

ACTIVELY ENCOURAGE, PASSIVELY RESPOND, OR ACTIVELY DISCOURAGE: AN ANALYSIS OF COLLEGE STUDENTS' RESPONSES TO CYBERBULLYING BEHAVIOR

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ABSTRACT

Cyberbullying behavior is known to cause severe consequences from short-term mental health issues to long-term physical and emotional trauma. Much research has been conducted on this topic; however, significantly less research has been conducted on cyberbullying bystanders. The current study assesses college students' responses to cyberbullying behavior. Specifically, do bystanders actively encourage, passively respond, or actively discourage cyberbullying behavior when they witness an incident. Our results reveal that students who have less exposure to cyberbullying are more likely to actively discourage cyberbullying activity compared to their counterparts. In addition, those who were prior victims of cyberbullying were also significantly more likely to actively respond to cyberbullying incidents. These results indicate that bystanders can play a significant role in cyberbullying incidents which, in turn, could lead to long-term benefits by deterring future cyberbullies. Policy implications and legal ramifications are also addressed concerning cyberbullying activity.

Keywords: Cyberbullying, College Students, Bystanders, Behavior, Response.

INTRODUCTION

Bullying refers to intentional and repeated aggressive behaviors that include a power imbalance between the bully and victim (Olweus, 1993; Olweus et al., 1999). Bullying encompasses both overt and relational forms of abuse. Overt forms of bullying refer to verbal threats, physical violence, aggression, property theft and destruction. While covert or relational bullying refers to social isolation, gossip, and rumor-spreading. Deliberate and repeated harm perpetrated through any source of digital technology is referred to as *cyberbullying* (Hinduja & Patchin, 2015). Cyberbullying also takes several forms including sending hurtful or threatening text messages or emails, spreading rumors through emails and private messaging, forwarding private pictures to unintended recipients, and posting derogatory comments and pictures on social media (National Crime Prevention Council, 2007).

Scholars suggest that cyberbullying is less common than traditional forms of bullying (Cross et al., 2015). However, (Monks et al., 2012) argue that cyberbullying will most likely increase as youths are exposed to new forms of technology and online platforms. From texting to social media sites (i.e. Instagram, Facebook, Twitter, and Snapchat) to gaming and video sites (i.e. YouTube), youths are finding new and innovative ways to bully each other

online. Furthermore, studies show that college students are not immune to these aggressive behaviors (Crosslin & Golman, 2014; Lam et al., 2022; MacDonald & Roberts-Pittman, 2010). For instance, (Lam et al., 2022; Crosslin & Golman, 2014) both found that cyberbullying victimization and perpetration was an issue for college students. Many times, behaviors that are instilled in middle and high school become constant throughout adulthood including harassing behaviors. Since college students have access to a wide range of technological tools, which allows them different ways (compared to middle and high school students) of engaging in cyberbullying, it is presumed that college-level cyberbullying may be worse than high school level bullying because of poor social controls, lack of parental monitoring, and being victims of cyberbullying.

Much of the focus on cyberbullying has been on middle and high school students (Crosslin & Golman, 2014). However, (Walker et al., 2011) argue that because cyberbullying may continue beyond the early teenage years, it is also important to address cyberbullying at the college and university levels. Research that does address cyberbullying among college/university students focuses primarily on the victims and the bullies, while fewer studies address cyberbullying bystanders (Sobba et al., 2019; Gahagan, et al., 2016). Because bullying is an interactive process, it may include a bully (or bullies), victim, and witnesses or bystanders (Gini et al., 2008). Bystanders are important to the interactive bullying process because how they choose to respond to the bullying encounter may further encourage or discourage the bully. In (Thornberg et al., 2012) argue that bystanders typically respond to bullying in one of three ways, (1) remaining on the outside, (2) reinforcing the bullying, or (3) defending the victim.

Our study fills an important interdisciplinary gap in the literature by addressing how college students react to cyberbullying: (1) *active encouragement*, (2) *passive response*, or (3) *active discouragement*. Our research addresses multiple disciplines from sociology and criminology to psychology. Because of the long-term and detrimental consequences of cyberbullying (Drogin & Young, 2008; Hinduja & Patchin, 2015), an additional goal of our research is to address policy implications and legal ramifications regarding cyberbullying behavior.

The paper is divided into the following sections: prior literature on the topic, materials & methodology, data analysis, results, discussion, limitations, and policy implications & legal ramifications. The data analysis includes descriptive statistics and significance testing as well as binary logistic regression to assess the relational significance between the dependent and explanatory variables. The policy implications and legal ramifications address the current consequences of cyberbullying and long-term resolutions to deter cyberbullying behavior.

LITERATURE REVIEW

Cyberbullying is a ubiquitous form of abuse that can affect individuals from adolescence to college (Crosslin & Golman, 2014; MacDonald & Roberts-Pittman, 2010; Zalaquett & Chatters, 2014). While the peak age for traditional bullying is generally during adolescence, we suspect that cyberbullying may not follow this trend and is likely to continue in later adolescence and emerging adulthood (Zalaquett & Chatters, 2014).

Cyberbullying Bystanders

When it comes to seeking help, research shows that both school and college-age students are less likely to be proactive regarding cyberbullying incidents (Spears et al., 2015; Wadian et al., 2016). Prior research establishes that adolescents who are victims of

cyberbullying are reluctant to seek help for themselves. For example, (Wadian et al., 2016) examined adolescents' likelihood to seek help from others when they were the victim of cyberbullying. Drawing from a sample of adolescents (N=116) ages 15 to 19, they found that adolescents were more likely to seek help from their friends than their parents when they were the victim of cyberbullying. They were especially reluctant to seek help from their teachers. In (Spears et al., 2010) show similar results with their study of adolescents which reveal that cyberbullying victims are less likely to engage in support services. These findings do point to directions in future research regarding why individuals choose not to actively seek help or report cyberbullying incidents.

