Students as Prosocial Bystanders to Sexual Assault: Demographic Correlates of Intervention Norms, Intentions, and Missed Opportunities

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Abstract
Sexual assault is a major public health issue. Bystander engagement programs are becoming widely used to combat sexual assault on college campuses. The purpose of this study was to examine students’ intervention norms, intentions, opportunities, and behaviors as bystanders to sexual assault. Undergraduate students (N = 779) completed the Sexual Assault Bystander Behavior Questionnaire in the fall of 2014. The t tests revealed differences in students’ intervention norms, intentions, opportunities, and missed opportunities based on sex, race/ethnicity, athletic participation, and fraternity/sorority membership. The findings support the use of additional measures to assess bystander behavior and to identify student subpopulations that may benefit from programs aimed at increasing prosocial intervention.

Keywords
sexual assault, alcohol and drugs, cultural contexts, anything related to sexual assault

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Introduction

Engaging students as prosocial bystanders is becoming widespread on college campuses as a strategy to decrease the incidence of sexual assault and mitigate the harm of assaults that have already occurred. Sexual assault is a major public health issue, affecting nearly one in four university women (Cantor et al., 2015), and implementation of effective prevention programming on U.S. college campuses is imperative. Bystander education programs, those aimed at engaging students as potential prosocial bystanders to sexual assault, have been identified and promoted as one such strategy (Centers for Disease Control and Prevention, 2015; The White House, 2014). To identify populations that may benefit from such programming, and to understand how best to tailor programming, assessing demographic correlates of behavior is imperative (A. L. Brown, Banyard, & Moynihan, 2014; McMahon, Postmus, & Koenick, 2011). To assess the effectiveness of behavior change programs, measuring behavioral outcomes is likewise important (Banyard, 2014; McMahon, Palmer, Banyard, Murphy, & Gidycz, 2015).

In recent years, there has been a surge of research dedicated to understanding students’ intervention behavior as bystanders to sexual assault. The body of literature generally falls into one of two broad categories: (a) understanding the demographic, situational, and psychosocial correlates of prosocial bystander intentions and behaviors (see McMahon, 2015a, for a review) and (b) evaluating the effectiveness of bystander engagement programs on efficacy, intentions, and behaviors (see Katz & Moore, 2013, for a review). Understanding the demographic correlates of prosocial intervention intention and bystander behavior is important to identify potential risk groups, and evaluating the impact of bystander education programs is critical for understanding what makes for effective strategies to engage students as prosocial bystanders. Research in this field is evolving as new developments give way to understanding the complexity of bystander behavior and the influences thereof. Experts have noted the challenges of assessing bystander behavior and underscore the need for effective measures in this field of research (Banyard, 2014; A. L. Brown et al., 2014; McMahon, Palmer, et al., 2015). One consistent theme is the need to measure behavioral outcomes, rather than relying exclusively on behavioral intention. Indeed, assessing prosocial bystander intervention in the context of missed opportunities to intervene can uncover at-risk groups for low bystander behavior. The purpose of this study was threefold: (a) to measure students’ bystander behavior relative to their opportunities to intervene; (b) to investigate the relationships between students’ intervention norms, intentions, and reported missed intervention opportunities; and (c) to explore demographic correlates of intervention norms, intentions, opportunities, and missed opportunities.
Students as Bystanders to Sexual Assault

Sexual Assault Situations

In an investigation of campus sexual assault, Abbey, Ross, McDuffie, and Auslan (1996) found a large proportion of assaults occurred between acquaintances, in a date or party setting, and involved alcohol, the latter of which has been replicated in other, more recent studies (Krebs, Lindquist, Warner, Fisher, and Martin, 2009). Although friends of the perpetrator and/or victim are often present during the preassault phase (Burn, 2009), students have the opportunity to perform a spectrum of prosocial intervention behaviors in the context of sexual assault. In their conceptual framework for sexual assault prevention through bystander intervention, McMahon and Banyard (2012) outlined a model for categorizing risk situations, including pre-, mid-, and postassault intervention. For instance, students have the opportunity to intervene prosocially when “a friend is bringing an intoxicated woman back to his room,” “witnessing a group rape,” or “a friend is seeking information for herself or another person on where to go for help for an assault” (McMahon & Banyard, 2012, p.8). Although from a public health stand point, primary prevention is key to reducing the incidence of sexual assault, midassault and postassault intervention have the potential to reduce the harm of the assault on the victim by removing them from the situation and/or supporting the survivor after their victimization.

Intervention Intentions and Behaviors

A major challenge in this field concerns the nature of researching actual intervention behavior; it is difficult to create opportunities for students to intervene in a laboratory setting or observe them as a natural experiment. The theory of planned behavior (TPB) asserts that behavioral intent precedes behavioral performance (Ajzen, 1991), and has been extensively used to explain variation in many health-related behaviors, such as smoking, smoking cessation, diet, and exercise, among others (Armitage & Conner, 2001). Combined with evidence that intentions are most proximal to behavioral performance for other health-related behaviors, students’ intent to intervene in sexual assault situations is often used as a measure of bystander willingness. Experts in the field, however, have questioned the utility of behavioral intention as a proxy for actual behavior in this particular body of research (Austin, Dardis, Wilson, Gidycz, & Berkowitz, 2016; Banyard, 2014; Banyard, Moynihan, Cares, & Warner, 2014; McMahon, Palmer, et al., 2015; McMahon, Peterson, et al., 2015); yet, the majority of the literature on this topic does not measure actual bystander behaviors as part of
their evaluation. Only one quarter of the intervention studies included in a recent meta-analysis used a behavioral outcome to assess program effectiveness (Katz & Moore, 2013).

