FISEVIER

Contents lists available at ScienceDirect

Computers in Human Behavior

journal homepage: www.elsevier.com/locate/comphumbeh



Full length article

College student cyberbullying on social networking sites: Conceptualization, prevalence, and perceived bystander responsibility



Kassandra Gahagan, J. Mitchell Vaterlaus*, Libby R. Frost

College of Education, Health and Human Development, Department of Health and Human Development, Montana State University, P.O. Box 173540, Bozeman, MT 59717-3540, United States

ARTICLE INFO

Article history:
Received 16 September 2015
Received in revised form
6 November 2015
Accepted 11 November 2015
Available online xxx

Keywords: Cyberbullying College Qualitative Bystander behavior Social networking sites

ABSTRACT

The majority of research on cyberbullying has been conducted with middle school and high school students and has not focused on specific technology platforms. The current study investigated college student experiences with cyberbullying on Social Networking Sites (SNS). College students (N=196) from a northwestern university shared their conceptualizations of what cyberbullying looked like on SNS. Some college students (19%) reported that they had been bullied on SNS and 46% indicating that they had witnessed cyberbullying on SNS. The majority (61%) of college students who witnessed cyberbullying on SNS did nothing to intervene. College students were also asked about their perceived responsibility when they witnessed cyberbullying on SNS. Two diverging themes emerged that indicated some college students believed their responsibility to intervene was circumstantial, while others believed there is a constant clear level of responsibility for college student cyberbullying bystanders on SNS.

© 2015 Elsevier Ltd. All rights reserved.

1. Introduction

Cyberbullying (i.e., bullying via technology) occurs among students in higher education, but most cyberbullying research has focused on middle school and high school students (Crosslin & Golman, 2014). Walker, Sockman, and Koehn (2011) indicated "further research is needed to expand our understanding of cyberbullying at the university level" (p. 37). The emerging studies concerning cyberbullying among college students have largely focused on broad digital settings (e.g., the internet), but there is a sparsity of research focused on cyberbullying on specific technology platforms (Schultz, Heilman, & Hart, 2014). Empirical efforts have also primarily focused on the victim and the bully, but not the cyberbullying bystanders (i.e., witnesses; Schultz et al., 2014).

The current exploratory study was designed to increase understanding regarding cyberbullying among college students with a specific focus on the experience of cyberbullying via social networking sites (SNS). Qualitative methodology was employed to contribute to the notable absence in the literature regarding "actual experiences of cyberbullying" (Rafferty & VanderVen, 2014, p. 365).

E-mail addresses: kmgahagan11@gmail.com (K. Gahagan), j.vaterlaus@montana. edu (J.M. Vaterlaus), libbyfrost@me.com (L.R. Frost).

Paullet and Pinchot (2014) advocated for studying "the problem of cyberbullying more holistically" (p. 68) and consistent with this recommendation we examined direct experiences of cyberbullying victimization in addition to bystander experiences. Finally, college students' perceptions regarding their responsibility when they were bystanders to cyberbullying behaviors on SNS were also examined.

2. College students and social media

Over the last decade, the percentage of young adults ages 18 to 29-years-old who use SNS has drastically increased from only 9% in 2004 to 89% in 2014 (Duggan, Ellison, Lampe, Lenhart, & Madden, 2015). Facebook continues to be the most commonly used SNS among this age demographic with 71% using Facebook, but young adults also report using Instagram (53%) and Twitter (37%; Duggan et al., 2015). The majority of young adults (92%) also report using SNS that focus on video sharing (e.g., YouTube; Moore, 2011). According to the Pew Research Center, 52% of online adults presently use two or more SNS, which is referred to as multi-platform use (Duggan et al., 2015). The rate of multi-platform use has increased by 10% from 2013 to 2014 and is likely to continue to increase as new SNS are created.

Vaterlaus, Jones, Patten, and Cook (2015) reported that 68% of

^{*} Corresponding author.

college students (N=743) spent between one and 6 h on SNS on a weekly basis. This is a shift from a 2008 report that indicated 40% of college students (N=95) spent no time on SNS (Subrahmanyam, Reich, Waechter, & Espinoza, 2008). Unfortunately, with the increase in time spent on SNS, the rates of cyberbullying have also increased (Schultz et al., 2014). The current study focuses on cyberbullying on SNS in general and specifically via Facebook, Instagram, Twitter, and YouTube.