Prior research reveals that bystanders tend to be active or passive when witnessing cyberbullying (Gahagan et al., 2016; Patterson et al., 2017; Shultz et al., 2014; Sobba et al., 2017). In (Shultz et al., 2014) research indicate that bystanders often act in two ways: (1) defending or supporting the bully victim or (2) reinforcing or joining in with the cyberbullying incident. Additionally, they argue that reinforcing cyberbullying is more likely compared to reinforcing or joining in with traditional forms of bullying. More recently, (Patterson et al., 2017) interviewed 24 youths, ages 13-16, to explore bystanders' experiences, perceptions, and responses to cyberbullying. Using a vignette to facilitate a guided discussion, they found that most youths suggested that their peers would ignore incidents of cyberbullying and bystanders would be less likely to get involved if they did not know the victim or bully. However, they indicated that bystanders would be more likely to get involved if the bullying encounter involved a family member or friend. The youths also reported that a key indicator of the likelihood of a bystander intervening was the perceived severity of the incident. Additionally, participants suggested that bystanders would be less likely to seek help from a teacher or adult. Friends and older adolescents were preferred when seeking help to address an issue online. Of particular interest to our study, (Patterson et al., 2017) findings revealed that several youths in their study reported that they may feel empowered to act when witnessing cyberbullying because they had been targets of online bullying themselves.

From a college student perspective, research shows that those who have witnessed cyberbullying were less likely to report or intervene (Gahagan et al., 2016; Sobba et al., 2017). Interestingly, (Gahagan et al., 2016) found among their sample of college students (N=196) that 30% of their sample indicated the responsibility of the bystander was clear and straightforward. Furthermore, 90% of these students indicated that it was the responsibility of the bystander to act, while the other 10% suggested that the bystander did not have the responsibility to act after witnessing cyberbullying. Examples of "acting" included confronting the cyberbully and providing support to the victim. Therefore, even though the sample clearly indicated that they believe bystanders were responsible for intervening, the majority of bystanders did not intervene when witnessing an incident.

Demographics

Some of the key demographic characteristics addressed in the literature are age, gender, and race. When it comes to age, cyberbullying tends to primarily affect adolescents from elementary school through high school (DeSmet et al., 2018; Schoffstall & Cohan, 2011). Furthermore, as age increases, cyberbullying behavior tends to decrease (Williams & Guerra, 2007). However, research shows that cyberbullying is also an issue at the college level (Zalaquett & Chatters, 2014). Therefore, even older students out of high school are not

immune to the abuse. The rate of cyberbullying though is expected to greatly reduce as one enters college.

When it comes to gender and racial disparities, there are mixed results. Regarding gender, some studies reveal that females are more likely to be victims (Wang et al., 2009; Zalaquett & Chatters, 2014) while others reveal that males are more often victims and offenders of cyberbullying (Erdur-Baker, 2010; Li, 2006). With the mixed information, we can assume that cyberbullying affects both sexes. Racial differences also suggest similar findings that cyberbullying affects all races and is not specific to any one racial category. The majority of studies show that no racial differences are found regarding cyberbullying behavior (Hinduja & Patchin, 2008; Schenk & Fremouw, 2012).

Perspectives Guiding the Current Research

Affective Empathy with Other Victims of Cyberbullying: Research consistently finds that while most youths believe that bullying is wrong (e.g., Boulton et al., 2002), bullying bystanders are not likely to intervene (Hawkins et al., 2001). It may be even more unlikely that bystanders are willing to intervene when they witness online bullying. This may be in part because cyberbullying often allows individuals to engage in online interactions anonymously, and (Barlinska et al., 2013) argue that the anonymity of the internet decreases inhibition and restraint in social interactions. Additionally, because of the anonymity of the internet, it may be more difficult for bystanders to empathize with cyberbully victims' experiences because victims appear to be nameless, unidentifiable objects (Joinson, 1998).

Empathy is a multidimensional construct, with some suggesting that it is the ability to *understand* the emotions of others (cognitive empathy) (Hogan, 1969), while (Mehrabian & Epstein, 1972) describes affective empathy as the ability to *share* the emotions of others. Empathy is an important component of bystander's willingness to intervene in cyberbullying incidents because less empathetic people are more likely to dehumanize victims (Haslam, 2006), while more empathetic people tend to feel sympathy for victims when they see others get hurt (Hoffman, 2000). In (Hayashi & Tahmasbi's, 2022) study on college bystanders of cyberbullying supports this idea. Their results revealed that college bystanders of cyberbullying were more likely to intervene when they felt empathy for the victim and anticipated regret. Therefore, following this logic, we argue that compared to those who have not experienced cyberbullying directly, victims of cyberbullying may be able to better empathize with their peers because of their shared experiences. We also argue that cyberbullying bystanders who were the victims of cyberbullying themselves are more likely to actively discourage cyberbullying than their peers who have not experienced cyberbullying because they are more likely to share the emotions of other cyberbullying victims.

Present Study and Hypotheses: The current research is an exploratory study. Exploratory studies are particularly valuable for investigating emerging issues, trends, or phenomena that have not yet been fully understood or documented. By exploring these areas of inquiry, researchers can generate timely insights and contribute to the discourse surrounding contemporary societal challenges, technological advancements, or cultural shifts. Therefore, this exploratory study is unique in its focus on examining the perceptions and experiences of both traditional and non-traditional college students with cyberbullying. Due to the frequency and severity of cyberbullying behavior, it is critical to broaden the research on the topic. The present study consists of the following hypotheses which fills a current gap in the literature:

H₀₁: Cyberbullying bystanders who had prior experiences with cyberbullying are more likely to actively discourage cyberbullying compared to their non-victimized peers.

