gender had a marginally significant impact on bystander ability and intent baseline scores. Furthermore, when analyzing gain scores from pre- to posttest, there was a significant race by gender interaction. Specifically, Latinx and Black men had higher preintervention scores, and White men had higher gains postintervention. Relevant cultural and social factors and directions for future research are discussed.

Keywords

bystander intervention, online intervention, sexual assault, intersectionality, diversity

Introduction

Sexual assault is a well-documented problem across colleges and universities in the United States. As of 2015, approximately 20% to 25% of women and 6% to 7% of men report experiencing a sexual assault while they are enrolled in college (Anderson &

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Clement, 2015; Krebs, Lindquist, Warner, Fisher, & Martin, 2007). Because these statistics are based only on reported assaults, it is expected that the actual rates of assault are even higher (Anderson, 2015). The prevalence of this public health problem and the tremendous costs and consequences for victims and institutions inspired the White House to prioritize solutions to campus sexual assault in recent years. For example, in 2014 the White House created a Task Force to Protect Students from Sexual Assault (The White House, 2014) and initiated the “It’s On Us” campaign to help put an end to sexual assault on college campuses (Somanader, 2014). As a result of these initiatives, the Campus Sexual Violence Elimination (SaVE) Act (2013) now requires colleges to provide training to students related to sexual assault and sexual assault prevention.

Among the various sexual assault trainings offered on college campuses, bystander intervention education and training appears to be an increasingly popular method used to influence attitudes, beliefs, and behaviors surrounding sexual assault on U.S. college campuses (Banyard, Plante, & Moynihan, 2005; Coker et al., 2016; Coker et al., 2015; Katz & Moore, 2013; National Sexual Violence Resource Center, 2016; Powell, 2014; Senn & Forrest, 2015). Moreover, significant research points to the efficacy of prevention programs that have a bystander and a social norms focus (Banyard, Moynihan, & Plante, 2007; Berkowitz, 2010; Fabiano, Perkins, Berkowitz, Linkenbach, & Stark, 2003; Salazar, Vivolo-Kantor, Hardin, & Berkowitz, 2014). These programs are expected to be broadly effective because all students have the capacity to intervene as bystanders (Lee, Guy, Perry, Sniffen, & Mixson, 2007; Senn & Forrest, 2015), while only a smaller number of (primarily men) students are actually committing sexual violence (Gidycz, Orchowski, & Berkowitz, 2011; Lisak & Miller, 2002). As most students do not rape, but many more could be witnesses to or in the presence of a potential rape or sexual assault, programming that is relevant to potential bystanders is incredibly important.

There is a plethora of research on in-person bystander intervention programming that demonstrates its efficacy with college student populations (Banyard et al., 2007; Coker et al., 2016; Coker et al., 2015; Katz & Moore, 2013; Langhinrichsen-Rohling, Foubert, Brasfield, & Hill, 2011). Some programs including an in-person bystander component with documented empirical support are Bringing in the Bystander (Banyard et al., 2007; Senn & Forrest, 2015), Mentors in Violence Prevention (Cissner, 2009), the Men’s Workshop (Gidycz et al., 2011), Green Dot (Coker et al., 2016; Coker et al., 2011; Coker et al., 2015), and One in Four (Foubert & Perry, 2007). Programs like these have been effective in decreasing participants’ rape myth acceptance, increasing sexual assault knowledge, increasing prosocial norms toward intervention, and increasing one’s personal willingness and confidence in intervening in threatening situations (Banyard et al., 2007; Coker et al., 2011; Gidycz et al., 2011). Increasing participants’ self-efficacy in regards to being a bystander (bystander efficacy/ability) and the likelihood that they will intervene as a bystander (bystander intent) are especially important outcomes for programs like these, as previous studies have shown (Banyard, 2008; Banyard, Moynihan, Cares, & Warner, 2014; Kleinsasser, Jouriles, McDonald, & Rosenfield, 2015). Moreover, improving intervention willingness and

confidence using these programs is associated with reductions in interpersonal violence victimization and perpetration on college campuses compared to controls (Coker et al., 2016).

Online Bystander Intervention

Despite the demonstrated effectiveness of in-person interventions, they have a number of major limitations. For example, high costs of implementation and limited audience reach are two commonly reported barriers to in-person interventions (Garrity, 2011; Salazar et al., 2014; White et al., 2010). In addition, time commitment and travel obstacles, known barriers to in-person bystander education workshops, may disproportionately affect working class students' ability to attend these interventions (Campus Answers, 2015). Students who feel that participating in sexual and mental health interventions is stigmatizing may also be less likely to attend in-person trainings and workshops (Amstadter, Broman-Fulks, Zinzow, Ruggiero, & Cercone, 2009). However, computer-delivered and online interventions are known to be widely accessible and convenient for college students, due to their ability to offer tailored content, personalized feedback, high levels of privacy, and time convenience (Smith, Rainie, & Zickuhr, 2011; Valle & Tate, 2015).

There are, however, only a small number of peer-reviewed publications that evaluate the utility of online bystander intervention programs. For example, Salazar and colleagues (2014) reported on the first online prevention program analysis for college student men that incorporated a bystander approach and resulted in significant changes to men's intentions to intervene and their actual bystander behavior. Kleinsasser and colleagues (2015) found that a primarily White sample of college students reported greater bystander efficacy for intervening in a potential sexual assault situation, as well as engaged in more actual bystander behaviors, when compared to the students in a control group 2 months after the intervention. However, to date there is generally scant analysis of online bystander intervention programs that address campus sexual assault.