Only recently has more attention been paid to the measurement of students’ prosocial bystander behavior. Unlike many other health-related behaviors, students can only intervene in sexual assault situations when they have the opportunity to do so (McMahon, Peterson, et al., 2015). Although vast improvements in the field were made with recent studies that asked students about their past intervention behaviors, they did not ask whether they had the opportunity to intervene (Austin et al., 2016; Banyard & Moynihan, 2011; Bennett, Banyard, & Garnhart, 2014; Burn, 2009). Scholars have noted the importance of investigating students’ opportunities to intervene in addition to their intervention behaviors (Bennett et al., 2014; A. L. Brown et al., 2014; McMahon, Palmer, et al., 2015; McMahon, Peterson, et al., 2015). Examining students’ intervention behavior in the context of their opportunities to intervene is beneficial for (a) uncovering discrepancies between those who report fewer intervention behaviors because they do not intervene and those who do not intervene due to a lack of opportunities, and (b) identifying subpopulations which could be targeted for bystander engagement programming because they report having many intervention opportunities. Experts assert that opportunities can be measured in different ways (McMahon, Palmer, et al., 2015). For example, McMahon and colleagues (2011; McMahon, Peterson, et al., 2015) asked students to report intervention behaviors with “yes,” “no,” or “wasn’t in situation” to better assess students’ intervention behaviors by excluding those who reported not to have been in bystander situations. A. L. Brown and colleagues (2014) asked students about having opportunities to intervene and whether they intervened in those opportunities to examine past intervention behaviors, as well as missed intervention opportunities. Still, others have examined bystander behavior relative to opportunity by including more specific measures of frequency of bystander opportunities (McMahon, Palmer, et al., 2015). Indeed, measuring bystander behavior can be varied and complex.

**Correlates of Bystander Behavior: Gender, Age, and Race/Ethnicity**

The gender of the bystander is commonly investigated as a correlate of intervention intent and behavior. In several studies, women have been found to report greater willingness to intervene in sexual assault risk situations compared with men (Banyard, 2008; Bennett, et al., 2014; Burn, 2009; Hoxmeier,
Flay, & Acock, 2015; McMahon, 2010; McMahon et al., 2011). Burn (2009) reasoned that women may be more likely to intervene because of their own vulnerability to sexual assault and better identification with the risk of the potential victim. This is supported by evidence demonstrating that sexual assault is a gendered phenomenon: Victims are more likely to be female, and perpetrators are more likely to be male (Tjaden & Thoennes, 2000). Scholars have found women not only report greater willingness to intervene as bystanders but also report more past prosocial intervention, compared with men (A. L. Brown et al., 2014; Diamond-Welch, Hetzel-Riggin, & Hemingway, 2016; McMahon et al., 2011).

Some scholars have found a negative correlation between students’ age and intervention behaviors (Banyard & Moynihan, 2011; Diamond-Welch et al., 2016), whereas others have found no correlation between students’ age and their intervention intent or behavior (A. L. Brown et al., 2014). The relationship between age and intervention behavior is important in light of research showing first-year women are particularly vulnerable to sexual assault (Gross, Winslett, Robert, & Gohm, 2006; Krebs, Lindquist, Warner, Fisher, & Martin, 2007; Sweeney, 2011).

Little is known regarding any race/ethnic differences in helping behaviors of bystanders specific to sexual assault. White students have been found to be more reluctant to help Black students compared with helping other White students, in nonsexual assault situations, whereas no difference in helping was observed for Black students (Kunstman & Plant, 2008). Investigation of this nature has focused more on helping behaviors between Black and White persons, specifically, and the differences in helping behaviors when the victim is Black (Crosby, Bromley, & Saxe, 1980; Gaertner, Dovidio, & Johnson, 1982; Saucier, Miller, & Doucet, 2005).

Rates of sexual assault victimization have been found to be similar among White, Black, Hispanic, and Asian college women (Abbey et al., 1996); yet, the relationship between race/ethnicity has been largely unexplored in the bystander literature specifically in the context of sexual assault. A. L. Brown et al. (2014) found that Black students reported greater bystander intervention behaviors and fewer missed opportunities to intervene, compared with White students, and called for examination of bystander engagement in other race/ethnic groups, such as among Asian/Pacific Islander and Hispanic students. Diamond-Welch and colleagues (2016) also examined race/ethnic differences in bystander behavior and found variation among Caucasian and non-Caucasian students dependent on age and community of origin. No further differentiation among the “non-Caucasian” group was conducted, however, and reported intervention opportunities were not assessed alongside reported intervention behaviors.
Correlates of Bystander Behavior: Fraternities, Sororities, and Intercollegiate Athletes

