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Event-specific and individual factors impacting college students' decisions to intervene in a potentially risky scenario

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ABSTRACT

Universities have attempted to address sexual violence on campuses through various prevention programs, including bystander intervention. Unfortunately, the extant literature on bystander intervention has primarily focused on bystander characteristics. Little is known about how situational characteristics affect the likelihood of intervening during sexual violence; yet, these variables have the potential to influence the effectiveness of bystander intervention programs. Using data collected from college students (N = 626) at a single university located in a large Southern metropolitan city, the present study utilizes a factorial survey design to investigate the impact of location, victim/offender sex, and perceptions of alcohol use on self-reported probability of intervention in an ambiguous sexual scenario. Results indicate that participants were more likely to intervene in scenarios that depicted a fraternity-hosted social (vs. on-campus) and less likely when there was a female perpetrator and a male victim. Perceived alcohol use did not impact intervention.

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Introduction

An estimated 20% to 25% of females attending college are victims of rape or attempted rape during their college careers.^{1,2} While the literature typically focuses on female college students, Tyler and colleagues revealed that 9.3% of college males reported experiencing forcible rape in the previous 12 months.3 Moving beyond general prevalence estimates, the victimization of other vulnerable populations, specifically gender and sexual minorities, has been highlighted in a recent national report.4 Indeed, sexual minority students are 2.3 times more likely to experience sexual victimization compared to heterosexual students.⁵ Individuals who are transgender are at especially high risk of sexual assault. Garafalo and colleagues⁶ found that 52% of their sample of MTF (male-to-female) youth reported experiencing unwanted sexual intercourse and Clements-Nolle et al.⁷ determined that 59% of their sample of MTF and FTM (female-to-male) individuals reported a history of rape.

Universities have a legal obligation to support survivors of sexual violence and prevent sexual victimization against students. Providing sexual assault prevention and risk reduction programs is federally mandated at all United States colleges and universities that receive federal funding. Many institutions of higher education have attempted to address the issue of sexual violence through various prevention programs, including bystander intervention initiatives. 8-10 Stemming from the work of Latané and Darley, 11 bystander intervention curricula teach safe and appropriate methods of interrupting potentially dangerous situations.^{8,9} Evaluations

of currently utilized bystander intervention programs indicate positive attitudinal and behavioral changes.^{8,10} Most importantly, there is evidence to suggest that campuses that implement bystander intervention initiatives have lower sexual victimization and perpetration rates than campuses that do not.9

Much of the extant literature on bystander intervention and college sexual assault has focused on the relationship between bystander characteristics and willingness to intervene. Less is known if or how the context of the situation impacts the decision to intervene. This is important to understand and investigate as these event-specific variables have the potential to influence the effectiveness of bystander intervention programs. Further, some event-specific characteristics may be more influential in promoting helping behaviors than others. The current study attempts to address this void in the literature by examining how various eventspecific characteristics influence willingness to intervene.

Sexual assault prevention through bystander intervention

Early methods of addressing campus sexual violence typically involved providing information on sexual assault prevalence, debunking rape myths, discussions on sex roles and gender-stereotypical behavior, as well as practical suggestions for safe dating practices to raise awareness and educate students. 12 Evaluations of these programs show that reductions in incidents of sexual assault were typically not achieved. 12,13 In response, the focus of prevention programs has shifted away from participants as potential perpetrators or victims toward highlighting their role as a bystander. 14,15

The bystander approach tackles the problem of college sexual violence in a broader community context by appealing to college students to challenge social norms supportive of sexual assault and take an active role in interrupting potentially highrisk situations.^{8,9,15} This method is especially beneficial for universities as bystanders are frequently present during the preassault phase. 16 Research also indicates that up to a third of sexual assaults and rapes occur in the presence of a third party.¹⁷ Additionally, college students are unrealistically optimistic and underestimate their personal chances of experiencing negative life events, such as victimization⁴; therefore, peers may be better suited to identify potentially dangerous situations. Bystander intervention approaches teach participants to act via interactive exercises and role-playing. Facilitators emphasize "understanding appropriate levels of intervention, being mindful of personal safety, and different personal options bystanders may employ depending on the nature of the situation".8 Holistically, these initiatives aim to diminish what is widely known as the bystander effect. The main proposition of the bystander effect is that "the presence of other people serves to inhibit the impulse to help". 11 The presence of others diffuses responsibility, and potential blame, among all observers.¹¹

Event-specific variables that may impact bystander involvement

Bystander intervention initiatives have proven effective in producing short-term beneficial changes in attitudes, cognitions, knowledge, and behaviors (eg, rape myth acceptance, sexual aggression, hypergender ideology) associated with sexual victimization. 8,10,13 Some programs are also effective in reducing sexual victimization and perpetration rates. Green Dot, for example, has resulted in lower victimization and perpetration rates for sexual violence, including unwanted sex, sexual harassment, stalking, and psychological dating violence compared to campuses without bystander training.9 Still, little is known about how event-specific characteristics impact a bystander's likelihood of intervening during sexual violence. As argued previously, these eventspecific factors have the potential to influence the effectiveness of bystander intervention programs. As such, the current study focuses on three event-specific variables which may increase or decrease bystander involvement. These factors are discussed in detail below.