Bystander Intervention With Racially Diverse Students

In addition to a scarcity of empirical publications evaluating the effectiveness of online bystander interventions to reduce sexual assault, few studies have examined the relevance of participant race/ethnicity on bystander outcomes or the success of interventions for college students. For example, Kleinsasser and colleagues (2015) reported that the participants in their online intervention included mostly White women (80.6% women and 66.7% White), prohibiting examinations of student race/ethnicity. Furthermore, some correlational and experimental studies have compared White college students to "non-White" students, placing all minority students within the same comparison group (Diamond-Welch, Hetzel-Riggin, & Hemingway, 2016). However, this is problematic given that racial/ethnic minority groups have divergent identity, cultural, and social processes relevant to gender and sexuality that may affect the

efficacy of sexual assault interventions (Burn, 2009; Diamond-Welch et al., 2016). Studies that do include multiple racial/ethnic minority groups also rarely have a substantial number of these students present. For example, Salazar and colleagues (2014) included only a very small subset of Latinx students in the sample (10.8%), and White students still comprised 44.1% of the sample.

Partly due to the limitations in the few existing studies examining race/ethnicity, the effect of race/ethnicity on bystander attitudes and the efficacy of bystander intervention programs aimed at sexual assault have been mixed. Some studies have found that race does not affect bystander intervention attitudes (Frye, 2007). Other correlational research has found that racial differences in bystander intervention are significant in certain areas. For example, Brown, Banyard, and Moynihan (2014) found that in a Black and White student sample, race was not related to bystander intentions, but Black participants reported more bystander behaviors compared to White participants. One study found that Latinx men and women were more likely to intervene in a sexual assault situation compared to their White counterparts (Weitzman, Cowan, & Walsh, 2017). In addition, in one of the few studies that targeted Latinx men and women specifically, Latinx men and women were more likely than their White counterparts to report past actual bystander intervention behavior and more likely to report future bystander intent (Lake, Snell, Gormley, Wiefek, & Lethbridge-Cejku, 2015).

Bystander Intervention With Men and Women Students

Unlike race/ethnicity, many studies have examined the impact of participant gender on bystander attitudes and beliefs. Most correlational studies have found that women college students report feeling more effective and positive about being a bystander than men, and are more likely to intervene than men (Banyard, 2008; Banyard & Moynihan, 2011; Banyard et al., 2007; Foubert & Bridges, 2017; Hoxmeier, Acock, & Flay, 2017; Hoxmeier, McMahan, & O'Connor, 2017; McMahan, 2010; Yule & Grych, 2017). For example, Banyard (2008) found that women were less likely than men to perceive themselves as an ineffective bystander, and women reported a greater willingness/intent to engage in actual bystander behavior. Diamond-Welch and colleagues (2016) found that women reported higher levels of positive bystander attitudes compared to men, while Burn (2009) found that men were less likely to intervene compared to women. However, not all studies have found that women have more positive attitudes about bystander intervention than men. Amar, Sutherland, and Laughon (2014), for example, found that male college students reported greater intention to act as a bystander than women.

In addition, not all correlational studies show gender differences in bystander attitudes and beliefs. For example, Exner and Cummings (2011) found that men and women in their study both reported moderately high bystander efficacy attitudes. These mixed findings on gender differences in bystander attitudes and beliefs in correlational studies have held true in actual program evaluations as well. For example, Banyard and colleagues (2007) performed an experimental evaluation of a sexual violence prevention program and found no gender differences in the impact of the

prevention program on bystander attitudes. Furthermore, Cares and colleagues (2015) found that both men and women who participated in an in-person bystander intervention program had significant positive changes in bystander efficacy and intent to help strangers up to a year later. However, Moynihan and colleagues (2015) found that women who engaged in a bystander intervention program performed more bystander behaviors toward strangers a year later than women in the control group, yet there was no difference between men in the same program or control group. Similarly, Cares et al. (2015) found an in-person bystander intervention program to be more effective for women compared to men in the study.

Intersectionality

Ultimately, there is a major gap in the literature in terms of measuring the interaction between demographic variables on bystander attitudes in college students, especially before and after an actual intervention (Brown et al., 2014). It is likely that considering such interaction effects could shed light on many of the mixed results we currently see in the literature. The recognition that people occupy multiple social identities which intersect to produce unique experiences and realities is known as intersectionality (McCall, 2005; Settles & Buchanan, 2014; Shields, 2008). Social science research in the last few decades has grown to appreciate that advancing research on health outcomes and reducing health disparities requires considering the unique, intertwined, and nonadditive effects of identity sets on factors that promote health and put individuals at risk (Bauer, 2014). Settles and Buchanan (2014), for example, have reviewed the various ways that membership in multiple marginalized groups, such as being a woman and a person of color, decreases individuals' well-being and other positive outcomes (double jeopardy or "multiple jeopardy," p. 164), while membership in multiple privileged groups, such as being a man and White, increases the likelihood of positive well-being and outcomes (double jeopardy or "multiple advantage," p. 164).

As a critical theory (Warner, Settles, & Shields, 2016), intersectionality challenges the notion that any social theory can hold equally across people from different backgrounds and identities. In terms of the psychology of sexual assault, research finds that Black women survivors of rape endure more victim blaming than other women, and are the least likely to disclose their assaults, potentially due to stereotypes specific to Black women's sexuality (Donovan & Williams, 2002). Therefore, best practices in intersectionality research suggest that scientists continue to test and consider both "master" identities, such as gender, and "emergent" identities, such as being a Hispanic woman/Latinx (Warner, 2008). The current study explores the impact of Haven—Understanding Sexual Assault on college students' bystander attitudes, specifically their perceived ability to intervene as well as their intent to intervene, based both on participants' racial and gender identities, as main effects, as well as on the interactions between these identities.

Considering the simultaneous impact of identities such as race and gender on bystander intervention ability and intent has value for future research, intervention, and education on sexual assault. The dearth of research involving Latinx college

students is particularly troubling in light of the growing representation of Latinx individuals in U.S. society. In 1980, 6.5% of the U.S. population self-identified as Latinx (Stepler & Brown, 2016). In 2014, however, Latinxs made up 17.3% of the total U.S. population, and are expected to constitute 28.6% of the U.S. population by 2060 (Stepler & Brown, 2016). Over this same span of time, the proportion of Latinx Americans with bachelor's degrees has almost doubled (Stepler & Brown, 2016), with Latinx students now enrolling in college at higher rates than White students (Fry & Taylor, 2013). Knowing the most effective methods to reduce sexual assault among Latinx college students is an increasingly urgent task for health and social science.