Using a variety of measures, members of fraternities and male student-athletes have been identified in previous research as potentially at risk for a lack of prosocial intervention, mostly on the basis of their acceptance of “rape myths,” attitudes that justify the use of sexual aggression (Lonsway & Fitzgerald, 1994), rather than actual measures of intervention opportunities and behaviors. Scholars have found that students who are more accepting of sexual aggression and/or who support rape myths are less willing to intervene as prosocial bystanders to sexual assault (Banyard & Moynihan 2011; A. Brown & Messman-Moore, 2010; McMahon, 2010). Fraternity members’ and male student-athletes’ acceptance of rape myths, in several studies, has been shown to correlate with decreased bystander intentions, although intervention behavior was not examined (Bannon, Brosi, & Foubert, 2013; Elias-Lambert & Black, 2016; Foubert, 2013; Foubert, Brosi, & Bannon, 2011; Foubert & Newberry, 2006; McMahon, 2010; McMahon et al., 2011; Moynihan, Banyard, Arnold, Eckstein, & Stapleton, 2010).

Bystander intentions and behaviors of sorority women have been examined less, though evidence has shown this population is at greater risk for victimization compared with nonsorority women (Copenhaver & Grauerholz, 1991; Kalof, 1993; Minow & Einolf, 2009), and may also hold attitudes accepting of rape myths (Kalof, 1993). Despite evidence suggesting the potential risk for fraternity members’ low bystander prosocial intervention, it should not be assumed that sorority women share similar norms that may discourage intervention as bystanders to sexual assault. Similarly, less examination has been directed at female student-athletes. Moynihan et al. (2010) noted the potential for capitalizing on athletes’ campus leadership, in general, and called for greater examination of female athletes, specifically, to understand this subpopulation as prosocial bystanders.

Although few investigations have measured actual intervention behaviors in addition to bystander willingness, McMahon and colleagues (2011) found that although students who participate in a fraternity/sorority or collegiate athletics reported less willingness compared with counterparts, these student groups did not report fewer prosocial intervention behaviors. A. L. Brown and colleagues (2014) noted the importance of examining these subpopulations’ intent to intervene, as well as their intervention opportunities and behaviors.

The Role of Bystander Intervention Norms

Social norms may be a salient influence in prosocial intervention (see Berkowitz, 2010); yet, normative beliefs (i.e., perceptions of appropriate or
socially normative behavior) regarding bystander behavior can be, and have been, conceptualized in different ways and often focus on men. Failure to intervene, among men, has been found to be influenced by not wanting to appear weak by male peers (Carlson, 2008) and perception of peers’ attitudes supportive of sexual coercion (A. Brown & Messman-Moore, 2010). Fabiano, Perkins, Berkowitz, Linkenbach, and Stark (2003) found that men’s willingness to intervene as bystanders was influenced by their perceptions of their peers’ willingness to intervention. Austin et al. (2016) found that men’s perception of their peers’ willingness to intervene was predictive of their intent to intervene but not their reported intervention behavior. In a mixed sample, and specific to self-reported intervention behavior, A. L. Brown et al. (2014) found male students with supportive peer norms, assessed by perception of friends’ approval to intervene, reported fewer missed intervention opportunities, although this relationship was not found for female students. Perception of friends’ approval for intervention did not differ between Black and White students, and racial/ethnic differences in students’ perception of friends’ approval to intervene have not been explored elsewhere. Still, other scholars have examined normative beliefs or socially normative attitudes related to sexual assault in different ways. Banyard and Moynihan (2011) hypothesized that students’ perception of peer approval for sexual coercion would influence their own bystander intentions, yet found those norms to correlate with more self-reported bystander behaviors (without exploration into opportunities). Similarly, Austin et al. (2016) hypothesized that men’s perception of their peers’ sexually aggressive behaviors would influence their own bystander intentions and found a significant relationship between the two variables.

Research has demonstrated that social norms may play a role in students’ intervention intentions and behaviors, although the measurements of such norms in the studies noted above vary in their operationalization and have not been explored within different student subpopulations. Conceptualizing norms from a theory-based perspective can help clarify the potential relationship between this variable and students’ own bystander intentions and behaviors.

From the perspective of the TPB, subjective norms can be operationalized as one’s perception of approval or disapproval by others to perform a behavior (Ajzen, 1991); “others” can be further divided into an individual’s peers, family members, romantic partners, or friends, for instance. Subjective norms influence one’s behavioral intent and, thus, their behavior, on the assumption that people are motivated to perform behaviors through social pressure (Ajzen, 1991). Students’ perception of social pressure applied by their good friends, conceptualized as their approval or disapproval of prosocial intervention behavior, could be a salient influence in intervention intention and behaviors due to students’ motivation to comply with good friends compared with other people or peers in general.
Assessing norms from a TPB perspective has several benefits, including the specificity of the norm itself to the intervention behavior, rather than perception of peer acceptance for sexual coercion in general (Banyard & Moynihan, 2011), others’ sexist attitudes and sexually aggressive behaviors (Austin et al., 2016), close friends’ acceptance of rape myths (Stein, 2007), or peers’ intervention intentions (Fabiano et al., 2003). In addition, given the likeliness that college students will be attending parties, and therefore be bystanders of sexual assault situations, with their good friends, it would be prudent to assess the role of friend’s approval, rather than peers, for students’ intervention behaviors. In addition to exploring intervention norms among men, it is important to understand the intervention norms among other student subpopulations, including women, fraternity/sorority members, and student-athletes.