Victim/offender sex

Previous research on violent victimization indicates that third parties are significantly more likely to intervene during instances of violence when the perpetrator is male and the victim is female. 18,19 Although there is limited knowledge regarding sexual victimization and bystander involvement specifically, previous studies have demonstrated that the sex of the victim influences the level of blame attribution they receive for their victimization experience. Compared to male rape victims,

female victims are perceived as less culpable.²⁰ It is not uncommon for individuals to assume that males are incapable of being raped.^{20,21} Indeed, college students are significantly more likely to perceive scenarios as rape when the victim is female, compared to when the victim is male.²⁰

The extant literature offers limited knowledge regarding gender or sexual minorities. This is of particular concern because gender and sexual minority college students face the greatest risk of experiencing sexual victimization. 4,5,22 Indeed, LGBT students have four times the risk of experistudents.²² rape compared to non-LGBT encing Furthermore, gender and sexual minority college students are more likely than their heterosexual and cisgender peers to experience negative consequences, such as problematic alcohol consumption²³ and substance abuse,²⁴ as a result of their victimization. As such, stopping the victimization of gender and sexual minorities may be particularly beneficial. Most relevant to the current study, individuals who are perceived as sexual minorities are less likely to receive assistance from others.^{25,26}

Victim/offender alcohol use

Third parties are more likely to assist in violent situations if the offender is believed to have been under the influence of alcohol or drugs.²⁷ Chabot and colleagues¹⁸ concluded that college students were more likely to intervene in severe instances of domestic violence when they attributed a male attacker's behavior to drunkenness. In the context of sexual assault, Hoxmeier et al. 16 found that a larger proportion of undergraduate college students did not intervene mid-assault when the victim was described as intoxicated than when the victim was depicted as forced to engage in sexual activity. Unfortunately, intoxicated victims may experience negative treatment and increased blame attribution; this reaction is especially so if the victim is female.²⁸ Research indicates that, when both the victim and the offender were described as experiencing equal levels of alcohol intoxication, participants rated the female victim more and the male offender less responsible than the other party for the sexual assault.²⁹ If bystanders perceive that victims of sexual violence are culpable (ie, blameworthy) due to intoxication, they may be less likely to render assistance.³⁰

Literature on the relationship between intoxication and blame attribution for gender and sexual minority victims of sexual violence is scant; however, one could speculate that LGBT victims who are intoxicated at the time of their assault may experience compounded stigma - that is, the cumulative effect of belonging to a marginalized population and being under the influence of alcohol and drugs - which, in turn, could potentially increase blame attribution among this group.

Location

Research suggests that behavioral scripts are associated with physical spaces. That is, different patterns of behavior can be elicited in predictable ways by different locations.³¹ Unfortunately, little is known about whether the location of the incident impacts helping behaviors. Howard and Crano³² found that undergraduate college students were significantly more likely to intervene during a potential book theft if the incident occurred in the student lounge than if the incident occurred in the library or dining area. More recently, Brewster and Tucker³³ examined the significance of location on undergraduate college students' likelihood of intervention during a verbal argument and physical struggle between a male and female. Results indicated that subjects expressed more willingness to intervene when the situation occurred on-campus versus off-campus.33

For sexual victimization, specifically, the literature has highlighted bars and college fraternities as especially high-risk locations for sexual violence. Fraternities often promote and sustain behaviors that perpetuate rape culture; further, alcohol is often used in conjunction with sexually coercive and aggressive behaviors in order to obtain sex.³⁴ In these distinct areas, college students may view sexually aggressive or coercive behaviors as normal conduct. On the other hand, college students may be especially cued to recognize the potential risk for sexual victimization in these specific locations.

Bystander-specific characteristics that may impact decisions to intervene

In addition to the event-specific characteristics described above, there are bystander-specific factors that may also impact bystander helping behaviors. Informed by the existing literature, the following bystander characteristics were examined in the current study. First, prior research has indicated that higher self-esteem is associated with enhanced initiative and higher levels of volunteerism.³⁵ Additionally, higher self-esteem has been found to be tied to increased self-efficacy, 36 which is the appraisal of one's capabilities of performing a task;³⁷ therefore, individuals with higher self-esteem may believe that they have the necessary skills and capabilities to intervene in risky situations. As evidence, LePine and Van Dyne³⁸ found that individuals with high self-esteem were most willing to speak out and criticize group behaviors.