Current Study

The purpose of the current study is to explore the role of race and gender on perceived bystander ability and intent in a diverse sample of college students before and after exposure to Haven (EverFi, 2016), an online bystander program. This two-part, 1-hr program provides students with education on healthy relationships, sexual consent, individual risk and protective factors, sociocultural contributors to sexual assault, and additional content related to federal government requirements (e.g., campus-specific definitions and policies, support and reporting resources). Course activities focus on bystander intervention by walking students through scenario-based exercises that align with Latane and Darley's (1970) five-step cognitive model for helping. There are multiple healthy and unhealthy scenarios illustrated during the course which depict victims and perpetrators from a wide variety of races, genders, and sexual orientations. Social norms content and statistics are provided to demonstrate the disconnect between actual and perceived norms related to bystander self-efficacy, behavioral intentions, and respect for students who intervene. The course was designed for students who are new to the university, although ongoing students can benefit from it as well.

The current study is unique and imperative in a number of ways. First, it addresses an important gap in the literature by assessing the bystander attitudes of Latinx college men and women at baseline and also after an online bystander program. To the best of our knowledge, this is also the first study on bystander attitudes (considering both online and face-to-face mediums) to consider the interaction of gender with a primarily Latinx college student population. White students are not the majority demographic. Finally, the current study has a large enough sample of racial and ethnic minority students to measure the impact of both race and gender on preintervention (aka "baseline") and postintervention outcomes, as well as "gain scores" from pre- to postintervention.

Method

Participants

Approximately 2,528 students began the study and 750 of these had complete data, including pre- and posttest data with full demographic information. Participants were

750 students at a large, public, Hispanic-serving university in the Southeastern United States. The sample included 472 women (62.9%) and 278 men (37%). In terms of race/ethnicity, 59% of students identified as Latinx, 22% identified as White, and 19% identified as Black. The racial/ethnic breakdown of the current sample mirrors the overall population of students at this school. Furthermore, participants were between 18 and 23 years of age ($M = 21.18$, $SD = 1.77$) with 11% freshmen, 8% sophomores, 56% juniors, 5% seniors, and 21% graduate students. Approximately 46% of students in the sample reported that they were first-generation college students. In terms of sexual orientation, 94% of the students in the sample identified as heterosexual, 3% bisexual, 2% gay, and 1% lesbian.

Procedure

Freshmen, transfer, and graduate students were sent mass email invitations to participate in Haven, indicating that their participation was not mandatory. Students received no compensation in exchange for completing the intervention or the survey questions. Prior to beginning the course and throughout the surveys, students were reminded that their responses to all questions were confidential. They were asked to reply honestly and to skip any questions they did not feel comfortable answering. The preintervention survey (Survey 1) was administered before any course content was delivered, which for some students occurred before they started attending the university. After students completed the course, there was a school-specific intersession period—typically of 30 to 45 days and generally after they had started the fall semester—after which students were contacted and asked to complete additional education modules and a postintervention survey (Survey 2). To ensure that students were actively engaged in the online program, students were only able to move through program modules by successfully passing previous module assessments. In addition, only students who passed all modules were provided access to the postcourse survey. Thus, only students who navigated through all course content and passed all associated modules had access to the postcourse survey (Survey 2). On average, the time between completion of the preintervention survey and postintervention survey was 1 month. All data collection and analysis were approved by the institutional review board at the university in which the students were enrolled.

Measures

A survey was used in the current study to measure bystander intervention ability and intent before and after intervention. Survey items for Haven—Understanding Sexual Assault were drawn from the Readiness to Change Scale (Banyard, Eckstein, & Moynihan, 2010), and other assessment instruments developed and used by campus professionals (Berkowitz, 2010; Coker et al., 2016; Gidycz et al., 2011). The survey reflecting bystander intervention ability and intent items first consisted of nine statements, but two statements that were not in line with the other items were removed from the survey. Therefore, there were seven statements in the final survey instrument.

Two examples of the survey items were the following: “I can identify warning signs of abuse in dating relationships” and “I would feel comfortable intervening if I witnessed abusive behavior.” Both Surveys 1 and 2 contained Likert-type questions that asked respondents to indicate their level of agreement or disagreement with each of the seven statements, with 1 = *strongly disagree* and 7 = *strongly agree*. Survey 1 also asked for demographic information, including biological sex, race/ethnicity, sexual orientation, academic status, age, and parental education level. Furthermore, bystander ability and intent were assessed as a single outcome variable in the current study due to the fact that both constructs are consistently positively correlated with each other in the literature (Banyard et al., 2014; Banyard et al., 2007).

Data Analysis

Students who did not report demographic information and did not participate in both the pre- and posttest were filtered out of the analysis. To investigate any systematic effect on attrition, we compared those who chose to participate in the posttest and those who chose not to participate. *T* tests were utilized for continuous variables (e.g., race) and chi-square tests for categorical variables (e.g., gender). The results indicated no gender differences, $\chi^2(1, 2472) = .017, p > .05$, and no racial differences, $t(2216) = 1.70, p > .05$, between the two groups of participants. There was a significant difference in the two groups’ pretest scores, $t(2407) = 2.55, p < .05$, but the difference between the two means was small (i.e., 0.9). This significant difference may be due to the large sample size, and it is likely that the differences between these two groups are random. We also compared those students who provided complete demographic information for the variables examined in the study (i.e., sex, race, pre-, and postintervention scores) and those who had missing data for these variables. No sex, race, or pretest score differences were found between the two groups (all $ps > .05$).