The Current Study

This study investigated demographic correlates of students’ intervention subjective norms, intervention intentions, opportunities to intervene, and missed intervention opportunities. Based on the literature, we made the following hypotheses:

**Hypothesis 1:** Students’ supportive intervention norms and greater intent to intervene will correlate with fewer missed intervention opportunities.

**Hypothesis 2:** Female students, members of fraternities/sororities, and those who participate in athletics will report more intervention opportunities.

**Hypothesis 3:** Female students, as well as those who do not participate in fraternities/sororities or athletics, will report more supportive intervention norms, greater intent to intervene, and fewer missed intervention opportunities.

The dearth of literature on the role race/ethnicity plays in bystander intervention challenged any generation of hypotheses based on these variables. An exploratory analysis was conducted to investigate any differences in intervention norms, intervention intentions, opportunities to intervene, and missed opportunities based on race/ethnicity variables.

**Method**

**Participants**

A convenience sample of 815 undergraduate students at a large university in the Pacific Northwest completed the Sexual Assault Bystander Behavior Questionnaire (SABB-Q) in the fall of 2014. We excluded students who
failed to provide their sex \((n = 2)\), year in school \((n = 1)\), race/ethnicity \((n = 5)\), or identified a race/ethnicity other than White, Black, Asian/Pacific Islander, or Hispanic \((n = 29)\) in the analysis. The final sample was 779 students, including 224 males (28.9%), 22 Black (2.8%), 119 Asian/Pacific Islander (15.3%), 67 Hispanic (8.4%), 153 in their first year (20.0%), 51 fraternity members (6.6%), 141 sorority members (18.1%), 13 male student-athletes (1.7%), and 31 female student-athletes (4.0%).

**Procedures**

To solicit study participants, we send recruitment emails to instructors of undergraduate courses in five social science disciplines. Instructors of 14 different courses, across four disciplines, allowed recruitment, which was voluntary and confidential. Students who consented completed the SABB-Q during class time, and, given the sensitive nature of the survey, were advised to space themselves to allow for confidential response. Also as a measure to ensure confidentiality, all students, regardless of whether they completed the paper-and-pen survey, turned in their own survey to the box at the front of the classroom, collected by the study investigator. All protocol was approved by the institutional review board. Data were double entered into an Excel spreadsheet by the study investigator and verified using Excel’s cross-referencing formula. All analyses were conducted with Stata 13.

**Measurement**

The SABB-Q was developed to answer the study hypotheses and included demographic variable items, items that assessed students’ intervention norms and intentions, opportunities to intervene, and past intervention behaviors. The 12 intervention behaviors used throughout the SABB-Q were developed from the conceptual framework for the prevention of sexual violence through bystander intervention (McMahon & Banyard, 2012) and the Bystander Behaviors Scale (BBS; Banyard, 2008). The BBS is widely used to measure bystander behavior and is comprised of 51 prosocial intervention behaviors based on a review of the literature as well as discussions with sexual assault prevention practitioners (Banyard, Plante, & Moynihan, 2005). We selected the 12 intervention behaviors to represent a range, from preassault intervention to postassault support, and behaviors that required intervention with the potential or actual victim and with the potential or actual perpetrator.

Similar to the changes made in another study (McMahon et al., 2014), we revised SABB-Q items to reflect student culture and respondent comprehension, based on cognitive interviews. Item language was changed from “woman”
to “girl” and from “man” to “boy,” for example. Items that did not specify the sex of the perpetrator or victim with gendered pronouns were changed to include gendered pronouns to specify a female victim and male perpetrator.

The intervention behaviors in the SABB-Q used to assess opportunities, past behaviors, subjective norms, and intentions were the following: (a) confront a friend who says he plans to give a girl alcohol to get sex; (b) help your female friend who is passed out and being approached or touched by a guy or group of guys; (c) check in with your friend who looks intoxicated and is being taken to a room by a guy; (d) say something to your friend who is taking an intoxicated girl back to his room; (e) interrupt the situation when you walk in on your friend who appears to be forcing a girl to have sex with him; (f) interrupt the situation when you walk in on a guy who appears to be forcing your female friend to have sex with him; (g) interrupt the situation when you walk in on your friend who is having sex with an intoxicated girl; (h) interrupt the situation when you walk in on a guy who is having sex with your intoxicated female friend; (i) express concern when a friend says she had an unwanted sexual experience but does not call it rape; (j) criticize your friend who says he had sex with a girl who was passed out or did not give consent; (k) help your friend who has been sexually assaulted access support services, that is, therapy, groups, and so on; and (l) cooperate with the police or campus security in an investigation of sexual assault that your friend committed. Each subscale contained the same 12 intervention behaviors.

Opportunities to Intervene and Missed Intervention Opportunities

We measured intervention opportunities and missed opportunities with concurrent items asking students whether they have had the opportunity to perform each of the intervention behaviors and whether they have performed the intervention behavior for which they had the opportunity. Opportunities were coded 1 when students indicated “yes” for having the opportunity to intervene. Missed intervention opportunities were coded 1 when students indicated “yes” to having the opportunity and “no” to having intervened when presented with that opportunity. Items were averaged across the 12 items to create a total opportunities and missed opportunities score.