Along with self-esteem, self-control may also explain differential helping behaviors. Self-control is linked to prosocial behaviors and moral emotions (eg, guilt and shame).³⁹ Individuals who experience feelings of guilt and shame may be more likely to develop a degree of personal responsibility when they come upon an individual in need of aid. As evidence, shame acknowledgement has been found to increase the likelihood of intervention during episodes of bullying. Homophobia may also impact decisions to intervene. As previously mentioned, individuals who are perceived as sexual minorities are less likely to receive assistance from others regardless of their actual sexual orientation.^{25,26}

Another factor that can impact an individual's decision to intervene is previous sexual victimization experiences. Some research indicates that previously experiencing victimization may have an impact on bystanding behaviors. To illustrate, teenagers who experience cyberbullying themselves are more likely to help other victims of cyberbullying. 40 In the context of sexual violence, research has demonstrated

that individuals with a history of sexual victimization exhibited more empathy toward victims of sexual violence than those without such a history⁴¹; however, Davidson⁴² found that, at the bivariate level, women who were sexually assaulted were not significantly more likely to intervene than women who did not have a previous history of sexual assault. In contrast, Rojas-Ashe et al. 43 found that individuals who both experienced sexual victimization themselves and knew a victim of sexual violence had higher willingness to help scores than individuals who had no exposure to sexual assault. These mixed findings indicate that further investigation into the impact of sexual assault history on bystander intervention is warranted.

Finally, attitudes toward sexual coercion have the ability to motivate or hinder a bystander from intervening.⁴⁴ Individuals who find sexual coercion acceptable may not intervene because they might not characterize sexually coercive or aggressive behaviors as wrong nor deem the situation as an emergency that requires action.

Current study

Despite research that shows that there are factors that motivate or hinder a bystander to intervene in a given situation, there are still gaps in the literature that prevent a full understanding of the factors that relate to bystander intervention. First, much of the research has focused on intervening in non-sexual victimization events. Thus, there is not a comprehensive understanding of what factors may influence intervention decisions during sexual violence. Second, there are several event-specific factors, as discussed above, that have not been thoroughly investigated and may be relevant for bystander intervention during incidents of sexual victimization. Third, little is known about bystander intervention when the sex of the offender and victim differ from heteronormative depictions of sexual violence (ie, a male perpetrator and a female victim). In an effort to address these gaps, the purpose of the current study is to examine whether or not location, perceived alcohol use, victim/ offender sex, and bystander characteristics impact helping behaviors during an ambiguous sexual scenario between two individuals (ie, nonconsensual sexual contact - that is, inappropriate touching of a sexual nature that may or may not progress to a more serious form of sexual victimization). The following hypotheses guide this study:

H₁: Bystanders will be more prone to intervene in high-risk locations (ie, bars and fraternity-hosted socials) compared to low-risk locations (ie, walking across campus to class).

H₂: Bystanders will be more prone to intervene when vignettes depict a female victim and male offender rather than in scenarios with other victim-offender combinations.

H₃: Bystanders will be more prone to intervene when the offender is suspected of being under the influence, while bystanders will be less inclined to intervene when the victim is suspected of being under the influence.

H4: Bystanders will be more prone to intervene if they have higher self-esteem and greater self-control. Additionally, bystanders who personally know a victim of sexual violence or

who have completed sexual violence programming will be more inclined to intervene.

H₅: Bystanders will be hindered from intervening if they have greater feelings of homophobia or attitudes that endorse sexual coercion. Furthermore, bystanders who have previously experienced sexual victimization will be less likely to intervene.

Methodology

Sample and data collection

The sample for the present study included students over the age of 18 who were enrolled in six selected courses at a single university located in a large Southern metropolitan city. With approval from instructors, a member of the research team visited the aforementioned classrooms during the Spring 2019 semester. During these classroom visits, the purpose of the study was introduced, the informed consent form was provided and explained, and paper surveys were distributed to students who were present. Students were offered two points extra credit for their participation and those who did not want to voluntarily participate were given alternate assignments by their instructors. Participants were allotted 25-30 minutes to complete the survey. All research materials and procedures were approved by the sample university's Institutional Review Board (IRB). A total of 748 students were enrolled in these courses. Of those students, 626 students¹ participated in the research project by completing an in-class paper survey, for a response rate of 83.7%. Descriptive statistics of the sample can be found in Table 1. The sample was predominately female (62.8%), with a mean age of 20.3 years old. The majority of students were Black (41.8%), followed by White (26.8%), Asian (16.9%), and multiracial or "other" (14.4%). Seventeen percent of the sample reported being Hispanic/Latinx.