Results

Reliability and Validity of the Instrument

The reliability and validity of the instrument used in the present study were examined among items in the surveys before and after the intervention, respectively. Both pre- and postintervention instruments yielded good reliability, with Cronbach’s alpha for preintervention being .82 and for postintervention being .86. Confirmatory Factor Analysis was conducted in Mplus 7.4 to examine construct validity in the two surveys, and both analyses resulted in a comparative fit index (CFI) of 0.95, a Tucker–Lewis index (TLI) of 0.93, and a standardized root mean square residual (SRMR) of 0.04. These fit indicators were considered a good fit with the data (Hooper, Coughlan, & Mullen, 2008; Marsh, Hau, & Wen, 2004; Schreiber, Nora, Stage, Barlow, & King, 2006). All seven items in the survey accounted for 58% of the variance in the construct in both pre- and postintervention surveys.

Descriptive Statistics

Preintervention scores. Participants' scores on all the items in the preintervention survey were summed to one single preintervention score or a score of participants' baseline perceptions of bystander intervention ability and intent. Overall, the baseline scores ranged from 9 to 49 with a mean of 39.95 ($SD = 6.92$). Higher mean scores indicate positive perceptions of intervention ability/intent. The mean scores of women and men were close, with women reporting an average score of 40.02 ($SD = 7.00$) and men reporting an average score of 39.82 ($SD = 6.77$). Of all the six groups, Latinx men reported the highest scores ($M = 40.51$, $SD = 6.51$), followed by Black women ($M = 40.48$, $SD = 6.68$), Black men ($M = 40.25$, $SD = 6.30$), White women ($M = 40.17$, $SD = 6.37$), and Latinx women ($M = 39.81$, $SD = 7.33$). Interestingly, White men ($M = 37.94$, $SD = 7.39$) reported the lowest baseline scores in intervention ability and intent.

Postintervention scores. Participants' scores on all the items after the intervention program were summed to one single postintervention score. Overall, the postintervention score for intervention ability and intent ranged from 7 to 49 with a mean of 41.12 ($SD = 6.66$). The mean of women ($M = 41.73$; $SD = 5.96$) was higher than that of men ($M = 40.09$; $SD = 7.61$). Among the six groups of participants, Black women reported the highest scores ($M = 42.05$, $SD = 5.47$), followed by Latinx women ($M = 41.90$, $SD = 6.22$), and White women ($M = 40.93$, $SD = 5.61$). White men ($M = 40.36$, $SD = 5.97$), Latinx men ($M = 40.01$, $SD = 7.89$), and Black men ($M = 39.95$, $SD = 8.95$) reported the lowest postintervention scores in intervention ability and intent.

Gain scores. Gain scores were computed by the difference between pre- and postintervention scores. According to Zimmerman and Williams (1998), the use of a gain score is reliable, especially when variances of pre- and posttest scores are homogeneous and the reliability coefficients of pre- and posttest scores are homogeneous with the same directionality. In the present analysis, Levene's tests for preintervention and gain scores were both insignificant ($ps > .05$), indicating both scores were homogeneous. In addition, the pre- and postintervention scores were significantly correlated ($r = .43$), and the reliability coefficients of pre- and posttest scores were close (.82 and .86, respectively).

Overall, the gain scores ranged from -37 to 40 with a mean of 1.17 ($SD = 7.10$). Women ($M = 1.71$, $SD = 6.83$) had a higher mean of gain scores than men ($M = .27$, $SD = 7.46$). Among the six groups of participants, White men reported the highest gain ($M = 2.41$, $SD = 6.00$), which was much higher than their Black ($M = -.30$, $SD = 8.81$) and Latinx counterparts ($M = -.49$, $SD = 7.50$). Latinx women reported the highest gain among women ($M = 2.09$, $SD = 7.28$), followed by Black women ($M = 1.57$, $SD = 6.08$) and White women ($M = .76$, $SD = 6.09$).

Analysis of Variance

Analysis of variance for pre- and postintervention scores. To better understand the effect of students' race and gender on pre- and postintervention scores, two 2-way analyses

Table 1. Two-Way Analysis of Variance for Pre- and Postintervention and Gain Scores.

Source	df	Sums Square	Mean Square	F	p	η^2
Pretest scores						
Gender	1	46.63	46.63	0.98	.32	.00
Race	2	169.01	84.51	1.77	.17	.01
Gender \times Race	2	250.27	125.13	2.63	.07	.01
Error	745	35,501.14	47.65			
Total	750	35,874.98				
Posttest scores						
Gender	1	308.09	308.09	7.01	.01	.01
Race	2	13.34	6.67	0.15	.86	.00
Gender \times Race	2	59.18	29.59	0.67	.51	.00
Error	745	32,722.39	43.92			
Total	750	33,280.73				
Gain scores						
Gender	1	115.00	115.00	2.32	.13	.00
Race	2	87.44	43.72	0.88	.41	.00
Gender \times Race	2	531.83	265.91	5.37	.01	.01
Error	745	36,860.51	49.48			
Total	750	37,784.15				

of variance (ANOVAs) were performed. The results indicated that race and gender had insignificant main effects on preintervention scores, $F(5, 745) = 1.57, p > .05, \eta^2 = .01$. This suggests that students who participated in the program, regardless of their race and gender, showed similar baseline bystander intervention ability and intent. However, the interaction of race and gender showed marginal significance, $F(2, 745) = 2.63, p = .07, \eta^2 = .01$ (see Table 1). Follow-up pairwise comparison tests showed that Hispanic and Black men had significantly higher preintervention scores than their White counterparts ($ps < .05$). In addition, gender had a significant main effect on postintervention scores, $F(5, 745) = 7.01, p < .05, \eta^2 = .01$, with women earning significantly higher postintervention scores than men. In contrast, race had an insignificant effect, $F(5, 745) = .15, p > .05, \eta^2 = .00$, and no significant effect was observed in the interaction between gender and race, $F(2, 745) = .67, p > .05, \eta^2 = .00$ (see Table 1).

Analysis of variance for gain scores. The same two-way ANOVAs were conducted on students' race, gender, and gain scores. The results indicated that gender, $F(1, 745) = 2.32, p > .05, \eta_p^2 = .00$, and race were insignificant, $F(2, 745) = .88, p > .05, \eta_p^2 = .00$. However, there was a significant interaction between gender and race, $F(2, 745) = 5.37, p < .05, \eta^2 = .01$, (see Table 1). Follow-up pairwise comparison tests further showed that White men had significantly higher gain scores than Black and Latinx

men ($ps < .05$), and that Latinx women had significantly higher gain scores than Latinx men ($p < .05$).