Intervention Norms and Intent

We measured intervention norms by assessing students’ perceived approval or disapproval of their good friends to perform each intervention behavior (1 = totally disapprove to 7 = totally approve). Students were asked, “How
much do you think your good friends would disapprove or approve of you if you were to take each of the following actions?” We measured intervention intentions by assessing the likelihood that students would perform each intervention behavior (1 = totally unlikely to 7 = totally likely). Students were asked, “If you were to encounter this situation, how likely are you to take each of these actions?” Items from each scale were averaged to create an intervention norm and intervention intent score. Each subscale met the threshold for high internal consistency (Cronbach’s α > .90).

Results

Hypothesis 1: The Relationship Between Subjective Norms, Intent, and Missed Opportunities

Table 1 presents mean values for study variables, as well as Pearson’s correlation values. Students reported supportive intervention norms (M = 5.94, SD = 1.09) and high intent to intervene (M = 5.96, SD = 0.91). Pearson’s correlations revealed students’ norms, intent, and missed opportunities correlated significantly in the hypothesized direction. Missed intervention opportunities negatively correlated with norms and intent; that is, students who reported more supportive intervention norms and greater intent to intervene reported fewer missed intervention opportunities. Interesting to note is the significant, positive relationship between total opportunities and missed intervention opportunities, indicating the more intervention opportunities students reported, the more missed opportunities they reported.

Table 2 presents the results for the t tests analyses conducted, along with effect sizes (Cohen’s d), for the study variables. Male students reported significantly less supportive intervention norms and less intent to intervene compared with female students, as hypothesized. Different than expected, we observed no differences in norms or intentions between fraternity members and nonfraternity members or between male student-athletes and non-student athletes. First-year students, female nonathletes, and Asian/Pacific Islander students reported less intent to intervene as bystanders compared with older students, female student-athletes, and White students, respectively.

Hypothesis 2: Opportunities to Intervene

Nearly, 40% (n = 322) of participants reported to have had the opportunity to “check in with your friend who looks intoxicated and is being taken to a room by a guy.” Conversely, just more than 2% (n = 18) of participants reported to have had the opportunity to “interrupt the situation when you walk in on your
friend who appears to be forcing a girl to have sex with him.” As hypothesized, fraternity and sorority members reported significantly more opportunities to intervene, compared with nonfraternity and sorority counterparts. Different than expected, nonathletes did not report fewer intervention opportunities compared with athletes. Asian/Pacific Islander students, as well as first-year students, reported fewer intervention opportunities, compared with White students and students beyond their first year, respectively.

**Hypothesis 3: Missed Intervention Opportunities**

Not all students intervened when they had the opportunity to do so. For example, nearly 20% of the sample reported they had the opportunity to “say something to your friend who is taking an intoxicated girl back to his room” ($n = 161$), and, of those, nearly 25% of students ($n = 40$) reported they did not intervene in that situation. To examine demographic differences in missed intervention opportunities, we excluded students who reported not to have any intervention opportunities in the analysis ($n = 278$). As hypothesized, female students reported significantly fewer missed intervention opportunities, compared with male students. Different than expected, fraternity members and male student-athletes did not report more missed intervention opportunities, compared with counterparts. In the exploratory analysis of racial/ethnic differences in bystander engagement, Black and Hispanic students reported significantly more missed intervention opportunities, compared with White students. The small sample of Black students in this sample should be noted in the reporting of the statistical difference of this test.

