COLLEGE DATING VIOLENCE
Bystander Responses to College Dating Violence: Can We Educate Undergraduate
Students Using an Online Intervention?
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Abstract

The purposes of this study were to improve an online bystander intervention educational program (STOP Dating Violence; O'Brien et al., 2019) and conduct a randomized controlled trial to test the effectiveness of this revised intervention. Specifically, the intervention was modified and converted into an engaging animated video and then tested for its effectiveness. College students (N=335) were randomly assigned to one of three conditions: (1) the STOP intervention, (2) a website containing information about dating violence, and (3) a control condition. Results indicated that students who viewed the STOP Dating Violence video intervention had the greatest knowledge of bystander interventions when compared to the website and control conditions. Thus, the STOP Dating Violence video has the potential to successfully educate undergraduates about appropriate bystander interventions for dating violence in a cost-effective manner.

Key words: dating violence; abuse; college students; online intervention; peer support

College Dating Violence: Evaluating an Online Bystander Intervention Educational Video

Intimate partner violence affects college students at staggering rates, with 21% of college students reporting having experienced dating violence by a current partner ("Dating and Domestic Violence on College Campuses," n.d.). Such violence puts victims at high risk for substance abuse, suicidality, risky sexual behavior, eating disorders, and further abuse from partners (Decker et al., 2005). Researchers point to community norms as playing a significant role in the perpetuation of this violence, especially on college campuses (Schwartz & DeKerseredy, 2000). This idea has contributed to the development of bystander intervention programs to be used in campus communities (Banyard et al., 2007). The ultimate goal of these by stander training interventions is to teach students to identify situations that involve dating violence and to intervene in a manner that is safe and productive (Moynihan & Banyard, 2008). The purposes of this study were to improve an online bystander intervention educational program (STOP Dating Violence; O'Brien et al., 2019) and conduct a randomized controlled trial to test the effectiveness of this revised intervention. Specifically, the STOP Dating Violence intervention was converted into an engaging animated video format and then tested for its effectiveness. Ultimately, this intervention could reduce rates of dating violence on college campuses through the education of responsible, motivated, and knowledgeable bystanders.

Theoretical Framework

Latane and Darley's (1970) Model of Bystander Behavior informs the basis of this study. The model provides the contingencies that are required for bystanders to become involved: bystanders must be aware of the problematic situation, perceive it as an emergency, decide that they have a responsibility to take action, and determine what help they are able to provide. Also, multiple psychological processes may impede bystander interventions, such as diffusion of

responsibility (i.e. bystanders believing that others will bear the responsibility for intervention), evaluation apprehension (i.e. bystanders worrying about acting in ways that may harm their reputation in the eyes of other bystanders), and pluralistic ignorance (i.e. bystanders believing that situations are not emergencies based on the inaction of other bystanders; Latane & Darley, 1970).

Bystander Behavior

For the purpose of this study, a bystander is defined as any person who witnesses or learns of an incident of dating violence. Bystander behavior is any engagement in actions to stop a given behavior. Theory suggests that bystanders are more likely to report engaging in bystander behaviors if they feel a greater sense of responsibility, self-efficacy, and believe that the benefits of intervening outweigh the costs (Jouriles et al., 2015). Moreover, it was argued that when bystander behaviors are not performed, bystanders are implicitly reinforcing abusive behavior (Katz, et al., 2011).

The individual and cultural impact of bystander behaviors are understood by sociologists as individual people being shaped by the way that they participate in social systems, which in turn shapes the systems themselves (Fleming, 2011). Bystander behaviors spread through student's social networks, ultimately causing community-level changes in social norms (Coker et al., 2015). This supports the notion that small portions of campus communities that engage with bystander behaviors can be impactful and worthwhile.

Bystander Interventions to Reduce Dating Violence on College Campuses

Bystander intervention is defined as engagement in actions intended to stop or reduce certain behaviors. Bystander intervention educational programs are relatively new in the field of dating violence prevention, but their outcomes are encouraging. However, they are few in

number and inconsistent in terms of their potential reach and cost-efficiency (Shorey et al., 2012). Most of the programs designed for college campuses are in-person interventions focused on preventing sexual assault rather than dating violence. Researchers have tested the efficacy of bystander intervention programs that were effective but had significant limitations. For example, Project PEACE, which is an in-person intervention for college students, had mixed findings in terms of hypothetical differences in outcome (Jaffe et al., 2017). A study examining the "Men's Project," an educational program for college men, found that when men had a support group, they were able to employ bystander strategies while challenging their sexist environment (Barone et al., 2007). However, this program was limited by its focus on male students alone. Another program evaluated by Moynihan and Banyard (2008) targeted campus Greeks and athletes, the populations with the highest rates of sexual violence on college campuses. In general, the intervention was found to be effective. A program called Bringing in the Bystander was effective in increasing likelihood of helping, confidence in bystander behaviors, and taking responsibility for ending college dating violence among sorority women (Moynihan et al., 2011). These programs were limited by high costs and small sample sizes, suggesting the need for the development of effective online interventions.