Almost all (84.7%) of the sample identified as heterosexual, with the remaining 15.3% identifying as lesbian, gay, bisexual, or other. Most of the sample were freshmen (41.9%). Just over seven percent of the sample reported being a member of a Greek organization or indicated that they were a collegiate athlete. Three percent of the sample were international students. Approximately 30% of the sample previously participated in either a rape awareness or bystander intervention program. Although nearly threequarters of the sample (74.7%) knew what the #MeToo movement represented, only 17% indicated that they had personally participated in the #MeToo movement by either signing a petition, attending a protest, or posting the #MeToo hashtag on their personal social media. Slightly less than half (47.7%) of the sample reported experiencing some type of sexual victimization during their lifetime and 59.4%

¹Before collecting data, we performed a power analysis to determine a sufficient sample size. We used a mean effect size of -.23 for willingness to intervene, which we derived from findings presented in a meta-analysis evaluating the impact of victim/requester sex on prosocial helping behaviors in general.⁴⁵ Other values used to determine sample size were $\alpha = 0.05$ and β = 0.20; thus, a required sample of 594 vignettes was determined. In our study, each person receives one vignette, which means that 594 individuals were needed. We were able to recruit a total of 626 participants.

of the sample indicated that they personally knew a victim of sexual violence. Importantly, nearly 81% of the sample indicated that they would intervene in some capacity.

Research design

The current research project utilizes a factorial survey design (ie, vignette research). Vignette studies are particularly appealing for studying situations that present moral or ethical dilemmas⁴⁶ and have been used extensively in criminological research. 47-49 For the current study, each respondent received one vignette in which the location, victim/offender sex, and perceived alcohol use were manipulated.

Vignette

Vignettes depicted an ambiguous sexual scenario between two individuals unknown to the respondent. The vignette template can be found in Appendix A. Since sexual victimization occurs on a continuum, it is likely that presenting a scenario on either end of the victimization spectrum would affect and predict intervention. For instance, it is predicted that most respondents would indicate that they would intervene during a forcible rape in progress.

The independent variables that were manipulated in each vignette included location, victim/offender sex, and alcohol use. Location has three levels: (1) walking across campus on your way to class; (2) at a fraternity-hosted social; and (3) at an off-campus bar on the weekend. Victim/offender sex has four levels: (1) male/female; (2) male/male; (3) female/male; (4) female/female. Alcohol use has four levels where (1) the offender, (2) the victim, (3) both, or (4) neither is depicted as slurring their speech and stumbling over their feet. The current study utilizes a $3 \times 4 \times 4$ factorial design, resulting in 48 different vignettes. The structure of the vignettes was largely influenced by and adopted from the work of Bennett et al.⁵⁰ Vignettes were randomly assigned to study participants. Table 1 indicates that the randomization process resulted in an approximately even distribution of dimensions across vignettes.

Measures

Bystander intervention

Respondents were asked if they would intervene by calling the police, saying something, or doing something. Examples of behaviors (eg, saying something like "Excuse me? Is there a problem here?" and doing something like stepping between the two individuals) were provided to cue respondents. Participants who indicated 'yes' on any of the three intervention methods were categorized as '1' and participants who indicated 'no' on all three methods of intervention were coded as '0.'

Bystander characteristics

Respondents were asked to report their age, race/ethnicity, sex, sexual orientation, academic year, whether they were an international student, and whether they were a member of

Table 1. Descriptive statistics of the sample (N = 626).

Variable name	M (SD)	% (<i>N</i>)
Vignette variables		
Location		
Campus	_	33.1 (207)
Fraternity-hosted social	_	34.0 (213)
Off-campus bar	_	32.9 (206)
Victim-offender sex		
Female victim/Male offender	_	26.2 (164)
Male victim/male offender	_	24.8 (155)
Female victim/female offender	_	25.2 (158)
Male victim/female offender	_	23.8 (149)
Victim-offender alcohol use		
Neither	_	26.2 (164)
Victim ONLY	_	24.8 (155)
Offender ONLY	_	24.1 (151)
Both	_	24.9 (156)
Intervention variables		(,
Intervention	_	80.9 (504)
Participant variables		,
Age	20.3 (3.58)	_
Female	_	62.8 (392)
Hispanic/Latinx	_	17.0 (106)
Race		()
White	_	26.8 (167)
Black	_	41.9 (260)
Asian	_	16.9 (105)
Multiracial/other	_	14.5 (90)
Heterosexual/straight	_	84.7 (525)
Freshman	_	41.9 (260)
Criminal justice major	_	22.0 (137)
Greek affiliation/college athlete	_	7.1 (44)
International student	_	3.0 (19)
Sexual violence programming	_	29.2 (182)
Sexual violence victim	_	47.7 (298)
Know a victim of sexual violence	_	59.4 (371)
#MeToo involvement	_	17.0 (106)
Self-esteem	21.2 (5.88)	17.0 (100)
Homophobia	17.2 (7.51)	
Low self-control	53.6 (9.18)	
Acceptance of sexual coercion	16.0 (7.28)	
Social desirability bias	4.8 (1.65)	