3. Defining cyberbullying

Frequent internet use has been associated with increased instances of cyberbullying (Balakrishnan, 2015). Cyberbullying definitions vary in research, which has resulted in researchers studying critically different phenomena using the same terminology and ultimately limiting cross-study comparisons (Tokunaga, 2010). Tokunaga (2010) synthesized 25 scholarly definitions of cyberbullying in order to create the following collaborative definition: "Any behaviour performed through electronic media by individuals or groups of individuals that repeatedly communicates hostile or aggressive messages intended to inflict harm or discomfort on others" (p. 278). However, the general public may not define cyberbullying in this way (Schultz et al., 2014). Bastiaensens et al. (2014) found that it may be especially difficult for those who witness online interactions to differentiate between cyberbullying and teasing without knowing the context of relational norms between the sender and recipient. Consequently, Shutlz et al. (2014) concluded "the definition of cyberbullying often relies on the perceptions and judgments of bystanders (observers) to the interaction to identify when the bully is asserting himself/herself over the victim and when he or she is causing intentional harm to the recipient" (para. 2).

4. Cyberbullying and college students

4.1. Prevalence

Most college students do not have a clear understanding of the term cyberbullying and view the term as "outdated" (Crosslin & Golman, 2014). Given the lack of understanding and acceptance of the term cyberbullying among college students, it is difficult to measure the prevalence of cyberbullying within this population. The prevalence rates are often inconsistent because researchers provide different definitions of cyberbullying to participants (Shultz et al., 2014), resulting in a broad range of reports regarding cyberbullying prevalence in college-aged samples. With results derived from a sample of 439 college students, Macdonald and Roberts-Pittman (2010) reported that 38% of college students knew someone who had been cyberbullied, 22% self-reported that they had been cyberbullied, and 8.6% stated that they had engaged in cyberbullying behaviors.

A few studies have included total reports of victimization, but also explored victimization on specific mediums. For example, a study with 613 college students reported that 35% of students self-reported that they were cyberbullied while in high school, but only 19% experienced cyberbullying while in college (Zalaquett & Chatters, 2014). Victims of cyberbullying indicated that their victimization occurred through text messaging (46.1%), email (43.5%) and websites (36.2%). Walker et al. (2011) surveyed 120 undergraduate students and identified that 54% of participants knew someone who had been cyberbullied and 11% had been cyberbullied. Additionally, 56% of college students reported that they knew someone who had been cyberbullied on Facebook, which was higher than reported cyberbullying on the other eight platforms (i.e., email, cell phones, web cam, instant messaging,

MySpace, Blogging, Twitter, and chat rooms) they were asked about.

Other studies have found cyberbullying prevalence may be difficult to accurately ascertain, as cybervictimization is not always reported. Paullet and Pinchot (2014) found most participants told a friend about the cyberbullying, but did not report it to an adult or an authority. The stigma of cyberbullying in college contributes to students avoiding the problem even though most admit it needs more attention. This has also resulted in cybervictims having less desire to talk to parents or friends about cyberbullying because they fear they will be seen as childish (Crosslin & Golman, 2014).

4.2. Motivations and consequences

Research on cyberbullying among college students has primarily focused on the consequences of cyberbullying for cyberbullies and cybervictims. Schenk and Fremouw (2012) reported college-aged victims of cyberbullying experienced significantly higher rates of suicidal thoughts and behaviors as well as higher rates of depression, anxiety, and paranoia. Interestingly, college students who cyberbullied also have reported experiencing increased emotional distress, suicidal behaviors, and higher rates of aggression than their peers (Schenk, Fremouw, & Keelan, 2013). Motivations to engage in cyberbullying have also been investigated among college students (Doane, Pearson, & Kelley, 2014; Rafferty & VanderVen, 2014). Rafferty and VanderVen (2014) identified three main motivations for cyberbullying among college students (N = 221), which included: (a) cyber-sanctioning: bullies intent was to make the victim ashamed of his or her actions. (b) power struggles: bully in an attempt to hurt, humiliate, or influence another, and (c) entertainment: to provoke or get an emotional response from the victim for personal enjoyment. Doane et al. (2014) reported that cyberbullying behaviors increased when college students perceived that their peers would respond favorably to them or if they thought their peers join in on the cyberbullying.

