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**DOES KNOWLEDGE MATTER?
THE RELATIONSHIP BETWEEN AWARENESS
OF SEXUAL VIOLENCE AND BYSTANDER SELF-EFFICACY**

**Dr Anna Macklin, Dr Nathalie Noret, Dr Melanie D. Douglass,
Dr Susan Hillyard, Jonny Dudley**

Sexual violence on campus is an issue of increasing concern and research attention. One strategy that has been utilized to tackle sexual violence is bystander training. Understanding factors that relate to effective bystander intervention are key to the development of appropriate intervention programs. Such interventions are underpinned by the notion that knowledge and awareness of sexual violence is related to bystander self-efficacy, however evidence supporting this relationship is limited. Therefore, the aim of this study was to examine the relationship between knowledge and understanding of sexual violence and bystander self-efficacy. Data were collected from 424 students in the UK. Participants completed measures of readiness to change and bystander self-efficacy as part of a larger campus climate survey. Results highlighted a significant relationship between the different subscales of readiness to change and bystander self-efficacy. The pre-contemplative and action subscales were significantly, but negatively, associated with bystander self-efficacy, whereas the contemplative subscale was significantly, but positively, associated with bystander self-efficacy. The findings of this study highlight how understanding sexual violence and a willingness to act are important factors in explaining bystander self-efficacy. Such findings have important implications for the development and evaluation of bystander intervention programs on campus.

Sexual violence in young people is a global issue and includes behaviors such as rape, sexual assault, sexual harassment, revenge porn, domestic violence, and coercive control. Universities have been identified as environments where sexual violence is endemic (1, 2). The university environment may pose a risk of sexual violence as stu-

dents adapt to independent living while negotiating new social groups and freedoms in the university environment (3). One large-scale survey across 152 UK institutions found that 62% of students had experienced some form of sexual violence. Female students were at particular risk of experiencing sexual violence, with 70% of female participants reporting sexual violence (4). Such experiences are related to a range of negative outcomes, including poor mental health, poor academic performance, and absence from university (5, 6). Therefore, prevention strategies to raise awareness of sexual violence and provide support for those who experience sexual violence are imperative to tackle the issue. Bystander intervention training programs are increasingly used on campuses to raise awareness of sexual violence, while also developing skills and confidence in students to intervene in problematic behaviors they may witness. Such programs are underpinned by the notion that raising awareness and understanding of sexual violence will aid the development of confidence (bystander self-efficacy) to intervene (7). However, evidence supporting this relationship in a sexual violence context is limited. Therefore, the aim of this article is to examine the relationship between knowledge and awareness of sexual violence and bystander self-efficacy.

BYSTANDER INTERVENTION PROGRAMS

Sexual violence may occur in private but there are often situations where others, i.e., bystanders, can intervene before an assault occurs (8). Bystander intervention is a broad term encompassing any action taken in a potentially harmful situation. This could be verbally intervening, challenging social norms, involving a third party (e.g., police, other friends), or getting physically involved to ensure the safety of another individual (9). Bystander intervention programs are frequently used on campuses internationally as a means of tackling sexual violence (10). Such programs are typically underpinned by the work of Latané and Darley (11) and aim to reduce sexual violence by empowering individuals to employ more active behaviors (7). Bystander in-

tervention programs encourage individuals to challenge myths around sexual violence and feel a personal responsibility to intervene. While improving knowledge and understanding, such programs also raise awareness of techniques that can be used to intervene, alongside developing students' confidence to be a more active bystander (7). Evidence suggests that greater confidence (bystander self-efficacy) is a good predictor of bystander intervention in a victimization context, such as bullying and sexual violence (12-17).

Bystander intervention programs are based upon the idea that increasing knowledge about sexual violence and the harm sexual violence can cause (not just to the victim but to the perpetrator and broader community) and enhancing an individual's skills, can increase confidence in taking action as an active bystander. Here the trans-theoretical model of change (TTM) (18) provides a useful theoretical understanding for why knowledge is an important predictor of behavior. Prochaska and DiClemente's (18) TTM proposes a non-linear movement through five stages of change from being unaware of the problem (precontemplation), to an intention to change in the future (contemplation), development of positive attitudes to change (preparation), implementation of change behaviors (action), and prevention of relapse (maintenance). The relationship between knowledge and self-efficacy is argued to be complex and bidirectional. Movement through these stages is suggested to relate to greater self-efficacy to enact a behavior. Due to the non-linear nature of the process, greater self-efficacy is also associated with an increased likelihood of individuals remaining in the final stages of the process (19). The TTM has been applied to a variety of health-protective behaviors and there is emerging evidence suggesting that TTM can be applied to sexual violence prevention (20).