Greek life and/or a collegiate athlete. Informed by the literature, the impact of other bystander characteristics on intervention were explored. Respondents were administered the Rosenberg Self-Esteem Scale, which has excellent internal consistency 51 and is highly reliable ($\alpha = 0.91$). The Rosenberg Self-Esteem scale is comprised of 10 items, with higher scores indicating greater levels of self-esteem. Additionally, participants were asked to complete the Behavior/Negative Affect Subscale of the Homophobia Scale⁵² since they may be presented with vignettes involving same-sex pairs. The Homophobia Scale ($\alpha = 0.93$) has demonstrated very good internal consistency.⁵² There were eleven items, with higher scores indicating greater feelings of homophobia. The Low Self-Control Scale⁵³ was also administered ($\alpha = 0.84$). The Low-Self Control Scale is comprised of twenty-four items, with higher scores indicative of lower self-control. Respondents were also asked about their previous sexual victimization experiences. The majority of the behaviorally-specific indicators of sexual victimization were adapted from the works of Fisher and colleagues,¹ while measures capturing incapacitated and drug-facilitated rape were adapted from Kilpatrick et al.⁵⁴ (eg, "Has anyone ever had sex with you when you didn't want to after they gave you enough alcohol or drugs to make you very high, intoxicated, or passed out?"). A total of eight sexual violence

questions were asked. Participants who answered 'yes' on any of the sexual victimization measures were coded as '1' while participants who indicated 'no' on all of the sexual victimization measures were coded as '0.' Respondents were then asked if they personally knew someone who had disclosed that they had experienced any of the eight unwanted sexual experienced previously described. A measure of attitudes toward sexually coercive behaviors was also included. The Acceptance of Sexual Coercion Scale⁵⁵ ($\alpha = 0.96$) is comprised of thirteen items, where higher scores indicate attitudes that are more condoning of sexual coercion. Due to a right-skewed distribution, with a sample mean of 16.0, a dichotomous measure was created in which participants at or below the mean were coded as '0' and respondents who scored above the mean were coded as '1.' Finally, social desirability bias was measured using a shortened form of the Marlowe-Crowne Social Desirability Scale,⁵⁶ where higher scores indicated higher levels of social desirability bias. Four items were removed from the original eight-item scale to achieve a higher alpha coefficient ($\alpha = 0.61$). Results were not substantively different when social desirability was excluded from the analyses.

Analytical plan

To examine differences between individuals who said they would or would not intervene, the bivariate stage of the analysis was performed using either a one-way analysis of variance (ANOVA) with post-hoc tests to compare means or Chi-square for categorical indicators. Binary logistic regression was used at the multivariate stage of analysis to examine the factors related to intervention.

Results

Results from the bivariate analyses are presented in Table 2. Several significant differences emerged between individuals who said they would intervene and individuals who said they would not intervene. First, interveners were significantly more likely to be female (64.7% vs. 53.8%), Asian (18.6% vs 10.1%), and freshmen (44.1% vs. 33.1%). Additionally, interveners were more likely to have participated in a sexual violence prevention program (32.1% vs. 17.6%) and to have participated in the #MeToo movement (19.0% vs. 9.2%). A significantly greater proportion of interveners indicated that they personally knew a victim of sexual violence (61.0% vs. 51.3%) and scored higher on social desirability bias (4.93 vs. 4.49). Lastly, interveners were less likely to be Black (52.9% vs. 39.0%) and had significantly lower mean homophobia scores (21.8 vs. 16.2) compared to non-interveners.

According to the results from the multivariate stage of analysis (see Table 3), two event characteristics were related to intervention. Compared to scenarios occurring on campus, participants were 2.4 times more likely to report that they would intervene in situations taking place at a fraternity-hosted social. When examining the impact of victimoffender sex, respondents were 64% less likely to intervene

Table 2. Bivariate statistics – intervention.