A promising online intervention to educate students about dating violence is the *STOP*Dating Violence educational program. The *STOP* intervention was designed to educate

bystanders about recognizing and intervening in dating violence situations (O'Brien et al., 2019).

Originally, the intervention was in the format of a Prezi slideshow, which is now a relatively dated medium for disseminating information to college students. The intervention has three components. The first component (*Education about Warning Signs of Dating Violence*) teaches college students to recognize the warning signs of dating violence, including psychological and

physical abuse (O'Brien et al., 2019). The use of risk recognition as a tool in interventions against sexual assault and domestic violence is well-established, but it is rarely applied to programs focused on dating violence (O'Brien et al., 2019). Survivors of intimate partner violence were not as likely to recognize danger in domestic violence vignettes as participants who had not experienced such violence (Witte & Kendra, 2010). The inability of victims to recognize risk supports the need for increased bystander intervention training efforts.

The second component (*Education Intended to Eradicate Psychological Barriers to Helping*) educates bystanders about impediments to action according to Latane and Darley's (1970) model: diffusion of responsibility, evaluation apprehension, and pluralistic ignorance. The third and final component (*Education Regarding Desired Bystander* Behaviors) provides bystanders with a series of actions that they can take to provide assistance to victims of dating violence. The intervention was effective in educating undergraduates about dating violence and bystander interventions in college contexts (O'Brien et al., 2019).

Current Study and Hypothesis

The purposes of this study were to improve an online bystander intervention educational program (STOP Dating Violence; O'Brien et al., 2019) and conduct a randomized controlled trial to test the effectiveness of this revised intervention. First, the intervention was updated and converted from a Prezi to a video format. Second, a study was conducted to assess the effectiveness of the updated *STOP Dating Violence* intervention (i.e., the degree to which individuals exposed to the intervention learned the desired bystander behaviors). We hypothesized that participants in the intervention group would have more knowledge about bystander intervention when compared to the website group and the control group.

Method

Participants

An *a priori* statistical analysis was calculated using the G*POWER v3 software (Faul, Erdfelder, Lang, & Buchner, 2007) to determine the number of participants needed to achieve statistical power of 0.95, a medium effect size (f = 0.25), with an overall $\alpha = 0.05$ for an ANCOVA and a MANCOVA. The results suggested that a total sample size of 204 participants was needed.

Initially, 456 undergraduate students accessed the online survey. Of those that accessed the survey, 449 met the inclusion criteria of being enrolled at the University of Maryland and between 18 and 24 years old, accessing the study on SONA and providing consent to participate. Participants who did not complete at least 80% of the items were removed from the sample (42 individuals, n = 407). Then, 72 participants failed to provide the correct response to validity check items, resulting in a total of 335 valid responses. There were 122 participants in the control condition, 120 in the intervention condition, and 93 in the website condition (see Figure 1). There were fewer valid responses in the website group as a number of participants in that condition failed to complete at least 80% of the items (perhaps due to the length of the time (10 minutes) that they were asked to review the website.

Participants were between 18 and 24 years old. The average age of participants was 19.43 (SD = 1.13). The majority of participants were women, with 73.1% of participants identifying as female, 26.6% identifying as male, and 0.3% identifying as non-binary. Regarding sexual orientation, 89.9% identified as straight, 1.5% identified as lesbian or gay, 8.1% identified as bisexual or pansexual, and 0.6% reported identifying with a sexuality that was not listed. In terms of relationship status, 63% of participants were single, 34.9% were in a dating relationship, 1.8% were unsure of their relationship status, and 0.3% were married. When asked if they had

experienced family violence, 11.9% of participants reported that they had, 83.3% reported that they had not, and 4.8% were unsure. Regarding dating violence, 15.8% had experienced dating abuse, 77% had not, and 7.2% were unsure. Students were enrolled in a wide range of college majors with the top three being Psychology (35.8%), Information Sciences (15.5%), and biology-related majors (10.7%).

Procedure

After approval was received from the University Institutional Review Board, participants were recruited through the Psychology subject pool, flyers, and social media. Specifically, students who met the inclusion criteria were invited to complete a demographic questionnaire and then a pretest survey assessing their knowledge about the *STOP* method and appropriate bystander interventions. Participants were then randomly assigned to one of three conditions. Depending on the condition, they either watched the *STOP Dating Violence* video intervention, scrolled through a website containing information about dating violence, or were asked to complete filler tasks (e.g., write an essay about your favorite course at UMD). Then, participants in every condition completed a posttest survey made up of the same items as the pretest survey. Students received one course credit for completing the pretest and posttest measures.

STOP Dating Violence Intervention

The *STOP Dating Violence* intervention was created to educate college students about recognizing dating violence and intervening in situations of dating violence (O'Brien et al., 2019). As noted previously, the intervention has three components, the first and third of which were adapted to create the *STOP Dating Violence* animated video intervention. The first component called "Education about Warning Signs of Dating Violence" teaches college students about the psychological and physical warning signs of dating violence (O'Brien et al., 2019). It is

consistent with the first two steps in Latane and Darley's (1970) Model of Bystander Behavior, which indicates that becoming aware of a problematic situation and perceiving the situation as an emergency are the first steps to intervention.