4.3. Bystander characteristics and behaviors

Bullying has been traditionally characterized as a group process involving a bully, a victim, and witnesses or bystanders (Gini, Albiero, Benelli, & Altoe, 2008). Bystanders can respond to bullying by remaining an outsider, assisting or reinforcing the bully, or supporting or defending the victim (Bastiaensens et al., 2014; Thornberg et al., 2012). In traditional (face-to-face) bullying, bystanders often decide to respond to the bullying based on their definition and evaluation of the situation, the social context, and their own personal characteristics (Thornberg et al., 2012). Their decision to respond may also be influenced by the audience, others' actions or non-actions, being blocked by others' actions, or diffusion of responsibility (Latane & Darley, 1970).

Characteristics are similar among bystanders in face-to-face and cyberbullying situations, but technology allows for increased accessibility, anonymity, and autonomy (Wong-Lo & Bullock, 2014). In traditional bullying, bystanders are bound by their immediate environment to decide and react to the incident in public. The digital environment allows bystanders the opportunity to decide on their reaction in private and to access or share the bullying with the click of a finger (Wong-Lo & Bullock, 2014). The anonymity of the internet creates a disinhibition characterized by loss of self-control and a lack of restraint in social interactions (Barlińska, Szuster, & Winiewski, 2013). It may be that SNS that promote or allow for more anonymity also have higher rates of cyberbullying reports.

Bystanders can respond to cyberbullying situations with positive (defending) and negative (reinforcing) behaviors (Shultz et al.,

2014). Positive bystander behaviors included defending the victim and confronting the bully and/or comforting and supporting the victim. Negative behaviors in a college student sample included joining in with the bully or forwarding or sharing the text or pictures with others (Shultz et al., 2014). Negative bystander behaviors have been found to be more likely in private digital interactions when compared to face-to-face public interactions.

Previously identified motivations among adolescent cyberbullying bystanders to defend or support the victim have included a bystander's sense of responsibility to help (i.e. parents or teachers expected them to; the victim was a close friend) and/or having an emotional response to the cyberbullying (DeSmet et al., 2014; Macháčková, Dedkova, Sevcikova, & Cerna, 2013). American adolescent cyberbullying bystanders (9–15 years old; N = 30) were motivated to respond by interpretations of the level of harm, emotional, reactions, moral evaluation, and their belief that they could help improve the outcome (Thornberg et al., 2012). Similarly, in a study with Flemish adolescents (9–16 years old; N = 2333), cyberbullying bystanders were unmotivated to act if they did not know the victim, lacked the knowledge or skills to help, feared being bullied themselves, or could not assess the timing or severity of the situation (Van Cleemput, Vandebosch, & Pabian, 2014). The adolescent bystanders that did not intervene also reported moral disengagement from the situation, which was justified by diffusion or displacement of responsibility, blaming the victim, and distortion of consequences (Van Cleemput et al., 2014).

The majority of studies focusing on cyberbullying bystander behaviors have focused on children and adolescents, while there is limited information about college student bystanders (Shultz et al., 2014). One study recruited college students (N=149) to read through a cyberbullying simulation on Facebook and then asked how they would respond if they were a part of the conversation (Shultz et al., 2014). Overall, less than half of the college students reported that they would engage in a positive bystander behavior to support the victim. College students explained that they did not respond because they did not want to get involved. Additional research is needed to understand bystander motivations and behaviors among college students.

5. Purpose of the current study

Presently, most research on cyberbullying among college students focuses on characteristics of cyberbullies (Gibb & Devereux, 2014), the prevalence of cyberbullying (Macdonald & Roberts-Pittman, 2010), and the negative outcomes for both victims and cyberbullies (Bonanno & Hymel, 2013). Few studies have focused on cyberbullying occurrences on specific platforms (Shultz et al., 2014). Social networking sites are used by the vast majority of young adults (Duggan et al., 2015) and more research is needed regarding cyberbullying on SNS (Shultz et al., 2014). The purpose of the current study was to understand college students' experiences relating to cyberbullying on SNS. The following research questions were developed to guide this study on cyberbullying and bystander behavior:

Research Question 1: How do college students conceptualize cyberbullying via SNS?

Research Question 2: Are there differences in college students' self-reports of perpetrating bullying and cybervicitmization on Facebook, Instagram, Twitter, and YouTube?