Variable name	No (N = 119)		Yes (N = 504)	
	M (SD)	% (N)	M (SD)	% (N)
Demographics				
Age	20.4 (2.88)	-	20.2 (3.74)	_
Female	-	53.8 (64)*	_	64.7 (325)*
Hispanic	-	11.8 (14)	_	18.3 (92)
Race			_	
White	-	22.7 (27)	_	28.0 (140)
Black	-	52.9 (63)**	_	39.0 (195)**
Asian	_	10.1 (12)*	_	18.6 (93)*
Multiracial/other	_	14.3 (17)	_	14.4 (72)
Heterosexual	_	88.9 (104)	_	84.2 (421)
Student characteristics				
Freshman	_	33.1 (39)*	_	44.1 (220)*
Greek/athlete	_	5.0 (6)	_	7.6 (38)
International	-	4.2 (5)	_	2.8 (14)
Criminal justice major	-	21.2 (25)	_	21.9 (110)
Training/programming				
Sexual violence programming	-	17.6 (21)**		32.1 (161)**
#MeToo involvement	-	9.2 (11) **		19.0 (95)**
Sexual victimization				
Any victimization	-	42.0 (50)	_	48.7 (245)
Know a victim	-	51.3 (61)*	_	61.0 (307)*
Scales				
Self-esteem	21.0 (5.89)	_	21.2 (5.90)	_
Homophobia	21.8 (9.35)***	_	16.2 (6.59)***	_
Self-control	54.57 (8.82)	_	53.35 (9.19)	_
Sexual coercion (above mean)	-	23.7 (28)	_	17.9 (89)
Social desirability	4.49 (1.84)**	_	4.93 (1.60)**	

Note. * $p \le 0.05$; ** $p \le 0.01$; *** $p \le 0.001$.

Table 3. Binary logistic regression – intervention.

		95% CI		
Variable name	Odds ratio	Lower bound	Upper bound	
Vignette variables				
Location				
Campus (referent)	_	_	_	
Fraternity-hosted social	2.37**	1.31	4.28	
Off-campus bar	1.41	0.81	2.47	
Victim-offender sex				
Female victim/Male offender (referent)	_	_	_	
Male victim/Male offender	0.63	0.32	1.27	
Female victim/Female offender	0.84	0.41	1.73	
Male victim/Female offender	0.36**	0.18	0.69	
Victim-offender alcohol use				
Neither (referent)	_	_	_	
Victim ONLY	1.79	0.90	3.57	
Offender ONLY	1.25	0.66	2.37	
Both	1.46	0.75	2.84	
Participant variables				
Age	1.06	0.95	1.17	
Female	0.86	0.48	1.53	
Hispanic/Latinx	2.24*	1.00	5.08	
Race				
White (referent)	_	_	_	
Black	0.79	0.42	1.46	
Asian	2.48*	1.02	6.03	
Multiracial/Other	0.66	0.29	1.52	
Heterosexual/Straight	0.75	0.35	1.61	
Freshman	1.71	0.97	3.04	
Criminal justice major	0.94	0.50	1.76	
Greek affiliation/College athlete	1.92	0.59	6.28	
International student	0.52	0.13	2.15	
Sexual violence programming	1.79*	1.00	3.20	
Sexual violence victim	0.93	0.51	1.68	
Know a victim of sexual violence	1.21	0.70	2.10	
#MeToo involvement	1.79	0.80	3.98	
Self-esteem	1.05*	1.00	1.10	
Homophobia	0.89***	0.86	0.93	
Self-control	1.01	0.98	1.04	
Sexual coercion (above mean)	0.98	0.51	1.88	
Social desirability bias scale	1.15	0.98	1.34	
Constant (unstandardized B)	-0.27	0.50	1.54	
R^2	0.28			

Note. $p \le 0.05$; $p \le 0.01$; $p \le 0.001$.

when there was a male victim and female offender compared to a female victim and male offender. There were no significant differences in the likelihood of intervention for same-sex depictions of unwanted sexual contact compared to vignettes with a female victim and male offender. Further, there were no significant differences in the likelihood of intervention for any depictions of perceived alcohol use (ie, victim only, perpetrator only, or both victim and perpetrator) compared to scenarios where neither the victim nor the perpetrator appeared to be intoxicated. Various bystander-specific characteristics were also predictive of intervention. Hispanic college students were 2.2 times more likely to indicate that they would intervene compared to non-Hispanic college students. Compared to White college students, Asian college students were 2.5 times more likely to intervene. Participating in a sexual violence prevention program increased the odds of intervention by 79%. Individuals with higher self-esteem scores had significantly higher odds of intervening while individuals with higher homophobia scores had significantly lower odds of intervening. Acceptance of sexual coercion and self-control, however, were not significantly associated with intervention.