Discussion

The current research provides, for the first time, a number of key findings about the interaction of college students' race and gender on self-reported bystander ability and intent outcomes both before and after exposure to an online bystander intervention program. First, this study found that neither race/ethnicity nor gender has significant main effects as “master” identities (Warner, 2008) in baseline bystander intent and ability scores, but the interaction of race/ethnicity and gender produced marginal significance on initial scores. Specifically, White men reported lower baseline scores than Black and Latinx men. In addition, there was a significant interaction between gender and race on students' gain scores from pre- to postintervention, highlighting the importance of examining “emergent” and intersectional identities in research on sexual violence (Warner, 2008). Specifically, White men reported higher gain scores than their Black and Latinx counterparts.

The marginally significant interaction of race and gender on baseline bystander intent and ability scores has important research and clinical implications, and can be partly understood using previous correlational studies on bystander intervention. For example, one reason Black men in our study had higher baseline scores than White men may be due to effects that emerge from an interaction between participant race and the race of the victim on whose behalf one is intervening (Brown et al., 2014). For example, research has found that Black students are willing to assist both White and Black individuals in an emergency situation, but White students preferred assisting White over Black individuals (Kunstman & Plant, 2008). In addition, Katz and colleagues (2017) provided White college women vignettes where the potential victim's race was either unclear or was more likely to be a Black woman (e.g., had a distinctively Black name). The researchers found that White women were less likely to intervene on behalf of victims they perceived as Black women. Future research on online bystander interventions may want to explore the unique impact of the race/ethnicity and the gender of both the person intervening and the supposed victim who needs intervention.

When considering the finding that Latinx college men reported the higher initial intervention ability and intent than White men—a finding also reported by Lake and colleagues (2015)—we look to research on cultural factors in the Latinx community. For example, the term *familismo* describes a cultural value whereby a person protects, helps, and values their family and surrounding community (Gallardo & Paoliello, 2008; Knight & Carlo, 2012). Research has found that *familismo* has been correlated with prosocial tendencies for certain groups of Latinxs (Calderón-Tena, Knight, & Carlo, 2011) and may affect bystander intervention attitudes. Another relevant cultural value is *machismo*, which can be defined as having a respect and honor for one's mother, as well as a sense of responsibility and strength in the male gender role.

Machismo has been identified in some instances as a protective factor against intimate partner violence (Moreno, 2007) and therefore may spill over into an obligation to intervene to protect those in need, especially for Latinx men.

Other possible reasons Latinx and Black men reported higher baseline bystander ability and intent compared to White men could be linked to community factors. Unfortunately, people of color are more likely to be raised in communities with increased poverty and rates of violence (Goldweber, Waasdorp, & Bradshaw, 2013). Researchers have suggested that being surrounded by poverty and violence could affect how young people (especially young men) respond to conflict and violence (Goldweber et al., 2013). Although research has associated communities with high poverty and violence to negative outcomes for young people, more research is needed to investigate the possibility that this early exposure could lead to more confidence and more intrinsic motivation to intervene.

When considering changes in participants' bystander attitudes and intentions after exposure to Haven, a number of important findings are noteworthy. At first glance, White men and Latinx women had the highest mean change scores. In terms of the significant gender by race interaction, White men reported a significantly higher change score when compared to both Black and Latinx men. There are a number of potential reasons for this finding. First, White men scored significantly lower than Black and Latinx men at baseline. Therefore, it may have been easier for them to show a significant increase between pre- and post-scores as they started lower at baseline. In fact, previous research has specifically identified White men as needing bystander training (Burn, 2009; Diamond-Welch et al., 2016). Nonetheless, men of color in this study were not inhibited by a ceiling effect (Wang, Zhang, McArdle, & Salthouse, 2009), and all groups had several points on the 7-point Likert-type scale by which to increase from pre- to post-intervention.

In addition, Exner and Cummings (2011) found that White college men at baseline doubted that anything could be done to teach people to prevent sexual assault. It is possible that engaging in the intervention and learning new skills and resources provided these students with new confidence in their abilities to prevent sexual assault. Finally, assessment measures for college students have typically been relevant to and primarily normed for White students (Shaw, Ramirez, Trost, Randall, & Stice, 2004). For this reason, White men typically respond quite well to bystander training (Langhinrichsen-Rohling et al., 2011).

The current study also found a significant difference in gain scores when comparing the results of Latinx men and Latinx women. Although Latinx Men endorsed more positive bystander attitudes at baseline compared to Latinx Women, Latinx women demonstrated a statistically significant change in bystander attitudes after exposure to Haven. Research on medical health interventions in the Latinx community has shown that once Latinx Women are exposed to and provided with relevant prevention material, many of them benefit from that information. For example, an intervention program to increase breast and cervical cancer screening resulted in Latinx women feeling more confident in their knowledge as well as becoming more proactive about making screening appointments and seeking relevant medical care after the intervention

(Torres, Erwin, Trevino, & Jandorf, 2013). Given the dearth of research on bystander intervention programs and the Latinx community, exploratory research is needed to tease apart potential gender differences in the Latinx community with bystander intervention programs, and the reasons for these differences.

Limitations and Future Research

There are a number of limitations in the current study. Although the sample size of the current study is adequate to formulate conclusions, there was a large attrition rate. Future studies on bystander intervention programs may want to focus on mandated programming, so that students must complete both pre- and postsurveys. In addition, students in the current study were not asked if they had been exposed to bystander intervention in some previous capacity. It will be important for bystander programs to include questions regarding previous training exposure to ensure that results are directly related to the program being evaluated. Response time was not examined during the current study and may be an important addition to future online bystander programs.