Research Question 3: What is the frequency of college students witnessing cyberbullying or being cybervictimized on SNS and how have college students responded to each situation?

Research Question 4: What do college students perceive as responsibilities of bystanders when they witness cyberbullying on SNS?

6. Methods

6.1. Sample

The sample included 196 college students (n=155 females, n=41 males; mean age =21 years old). The participants reported their class standing as follows: 29% freshmen, 21% sophomore, 17% junior, and 33% senior. The majority of participants was Caucasian (89%) and reported a single marital status (86%), while fewer reported that they were married (4%) or cohabiting (10%). Students reported living off campus in single student housing (56%), on campus in single student housing (25%), with their romantic partner (16%), and with their parents (3%).

6.2. Procedures and data analysis

Students (N = 274) in five undergraduate classes were invited to participate in an Institutional Review Board approved study on social media and human well-being. Extra credit was used to incentivize participation. Students were provided with a link to the online survey that included both closed and open-ended questions, which was hosted on a secure website. In order to document participation, the final page of the survey directed students to a separate survey to report their names and class information. Names were never associated with the data and were deleted after they were sent to the instructors of participating courses. A total of 228 students completed the survey (83% response rate). Sample inclusion required that students be between the ages of 18–25 and 32 students were outside the age range (mean age = 34 years old).

Research question 1. The first research question sought to identify how college students conceptualized cyberbullying on SNS. Students were specifically asked to "Describe what bullying or cyberbullying looks like on social networking sites." Researchers elected to use a conventional content analysis approach because of the varied definitions of cyberbullying (Hsieh & Shannon, 2005). Two researchers independently immersed themselves in the data and identified words and phrases that were representative of "key thoughts" (Hsieh & Shannon, 2005, p. 1279). The two researchers met together and agreed upon 16 codes, then independently coded the data (98% inter-coder agreement) line-by-line. Disagreements were resolved through discussion between the two researchers and consulting the original data. Finally, two researchers identified commonalities among the codes resulting in three "key categories" that accurately represented participant responses and were used to present the results.

Research question 2. To assess the potential differences of reported bullying and victimization on different SNS, participants responded to eight likert scale (1-Not like me at all to 7-Just like me) items. The first four items asked college students if they had participated in cyberbullying behaviors (i.e., posting mean, negative, or hurtful content) on (a) Facebook, (b) Instagram, (c) Twitter, and (d) YouTube. The other four items asked participants to respond on the same likert scale to the statement "I have been bullied on ..." each of the four aforementioned SNS. Sample sizes varied because participants were only directed to the items if they first reported that they used the SNS (e.g., if a participant reported that they used Twitter they were asked about bullying and being bullied on Twitter, if they did not have Twitter they were not asked the questions). Because there were different sample sizes for each item a multiple comparison approach was selected—using paired t

tests to compare differences between bullying and victimization on SNS.

Research question 3. This research question evaluated the frequency of being victimized and/or witnessing cyberbullying online. Sample sizes varied for both items because only those who had personal experience responded to the open-ended item. First. students were directed to an item that asked. "Have you ever been bullied on a SNS?" and if they answered in the affirmative they were directed to an open-ended item that asked, "How did you respond when the bullying occurred? Please explain." Second, students responded to an item that asked, "Have you ever witnessed someone being bullied on a SNS?" and if they answered yes they were directed to an open-ended item that asked, "How did you respond when you witnessed the bullying? Please explain." Percentages were used to highlight the number of cybervictims and bystanders of cyberbullying. Consistent with research question one, a conventional content analysis approach was selected (Hsieh & Shannon, 2005) and the same analysis procedures were implemented. For the cybervictim responses seven codes were identified (93% inter-coder agreement), which were refined into two key categories for reporting results. Among the bystander responses six codes were identified (89% inter-coder agreement) and three key categories emerged that are used to present the results.

Research question 4. The final research question used responses to an open-ended item that asked "What do you think a person's responsibility is when they witness someone being bullied on a SNS?" A qualitative analysis approach described by Bogdan and Biklen (2007) was used to analyze college student's responses. First, two researchers independently read the data several times to gain a sense of the totality of the data and identified words and phrases that were reflective of more than one thought. The two researchers met together and through discussion identified two major themes. Data was independently coded into these themes (90% inter-coder agreement). Coding disagreements were resolved through discussion between the two researchers.