Discussion

The purpose of the current study was to address bystander intervention during incidents of sexual victimization by testing the impact of location, victim-offender sex, and perceptions of victim-offender alcohol use on college students' decisions to intervene during an ambiguous sexual scenario. The current study also aimed to establish what, if any, respondent characteristics motivate or hinder college students' intervention decisions. To that end, there are four main findings. The results of the study indicate that the vast majority of participants would intervene in an ambiguous sexual scenario in some capacity. Previous studies have also documented that college students frequently intervene and appear willing to intervene. For example, McMahon and colleagues⁵⁷ indicated that 74.6% of incoming college students engaged in some form of bystander intervention to prevent sexual violence in the previous twelve months. Bystander intervention training programs should reiterate that prosocial behaviors are normative among college students.

Second, results are in line with prior research on property³² and physical³³ victimization which suggest that college student bystanders consider their location when deciding whether or not to intervene. We find partial support for H₁, as respondents reported greater odds of intervention when their vignette depicted a fraternity-hosted social compared to an on-campus scenario. College fraternities have frequently been identified as high-risk locations for sexual violence^{58,59}; therefore, college students may be especially cued to recognize the potential risk for sexual victimization in those specific locations. Additionally, college students may perceive a greater potential for victimization risk in locations that are intrinsically tied to alcohol consumption regardless of whether or not the victim or offender is perceived to be intoxicated. Fraternity parties are further identified as high-

risk because the Greek system perpetuates rape culture;60 therefore, college students may perceive this environment as higher risk than a bar, which is indicated by this location's effect being non-significant (relative to on-campus). Bystander intervention initiatives should reinforce that sexual violence can take place anywhere, as well as incorporate a variety of locations and circumstances that may present college students with opportunities for intervention, such as parking decks, residence halls, and the library. Although outside the scope of the current study, future research should investigate the role of bystander intoxication, as this has been found to be a contributing factor in terms of risk recognition and subsequent intervention. 61-63

Third, this study finds limited support for H2 and points out that victim-offender sex is predictive of bystander intervention. Compared to the heteronormative depiction of a female victim and male offender, college students reported significantly lower odds of intervening in scenarios depicting a male victim and female offender; however, there were no significant differences in the likelihood of intervention for same-sex depictions. Despite the fact that persons of all sexes can be sexually victimized, bystander intervention training programs most often address one representation of sexual violence - that of a male committing sexual violence against a woman.64 Although the focus on male-on-female sexual violence may constitute a "more bang for your buck" approach, evidence clearly indicates that there are other underserved student subpopulations⁶⁵ (eg, males) that should be addressed in bystander intervention curricula.

In contrast with H₃, it was somewhat surprising that none of the alcohol use variables were significantly related to the odds of intervening. Previous literature suggests that bystanders are more likely to intervene when the perpetrator is intoxicated^{18,29} and less likely to intervene when the victim is intoxicated.^{16,29} The results of our study, however, indicated that perceptions of alcohol use were unrelated to intervention. Although speculative, it is possible that since alcohol use is normative on university campuses, college students commonly interact with inebriated individuals. If true, then they may not perceive alcohol use as a barrier or driver to intervene. Future research may want to consider how victim and offender alcohol use may interact with other factors to influence intervention. For instance, it may be that alcohol use in particular locations or under certain circumstances may influence the likelihood of intervention.

Lastly, independent of contextual factors, various bystander-specific variables were predictive of intervention. In terms of race and ethnicity, in line with previous research on intention to intervene in LGBT discrimination, 66 Hispanic/Latinx college students had significantly higher odds of intervening than their non-Hispanic counterparts when confronted with an ambiguous sexual scenario. Previous research has shown that Asian students have lower intentions to intervene during a sexual assault¹⁶; however, results from this study indicate that, compared to White college students, those who identified as Asian were 2.5 times more likely to intervene. Asian and Hispanic cultures are collectivistic in nature, 67,68 whereby individuals define

themselves as parts or aspects of a group and cooperation among members is high. Furthermore, the goals and needs of the group supersede the goals and needs of the individual. 67,68 As such, Asian and Hispanic/Latinx college students may feel a duty to intervene to increase the welfare of the college community as a whole. Indeed, Ferreira and colleagues⁶⁹ demonstrated that higher levels of collectivism were associated with greater bystander intervention in cases of cyberbullying. Findings from the present study, as well as from previous research, justify further investigation into the experiences of bystanders of color and whether cultural perceptions of sexual assault influence bystander decision-making. Programs that are culturally relevant are more likely to result in lasting changes, thereby increasing program effectiveness.⁷⁰