In addition, student responses to the Haven course are not homogeneous and can vary between learners. The gender and racial differences found in the current study could be due to a number of factors including student engagement, baseline knowledge and perspective, personal experience, and variations in socioecological influences. It is important that we continue to study students' interactions with the content and feedback about the program so that we can further iterate on the course and improve the individualized experience for all students. The knowledge-based, attitudinal, and behavioral data garnered from the course can also be used by higher education administrators and practitioners to highlight supportive communities on campus and acknowledge the strengths of their student body, as well as to identify high-risk students who would benefit from additional intervention on how to prevent sexual assault, abuse, and harassment on their campuses.

Although the current sample had a large proportion of Latinx and Black students, we cannot generalize these results to all Black and Latinx students in the United States. For example, there is a substantial Caribbean population in our sample, both for Black and Latinx students. Current findings may differ in non-Caribbean Black and Latinx samples. Furthermore, given that this is the first study examining an online bystander training program with a significant Latinx population, more research is needed to understand how Latinx college students perceive bystander intervention programming. In addition, it will be important to continue to be more inclusive and to measure the bystander attitudes of Asian Americans, Native Americans, Muslim Americans, and other minority groups that are typically underrepresented in bystander intervention research.

Finally, research is needed to tease apart the impact of other demographic identities. For example, low-income individuals were more likely to intervene in a violent interpersonal situation compared to moderate- or high-income individuals (Edwards, Mattingly, Dixon, & Banyard, 2014). The role of social class may be important to investigate as it may be another identity that affects bystander intervention ability and

intent. Given the continued increase in student diversity on college campuses, understanding the role of multiple intersecting identities on bystander intervention is of critical importance.

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References

- Amar, A. F., Sutherland, M., & Laughon, K. (2014). Gender differences in attitudes and beliefs associated with bystander behavior and sexual assault. *Journal of Forensic Nursing, 10*, 84-91.
- Amstadter, A. B., Broman-Fulks, J., Zinzow, H., Ruggiero, K. J., & Cercone, J. (2009). Internet-based interventions for traumatic stress-related mental health problems: A review and suggestion for future research. *Clinical Psychology Review, 29*, 410-420.
- Anderson, N. (2015). Were one in five college women sexually assaulted? The debate over numbers continues. *Washington Post*. Retrieved from <https://www.washingtonpost.com/news/grade-point/wp/2015/06/23/were-one-in-five-college-women-sexually-assaulted-the-debate-over-numbers-continues/>
- Anderson, N., & Clement, S. (2015). College sexual assault: 1 in 5 college women say they were violated. *Washington Post*. Retrieved from <http://www.washingtonpost.com/sf/local/2015/06/12/1-in-5-women-say-they-were-violated/>
- Banyard, V. L. (2008). Measurement and correlates of prosocial bystander behavior: The case of interpersonal violence. *Violence and Victims, 23*, 85-99.
- Banyard, V. L., Eckstein, R. P., & Moynihan, M. M. (2010). Sexual violence prevention: The role of stages of change. *Journal of Interpersonal Violence, 25*, 111-135.
- Banyard, V. L., & Moynihan, M. M. (2011). Variation in bystander behavior related to sexual and intimate partner violence prevention: Correlates in a sample of college students. *Psychology of Violence, 1*, 287-301.
- Banyard, V. L., Moynihan, M. M., Cares, A. C., & Warner, R. (2014). How do we know if it works? Measuring outcomes in bystander-focused abuse prevention on campuses. *Psychology of Violence, 4*, 101-115.
- Banyard, V. L., Moynihan, M. M., & Plante, E. G. (2007). Sexual violence prevention through bystander education: An experimental evaluation. *Journal of Community Psychology, 35*, 463-481.
- Banyard, V. L., Plante, E. G., & Moynihan, M. M. (2005). *Rape prevention through bystander education: Bringing a broader community perspective to sexual violence prevention* (Report to the US Department of Justice). Retrieved from <https://www.ncjrs.gov/pdffiles1/nij/grants/208701.pdf>
- Bauer, G. R. (2014). Incorporating intersectionality theory into population health research methodology: Challenges and the potential to advance health equity. *Social Science & Medicine, 110*, 10-17.

- Berkowitz, A. D. (2010). Fostering healthy norms to prevent violence and abuse: The social norms approach. In K. L. Kaufman (Ed.), *The prevention of sexual violence: A practitioner's sourcebook* (pp. 147-171). Holyoke, MA: NEARI Press.
- Brown, A. L., Banyard, V. L., & Moynihan, M. M. (2014). College students as helpful bystanders against sexual violence: Gender, race, and year in college moderate the impact of perceived peer norms. *Psychology of Women Quarterly*, *38*, 350-362.
- Burn, S. M. (2009). A situational model of sexual assault prevention through bystander intervention. *Sex Roles*, *60*, 779-792.
- Calderón-Tena, C. O., Knight, G. P., & Carlo, G. (2011). The socialization of prosocial behavior tendencies among Mexican American adolescents: The role of familism values. *Cultural Diversity & Ethnic Minority Psychology*, *17*, 98-106.
- Campus Answers. (2015). *Why college-age people prefer online bystander intervention education*. Retrieved from <http://www.campusanswers.com/why-college-age-people-prefer-online-bystander-intervention-education/>
- Campus Sexual Violence Elimination (SaVE) Act. (2013). Available from <http://www.campusaveact.org/>
- Cares, A. C., Banyard, V. L., Moynihan, M. M., Williams, L. M., Potter, S. J., & Stapleton, J. G. (2015). Changing attitudes about being a bystander to violence: Translating an in-person sexual violence prevention program to a new campus. *Violence Against Women*, *21*, 165-187.
- Cissner, A. B. (2009). *Evaluating the mentors in violence prevention program: Preventing gender violence on a college campus*. Center for Court Innovation. (Report Submitted to the U.S. Department of Education). Retrieved from <http://www.mvpnational.org/wp-content/uploads/2011/12/DOE-MVP-Eval-Report-2008.pdf>
- Coker, A. L., Bush, H. M., Fisher, B. S., Swan, S. C., Williams, C. M., Clear, E. R., & DeGue, S. (2016). Multi-college bystander intervention evaluation for violence prevention. *American Journal of Preventive Medicine*, *50*, 295-302.
- Coker, A. L., Cook-Craig, P., Williams, C. M., Fisher, B. S., Clear, E. R., Garcia, L. S., & Hegge, L. M. (2011). Evaluation of Green Dot: An active bystander intervention to reduce sexual violence on college campuses. *Violence Against Women*, *17*, 777-796.
- Coker, A. L., Fisher, B. S., Bush, H. M., Williams, C. M., Clear, E. R., & DeGue, S. (2015). Evaluation of the Green Dot bystander intervention to reduce interpersonal violence among college students across three campuses. *Violence Against Women*, *21*, 1507-1527.
- Diamond-Welch, B. K., Hetzel-Riggin, M. D., & Hemingway, J. A. (2016). The willingness of college students to intervene in sexual assault situations: Attitude and behavior differences by gender, race, age, and community of origin. *Violence and Gender*, *3*, 49-54.
- Donovan, R., & Williams, M. (2002). Living at the intersection: The effects of racism and sexism on Black rape survivors. *Women & Therapy*, *25*, 95-105.
- Edwards, K. M., Mattingly, M. J., Dixon, K. J., & Banyard, V. L. (2014). Community matters: Intimate partner violence among rural young adults. *American Journal of Community Psychology*, *53*, 198-207.
- EverFi. (2016). Haven: Understanding Sexual Assault [Computer software]. Available from <http://www.everfi.com>
- Exner, D., & Cummings, N. (2011). Implications for sexual assault prevention: College students as prosocial bystanders. *Journal of American College Health*, *59*, 655-657.
- Fabiano, P. M., Perkins, W. H., Berkowitz, A., Linkenbach, J., & Stark, C. (2003). Engaging men as social justice allies in ending violence against women: Evidence for a social norms approach. *Journal of American College Health*, *52*, 105-112.