H₀₂: Cyberbullying bystanders who more frequently witnessed cyberbullying would be less likely to actively discourage cyberbullying compared to their peers with less frequent exposure to cyberbullying.

H₀₃: The interactive effect between (1) being the victim of cyberbullying and (2) less frequent exposure to cyberbullying has a cumulative effect on the likelihood of actively discouraging cyberbullying.

MATERIALS & METHODOLOGY

Data and Sample

The data were collected through a survey administered to 250 college students from a university in the southern region of the United States. The survey instrument used was adopted and modified by a survey created by (Willard, 2004; Li, 2010). The sample obtained was derived through convenient sampling methods, where participants were selected based on availability and accessibility rather than through random selection. The response rate for the survey was exceptionally high at 99%, resulting in a final sample size of 248 respondents. Given the nature of convenient sampling, it's important to note that the survey participants represent a subset of college students who were readily available on campus. The university has a diverse student body comprising students from various racial, ethnic, socioeconomic, and geographic backgrounds. Convenient sampling was well-suited for this exploratory study where the primary goal was to gain initial insights about cyberbullying.

The cyberbullying survey commenced with a clear definition of cyberbullying to ensure uniform understanding among participants. Subsequently, the survey was divided into three sections: Section I: Demographics; Section II: Opinions about cyberbullying; and Section III: Personal experiences with cyberbullying.

In the first section, the survey asked for demographic information such as, age, gender, race, and college classification. Following this, participants were prompted to express their attitudes and opinions regarding cyberbullying in a dedicated section. Utilizing a Likert-scale ranging from "strongly agree" to "strongly disagree," participants were able to articulate their degree of agreement or disagreement with various statements related to cyberbullying. Subsequently, participants were invited to recount their personal encounters with cyberbullying through a series of questions. This section employed diverse question types, encompassing short-answer inquiries, yes/no prompts, and check-all-that-apply questions. Short-answer questions allowed participants to furnish detailed narratives of their experiences, while yes/no inquiries facilitated direct responses to specific aspects of cyberbullying encounters. The check-all-that-apply questions enabled participants to indicate multiple forms or contexts in which they experienced cyberbullying.

By incorporating a variety of question types, the survey aimed to capture a comprehensive range of cyberbullying perceptions and experiences. This approach not only facilitated robust data collection but also promoted participant engagement by accommodating diverse cognitive styles and preferences, thus reducing survey fatigue. Ultimately, the utilization of a variety of question types in the cyberbullying survey contributed to enhanced data richness, participant engagement, and a nuanced understanding of cyberbullying experiences among the study population.

Our sample revealed that Males were the majority of the sample (n=140; 56.6 percent). In regard to race, the majority answered *White* (n=132; 53.2%) followed by *Black* (n=90; 36.3%), *Latino, Hispanic, or Mexican* (n=10; 4%), *Asian/Pacific Islander* (n=8; 3.2%), and *Other* (n=7; 2.8%). The ages of students were between 18-68 years (M = 24.91;

SD = 9.944). More specifically, we broke down ages into traditional (18 to 23-years-old) and nontraditional (24-years-old and older) students.

Dependent Variables

Our dependent variable is bystanders' responses to cyberbullying. We asked respondents, "If you have been a witness to cyber-bullying incidents, what is your normal response?" (check all that apply). Response options included (1) join in, (2) cheer on the cyber-bully, (3) watch or look, but do not participate, (4) leave the online environment, (5) object to the cyber-bully, (6) try to help or befriend the victim, (7) report the cyber-bullying to someone who can help the victim, (8) have not been a witness, and (9) other, specify.

We recoded the first seven response choices into three categories to reflect three key ways in which respondents identified that they would normally respond to cyberbullying: (1) active encouragement—respondents who indicated that they would encourage the cyberbully by joining or "cheering on" the cyberbully, (2) passive response—respondents who reported that they would watch the cyberbullying incident (but not participate) or who would leave the online environment where the cyberbullying incident was taking place, and (3) active discouragement—respondents who suggested that they would take a more pro-active response to the cyberbullying incident by objecting to the cyberbully, befriending the victim, or reporting the cyberbullying to someone would help.

Explanatory Variables

Our first explanatory variable is *prior victimization*. We use the following question to measure prior victimization, "Have you ever been cyberbullied?" Responses consisted of three options: (1) = Yes, (2) = No, and (3) = Not Sure. We dichotomized the variable, combining the second and third categories into one category that reflects that the respondent had not experienced cyberbullying: (1) = Victim of cyberbullying and (0) = Not a victim of cyberbullying.

The next independent variable is the *frequency of witnessing cyberbullying*. The following categories could be selected: (1) = Never, (2) = Once/ Twice, (3) = A few times, (4) = Many times, or (5) = Almost every day. These categories were then dichotomized: (0) = Never witnessed cyberbullying (N = 100; 40.3%) and (1) = Witnessed at least one occurrence of cyberbullying (N = 148; 59.7%).

Our demographic variables consisted of *gender*, *race*, and *type of student*. Gender was simply broken down into the categories (1) = Male and (0) = Female with Males being the majority (56.6%). Race was dichotomized into (1) = White and (0) = Non-White with Whites being the majority (53.4%). The Non-White categories included Black, Asian/Pacific Islander, Native American, Hispanic/Latino, and Other. Lastly, the type of student was categorized by modifying the age variable from ages 18-68 years (M = 24.91; SD = 9.944) to the following: (Ages 18-22 yrs.) = Traditional student and (Ages 24 and above) = Non-Traditional student.