To date, most evidence demonstrating a relationship between knowledge of sexual violence and bystander self-efficacy is based on the evaluation of bystander interventions on campus. Such evaluations typically include measures of change focusing on participants'

knowledge and awareness of sexual violence and bystander self-efficacy—their confidence to intervene in such behavior (21). Although limited, the evidence suggests a relationship among these variables. For example, in their study of 389 undergraduate students who completed a bystander training program, Banyard et al. (21) found that low scores on the precontemplation stage (e.g., disagreement with statements such as “I don’t think sexual violence is a big problem”) were associated with higher levels of self-efficacy. Participants that scored higher on the contemplation and action stages of change reported more prosocial intervention behaviors in relation to sexual violence and were more effective at intervening post intervention. Such evidence suggests that knowledge and awareness of sexual violence is associated with confidence, and bystander programs can lead to an increase in participants’ confidence to intervene and active bystander behavior (22).

Evidence from a broader student sample who have not engaged in bystander training programs is lacking. Those who engage with bystander training programs may have a different behavioral profile to others in their community (23), possessing greater awareness of the issue of sexual violence, and may be in a different stage of change compared to those who do not. Given the central theoretical point that knowledge regarding sexual violence increases a bystander’s confidence to engage in active strategies, which underpins many bystander intervention programs, further data on this relationship independent of any intervention is required. Therefore, the aim of this study is to examine the association between knowledge and awareness of sexual violence and bystander self-efficacy; specifically, to test the assertion that bystander self-efficacy is associated with greater awareness of sexual violence.

METHOD

Design and Participants

A cross-sectional survey of a UK university was conducted. Participants were 424 students, 86.1% were female (N=365), 13.2% were male (N=56), two students stated they preferred not to state their sex (0.5%), and one participant reported their sex as other (0.2%). Participants were from across all levels of study, including foundation year (N=2, 0.5%), first year (N=128, 30.2%), second year (N=120, 28.3%), third year (N=130, 30.7%), taught post-graduate (N=28, 6.6%), re-search post-graduate, (N=8, 1.9%), and other (N=7, 1.7%).

Measures and Procedure

Readiness to change. Banyard et al.'s (21) readiness to change model was used to assess students' awareness of the issue of sexual violence on campus. Banyard et al. (21) specifically designed a readiness to change measure based upon the TTM framework which aims to capture individuals' knowledge and awareness of sexual violence. This scale measures three components of readiness to change: pre-contemplative, contemplative, and action. The scale includes 12 items (four items measuring each domain) on a five-point Likert scale ranging from strongly disagree—1 to strongly agree—5. Scores within each domain were averaged across the number of items, therefore scores could range from 1 to 5, where a higher score indicates greater agreement with the statements in that domain. Participants receive a score for each stage. The *pre-contemplative stage* (also known as the "no awareness" stage) suggests that students are not aware of sexual violence as being an issue or a problem on campus. Items included in the scale reflective of this stage capture this lack of awareness, for example "I don't think sexual violence is a problem at college." The *contemplative* stage suggests that students have a greater awareness of the issue of sexual violence on campus and intend to change their behavior, for example "I am planning to learn more about the problem of sexual violence on campuses." The final stage is *action*; stu-

dents who score higher on this already acknowledge the issue of sexual violence and have modified their behaviors. Items on the scale measuring action reflect the behaviors that participants already use to challenge sexual violence on campus, for example “I have recently taken part in activities or volunteered my time on projects focused on ending sexual violence on campuses.” The reliability of these subscales were: $\alpha = .59$ for pre-contemplative, $\alpha = .43$ for contemplative, and $\alpha = .92$ for action.

Bystander self-efficacy. Banyard’s (24) Bystander Efficacy Scale, a 17-item measure, was used to assess participants’ self-reported confidence on a scale of 0 to 100 (e.g., Talk to a friend who I suspect is in an abusive relationship). The scale is designed to produce a continuous score of self-efficacy. A mean score from responses to the 17-items is calculated to produce a final self-efficacy score between 0 to 100. A higher score is reflective of higher self-reported bystander self-efficacy. The reliability of the scale was excellent, $\alpha = .91$.

The current study was approved by the university’s ethics committee. The questionnaire was conducted in 2018 as part of a larger, online questionnaire on students’ awareness and experiences of sexual violence on campus, distributed to all students via email using the Qualtrics survey tool. It took approximately 30 minutes to complete. Given the sensitive nature of the survey, students were provided with links to local support material.

RESULTS

Table 1 provides a breakdown of the descriptive statistics for each of the scales, and correlations across variables. There were significant relationships across the readiness to change subscales and between the pre-contemplative, contemplative and bystander self-efficacy scales. No relationship was found between action and bystander self-efficacy.

Table 1. Descriptive Statistics and Correlations for Bystander Self-Efficacy and Readiness to Change

	2.	3.	4.	M (SD)
1. RTC: Pre-Contemplative	-.24***	-.14**	-.25***	2.77 (0.53)
2. RTC: Contemplative	-	.54***	.19***	2.66 (0.64)
3. RTC: Action		-	-.03	1.58 (0.79)
4. Bystander Self Efficacy			-	77.68 (16.00)

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

The Associations Between Readiness to Change and Bystander Self-Efficacy

The associations between the readiness to change subscales and bystander self-efficacy were examined using multiple regression. A significant model was found, $F_{(3,354)} = 13.76$, $p < .01$ which accounted for 10.4% of the variance in bystander self-efficacy ($R^2 = .10$). The pre-contemplative and action subscales were significantly, but negatively, associated with bystander self-efficacy, whereas the contemplative subscale was significantly, but positively, associated with bystander self-efficacy, see Table 2.