7. Results

7.1. Research question 1

College students (n=196) detailed their conceptualization of what cyberbullying looks like on SNS. Table 1 includes the 16 coding categories that were the basis of the three major themes. Themes are reported in order of prevalence and ages of participants are presented parenthetically to contextualize the results.

Recognizing cyberbullying on SNS. Participants used negative words such as "mean," "nasty," "hateful," "rude," "inappropriate," and "foul" in their descriptions of cyberbullying on SNS. Further, cyberbullying was also described in terms of posting content without permission. For example, one college student (female, 20) defined cyberbullying as, "Posting secret videos of people changing or something." According to participants, this degrading or private content could be disseminated by cyberbullies in comments (62%), posts (17%), photos (11%), and/or messages (10%) on SNS.

Respondents conceptualized cyberbullying as both a private and public phenomenon. For instance, a college student (female, 20) shared that cyberbullying is "negative, nasty comments publicly displayed" (female, 19). Representing the general consensus on the private nature a cyberbullying, a college student explained (male, 21), "[cyberbullying] typically looks like negative comments or messages. Mostly messages, people don't have the balls to call people out in public" (male, 21). A few participants also indicated that cyberbullying is a frequent process— "many deal with that daily" (female, 22).

Motivations behind cyberbullying. Participants reported that

cyberbullying could be an intentional or unintentional process. Intentional cyberbullying consists of negative remarks made either publically or privately towards a victim with the intention of causing them "embarrassment," "harm," or "pain." This can involve intentionally "snubbing" someone or "leaving people out." One participant (male, 21) elaborated, "[Cyberbullying involves] commenting on photos or posts rudely or with the intention of getting a reaction out of someone." Another college student (female, 23) reiterated this, "When I think of cyberbullying, I think of extremely cruel, emotionally driven comments posted in the hopes of hurting another person." Intentional cyberbullying was presented as a way for the bully to gain power or feel like they were part of a group, aided by the anonymity afforded by social media. A small number (n=9) indicated that the cyberbullying was not only intentional, but also justified because the victim provoked the behavior.

In contrast, unintentional cyberbullying consists of remarks that are made with the intent of being "humorous," but come across as offensive—"Things that are meant as funny, but are actually hurtful" (female, 25). Further, respondents described how unintentional cyberbullying could be directed at specific people or could be offensive to a group of people. For example, a college student explained (female, 19), "[Cyberbullying can be] pictures posted that people don't agree with, for example, hunting; when they post those pictures, a lot of people get threats."

Unaware of cyberbullying. Although only a few, some participants reported they had never witnessed cyberbullying on SNS. They further indicated they knew it happened, but are unsure of how to define it due to their lack of exposure to it. Summarizing the general sentiment of these participants a college student (female, 22) shared, "I have never witnessed cyberbullying or have been cyberbullied—so I have no idea. I do not doubt that it happens it just has not obviously happened in my life."

7.2. Research question 2

Respondents' means of self-reported perpetration of bullying on Facebook, Instagram, Twitter, and YouTube were small (see Table 2). Table 2 provides the comparisons between the different SNS. Participants were significantly more likely to report they had bullied other people on Twitter (m=2.05, sd=1.60) when compared to Facebook (m=1.46, sd=1.04); t (36) = 2.44, p=.020. The same pattern emerged with higher reports of bullying on Twitter (m=1.97, sd=1.64) when compared to Instagram (m=1.26, sd=.89); t (34) = 2.92, p=.006 and when Twitter (m=1.48, sd=.21) was compared with YouTube (m=1.04, d=1.48); t (22) = 2.20, p=.006.

Table 3 provides participants' reports of being cybervictimized on Facebook, Instagram, Twitter, and YouTube. The largest identified significant differences related to higher incidences of victimization on Facebook. Participants reported that they had been bullied more on Facebook (m=2.16, sd=1.76) when compared to Instagram (m=1.33, sd=.87); t(121)=5.74, p=.000. Also, reports of being bullied on YouTube (m=1.13, sd=.47) were significantly less than reports of being bullied on Facebook (m=2.18, sd=1.85); t(97)=5.69, p=.000.

7.3. Research question 3

College students were asked if they had experienced cyberbullying on any SNS and then to describe how they responded to the situation. Also, participants who had witnessed cyberbullying on any SNS were asked how they responded when they witnessed the bullying. In this section the responses to being cyberbullied are covered first, followed by a summary of responses related to witnessing cyberbullying on SNS.