DATA ANALYSIS

Our current study utilizes descriptive statistics, chi-square, correlations, and binary logistic regression. To start, we use descriptive statistics to characterize the variables. In (Hejase & Hejase, 2011) contend that giving data meaning leads to useful information. Furthermore, according to (Hejase & Hejase, 2013), "descriptive statistics deals with

describing a collection of data by condensing the amounts of data into simple representative numerical quantities or plots that can provide a better understanding of the collected data” p. 272. Therefore, descriptive statistics included frequencies, percentages, and maximum and minimum values presented in tables for simplicity. Furthermore, to test for significance between each of the variables, we use chi-square and correlations.

In addition to basic descriptive statistics and significance tests, since our dependent variable is dichotomous, we use logistic regression to predict the likelihood of actively discouraging cyberbullying from sets of independent variables, including prior cyberbullying victimization, frequency of witnessing cyberbullying, and the control variables, gender, race/ethnicity, and student type (i.e., traditional or non-traditional). In addition, we wanted to note that multicollinearity did not challenge the findings as we thoroughly examined the bivariate correlations between each of the independent variables.

The equation for the logit is expressed as:

$$\text{logit} [\theta(x)] = \log([\theta(x)]/[1-\theta(x)]) = \alpha + \beta_1X_1 + \beta_2X_2\dots + \beta_kX_k$$

We present six logistic regression models. In Model 1, we test the effects of being the victim of cyberbullying predicting the likelihood of actively responding to cyberbullying. Model 1 tests our first hypothesis. We test our second hypothesis in Model 2, testing the effects of the frequency of witnessing cyberbullying and predicting the likelihood of actively responding to cyberbullying. In Model 3, we add the dichotomous control variables, (1) female, (2) nonwhite, and (3) nontraditional student. In our final model, Model 4, we add a product-term interaction model to test hypothesis 3. Model 4 tests the interaction effect between being the victim of cyberbullying and the frequency of witnessing cyberbullying predicting the likelihood of actively responding to cyberbullying victimization, net of the control variables.

RESULTS

Table 1 contains descriptive statistics for the sample. Two percent of respondents indicated that they would join the cyberbully by bullying the victim, and two percent also said that they would encourage or “cheer on” the cyberbully. A total of 30% of respondents reported that they would watch the cyberbullying incident, but they would not participate, while approximately 23% indicated that they would leave the online environment where the cyberbullying was taking place. Nearly 22% reported that they would object to the cyberbullying, almost 25% indicated they would try to help or befriend the victim, and approximately 13% said that they would report the cyberbullying incident to someone who could help the victim. (Table 1)

Table 1 DESCRIPTIVE STATISTICS FOR ALL VARIABLES INCLUDED IN ANALYSES				
“Normal” Responses to Cyberbullying				
	N	Mean	Std. Dev	Min-Max
Join In	248	.020	.141	0-1
Cheer on the Cyberbully	248	.020	.141	0-1

Watch or Look	248	.300	.460	0-1
Leave the Online Environment	248	.230	.424	0-1
Object to the Cyberbully	248	.220	.414	0-1
Try to Help or Befriend Victim	248	.250	.432	0-1
Report the Cyberbullying	248	.130	.340	0-1
Recoded Major Themes of Responses to Cyberbullying				
	N	Mean	Std. Dev	Min-Max
Active Encouragement (Join In, Cheer on the Cyberbully)	248	.028	.166	0-1
Passive Response (Watch or Look, Leave the Online Environment)	248	.415	.494	0-1
Active Discouragement (Object to the Cyberbully, Try to Help or Befriend Victim, Report the Cyberbullying)	248	.383	.487	0-1
Explanatory Variables				
	N	Mean	Std. Dev	Min-Max
Victim of Cyberbullying	224	.237	.426	0-1
Frequency of Witnessing Cyberbullying	248	2.12	1.17	0-5
Female (male omitted category)	248	.436	.497	0-1
Nonwhite (white omitted category)	247	.466	.500	0-1
Nontraditional Student (traditional omitted category)	243	.280	.450	0-1

In **Table 2**, we compare student characteristics and cyberbullying experiences with responses to cyberbullying using chi-square. The chi-square results show many statistically significant results associated with all three dependent variables: active encouragement, passive encouragement, and active discouragement.

Active Encouragement: We find a statistically significant relationship between the frequency of witnessing cyberbullying and active encouragement at all levels: never ($X^2 = 3.1$; $p < .05$), once/twice ($X^2 = 3.1$; $p < .05$), a few times ($X^2 = 0$; $p < .05$), many times ($X^2 = 0$; $p < .05$), and almost every day ($X^2 = 20$; $p < .05$). There is also a statistically significant relationship between gender and active encouragement: Female ($X^2 = 0$; $p < .05$) and Male ($X^2 = 5$; $p < .05$).

Passive Response: We find a statistically significant relationship between victims of cyberbullying and passive response: Yes ($X^2 = 58.8$; $p < .05$) and No ($X^2 = 37.4$; $p < .05$). Once again, we find statistically significant relationships with frequency of witnessing cyberbullying and passive response at all levels: never ($X^2 = 6.8$; $p < .05$), once/twice ($X^2 = 32$; $p < .05$), a few times ($X^2 = 38.8$; $p < .05$), many times ($X^2 = 12.6$; $p < .05$), and almost every day ($X^2 = 8.7$; $p < .05$). Lastly, there is a statistically significant relationship between type of student and passive response: traditional ($X^2 = 82$; $p < .05$) and nontraditional ($X^2 = 18$; $p < .05$).