Table 2. Regression Co-Efficients for Readiness to Change Subscales

	B	SEb	β
RTC: Pre-Contemplative	-6.59***	1.56	-.22
RTC: Contemplative	5.95***	1.53	.24
RTC: Action	-3.73**	1.22	-.18

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

DISCUSSION

The current study examined the relationship between knowledge and awareness of sexual violence and bystander self-efficacy in undergraduate students. The findings of the study highlight a significant association between all subscales of the readiness to change measure

and bystander self-efficacy but in different directions. The pre-contemplative and action scales were significantly associated with lower bystander self-efficacy, whereas contemplation was significantly associated with higher bystander self-efficacy.

Pre-contemplation reflects a denial about sexual violence, lack of awareness, and feeling no personal responsibility to tackle the issue (21). Individuals in this stage can be most resistant to change (25). The negative relationship reported in our study between pre-contemplation and lower confidence to intervene in problematic behaviors may reflect a lack of awareness and skills that bystanders can use to intervene, or indeed what behaviors to intervene in. We found a positive relationship between contemplation and bystander self-efficacy. Individuals in the contemplation stage recognize sexual violence as an issue and are motivated to enhance their knowledge and skill development. Previous research (21) has identified that individuals in this stage report more bystander behaviors and willingness to help, which may reflect greater bystander self-efficacy. Finally, our results highlight a negative relationship between being in the action stage and bystander self-efficacy. Bystander behavior and deciding to take action are affected by a continuous feedback loop. These findings support Prochaska and DiClemente's (18) proposed non-linear process of change. The consequences of taking action may affect future behavior and confidence (26). Following an intervention, any negative reactions from the victim, perpetrator, or others, such as anger or negative personal feelings about the intervention, may reduce self-efficacy. This, in turn, may reduce the likelihood of future active bystander behaviors (27). Therefore, further longitudinal research is needed to better understand the relationship between self-efficacy, changes in knowledge and awareness of sexual harm, and bystander behavior change over time.

Our study highlights different patterns of association between the different stages of change and bystander self-efficacy. However, these findings are, in part, inconsistent with previous research find-

ings. Banyard et al. (21) reported a positive correlation between pre-contemplation and bystander self-efficacy and a negative correlation between both the contemplative and action stages and bystander self-efficacy. This different pattern of findings may reflect differences in the samples recruited. Whereby Banyard et al.'s (21) sample was recruited to participate in an evaluation of bystander training, the sample in this study was drawn from a student community sample. Participants recruited through an intervention project may have a greater awareness of the issue of sexual harm and feel less confident in intervening in such pervasive behaviors. Banyard et al. (21) did report that on completion of the training, participants in the contemplation and action stage reported more prosocial intervention behaviors, which provides some support to the current findings. The action stage in the readiness to change measure may also reflect more focus on involvement in intervention projects rather than actual bystander behavior (21) and may require revision. Further research is required to better understand the effect of training, why individuals volunteer to participate in training and the effect on readiness to change and bystander self-efficacy.

The findings of the current study contribute to a body of literature highlighting an association between knowledge of sexual violence (readiness to change) and bystander self-efficacy. In the current study, scores of readiness to change and bystander self-efficacy were measured in a large sample of university students who had not completed any bystander intervention training. However, the findings should be taken in the context of some limitations. The data were collected through a cross-sectional, self-report survey. Any future research should consider employing a longitudinal design to consider how knowledge of sexual violence and bystander self-efficacy are related over time. Research is also emerging indicating that improving knowledge and awareness of sexual violence can lead to increased self-efficacy and behavioral change in other areas (e.g., interpersonal violence) (28). We also did not measure active bystander behavior

and, while there is evidence to support the relationship between self-efficacy and behavior, future research should include specific behavioral measures. Finally, the reliability of the readiness to change scale was poor. Similar issues have been reported in other international samples (29). Measuring readiness to change and understanding students' motivation to engage in training are central to ensuring rigorous program evaluations (21). Therefore, it is essential that all measures used are reliable and valid; further development and validation of such scales should be a focus of future research.

The results of the current study demonstrate a relationship between readiness to change with regard to greater understanding of sexual violence and bystander self-efficacy. The negative association between the action subscale and bystander self-efficacy suggests a need for further research aimed at explaining this relationship. Bystander intervention programs are a frequently used means of empowering students to intervene in risky situations. The findings of this study highlight how understanding sexual violence and a willingness to do something about it are important factors in explaining bystander self-efficacy and are, therefore, important topics to include in such programs. They represent an important first step in developing our understanding and thereby ensuring safe learning spaces for our students.

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