The third component, entitled "Education Regarding Desired Bystander Behaviors" teaches students a series of actions that they can take to provide assistance to a victim of dating violence (O'Brien et al., 2019). This component addresses recommendations to emphasize the role of bystanders in reducing dating violence (Shorey et al., 2012). Research on dating violence and sexual assault prevention identified bystander education that teaches students to proactively interfere when they witness potentially harmful or controlling behaviors as the key to prevention of abusive behaviors (Banyard, 2011).

The intervention was originally presented in the form of a Prezi presentation. For this study, the presentation first was modified to shorten the content to maximize participant engagement. Specifically, the student and her advisor removed the multiple-choice questions from both portions of the original intervention. In this script, multiple choice questions were given to check participant understanding of the different forms of dating violence and the desired bystander behaviors. In the revised version of the intervention, these questions were removed from the first component and presented as open-ended questions before an answer was provided in the second component. Consistent with the original intervention, information in each component was delivered in a brief lecture format and then applied to vignettes so that students were able to see how the steps could be used in real-life situations. Important information was repeated, and time was provided for participants to restate the *STOP* steps. See Appendix A for the modified intervention script.

Next, a video was created using online animation software (Vyond) and the modified version of the original Prezi voiceover recording. The characters shown in the vignettes were of diverse ethnic backgrounds and represented a range of sexualities and dating preferences. The first component of the video intervention can be found at go.umd.edu/DatingViolenceWarningSigns, and the second can be found at go.umd.edu/DatingViolenceHowToHelp.

Measures

Knowledge regarding appropriate interventions. Eight items from the Knowledge of Appropriate Bystander Interventions scale (O'Brien et al., 2019) were used to measure knowledge regarding appropriate bystander behaviors outlined in the STOP Dating Violence intervention. Responses were provided on a 6-point Likert scale ranging from 1 (strongly disagree) to 6 (strongly agree) for each item (e.g., "It's important to help in a dating violence situation even if it means that I might be in danger"). Items 1, 2, 3 and 6 were reverse scored and the responses were summed to create an index of knowledge about recommended bystander intervention practices from the STOP Dating Violence intervention. High scores indicated greater knowledge about general bystander behaviors and those emphasized in the STOP intervention. In prior research, the reliability of the 8-item measure was not assessed because the items assessed different dimensions of knowledge and were not expected to correlate. Support for validity was found in a prior study as students who completed the STOP Dating Violence intervention scored the highest on this measure (O'Brien et al., 2019).

Demographics. Participants also responded to items assessing gender, age, sexual orientation, major, relationship status, the length of their relationship, and whether they experienced family violence or relationship abuse.

Analyses

The means, standard deviations, and ranges for the pre and post test scores on the Knowledge of Appropriate Bystander Interventions scale were calculated and are provided in Table 1. An analysis of covariance (ANCOVA) was used to test the hypothesis by examining differences in scores on the measure of knowledge about appropriate bystander interventions at posttest across conditions. The independent variable was the experimental condition, with pretest score as the covariate and posttest score as the dependent variable. An alpha level of .05 was used to test for significance.

Pre-Test to Post-Test Evaluation of the Intervention Results

Significant differences were found among conditions for scores on the measure assessing knowledge of appropriate bystander interventions (F(2, 332)= 77.414, p <.01, partial η 2 = .319). The results of the Least Significant Difference (LSD) post hoc test are presented in Table 2. Students who viewed the intervention video had the greatest knowledge of appropriate bystander interventions (p < .01). Students in the website condition had higher scores on the measure of knowledge of appropriate bystander interventions than those in the control condition (p < .01). To summarize, students in the intervention condition had the most knowledge regarding appropriate bystander interventions at posttest.

Discussion

Findings from this study suggested that the updated *STOP Dating Violence* video intervention was effective in educating undergraduate students about appropriate bystander interventions. Participants who viewed the *STOP Dating Violence* video intervention had the greatest knowledge of appropriate bystander interventions at posttest when compared to participants who were in the control and website groups. This result is important because it

indicates that the video intervention effectively aids college students in learning how to provide help in dating violence situations. This was consistent with the hypothesis.

An important strength of this study was the engaging nature of the animated video intervention. The use of an intervention that was aesthetically appealing to college students may have contributed to its effectiveness. In addition, the results of this study are significant because this intervention was designed and evaluated for the general college student population rather than a specific subset of that community. Because dating violence is common on college campuses, it is necessary to educate as many college students as is possible, pointing to a need for effective interventions that can be used for all college students.

Additionally, a large portion of data collection took place during campus closure due to covid-19. The success of the intervention during this time demonstrated that educational videos may be valuable tools for expanding accessibility to information regardless of student and campus location. Should these findings be replicated, the *STOP Dating Violence* video intervention may serve as a low-cost and effective educational tool to reduce rates of dating violence on college campuses through the education of responsible, motivated, and knowledgeable bystanders.

Limitations

There are several important limitations of this study. First, the sample was predominantly comprised of straight women. This may be because participants were recruited through the Department of Psychology study pool which contains more women than men. It is important to ensure that the intervention works well for all genders and sexualities. While the intervention included inclusive language and provided examples of many different kinds of relationships, it is

necessary to assess its effectiveness for a broader population to ensure that the results are generalizable.