Active Discouragement: Several statistically significant relationships are found with active discouragement. Victim of cyberbullying and active discouragement are statistically significant: Yes ($X^2 = 54.7$; $p < .05$) and No ($X^2 = 33.3$; $p < .05$). Similar to the previous models, frequency of witnessing cyberbullying and active discouragement is found to have a statistically significant relationship at all levels: never ($X^2 = 8.2$; $p < .05$), once/twice ($X^2 = 60$; $p < .05$), a few times ($X^2 = 62.5$; $p < .05$), many times ($X^2 = 52.6$; $p < .05$), and almost

every day ($X^2 = 40$; $p < .05$). Next, a statistically significant relationship is shown with race and active discouragement: Nonwhite ($X^2 = 28.7$; $p < .05$) and White ($X^2 = 47$; $p < .05$). Finally, type of student and active discouragement also had a statistically significant relationship: Traditional ($X^2 = 42.3$; $p < .05$) and Nontraditional ($X^2 = 27.9$; $p < .05$). (Table 2)

Table 2			
COMPARISONS OF STUDENT CHARACTERISTICS AND EXPERIENCES WITH CYBERBULLYING VICTIMIZATION WITH RESPONSES TO CYBERBULLYING USING CHI-SQUARE			
Victim of Cyberbullying (N = 224)			
	Active Encouragement (1) = Yes (%)	Passive Response (1) = Yes (%)	Active Discouragement (1) = Yes (%)
Yes	1.9	58.5*	54.7*
No	2.3	37.4*	33.3*
Frequency of Witnessing Cyberbullying (N=248)			
Never	3.1*	6.8*	8.2*
Once/Twice	3.1*	32.0*	60*
A few times	0*	38.8*	62.5*
Many times	0*	12.6*	52.6*
Almost every day	20*	8.7*	40*
Gender (N=248)			
Female	0*	44.4	45.4
Male	5*	39.3	32.9
Race/Ethnicity (N=247)			
Nonwhite	2.6	50.5	28.7*
White	3.0	49.5	47.0*
Type of Student (N=243)			
Traditional	3.4	82*	42.3*
Nontraditional	1.5	18*	27.9*

* $p < .05$

Table 3 shows the bivariate correlations between each of the independent variables with the three responses to cyberbullying: (1) active encouragement, (2) passive response, and (3) active discouragement.

Active Encouragement: We find that males were more likely than females to actively encourage cyberbullying ($-.150$; $p < .05$); the bivariate correlations between active encouragement and race/ethnicity, student type, and victim of cyberbullying were not statistically significant.

Passive Response: We also find that traditional students ($-.262$; $p < .001$) were more likely to have a passive response to cyberbullying compared to non-traditional students. Additionally, individuals who indicated that they had been the victim of cyberbullying were more likely to have a passive response to cyberbullying victimization. Race/ethnicity and gender were not statistically significantly correlated with passive response to cyberbullying.

Active Discouragement: Regarding students who indicated that they would actively discourage cyberbullying, traditional college students ($-.153$) were less likely to report that they would actively discourage cyberbullying victimization compared to non-traditional

students. We also find that female (.128) and nonwhite students (-.187) were more likely to indicate that they would take an active approach to deter cyberbullying compared to their male and white peers. There was also a statistically significant bivariate correlation between students who reported being the victim of cyberbullying (.187) and actively discouraging cyberbullying victimization. (Table 3)

Table 3
BIVARIATE CORRELATIONS OF EXPERIENCES WITH CYBERBULLYING VICTIMIZATION AND STUDENT CHARACTERISTICS WITH RESPONSES TO CYBERBULLYING

	Active Encouragement	Passive Response	Active Discouragement
Victim of Cyberbullying (N = 224)	-0.013	.181**	.187**
Frequency of Witnessing Cyberbullying (N = 248)	0.046	.506**	.377**
Female (male omitted category) (N = 248)	-.150*	0.052	.128*
Nonwhite (white omitted category) (N = 247)	-0.013	0.067	-.187**
Nontraditional Student (traditional omitted category) (N = 243)	-0.053	-.186**	-.132*

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

Table 4 reveals the logistic regression models of actively responding (discouraging) to cyberbullying victimization.

In Model 1, being a victim of cyberbullying and actively responding to cyberbullying victimization is statically significant indicating that at baseline victims had two times greater odds of actively responding to cyberbullying victimization ($\exp(b) = 2.42$; $p < .000$).

In Model 2, the results show that the increase in the frequency of witnessing cyberbullying led to greater odds of actively responding to cyberbullying victimization ($\exp(b) = 2.06$; $p < .000$).

In Model 3, once again, the frequency of witnessing cyberbullying led to greater odds of actively responding to cyberbullying victimization ($\exp(b) = 2.07$; $p < .000$). In addition, females had moderately greater odds of actively responding to cyberbullying victimization ($\exp(b) = 1.83$; $p < .10$). Nonwhites also showed significantly greater odds of actively responding to cyberbullying victimization ($\exp(b) = .316$; $p < .000$).