**Discussion**

The findings of this study contribute to the breadth of literature in college bystander behavior in several ways, including those that support the
Table 2. Differences in Mean Values of Intervention Norms, Intent, Opportunities, and Missed Opportunities, t tests.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Intervention N</th>
<th>Intervention I</th>
<th>Total O</th>
<th>Missed O</th>
</tr>
</thead>
<tbody>
<tr>
<td>Females</td>
<td>555 (71.2)</td>
<td>6.02 (1.06)**</td>
<td>.229</td>
<td>6.07 (0.83)***</td>
</tr>
<tr>
<td>Males</td>
<td>224 (28.8)</td>
<td>5.77 (1.13)</td>
<td>.081</td>
<td>6.00 (0.88)*</td>
</tr>
<tr>
<td>Older than first-year</td>
<td>626 (80.4)</td>
<td>5.96 (1.10)</td>
<td>.209</td>
<td>5.72 (1.00)</td>
</tr>
<tr>
<td>First-year</td>
<td>153 (19.6)</td>
<td>5.89 (1.05)</td>
<td>.080</td>
<td>5.80 (0.99)</td>
</tr>
<tr>
<td>Nonfraternity members</td>
<td>176 (87.3)</td>
<td>5.82 (1.14)</td>
<td>.209</td>
<td>5.72 (1.00)</td>
</tr>
<tr>
<td>Fraternity members</td>
<td>51 (22.7)</td>
<td>5.56 (1.12)</td>
<td>.080</td>
<td>5.55 (1.05)</td>
</tr>
<tr>
<td>Nonsorority members</td>
<td>414 (74.6)</td>
<td>5.99 (1.10)</td>
<td>-.097</td>
<td>6.07 (0.85)</td>
</tr>
<tr>
<td>Sorority members</td>
<td>141 (25.4)</td>
<td>6.09 (0.95)</td>
<td>-.097</td>
<td>6.07 (0.75)</td>
</tr>
<tr>
<td>Male nonstudent athletes</td>
<td>210 (94.2)</td>
<td>5.75 (1.14)</td>
<td>.124</td>
<td>5.66 (1.03)</td>
</tr>
<tr>
<td>Male student athletes</td>
<td>13 (5.8)</td>
<td>5.90 (1.04)</td>
<td>.124</td>
<td>6.05 (0.72)</td>
</tr>
<tr>
<td>Female nonstudent athletes</td>
<td>524 (94.4)</td>
<td>6.02 (1.07)</td>
<td>.023</td>
<td>6.05 (0.84)</td>
</tr>
<tr>
<td>Female student athletes</td>
<td>31 (5.6)</td>
<td>6.00 (1.04)</td>
<td>.023</td>
<td>6.36 (0.53)*</td>
</tr>
<tr>
<td>Non-Hispanic White</td>
<td>566 (96.3)</td>
<td>5.98 (1.05)</td>
<td>.054</td>
<td>6.01 (0.82)</td>
</tr>
<tr>
<td>Black</td>
<td>22 (3.7)</td>
<td>5.93 (1.05)</td>
<td>.054</td>
<td>6.29 (0.60)</td>
</tr>
<tr>
<td>Non-Hispanic White</td>
<td>566 (82.7)</td>
<td>5.98 (1.05)</td>
<td>.436</td>
<td>6.01 (0.82)***</td>
</tr>
<tr>
<td>Asian</td>
<td>119 (17.3)</td>
<td>5.87 (1.13)</td>
<td>.208</td>
<td>5.57 (1.23)</td>
</tr>
<tr>
<td>Hispanic</td>
<td>566 (89.5)</td>
<td>5.98 (1.05)</td>
<td>.208</td>
<td>6.01 (0.82)</td>
</tr>
</tbody>
</table>

Note. Intervention norms and intent are measured in a 7-point rating scale. Total opportunities and missed opportunities are continuous variables. *p < .05. **p < .01. ***p < .000.
findings of previous research and those that shed new light on correlates of bystander behavior. Congruent with previous research, female students reported significantly greater intent to intervene compared with male students (Banyard, 2008; A. L. Brown et al., 2014; Hoxmeier et al., 2015; McMahon, 2010; McMahon et al., 2011), and more supportive intervention norms (A. L. Brown et al., 2014). Male students reported more missed intervention opportunities, compared with female students, similar to the findings of A. L. Brown et al. (2014). Although other research has found male students to report fewer past intervention behaviors compared with female students, differences in opportunities to intervene were not measured. Echoing the assertions made by experts in the field (A. L. Brown et al., 2014; McMahon, Palmer, et al., 2015), opportunities to intervene should be included in behavioral outcome measures to differentiate between students who report fewer intervention behaviors because they lack opportunities compared with those who do not intervene when presented with an opportunity.

First-year students reported fewer intervention opportunities and less intervention intentions, compared with those students beyond their year. These findings, coupled with previous research showing the vulnerability of first-year college women to sexual assault (Gross et al., 2006; Krebs et al., 2007; Sweeney, 2011), may justify the need to engage first-year students as prosocial bystanders early in their college career. In addition, this examination of intervention opportunities, as well as the timing of data collection early in the academic year, indicates that including first-year students in data analysis of a college sample may skew results. Research similar in nature may benefit from considering the timing of data collection for later in the academic year and examining opportunities and behaviors separately for first-year students and older students to account for the potential lack of opportunities among younger students.

Although fraternity members have been identified as at risk for an unwillingness to intervene in previous research, those in this study did not differ from nonfraternity members in their reported intervention norms, intentions, and missed opportunities. This finding suggests that, regardless of participation in fraternities, male students may not intervene when they have the opportunity to do so. Given the intersection of alcohol and sexual assault, as well as the intersection of alcohol use and fraternity membership (De Los Reyes & Rich, 2003), the finding that fraternity members in this sample report greater opportunities to intervene is unsurprising. Similarly, other researchers have found fraternity men at greater risk for sexual assault perpetration than counterparts in part due to norms that support use of sexual aggression (Elias-Lambert & Black, 2016).
Fraternity men, along with sorority women, have the potential to make a positive impact on sexual assault incidence by increasing their prosocial intervention behavior because they appear to have greater opportunities to intervene. Scholars have noted challenges in increasing bystander behaviors with this population (Elias-Lambert & Black, 2016). With no observable differences in intervention norms and intentions between Greek members and counterparts, it may suggest that additional barriers challenge prosocial intervention for these students, underscoring the need for further research and the importance of developing programs that meet the needs of this population.