Additionally, no constructs were assessed besides knowledge of appropriate bystander interventions. Constructs like intention to intervene or self-efficacy may be important in gauging the effectiveness of the measure, as knowledge alone may not be enough of a catalyst for bystander action. Other facets of participant perspectives could play valuable roles in determining the effectiveness of the measure including general knowledge of dating violence, core beliefs about gender and sexuality, and life experience. Students who experienced relationship or family violence may respond differently to the intervention as it may be challenging for them to think about their relationships as possibly abusive or because the information is focused on providing help to a peer rather than seeking support for oneself.

It also is important to note that participants in the intervention group were asked to restate their learning about appropriate bystander behaviors while participants in the website group were not. It is possible that inviting the participant to recall their learning contributed to the retention of the information. Thus, some variability in knowledge scores between groups could have occurred because of the lack of restatement in the website group.

Another limitation of this test of the intervention's effectiveness was that participant knowledge was assessed only about bystander interventions in situations of dating violence in general rather than for specific circumstances. The vignettes provided in the video were specific and nuanced, and it would be valuable to assess how participants would apply their knowledge to different forms of dating violence and the complexities associated with specific situations (e.g., monitoring a partner who had cheated on them previously). This would allow researchers to

draw informed conclusions about the dimensions of bystander intervention that participants most struggle with and the focus of future interventions.

Finally, there is no guarantee that the increased knowledge would result in actual bystander behaviors in real-life situations as bystander behaviors in actual dating violence situations were not measured for this study. Numerous factors including social pressures, substance use, or other variables that may impact motivation to intervene may prevent this knowledge from being applied.

Future Research Directions

Future research is needed to evaluate whether the knowledge gained from the STOP Dating Violence video intervention translates into actual bystander behaviors in real-life dating violence situations. Conducting this research is difficult because it requires students to have been exposed to dating violence. In addition, students may not be aware that what they have witnessed or heard about was dating violence, or they may be unable to remember exactly what occurred. A promising mechanism for evaluating bystander behaviors in real-life dating violence situations is the use of diary collection methods which involve repeated participant self-reports for a specified window of time. The use of such methodology would allow participants to log their experiences with encountering dating violence as they occur using their phones or computers.

A similarly challenging but important future direction is to examine the barriers and facilitators associated with bystander behaviors in real dating violence situations. Many factors ranging from social norms to core values could play a role in making it easier or more challenging to intervene. Information about salient barriers and facilitators could be collected in conjunction with self-reports about bystander behaviors in real-life dating violence situations.

After participants report having seen dating violence and the actions that they took, they could

then respond to measures asking them about what factors facilitated and hindered intervention.

These factors must be studied so that researchers can develop educational programming focused on the most important factors that impact the decisions of college student bystanders.

Another important future direction is to see whether participation in this intervention affects students' ability to recognize dating violence in their own relationships and to leave an abusive relationship. An ideal and most effective intervention would allow students to recognize dating violence in their own lives as well as in the lives of their peers.

Finally, it is important that future interventions address how the nuances of specific situations may change bystander perceptions of dating violence and plans to intervene or engage in helpful bystander behaviors. Real-life situations of dating violence are likely to be complex and confusing for bystanders who are considering taking action. To counteract victim-blaming or lack of bystander confidence as a result of contextual nuance, interventions should emphasize that the behaviors described as dating violence call for responsible bystander action under all circumstances.

Conclusion

To conclude, dating violence is a common and harmful occurrence on college campuses and college students are often unsure of how to provide help to their peers who are victims. The findings from this study indicate that the *STOP Dating Violence* video intervention may serve as a cost-effective, engaging and informative educational tool that teaches students how to recognize and respond to dating violence. It is our hope that this research will contribute to efforts to increase bystander behaviors, resulting in a decrease in dating violence on college campuses.

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Figure 1: Distribution of Participants

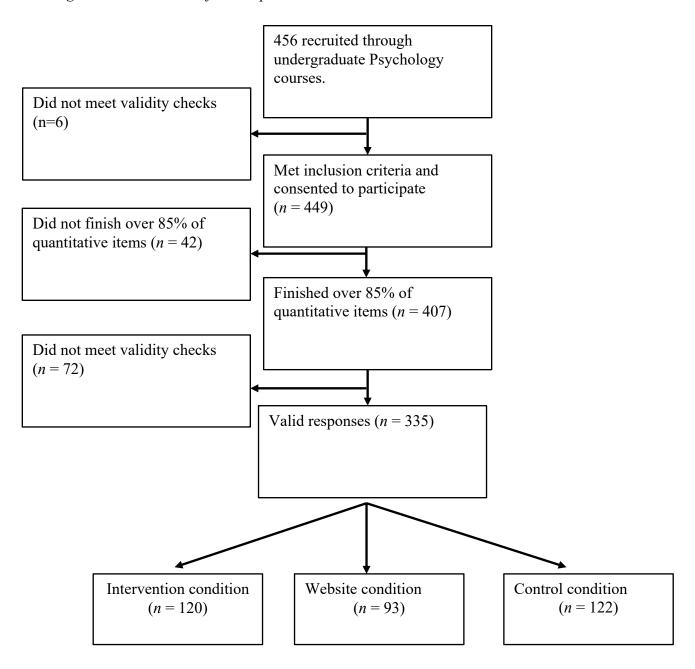


Table 1: Demographics (n = 335).