- Foubert, J. D., & Bridges, A. J. (2017). Predicting bystander efficacy and willingness to intervene in college men and women: The role of exposure to varying levels of violence in pornography. *Violence Against Women, 23*, 692-706.
- Foubert, J. D., & Perry, B. C. (2007). Creating lasting attitude and behavior change in fraternity members and male student athletes: The qualitative impact of an empathy-based rape prevention program. *Violence Against Women, 13*, 70-86.
- Fry, R., & Taylor, P. (2013). *Latino high school graduates pass whites in rate of college enrollment*. Retrieved from <http://www.pewhispanic.org/2013/05/09/hispanic-high-school-graduates-pass-whites-in-rate-of-college-enrollment/>
- Frye, V. (2007). The informal social control of intimate partner violence against women: Exploring personal attitudes and perceived neighborhood social cohesion. *Journal of Community Psychology, 35*, 1001-1018.
- Gallardo, M. E., & Paoliello, Y. (2008). Familismo. In F. Leong (Ed.), *Encyclopedia of counseling* (pp. 1207-1208). Thousand Oaks, CA: Sage.
- Garrity, S. E. (2011). Sexual assault prevention programs for college-aged men: A critical evaluation. *Journal of Forensic Nursing, 7*, 40-48.
- Gidycz, C. A., Orchowski, L. M., & Berkowitz, A. D. (2011). Preventing sexual aggression among college men: An evaluation of a social norms and bystander intervention program. *Violence Against Women, 17*, 720-742.
- Goldweber, A., Waasdorp, T. E., & Bradshaw, C. P. (2013). Examining associations between race, urbanicity, and patterns of bullying involvement. *Journal of Youth and Adolescence, 42*, 206-219.
- Hooper, D., Coughlan, J., & Mullen, M. R. (2008). Structural equation modeling: Guidelines for determining model fit. *Electronic Journal of Business Research Methods, 6*, 53-60.
- Hoxmeier, J. C., Acock, A. C., & Flay, B. R. (2017). Students as prosocial bystanders to sexual assault: Demographic correlates of intervention norms, intentions, and missed opportunities. *Journal of Interpersonal Violence*. Advance online publication. doi:10.1177/0886260517689888
- Hoxmeier, J. C., McMahon, S., & O'Connor, J. (2017). Beyond yes or no: Understanding undergraduate students' responses as bystanders to sexual assault risk situations. *Journal of Interpersonal Violence*. Advance online publication. doi:10.1177/0886260517723143
- Katz, J., Merrilees, C., Hoxmeier, J. C., & Motisi, M. (2017). White female bystanders' responses to a black woman at risk for incapacitated sexual assault. *Psychology of Women Quarterly, 41*, 273-285.
- Katz, J., & Moore, J. (2013). Bystander education training for campus sexual assault prevention: An initial meta-analysis. *Violence and Victims, 28*, 1054-1067.
- Kleinsasser, A., Jouriles, E. N., McDonald, R., & Rosenfield, D. (2015). An online bystander intervention program for the prevention of sexual violence. *Psychology of Violence, 5*, 227-235.
- Knight, G. P., & Carlo, G. (2012). Prosocial development among Mexican American youth. *Child Development Perspectives, 6*, 258-263.
- Krebs, C. P., Lindquist, C., Warner, T., Fisher, B., & Martin, S. (2007). *The Campus Sexual Assault (CSA) study: Final report*. Retrieved from <http://www.ncjrs.gov/pdffiles1/nij/grants/221153.pdf>
- Kunstman, J. W., & Plant, E. A. (2008). Racing to help: Racial bias in high emergency helping situations. *Journal of Personality and Social Psychology, 95*, 1499-1510.