The final model, Model 4, includes all independent variables and the interaction effect of victim and witness. Victims of cyberbullying had 7 times greater odds of actively responding to cyberbullying victimization ($\exp(b) = 7.45$; $p < .05$). In addition, those who had less often witnessed cyberbullying had 2 times greater odds of actively responding to cyberbullying victimization ($\exp(b) = 2.54$; $p < .000$). Next, Females ($\exp(b) = 1.99$; $p < .05$) and Nonwhites ($\exp(b) = .300$; $p < .000$) had significantly greater odds of responding to cyberbullying victimization compared to their alternative categories. Finally, with the inclusion of the interaction effect, those who were both victims and less often witnessed cyberbullying had significantly greater odds of actively responding to cyberbullying victimization ($\exp(b) = .477$; $p < .05$). (Table 4)

Values are exponentiated β (effects on the odds); standard errors are in the parentheses below

Table 4 SUMMARY OF LOGISTIC REGRESSION RESULTS PREDICTING THE LIKELIHOOD OF ACTIVELY RESPONDING TO CYBERBULLYING VICTIMIZATION				
	Model 1	Model 2	Model 3	Model 4
	2.42***		0.988	7.45*
Victim of Cyberbullying	-0.32		-0.397	-0.987
		2.06***	2.07***	2.54***
Frequency of Witnessing Cyberbullying		-0.13	-0.159	-0.329
			1.83†	1.99*
Female (male omitted category)			-0.324	-0.329
			.316***	.300***
Nonwhite (white omitted category)			-0.336	-0.339
			0.705	0.75
Nontraditional Student (traditional omitted category)			-0.371	-0.377
				.477*
Victim X Witness (interaction effect)				-0.337
	.500***	.128***	.173***	.111***
Constant	-0.162	-0.322	-0.402	-0.47
-2 log likelihood	290.69	293.82	243.27	238.57
Chi-Square	7.66	36.29	47.38	52.07
df	1	1	5	6

N = 224

***p < .001, **p < .01, *p < .05, †p < .10

Figure 1 is simply a graphic representation of the interaction effect between the frequency of witnessing cyberbullying and being the victim of cyberbullying predicting the likelihood of actively discouraging cyberbullying. It shows that there is an interaction between the two variables and actively discouraging cyberbullying. This is important to predict to show a sequence of events between the variables. (Figure 1)

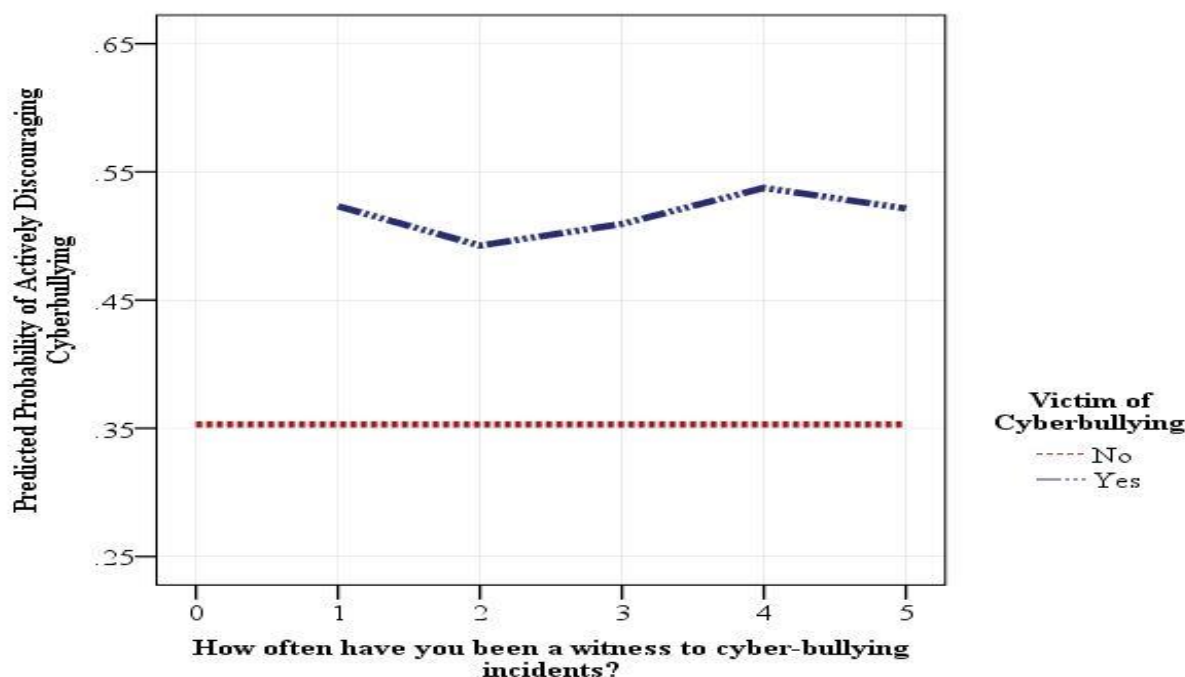


FIGURE 1
PREDICTED PROBABILITY OF ACTIVELY DISCOURAGING
CYBERBULLYING BY FREQUENCY OF WITNESSING CYBERBULLYING AND
BEING THE VICTIM OF CYBERBULLYING

DISCUSSION

Our research shows many significant findings that are somewhat consistent with previous research. We consistently found that females, Nonwhites, prior victims, less frequent witnesses, and those who were both victims of cyberbullying x less often witnessed cyberbullying are consistently more likely to actively discourage cyberbullying. Furthermore, there are significant relationships between the three main dependent variables, actively encourage, passively respond, and actively discourage with the explanatory variables. These results are consistent with prior research which show similar types of responses by bystanders (Gahagan et al., 2016; Shultz et al., 2014; Thornberg et al., 2012). In (Thornberg et al., 2012) research on bullying responses showed that the bystander would remain on the outside, reinforce the cyberbully or defend the victim. Similarly, (Shultz et al., 2014) found that bystanders either defended the victim or reinforced the cyberbully. Our study fills a gap in the literature by understanding the relationship between victims, witnesses, and their behavior towards active cyberbullying.

H₀₁: Cyberbullying bystanders who had prior experiences with cyberbullying are more likely to actively discourage cyberbullying compared to their non-victimized peers. We find this hypothesis to be validated as our data supports this statement.