Variable	Total %	(n)				
Age (years)						
18	20%	67				
19	37%	124				
20	25.7%	86				
21	11%	37				
22	.02%	7				
23	.01%	5				
24	.003%	1				
Gender						
Female	73.1%	245				
Male	26.6%	89				
Non-binary	.3%	1				
Sexual Orientation						
Straight	89.9%	301				
Lesbian/Gay	1.5%	5				
Bisexual/Pansexual	8.1%	27				
Other	.6%	2				
Relationship Status						
Single	63%	211				
In a dating relationship	34.9%	117				

Married	.3%	1
Unsure	1.8%	6
Experienced Family Violence (Y/N)		
Yes	11.9%	40
No	83.3%	279
Unsure	4.8%	16
Experienced Relationship Abuse (Y/N)		
Yes	15.8%	53
No	77%	258
Unsure	7.2%	24
Major		
Information Sciences	13.4%	45
Biology-related	10.1%	34
Communications	1.2%	4
Public health-related	6.2%	21
Nursing	1.2%	4
Psychology	23.3%	78
Multiple Majors	14.6%	49
Kinesiology	4.2%	14
Computer Science	2.1%	7
Criminal Justice and Criminology	1.5%	5
Journalism	1.5%	5

COLLEGE DATING VIOLENCE		
English	0.1%	3
Business	3%	10
Education-related	1.5%	5
Economics	1.5%	5
Family Science	.1%	3
Undecided	6%	20
Other	6.6%	22

Table 2: Means, Standard Deviations, Ranges, and Correlations Among the Measures

Measures	1	2
1. Knowledge, pre	1	
2. Knowledge, post	1	.47*
Mean	31.57	34.42
Standard Deviation	3.36	4.51
Actual Range	22-42	23-48
Possible Range	17-68	17-68

^{*}Correlation is significant at the .01 level.

Table 3: Results of Post Hoc Test for Time 1 to Time 2 Outcomes

Dependent Variable	Intervention M	Website M	Control M
Knowledge of appropriate intervention	$37.16_a (SD = 4.73)$	$34.16_b(SD = 3.87)$	$31.93_{c}(SD = 3.01)$

 $\it Note.$ Estimated marginalized means that do not share subscripts within the same row differ, p<.01.

Appendix A

STOP Dating Violence Intervention Video Script

COMPONENT 1: EDUCATION ABOUT WARNING SIGNS OF DATING VIOLENCE

	Script Begins Here:
1	Welcome to STOP Dating Violence . We are a team of researchers from the University of Maryland who created an intervention to end dating violence on our campus.
	First, we will teach you about unhealthy romantic relationships.
	Let's begin.*
2	Dating violence refers to a pattern of abusive behaviors within a romantic relationship * Partner violence can happen in both same and cross sex couples and includes physical*, psychological* and sexual abuse.*
3	Physical abuse is what many people think when they hear the words "dating violence" - some examples are shoving*, hitting*, kicking*, or holding someone down.*
4	Psychological abuse often involves verbal or emotional abuse – yelling *, threatening* and name-calling.*
5	Other forms of psychological abuse include behaviors that tend to be mean *, degrading, or coercive, such as stalking*, monitoring*, or trying to control your partner.* These behaviors can happen online or in-person. Examples include demanding to have the password to your phone * or telling you who you can or cannot hang out with. *
6	Next is sexual abuse* – which some people think can't happen in dating relationships. * But anything that pressures someone into unwanted sexual activity, even in a relationship, is abuse. This might include forcing you to have sex after you have said no* or insisting that you have unprotected sex.*
7	Now that we have described dating violence, we want you to imagine your best friend has been dating someone for three months.* What are some "red flags" or warning signs of dating violence that you might notice? **
	Maybe this exercise was easy for you and you came up with several behaviors you would consider red flags, or maybe you're not sure what behaviors you could be looking for. *
8	To help you recognize warning signs of dating violence, we will describe some common red flags.*

9	A couple is at a restaurant having dinner, when one partner goes to the restroom and leaves his cell phone on the table. His boyfriend begins to look through his text messages without his partner's permission. This is a monitoring behavior. *
11	Here is another example of a red flag. Whenever a girl tries to make plans with her friends, her girlfriend tells her that she shouldn't go and that they should only hang out with each other. This is called a controlling behavior.*
13	For the next example, imagine a girl is getting ready to attend a concert with her boyfriend. When he picks her up, he tells her that her outfit makes her thighs look huge. This is considered a demeaning behavior.
	Demeaning behaviors include hurting a person's self-esteem, such as calling them names.*
15	Now picture a couple at a party. When the girl tries to ask her boyfriend a question during the game, he shoots her an angry look that frightens her and says, "it's time for us to leave" through gritted teeth. This is a threatening and aggressive behavior.*
18	Ok – just one more example about warning signs. A guy notices his girlfriend talking to another guy. He walks up to her, pulls her away, and demands to know how long she has been cheating on him. This is considered a jealous and possessive behavior.*
20	Now you have learned how to recognize red flags of unhealthy relationships.*
21	Let's put your new knowledge to the test! Please answer the questions on the following page.