- Lake, C., Snell, A., Gormley, C., Wiefek, N., & Lethbridge-Cejku, F. (2015). *The no mas study: Domestic violence and sexual assault in the U.S. Latin@ Community*. Retrieved from http://nomore.org/wp-content/uploads/2015/04/Report.CASA_F.revised.f.050715.pdf
- Langhinrichsen-Rohling, J., Foubert, J. D., Brasfield, H., & Hill, B. (2011). The Men's Program: Does it impact college men's self-reported bystander efficacy and willingness to intervene? *Sex Roles, 17*, 743-759.
- Latane B & Darley JM (1970) *The unresponsive bystander: Why doesn't he help?* New York: Appleton-Century Crofts.
- Lee, D. S., Guy, L., Perry, B., Sniffen, C. K., & Mixson, S. A. (2007). Sexual violence prevention. *The Prevention Researcher, 14*(2), 15-20.
- Lisak, D., & Miller, P. M. (2002). Repeat rape and multiple offending among undetected rapists. *Violence and Victims, 17*, 73-78.
- Marsh, H. W., Hau, K.-T., & Wen, Z. (2004). In search of golden rules: Comment on hypothesis-testing approaches to setting cutoff values for fit indexes and dangers of overgeneralizing Hu and Bentler's (1999) findings. *Structural Equation Modeling, 11*, 320-341.
- McCall, L. (2005). The complexity of intersectionality. *Signs, 30*, 1771-1800.
- McMahon, S. (2010). Rape myth beliefs and bystander attitudes among incoming college students. *Journal of American College Health, 59*(1), 3-11.
- Moreno, C. (2007). The relationship between culture, gender, structural factors, abuse, trauma, and HIV/AIDS for Latinas. *Qualitative Health Research, 17*, 340-352.
- Moynihan, M. M., Banyard, V. L., Cares, A. C., Potter, S. J., Williams, L. M., & Stapleton, J.G. (2015). Encouraging responses in sexual and relationship violence prevention: What program effects remain 1 year later? *Journal of Interpersonal Violence, 30*, 110-132.
- National Sexual Violence Resource Center. (2016). *Bystander intervention: Campaigns and programs*. Retrieved from <http://www.nsvrc.org/bystander-intervention-campaigns-and-programs>
- Powell, A. (2014). *Bystander approaches: Responding to and preventing men's sexual violence against women* (ACSSA Issues No. 17). Melbourne, Australia: Australian Centre for the Study of Sexual Assault, Australian Institute of Family Studies.
- Salazar, L. F., Vivolo-Kantor, A., Hardin, J., & Berkowitz, A. (2014). A web-based sexual violence bystander intervention for male college students: Randomized controlled trial. *Journal of Medical Internet Research, 16*(9), 3-24.
- Schreiber, J. B., Nora, A., Stage, F. K., Barlow, E. A., & King, J. (2006). Reporting structural equation modeling and confirmatory factor analysis results: A review. *Journal of Educational Research, 99*, 323-338.
- Senn, C. Y., & Forrest, A. (2015). "And then one night when I went to class . . .": The impact of sexual assault bystander intervention workshops incorporated in academic courses. *Psychology of Violence, 6*, 607-618.
- Settles, I. H., & Buchanan, N. T. (2014). Multiple groups, multiple identities, and intersectionality. In V. Benet-Martínez & Y. Hong (Eds.), *The Oxford handbook of multicultural identity* (pp. 160-180). New York: Oxford University Press.
- Shaw, H., Ramirez, L., Trost, A., Randall, P., & Stice, E. (2004). Body image and eating disturbances across ethnic groups: More similarities than differences. *Psychology of Addictive Behaviors, 18*, 12-18.
- Shields, S. A. (2008). Gender: An intersectionality perspective. *Sex Roles, 59*, 301-311.
- Smith, A., Rainie, L., & Zickuhr, K. (2011). *College students and technology* (Pew Internet and American life project). Retrieved from <http://www.pewinternet.org/Reports/2011/College-students-and-technology/Report.aspx>

- Somanader, T. (2014). *President Obama launches the "It's On Us" campaign to end sexual assault on campus*. Retrieved from <https://www.whitehouse.gov/blog/2014/09/19/president-obama-launches-its-us-campaign-end-sexual-assault-campus>
- Stepler, R., & Brown, A. (2016). *Statistical portrait of Latinos in the United States*. Retrieved from <http://www.pewhispanic.org/2016/04/19/2014-statistical-information-on-hispanics-in-united-states/>
- Torres, E., Erwin, D. O., Trevino, M., & Jandorf, L. (2013). Understanding factors influencing Latina women's screening behavior: A qualitative approach. *Health Education Research, 28*, 772-783.
- The White House. (2014). *Memorandum—Establishing a White House task force to protect students from sexual assault*. Retrieved from <https://www.whitehouse.gov/the-press-office/2014/01/22/memorandum-establishing-white-house-task-force-protect-students-sexual-a>
- Valle, C., & Tate, D. F. (2015). Technology-based interventions to promote diet, exercise and weight control. In L. Marsch, S. Lord, & J. Dallery (Eds.), *Behavioral healthcare and technology: Using science-based innovations to transform practice* (pp. 113-138). New York: Oxford University Press.
- Wang, L., Zhang, Z., McArdle, J. J., & Salthouse, T. A. (2009). Investigating ceiling effects in longitudinal data analysis. *Multivariate Behavioral Research, 43*, 476-496.
- Warner, L. R. (2008). A best practices guide to intersectional approaches in psychological research. *Sex Roles, 59*, 454-463.
- Weitzman, A., Cowan, S., & Walsh, K. (2017). Bystander interventions on behalf of sexual assault and intimate partner violence victims. *Journal of Interpersonal Violence*. Advance online publication. doi:10.1177/0886260517696873
- White, A., Kavanagh, D., Stallman, H., Klein, B., Kay-Lambkin, F., Proudfoot, J., & Young, R. (2010). Online alcohol interventions: A systematic review. *Journal of Medical Internet Research, 12*, 160-171.
- Yule, K., & Grych, J. (2017). College students' perceptions of barriers to bystander intervention. *Journal of Interpersonal Violence*. Advance online publication. doi:10.1177/0886260517706764
- Zimmerman, D. W., & Williams, R. H. (1998). Reliability of gain scores under realistic assumptions about properties of pretest and posttest scores. *British Journal of Mathematical and Statistical Psychology, 51*, 343-351.

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