Table 1Conceptualizing cyberbullying on social networking sites: results from a qualitative content analysis.

Content area	Number of participant responses*	Example
Theme 1 Recognizing C	yberbullying on Social	Media (n = 145)
Negative words	131	"Name calling, saying rude or inappropriate things to others." (female, 23)
Messages	12	"Any negativity can be seen as bullying. There are so many ways that people are attacked, especially when someone sends a personal message to bully them." (male, 21)
Photos	11	"Photos that are hurtful or harmful to ones well-being." (female, 24)
Comments	69	"Negative, derogatory comments on posts or pictures." (male, 19)
Posts	19	"Something as little as a mean post. "(female, 20)
Posting content without permission	5	"People posting pics of someone without getting permission." (female, 21)
Continual	11	"Continuously posting or messaging people when they have been asked to be left alone."(female, 19)
Public	46	"Posting mean or hurtful comments about someone." (male, 20)
Private	27	"Messaging mean or negative messages to other people." (female, 21)
Theme 2 Motivations Bo	ehind Cyberbullying (n	= 72)
Intentional	28	"I see cyberbullying as any video, photo, post, etc. added without the permission of the individual, with the intent to hurt and harm them." (female, 22)
Unintentional	4	"It comes off as a joke usually, but then people get their feelings hurt."(female, 19)
Gang up	8	"Usually a ton of people gang up on one person usually for posting a picture that may be a bit risky or show a little too much skin." (female, 21)
Gain Power	6	"Making jokes or even engaging in sarcasm about someone or at their expense in order to gain power or status over them." (female, 22)
Anonymous	11	"When people comment mean things that they would not normally say in person because they have the safety of a computer screen between them and the person they are bullying. There are a lot of mean bullying comments on YouTube videos that are so mean I cannot believe anyone would say them even if it was to a total stranger. It's terrible!" (female, 22)
Victim Blaming	8	"I think there is no unreasonable bully on social media. There must be something wrong with the one who is being bullied on social media. If you were not so actively showing your opinion, no one would be interested in you or bully you." (female, 24)
Theme 3 Unaware of cy	berbullying ($n = 19$)	
Never seen it or Don't know	19	"I wouldn't know. I know it's there, but I don't pay attention to it." (female, 23)

Note. *Total responses exceed sample size because coding was done line-by-line. Some participant complete responses were reflective of more than one coding area.

Table 2Paired t tests comparing college student reports of cybervictimizing others on four social networking platforms.

	n	m	sd	t	d
Facebook × Instagram					
Facebook	122	1.41	.92	.73	.056
Instagram	122	1.36	.87		
Facebook × Twi	tter				
Facebook	37	1.46	1.04	2.44*	.437
Twitter	37	2.05	1.60		
Facebook × You	Tube				
Facebook	99	1.44	.90	2.84*	.331
YouTube	99	1.18	.65		
Instagram \times Tw	ritter				
Instagram	35	1.26	.89	2.92^{*}	.538
Twitter	35	1.97	1.64		
Instagram × YouTube					
Instagram	62	1.37	.83	2.84*	.323
YouTube	62	1.13	.64		
YouTube × Twitter					
YouTube	23	1.04	.21	2.20^{*}	.615
Twitter	23	1.48	.99		

^{*}p < .05.

Responses to being cyberbullied. In total, 37 participants reported that they had been cyberbullied on SNS. Table 4 includes the codes that compose the two themes that represent how the victims responded to the experience. Participants specifically addressed the treatment of the cyberbully and self-care processes.

Treatment of cyberbully. Respondents who experienced cyberbullying largely focused their reactions on how to treat the cyberbully. Generally, participants focused on getting rid of the negativity by "blocking" the bully, "ignoring" the content, taking a hiatus from the SNS, or "deleting" the content. One college student (female, 22) shared:

Table 3Paired t tests comparing college student reports of being cybervictimized on four social networking platforms.

	n	m	sd	t	d
Facebook × Instagram					
Facebook	122	2.16	1.76	5.74***	.600
Instagram	122	1.33	.87		
Facebook × Twi	tter				
Facebook	37	2.73	2.17	2.63*	.453
Twitter	37	1.84	1.74		
Facebook × You	Tube				
Facebook	98	2.18	1.85	5.69***	.757
YouTube	98	1.13	.47		
Instagram \times Tw	itter				
Instagram	35	1.17	.71	2.43*	.461
Twitter	35	1.77	1.70		
Instagram × YouTube					
Instagram	62	1.34	.97	2.45*	.347
YouTube	62	1.08	.42		
YouTube × Twitter					
YouTube	23	1.00	.00	1.78	.523
Twitter	23	1.52	1.41		

p < .05, ***p < .000.