In addition to race and ethnicity, receiving sexual violence programming and having higher self-esteem were both associated with higher odds of intervention (H_4) . These findings are consistent with previous research. 8,38,67 Homophobia, on the other hand, appears to reduce the likelihood of intervening (H₅). Even after controlling for victimoffender sex, individuals with greater feelings of homophobia still reported significantly lower odds of intervening. This association may be explained by research that concluded that homophobia is predictive of rape myth acceptance.⁷¹ Acceptance of rape myths is negatively related to bystanders' willingness to intervene in situations involving sexual violence.^{8,72} Additionally, homophobia is interrelated with other forms of intolerance, such as racism and sexism,⁷¹ and a lack of empathetic concern for others⁷³; suggesting that individuals who are homophobic may not feel compelled to help others in general. As such, it is recommended that bystander intervention training curricula combat myths and misconceptions associated with different sexual orientations and gender identities. More generally, bystander intervention initiatives would benefit from focusing on diversity, inclusivity, and tolerance.

We did not find that previous sexual victimization or knowing a victim of sexual victimization was related to intervention (H₄ and H₅). It could be that experiencing or being aware of sexual victimization does not increase a person's ability to recognize a situation as one that is worthy of intervention. Indeed, some research shows that the experience of sexual victimization does not increase risk recognition.⁷⁴ Further, experiencing sexual victimization may reduce an individual's self-efficacy in thwarting a sexual victimization event. Similarly, acceptance of sexual coercion was not significantly associated with intervention (H₅). It may be that individuals who find sexually coercive behaviors unproblematic are not primed to recognize unwanted sexual contact as a situation that warrants intervention. Lastly, selfcontrol did not predict intervention (H₄). While self-control may be related to prosocial behaviors, ³⁹ consistent with our findings, prior research^{75,76} has not established self-control as a predictor of bystander intervention.

As with any study, it is important to identify limitations. First, the sample includes college students attending a single large, urban institution in the Southeast region of the United States; therefore, caution must be exercised when generalizing the results of this study to other colleges and universities in the United States or abroad. Future research should explore whether these findings hold true for different types of institutions (eg, public vs. private; suburban vs. urban; residential vs. commuter) across various locales.

Second, participation in the current research was contingent upon student attendance during classroom visits, so students who were absent were excluded from the sample. The descriptive statistics of the sample, however, were comparable to the demographic make-up of the sample university more generally. Still, it could be that absent students are less engaged and not as connected to the campus community compared to students who were present in class; therefore, the findings of the present study may overestimate the likelihood of intervention. Third, it may be that unwanted sexual contact was not perceived as "serious enough" to warrant intervention. Future research should incorporate the sexual violence continuum (ie, verbal sexual harassment to forcible rape) to examine how severity impacts college students' intervention decisions. Fourth, the current study lacked the statistical power to examine interactions between event-level vignette variables; however, the current study supports the importance of such an analysis and future studies should be designed with sufficient statistical power to examine those interactions.

Fifth, this study is founded on the belief that intentions reflect behavior; therefore, it is recommended that some caution be exercised when generalizing the findings of previous studies linking intention and behavior to the current study. Van Boven and Loewenstein⁷⁷ note people in "cold,' nonemotional states underestimate the impact of 'hot,' emotional arousal" on decision-making. To that end, participants in a "cold" emotional state (eg, sitting in class and filling out the survey) may have a difficult time predicting their response when confronted with sexual violence in real life. Still, Fishbein and Ajzen's⁷⁸ theory of reasoned action and Ajzen's⁷⁶ theory of planned behavior argue that intention is an important and effective predictor of future behavior. As a general rule, the stronger one's intention to perform a behavior, the more likely one is to actually perform the behavior.⁷⁹

Conclusion

Results from the present study suggest that both incidentand bystander-specific characteristics have the ability to motivate or inhibit college students' decisions to intervene. If these findings can be replicated across various institutions of higher education in different regions, states, and cities of the United States, then the success of bystander intervention initiatives in regards to reducing sexual violence on college campuses is contingent upon the inclusion of important incident-specific variables.

Conflict of interest disclosure

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Appendix A

Vignette

You are [location: walking across campus on your way to class; at a fraternity-hosted social; at an off-campus bar on the weekend]. You notice a [sex of offender: male college student; female college student]. Next to them is a [sex of victim: male college student; female college student]. You have never met either of these individuals before. From what you can see, the [sex of offender: male college student; female college student] keeps grabbing the [sex of victim: male college student; female college student]'s butt, rubbing up against them, and trying to kiss them. You can tell the [sex of victim: male college student; female college student] is trying to pull away. The [sex of victim: male college student; female college student] keeps removing the [sex of offender: male college student; female college student]'s hands from his/her body and politely says to "cut it out." The [sex of offender: male college student; female college student] continues to make advances. As you get closer, you notice that the [alcohol use: offender; victim; both; neither (leave out)] is/are slurring their speech, stumbling over their feet, and seem to be drunk.