H₀₂: Cyberbullying bystanders who more frequently witnessed cyberbullying would be less likely to actively discourage cyberbullying compared to their peers with less frequent exposure to cyberbullying. Our research also shows this hypothesis to be supported as our data reinforced this hypothesis. This is supported by prior research indicating that bystanders are less likely to intervene (Gahagan et al., 2016; Sobba et al., 2017; Hawkins, Pepler, & Craig, 2001).

H₀₃: The interactive effect between (1) being the victim of cyberbullying and (2) less frequent exposure to cyberbullying has a cumulative effect on the likelihood of actively discouraging cyberbullying. That is, when

students have been the victim of cyberbullying and have had less exposure to cyberbullying as a bystander, we expect that they are the most likely to actively discourage cyberbullying. This hypothesis was also supported by our data and reveals the interaction is validated.

In terms of the perspectives that are guiding our research, our results are supported by previous findings. For instance, (Hoffman, 2000) stated that individuals who have more empathy tend to feel compassion when they view others get hurt. Furthermore, (Hayashi & Tahmasbi, 2022) research on college students and cyberbullying revealed that students were more likely to intervene when they felt empathy and anticipated regret. Consistent with prior research, we believe with the support of our study that students feel empathy towards victims especially if they were prior victims themselves. In (Mehrabian & Epstein, 1972) term, affective empathy, refers to the ability to share the emotions of others. By sharing similar emotions, we expect that bystanders are more likely to likely to actively discourage cyberbullying as a result of feeling empathy.

LIMITATIONS

Our data were drawn from a convenient sample; therefore, it is not a representation of the population and cannot be generalized to other college students. In addition, some of our measures were highly correlated such as victims and witnesses. Therefore, we were unable to determine inerrant differences between the two groups. Also, we asked college students about their prior experiences with cyberbullying which could result in inaccuracies due to the longer time frame of being out of school. Even though there are limitations to our study, these shortcomings simply point to important directions for future research.

Policy Implications & Legal Ramifications

While our findings point to the idea that prior victims and those who less frequently witness cyberbullying are more likely to actively discourage cyberbullying, more research is needed regarding why college students who witness cyberbullying more often are reluctant to get involved. Part of the problem may rely on the fact that students do not know how to help the victim or are scared that they will become victims themselves.

Furthermore, it is important to point out the legal ramifications of cyberbullying so that individuals know the consequences of their actions. Cyberbullying can lead to unintended consequences including depression (Bauman et al., 2013), victims becoming bullies themselves (Mishna et al., 2012), and, even, suicidal ideation (Bauman et al., 2013). Therefore, it is critical to address legal consequences. Cyberbullying is considered a state-level offense; there are currently no federal laws on cyberbullying (Hinduja & Patchin, 2022). Oftentimes, school and university administrators develop a plan of action to handle the situation without involving law enforcement. The more severe cases of cyberbullying can lead to criminal and civil lawsuits depending on the severity of the case.

CONCLUSION

With this knowledge, schools and universities must address ways to report cyberbullying as well as proper strategies to intervene when witnessing cyberbullying incidents. Since cyberbullying can lead to deadly consequences, the educational system must get involved and provide proactive solutions for long-term results.

REFERENCE

- Barlinska, J., Szuster, A., & Winiewski, M. (2013). Cyberbullying among adolescent bystanders: Role of the communication medium, form of violence, and empathy. *Journal of Community & Applied Social Psychology*, 23(1), 37-51.
- Bauman, S., Toomey, R. B., & Walker, J. L. (2013). Associations among bullying, cyberbullying, and suicide in high school students. *Journal of adolescence*, 36(2), 341-350.
- Boulton, M. J., Trueman, M., & Flemington, I. (2002). Associations between secondary school pupils' definitions of bullying, attitudes towards bullying, and tendencies to engage in bullying: Age and sex differences. *Educational studies*, 28(4), 353-370.
- Cross, D., Lester, L., & Barnes, A. (2015). A longitudinal study of the social and emotional predictors and consequences of cyber and traditional bullying victimisation. *International journal of public health*, 60, 207-217.
- Crosslin, K., & Golman, M. (2014). "Maybe you don't want to face it"—College students' perspectives on cyberbullying. *Computers in Human Behavior*, 41, 14-20.
- DeSmet, A., Rodelli, M., Walrave, M., Soenens, B., Cardon, G., & De Bourdeaudhuij, I. (2018). Cyberbullying and traditional bullying involvement among heterosexual and non-heterosexual adolescents, and their associations with age and gender. *Computers in Human Behavior*, 83, 254-261.
- Drogin, E. Y., & Young, K. (2008). Forensic mental health aspects of adolescent "cyber bullying": A jurisprudential science perspective. *The Journal of Psychiatry & Law*, 36(4), 679-690.
- Erdur-Baker, Ö. (2010). Cyberbullying and its correlation to traditional bullying, gender and frequent and risky usage of internet-mediated communication tools. *New media & society*, 12(1), 109-125.
- Gahagan, K., Vaterlaus, J. M., & Frost, L. R. (2016). College student cyberbullying on social networking sites: Conceptualization, prevalence, and perceived bystander responsibility. *Computers in human behavior*, 55, 1097-1105.
- Gini, G., Albiero, P., Benelli, B., & Altoe, G. (2008). Determinants of adolescents' active defending and passive bystander behavior in bullying. *Journal of adolescence*, 31(1), 93-105.
- Haslam, N. (2006). Dehumanization: An integrative review. *Personality and social psychology review*, 10(3), 252-264.
- Hawkins, D.L., Pepler, D. J., & Craig, W. M. (2001). Naturalistic observations of peer interventions in bullying. *Social development*, 10(4), 512-527.
- Hayashi, Y., & Tahmasbi, N. (2022). Psychological predictors of bystanders' intention to help cyberbullying victims among college students: An application of theory of planned behavior. *Journal of interpersonal violence*, 37(13-14), NP11333-NP11357.
- Hejase, A.J. and Hejase, H.J. (2011). *Foundations of Management Information Systems*. (1st Ed.) Beirut: Sader Publishers, P. 61.
- Hejase, A.J. and Hejase, H.J. (2013). *Research Methods, A Practical Approach for Business Students*. (2nd Ed.) Philadelphia, PA: Massadir Inc., P. 220.
- Hinduja, S. & Patchin, J. (2022) State bullying Laws. Cyberbullying Research Center.
- Hinduja, S., & Patchin, J. W. (2008). Cyberbullying: An exploratory analysis of factors related to offending and victimization. *Deviant behavior*, 29(2), 129-156.
- Hinduja, S., & Patchin, J.W. (2015). *Bullying beyond the schoolyard: Preventing and responding to cyberbullying* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Hoffman, M. L. (2000). *Empathy and Moral Development: Implications for Caring and Justice*, Cambridge University Press, Cambridge, U.K..
- Hogan, R. (1969). Development of an empathy scale. *Journal of consulting and clinical psychology*, 33(3), 307.
- Joinson, A. N. (1998). Causes and effects of disinhibition on the Internet. *The psychology of the Internet*, 43-60.
- Lam, T. N., Jensen, D. B., Hovey, J. D., & Roley-Roberts, M. E. (2022). College students and cyberbullying: how social media use affects social anxiety and social comparison. *Heliyon*, 8(12).
- Li, Q. (2006). Cyberbullying in schools a research of gender differences. *School Psychology International*, 27(2), 157-170.
- Li, Q. (2010). Cyberbullying in high schools: A study of students' behaviors and beliefs about this new phenomenon. *Journal of Aggression, Maltreatment & Trauma*, 19(4), 372-392.
- MacDonald, C. D., & Roberts-Pittman, B. (2010). Cyberbullying among college students: Prevalence and demographic differences. *Procedia-Social and Behavioral Sciences*, 9, 2003-2009.
- Mehrabian, A., & Epstein, N. (1972). A measure of emotional empathy. *Journal of personality*.
- Mishna, F., Khoury-Kassabri, M., Gadalla, T., & Daciuk, J. (2012). Risk factors for involvement in cyber bullying: Victims, bullies and bully-victims. *Children and Youth Services Review*, 34(1), 63-70.