Male and female student-athletes did not differ from counterparts on any of the study variables, with the exception that female student-athletes reported greater intent to intervene compared with female non-student athletes. Although previous research has found students who participate in university athletics to report less willingness to intervene (Banyard, 2008; McMahon, 2010), gender variation was not examined. Regardless of gender, however, focusing on student-athletes, a preestablished friend group, as potential campus leaders in bystander intervention, based on their status and visibility, could prove an effective strategy in reducing the incidence of sexual assault (McMahon, 2015b; Moynihan et al., 2010).

How the present findings of the race/ethnic correlates of study variables relate to current literature is less clear. Although Asian students in this sample reported less opportunities to intervene, they also reported less intent to intervene. Both Black and Hispanic students reported more missed opportunities, compared with White counterparts, despite no differences in norms nor intentions. The former finding differs from A. L. Brown et al. (2014), and although a small sample of Black students participated in this study, the sample was representative of the campus population, different than the campus make-up in the Brown et al. study. Previous research has shown Asian male (Mori, Bernat, Glenn, Selle, and Zarate, 1995) and Hispanic male (Fischer, 1987) college students to be more vulnerable to date rape myths. Jimenez and Abreu (2003) extended these findings to Latinas, in a study examining perceptions of acquaintance rape, who reported greater acceptance of rape myths and less positive attitudes toward victims of sexual assault. Although this examination of race/ethnic differences is preliminary, the differences among these groups here justify investigation into the experiences of bystanders, or potential bystanders, of color and whether specific, cultural perceptions of sexual assault influence perceptions of peer approval and intent to intervene. Qualitative research in this area may better shed light on the role students’ race/ethnicity plays in their intervention behavior, particularly in situations where racial/ethnic minorities are bystanders to situations with victims and perpetrators of the dominant race/ethnicity. The implication for public health practice is that
students of color may be further marginalized when programs aimed to increase bystander behaviors do not consider their experiences as bystanders.

Scholars have examined intervention norms among students (Austin et al., 2016; A. L. Brown et al., 2014; Fabiano et al., 2003; Stein, 2007), and the examination of peer approval for intervention behaviors contributes to the understanding of the role norms play in students’ bystander behavior. This study specifically examined the role of friend approval for prosocial intervention, and the findings here give weight to the need to conduct bystander programming with established friend groups as a way to heighten students’ perception that their friends will approve of intervening prosocially in sexual assault situation. Similarly, subjective norms are perceptions; that is, students’ belief in their friends’ disapproval to intervene may be a misperception. Further research could examine whether students do, in fact, approve of prosocial intervention behavior to incorporate into health promotion messaging to shift social norms. Although no significant differences in perceived friend approval were observed among student subpopulations, male students specifically reported less supportive subjective norms, in addition to less intent and more missed opportunities, compared with female students. Male-specific programming, including programming done with fraternity men, has been found to be effective in increasing intervention intentions (Foubert & Newberry, 2006; Katz, Heisterkamp, & Fleming, 2011; Langhinrichsen-Rohling, Foubert, Brasfield, Hill, & Shelley-Tremblay, 2011). The use of measures to assess intervention behavior relative to opportunities would benefit evaluation of bystander engagement programming, and continued research to understand—and change—social norms to better support prosocial bystander intervention is warranted.

Another interesting finding of this study is the positive relationship between reported opportunities to intervene and missed opportunities. For the sample as a whole, the more types of intervention opportunities students reported, the fewer intervention actions students reported taking. Given the dearth of literature in this area, specifically, it cannot be concluded whether this replicates previous findings of this nature. The authors speculate that the relationship between the norms that support the use of sexual aggression and the norms that discourage bystander intervention may explain the relationship between total and missed opportunities to intervene. Eight of the 12 sexual assault situations were those in a party context, and we assume that students party with members of their social network. Students with a social network where the use of aggression is more acceptable and/or normalized may be exposed to more types of sexual assault risk situations, yet view intervening in such as socially undesirable and have less intention of intervening (Austin et al., 2016; Murnen, Wright, & Kaluzny, 2003).
Under the Campus Sexual Violence Elimination (SaVE) Act of 2013, institutions of higher education are required to provide sexual assault prevention programs on campus. Given that programs aimed to engage students as prosocial bystanders have been recognized as a potentially effective strategy to reduce the incidence of sexual assault, continued pursuit of refined tools to measure bystander behaviors, and the influences thereof, is warranted. Similarly, identifying groups at risk for lacking intervention can help focus programmatic efforts. Experts have noted the challenges of assessing intervention behavior and underscore the necessity of finding effective measures in this field of research (Banyard, 2014; McMahon, Palmer, et al., 2015). The findings of this study contribute to this argument: Measuring missed intervention opportunities has benefits over measuring the intent alone. Different than in other studies (McMahon, Palmer, et al., 2015), the SABB-Q did not allow students to report their total number of intervention opportunities in a set time period and, thus, the frequency of their prosocial intervention in those opportunities. Experts contend there are several methods for measuring bystander behavior, each with unique benefits and challenges (see McMahon, Palmer, et al., 2015). The method in which bystander behavior was measured in the SABB-Q lends itself to examining the types of opportunities students have to intervene, yet do not uncover the frequency of those opportunities. We created an average score for students’ bystander behaviors, to compare against their intervention opportunities, as a method to examine student sub-populations’ bystander behavior, similar in other studies (McMahon, Palmer, et al., 2015).