COMPONENT 3: EDUCATION REGARDING DESIRED BYSTANDER BEHAVIORS

1	College students often want to know what to do if their friend is in an abusive relationship because they want to help. The following information will teach you how to help someone who is being hurt by a boyfriend or girlfriend.*
2	There are 4 steps that can make a big difference in dating violence situations. You can use the acronym STOP to remember the 4 steps:
	First - S - Stay safe – ensure that you and the victim are not in danger,* Second - T - Tell the victim that you are concerned,*
	Third - O - Offer support – and listen to what the victim needs,* Fourth - P - Provide the crisis link or number - loveisrespect.org 1.866.331.9474*
3	OK, now, we're going to give you one example and show you how to help. Imagine that you walked into your apartment late at night and heard your roommate's boyfriend yelling at her (saying "you're so stupid and ugly – you are such a slut"). She was crying and they both seemed drunk. He left when he saw you and she told you that he found out that she kissed another guy at a bar. You heard him say mean things to her several times before.*
4	How might you respond to this situation?***
	First, remember S for stay safe - assess the situation to make sure that everyone is safe.*
	Second, remember T for tell her that you are concerned. You might say, "I'm really worried about you."*
	The third step starts with O – offer support like saying "I'm here for you."*
	Last, P stands for provide the crisis link or number. You might say, "If it's ok, I'll text you a link that might help." This link is important because it provides someone to talk to or chat with online who knows about dating violence and helpful resources.*
5	Now, we're going to give you an example to see if you know how to help.*
	Imagine that you're walking home on a Saturday night when you see a girl and guy in the hall of your building and he is calling her "stupid, lazy, and worthless." As they're yelling, you see him turn around and throw the beer against the wall. She gets up off the floor and starts to leave, but he follows her and continues to call her names. By the time you reach them, it is clear that they are both drunk and the yelling is only getting worse.*
6	How might you respond to this situation?***
<u> </u>	

	The first step is to stay safe - stay at a distance to make sure you are safe, and check the safety of the victim.*
7	Ok, after you have ensured that everyone is safe, what's your next step?
	The second step is to tell the victim that you are concerned.*
8	This situation is a bit difficult because you don't know the people involved, but what you do in this moment can really help in the long run. So after you determined that everyone was safe and you told her that you were concerned, what would the third step look like?
	The third step is to offer support by asking if the girl needs anything. Calling the police is useful if there is immediate danger, like someone physically harming another person – then call 911. In this situation, there is no physical harm.*
9	Let's say the girl is able to walk away and is walking past you, what is one more thing that you would want to do?
10	Remember that the last step is to provide the love is respect link. Some people might think that saying negative things about the boyfriend may be helpful, but this could make her feel like she needs to defend him. It also takes the focus away from what she needs and it might put you in danger if he hears you.*
11	You did it – fantastic! You are doing really well.***
12	We have one last scenario for you. As you know, dating violence happens to both girlsand guys. We are going to present a situation where the guy is the victim of dating abuse. Remember, the four STOP steps work for guys too.
	1-S – stay safe, 2-T - tell the victim that you are concerned,
	3-O - offer support, 4-P - provide the crisis link - loveisrespect.org
	If you have not yet memorized these steps, we will give you some time to learn them. ******
13	OK, over the last month you noticed that one of your close friends has stopped coming to pick-up basketball games on Friday nights. When you see him at the gym, you ask why he hasn't been around. He says that he's really busy – and that his girlfriend wants him to spend all of his time with her. He tells you that he tried to break up with her but she threatened to kill herself. He feels stuck but he would feel really guilty if something bad happened to her.*

How might you respond to this situation?*** What would you do first? it's important to first assess the safety of the situation. In this case, both you are not in immediate danger.	ı and the victim
it's important to first assess the safety of the situation. In this case, both you	and the victim
i i	ı and the victim
Ok, what's your next step after you ensure that everyone is safe?	
The second step is to tell him that you are concerned.*	
What you say now can really help your friend. So, after ensuring safety and concerned, what would the third step be?	saying you are
The third step is to offer support by asking if you can help. Not saying anyth get him the help he needs.*	hing would not
Finally, what is the final step after making sure everyone is safe, expressing and offering support?	your concern,
If your friend agrees, it would be great to provide the loveisrespect link to h	im.*
18 Great job!	
Ok, now we are going to wrap up with a review of what to do when you see violence.	dating
Remember the STOP dating violence steps: 1-S - stay safe – ensure that you and the victim are not in danger, 2-T - tell the victim that you are concerned, 3-O - offer support – and listen to what the victim needs, and 4-P - provide the crisis link - loveisrespect.org	
Now, please enter the crisis link and phone number into your phone. *****	*
Thank you! *****	
Please return to the survey and complete the questions. Thanks again!	