- Monks, C. P., Robinson, S., & Worlidge, P. (2012). The emergence of cyberbullying: A survey of primary school pupils' perceptions and experiences. *School Psychology International, 33*(5), 477-491.
- National Crime Prevention Council, (2007). Teens and cyberbullying.
- Olweus, D. (1993). Bullies on the playground: The role of victimization.
- Olweus, D., Limber, S., & Mihalic, S. F. (1999). Blueprints for violence prevention, book nine: Bullying prevention program. *Boulder, CO: Center for the Study and Prevention of Violence, 12*(6), 256-273.
- Patterson, L. J., Allan, A., & Cross, D. (2017). Adolescent perceptions of bystanders' responses to cyberbullying. *New media & society, 19*(3), 366-383.
- Schenk, A. M., & Fremouw, W. J. (2012). Prevalence, psychological impact, and coping of cyberbully victims among college students. *Journal of school violence, 11*(1), 21-37.
- Schoffstall, C. L., & Cohen, R. (2011). Cyber aggression: The relation between online offenders and offline social competence. *Social development, 20*(3), 587-604.
- Shultz, E., Heilman, R., & Hart, K. J. (2014). Cyber-bullying: An exploration of bystander behavior and motivation. *Cyberpsychology, 8*(4).
- Sobba, K. N., Paez, R. A., & Ten Bensel, T. (2017). Perceptions of cyberbullying: An assessment of perceived severity among college students. *TechTrends, 61*, 570-579.
- Sobba, K. N., Prochaska, B. F., Radu, M. B., Gass, W. M., & Glidden, M. D. (2019). College students' perceptions of cyberbullying on a nontraditional campus: An assessment of victims and witnesses. *International journal of law, crime and justice, 57*, 116-125.
- Spears, B. A., Taddeo, C. M., Daly, A. L., Stretton, A., & Karklins, L. T. (2015). Cyberbullying, help-seeking and mental health in young Australians: Implications for public health. *International journal of public health, 60*, 219-226.
- Thornberg, R., Tenenbaum, L., Varjas, K., Meyers, J., Jungert, T., & Vanegas, G. (2012). Bystander motivation in bullying incidents: To intervene or not to intervene?. *Western Journal of Emergency Medicine, 13*(3), 247.
- Wadian, T. W., Jones, T. L., Sonnentag, T. L., & Barnett, M. A. (2016). Cyberbullying: Adolescents' experiences, responses, and their beliefs about their parents' recommended responses. *Journal of Educational and Developmental Psychology, 6*(2), 47.
- Walker, C. M., B. R. Sockman, and S. Koehn. (2011). An exploratory study of cyberbullying with undergraduate university students.
- Wang, J., Iannotti, R. J., & Nansel, T. R. (2009). School bullying among adolescents in the United States: Physical, verbal, relational, and cyber. *Journal of Adolescent health, 45*(4), 368-375.
- Willard, N. (2004). An Educator's Guide to Cyberbullying and Cyberthreats
- Williams, K. R., & Guerra, N. G. (2007). Prevalence and predictors of internet bullying. *Journal of adolescent health, 41*(6), S14-S21.
- Zalaquett, C. P., & Chatters, S. J. (2014). Cyberbullying in college: Frequency, characteristics, and practical implications. *Sage Open, 4*(1), 2158244014526721.

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