Limitations

This study is not without its limitations. Studies that rely on self-report data are subject to the accuracy of participant memory, specifically whether students recall intervention opportunities and social desirability, specifically whether students intervened, for which we did not control. Prior research asserts the first step in bystander intervention behavior is to notice the situation (Burn, 2009; Latané & Darley, 1970). Although asking students to report their intervention opportunities is an improvement of behavioral measures, their reports of opportunities can only account for those they actually noticed and, thus, may not fully capture all intervention opportunities. Experts suggest that appropriate ordering of bystander items and scales may reduce mis-reporting of behaviors and that asking opportunities and behaviors concurrently can help reduce students’ overreporting of intervention behaviors (McMahon, Palmer, et al., 2015). This concurrent ordering of opportunities and behaviors was done in the SABB-Q.
A cross-sectional analysis does not lend itself to conclusions of causality, and it cannot be assumed that intent preceded intervention opportunities and behavior. Other scholars have noted the potential for past experience with prosocial intervention to influence future intentions (A. L. Brown et al., 2014; McMahon, Peterson, et al., 2015), a relationship that only longitudinal designs can establish. A convenience sample may limit the generalizability of findings to other student populations at other campuses; similarly, although the sexual assault situations used in the SABB-Q are similar to the ones used elsewhere, the 12 situations do not fully capture the range of sexual assault situations students, throughout U.S. campuses, encounter.

This study did not differentiate between intervention behaviors based on the typology that experts have outlined (McMahon & Banyard, 2012; McMahon, Palmer, et al., 2015). Previous research has demonstrated that students’ intervention intentions and behaviors may differ based on the context of the situation (Hoxmeier et al., 2015; McMahon, Palmer, et al., 2015; McMahon, Peterson, et al., 2015). Given the limited research examining behavior relative to opportunity, no differentiation was made in effort to provide a more general picture of bystander engagement, similar in other studies (A. L. Brown et al., 2014; McMahon, Peterson, et al., 2015). Similarly, Bennett et al. (2014) found that students report less intent to intervene in situations that involve strangers, and the SABB-Q used sexual assault situations in which either the perpetrator or victim was a friend of the bystander. Scholars note this particular complexity of sexual assault situations as a challenge in assessing the full range of situations students may encounter, and how knowing, or not knowing, those involved as either victims or perpetrators may influence intervention behavior (McMahon, Palmer, et al., 2015). As such, the findings here may not account for variability in intervention behavior, or the influences thereof, in situations where both the perpetrator and victim are unknown to the bystander. In investigations where uncovering differences between intervening with friends and strangers is not of focus, researchers may consider using items that do not indicate a relationship between bystander and victim or perpetrator, as to avoid limiting respondents’ reports of intervention opportunities and behaviors in a specific context.

The student population at this institution is ethnically homogeneous, and the findings may not generalize to a more ethnically diverse student population. With the exception of A. L. Brown et al. (2014), race/ethnicity has received little attention in the bystander engagement literature. Their findings, and those of this study do, however, underscore the need for investigating the variation in bystander behavior, and the influences thereof, based on race/ethnicity and variation in engagement when the victim/perpetrator and bystander are not of the same race/ethnicity.
Finally, students were not asked to specify their total number of intervention opportunities and behaviors; thus, we did not account for the totality of students’ missed opportunities. Such study designs would be appropriate for determining perhaps a more comprehensive picture of bystander behavior by allowing analysis of the proportion of opportunities that students intervened in and/or for examining the effectiveness of bystander engagement programs that aim to increase students’ bystander behavior (McMahon, Palmer, et al., 2015).

Future research should consider larger sample sizes of diverse student populations to examine any differences in intervention behaviors between the different typologies of bystander behavior, as well as consider measures that account for frequency of intervention opportunities and behaviors. Finally, longitudinal study designs, such as in Austin et al. (2016), can better differentiate between the potential influences as predictive rather than correlative to behavior.

**Conclusion**

College students as prosocial bystanders have the potential to reduce the incidence of sexual assault and mitigate the harm of assaults that have already occurred. Recognizing the potential of bystander engagement, the White House Task Force has encouraged widespread implementation on U.S. college campuses. Similar to the findings in previous work, male students continue to demonstrate risk for lack of bystander behavior; perception of peer approval to intervene may be heightened when programming is conducted with established friend groups. Bystander research as well as programming often relies on measures of intentions rather than behavior. Although, from a theoretical perspective, behavioral intent may be most proximal to actual behavior, limited research of this relationship specifically in the context of bystander intentions and behaviors cautions against using intentions alone to assess students as prosocial bystanders. As new measures are developed for the purpose of assessing actual intervention behavior, it is important to measure reported behavior against reported opportunity. Similarly, due to the complexities in measuring sexual assault bystander behaviors, and the influences thereof, a one-size-fits-all approach may not be appropriate, depending on the objectives of the research. This study contributes to the understanding of these complexities and potential challenges inherent in measuring complex behaviors. In the absence of the ability to test these relationships in the lab or in the field, it is critical that sound measures of intervention opportunities and behaviors are developed and used to more effectively to examine correlates of bystander behavior and the programs that aim to increase that behavior, especially among identified at-risk student populations, as well as with subpopulations traditionally unexamined.
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