Appendix B

Literature Review

The current study assessed the effectiveness of an online dating violence bystander education video intervention. Bystander intervention is defined as engagement in actions intended to stop or reduce dating violence when it occurs. Literature on dating violence, bystander intervention, and bystander intervention educational programs is described within the context of college dating violence. The hypothesis for this study also is included.

College Dating Violence

For the purpose of this study, dating violence will be defined as any emotionally or physically harmful or controlling behaviors between dating or romantic partners. Dating violence is common on college campuses, with 21% of college students reporting experiencing dating violence by a current partner ("Dating and Domestic Violence on College Campuses," n.d.). Statistics reported on each campus are of a range widely. Since the early 1980s, estimates of rates of dating violence in couples on college campuses have ranged from 16.7% to 48% (Murray & Kardatzke, 2011). Emotional violence was the most common form of abuse experienced before college, but during college, physical and sexual violence become equally common (Forke, Myers, & Catallozzi, 2008).

Factors that contribute to high rates of dating violence on college campuses. Intimate relationships in college are unique in their levels of intimacy, commitment, and fidelity (Kaukinen, Gover, & Hartman, 2012). There are certain populations in college who are more likely to be at high risk for dating violence. For example, members of fraternities and sororities tend to have more traditional attitudes about gender roles, which are consistent with beliefs that women should be submissive and that men should be dominant (Harkins & Dixon, 2010). Also

specific to college, men who live primarily with other men, as most college living situations are structured, tend to exhibit exaggerated traditional male role norms (Hong, 2000). Members of primarily male communities, such as fraternities, have higher rates of dating violence (Davis & Liddell, 2012).

Effects of Dating Violence for College Students. Dating violence is associated with many heightened challenges for college students. For example, alcohol and substance-related problems are linked to higher rates of dating violence (Campbell, 2002; Shorey, Stuart, & Cornelius, 2011). Moreover, both victims and perpetrators of intimate partner violence experience higher rates of suicidal ideation (Chan, Straus, Brownridge, Tiwari, & Leung, 2010). Victims of dating violence in college have higher scores on anxiety, depression, somatization, hostility, and interpersonal sensitivity indexes than non-victims (Frederick & Gennaro, 2005).

Role of Peers in College Dating Violence. College students who are victims of dating violence are somewhat likely to tell their friends about their experiences but are not very likely to tell a counselor (Amar & Gennaro, 2005). In fact, about half of female college students who were victims of dating violence told anyone (Amar & Gennaro, 2005). Among those who did tell someone, 50% told friends, and only about 6% told a counselor. This phenomenon illustrates the importance of bystander intervention training, since peers could play an integral role in the experiences of survivors of dating violence.

Bystander Intervention

Bystander intervention is the engagement in actions intended to reduce or stop dating violence when it occurs. Bystander intervention for dating violence evolved from the development of bystander intervention tools for sexual violence. The bystander approach was first applied to the prevention of campus violence in the mid-1990s (Katz, 1994). This was

rooted in the idea that a large-scale shift in cultural and social norms need to occur, requiring action from the campus community (Banyard, 2004).

According to this understanding, each student member of the campus community has a specific role to play in preventing the problem of dating violence on campus (Banyard et al., 2007). The bystander approach applies to all three levels of prevention, including primary (i.e. prior to the assault occurring), secondary (i.e. during the assault or high-risk situation), and tertiary (i.e. after the assault has occurred; McMahon & Banyard, 2012). By engaging the entire community, bystander intervention programs assist in shifting campus culture and bringing students to act in situations of crisis, effectively addresses each of the three levels.

Theory

This study was based on Latane and Darley's (1970) Model of Bystander Behavior. The model stipulated the contingencies that are required for bystanders to intervene: bystanders must know about the problematic situation, perceive it as an emergency, decide that they have a responsibility to take action, and determine what help they are able to provide. Multiple psychological processes may impede bystander intervention, like evaluation apprehension (i.e. bystanders worrying about acting in ways that may harm their reputation in the eyes if other bystanders), diffusion of responsibility (i.e. bystanders thinking that others will take on the responsibility for intervention), and pluralistic ignorance (i.e. bystanders believing that situations are not urgent because of the inaction of other bystanders; Latane & Darley, 1970).

Furthermore, focusing on the improvement of self-efficacy could contribute to the development of bystander training interventions. Self-efficacy, or confidence in performing the required behaviors to achieve goals, was important in predicting behaviors (Bandura, 1977). This theory stipulated that people will try to perform goal-directed behaviors at a level that reflects

how confident they are in their ability to succeed. Therefore, providing bystanders with simple and effective strategies and improving their confidence may result in increased helping behaviors (O'Brien et al., 2019).

Bystander Training Interventions for College Dating Violence

Other Interventions. Several interventions intended to educate and motivate bystanders to intervene in college dating violence have been developed and evaluated. One study examined a bystander intervention program that targeted members of Greek life and athletes, which are the two populations on college campuses with the highest rates of dating violence (Moynihan & Banyard, 2008). The program was effective, but the results were not generalizable to the college population as a whole. An educational program called the "Men's Project" provided men with a support group, where they were able to challenge their sexist environment and employ bystander strategies (Barone et al., 2007). This study provided strong support for the potential effectiveness of interventions focused on men, but women also are extremely valuable bystanders as the peers of female college students, who are most commonly the victims in these situations.

Project PEACE is another bystander intervention education program and was found to be mixed in effectiveness (Jaffe et al., 2017). Project PEACE also measured hypothetical outcomes rather than real ones (Jaffe et al., 2017). Another program called Bringing in the Bystander increased the likelihood of helping, taking responsibility for ending dating violence among sorority women, and confidence in bystander behaviors (Moynihan et al., 2011). This program, like many other in-person intervention programs, was limited by its high cost and small sample sizes. There are very few dating violence prevention programs for college students, and they tend to be somewhat inconsistent in their effectiveness. Most of the programs designed for college

campuses are focused on preventing sexual assault rather than dating violence, and also are designed to be administered in person (Shorey et al., 2012).

The STOP Dating Violence Intervention. The STOP Dating Violence intervention (O'Brien et al., 2019) was grounded in research on the usefulness of bystander education in reducing sexual abuse and relationship violence (Banyard, Moynihan, Cares, & Warner, 2014). It also responded to recommendations for addressing the role of bystanders in reducing rates of dating violence (Shorey et al., 2012). Because the STOP Dating Violence intervention is administered online, it would be able to reach a large sample size at a low cost (O'Brien et al., 2019). This kind of intervention may address limitations associated with costlier in-person educational programming. Initial evaluation of the STOP Dating Violence program indicated that replication of the study was needed to ensure that the STOP intervention works with other samples.

Conclusion

Dating violence is prevalent on college campuses, and victims are at high risk for harmful behaviors such as eating disorders, substance abuse, and suicide attempts. The STOP Dating Violence intervention fills an important gap in the available bystander training interventions because of its effectiveness, low cost, and online accessibility. It is necessary to update the intervention and examine the effectiveness of an engaging animated video version of the STOP Dating Violence intervention.

Hypothesis

Participants in the intervention group would have the most knowledge about bystander intervention when compared to the website group and the control group.

Appendix C

Eligibility Questions (O'Brien et al., 2019)

- 1. Are you enrolled at the University of Maryland College Park? Y/N
- 2. Are you between the ages of 18 and 24? Y/N

(If no to either question: We appreciate your interest in our study. Unfortunately, you do not meet the criteria for participation in our research. Thanks again!)

(If yes to both questions, randomly assigned to one of three conditions and given the appropriate consent form.)

Do you consent to participate in this study? Y/N

If you are interested, you can print a copy of this consent form.

QUESTIONS USED TO GENERATE ANONYMOUS ID TO LINK TIME 1 AND 2 DATA 1. Enter the last four digits of your UID.

2. On what day of the month were you born? (Provide pull down menu with numbers 01, 02,03,....31).

Are you a robot? Y/N

Appendix D

Knowledge of Appropriate Bystander Interventions (O'Brien et al., 2019)

Instructions: The following questions are about appropriate bystander interventions. Please read each statement carefully and indicate the degree to which you agree with each one.

	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
1. It's important to help in a dating violence situation even if it means that I might be in danger.						
2. Not saying anything about dating violence may be the best response as the victim could be very embarrassed.						
3. It is important to tell dating violence victims to leave the harmful relationship.						
4. I know a link that I could share with a friend who is being hurt in a dating relationship.						

1	1	1	i	i	ī	
5. Listening to the victim of dating violence is more helpful than telling her that she does not deserve to be with an abusive partner.						
6. It's best if dating violence victims find online resources themselves.						
7. Bystanders should be aware that dating violence situations can be dangerous.						
8. Telling a dating violence victim "I'm really worried about you" is a helpful way to say that you are concerned.						

Note: Items 1, 2, 3 & 6 were reverse-scored, and responses to all items were summed to create an index of knowledge. High scores indicated greater knowledge about the bystander behaviors in the *STOP* intervention.

1. Your age: _____

Appendix J

Demographic Questionnaire

	2. What is your gender?
•	Female Male Non-binary Other 3. What is your sexual orientation?
•	Straight Lesbian/Gay Bisexual/Pansexual Other
	4. What is your major?
	5. What is your relationship status?
•	Single In a dating relationship Married Unsure
	6. If currently in a relationship, how long have you been with your partner?
	7. Have you experienced family violence?
•	Yes No Unsure
	8. Have you experienced relationship abuse?
•	Yes No Unsure

THANK YOU FOR YOUR PARTICIPATION IN OUR STUDY!

FOLLOWING ARE SEVERAL RESOURCES THAT MAY BE OF INTEREST TO YOU IF YOU WOULD LIKE ADDITIONAL INFORMATION ABOUT DATING VIOLENCE OR TO SPEAK TO SOMEONE ABOUT DATING VIOLENCE.

National Domestic Violence Dating Violence Hotline (1.866.331.9474; loveisrespect.org)

National Coalition Against Domestic Violence Hotline (1.800.799.7233)

University of Maryland Counseling Center (301.314.7651)