I actually stopped using Facebook for a whole month to get away from the negativity that it was causing in my life. Once I got back on Facebook, I hid those people from my timeline so I wouldn't have to see or deal with them. I thought that was polite way of dealing with it and not de-friending them.

Participants commonly talked about how blocking or ignoring the content could diffuse the situation. In contrast, some participants directly confronted the cyberbully—"I commented and told them to take to take [the content] down" (female, 23). Direct

 Table 4

 Qualitative content analysis: college student responses to being cybervictimized on social networking sites.

Content area	Number of participant responses*	Example
Theme 1 Treatment	of Cyberbully $(n = 30)$	
Confronted the Cyberbully	9	"Someone made a really mean/hateful post about me on Facebook and I asked him to take it down and he never did" (female, 21)
Supported the Cyberbully	1	"If its someone I know I do my best to support them and get rid of the negativity" (female, 21)
Blocked the Cyberbully	8	"I blocked that person" (female, 25)
Ignored it/deleted it	15	"I either say 'okay.' or I ignore it. It's just someone trying to be tough through a keyboard. I'd respond more in person if people said stuff in person." (male, 22)
Reciprocated with negativity	6	"I asked the person if they thought they were so tough if they wanted to meet in person, they said sure, and I kicked the shit out of them." (male, 20)
Theme 2 Self-Care (1	n = 15)	
Sought Social Support	15	"I did talk to my close friend for advice and support." (female, 23)
Secrecy	4	"It was just small petty stuff that didn't really affect me so I never felt the need to talk to anyone about it." (female, 19)

Note. *Total responses exceed sample size because coding was done line-by-line. Some participant complete responses were reflective of more than one coding area.

Table 5Responses to witnessing cybervictimizization on social networking sites.

Content area	Number of participal responses*	nt Example			
Theme 1 No Response to Cy	Theme 1 No Response to Cyberbully or Victim ($n = 72$)				
Assessed responsibility and did not intervene	28	"I didn't know the people and didn't want to get involved in something that could potentially bring me into it" (female, 21)			
Ignored it	10	"I usually just unfollow the post because I don't want to see anyone getting bullied." (female, 21)			
Did nothing	26	"I saw, I got off of the internet, and I got on with my life." (female, 25)			
Emotional Reaction	8	"I get angry and sad for the person being bullied." (female, 20)			
Theme 2 Confronting the Cy	berbully $(n=28)$				
Confronted the cyberbully	28	"I told the [cyberbully] that the things they are posting could potentially be taken the wrong way and negatively influence the person they are talking to. It is unfair to assume things about other people you don't know." (female, 20)			
Theme 3 Supporting the Vic	etim (n = 17)				
Supported the victim	17	"Supported the person being bullied. I have zero tolerance for that stuff." (female, 25)			

Note. *Total responses exceed sample size because coding was done line-by-line. Some participant complete responses were reflective of more than one coding area.

confrontation occurred when the victim had a personal relationship with the bully. The direct confrontation sometimes led to reciprocating with negativity toward the bully. A college student (female, 19) explained that when she was bullied by her friend, "I just told my friend she was being a bitch and the situation was resolved."

Self-care. After experiencing cyberbullying on SNS, victims discussed how they either sought social support or kept it a secret. The decision to seek support or maintain secrecy was motivated and determined by what the victim reasoned would be best for self-preservation. A college student (female, 19) disclosed, "I didn't tell anyone because I didn't want anyone else getting involved." When participants elected to seek support they reported reaching out to "friends," "parents," and in some instances "school administrators." For example, a cybervictim (female, 19) explained, "I talked to my parents about the situation and I also had support from my friends. The second time around [experiencing cyberbullying] I talked to my parents and we talked to the school."

Responses to witnessing cybervictimization. Ninety college students reported that they had been witnesses to cyberbullying on SNS. Table 5 includes the three themes that emerged through qualitative analysis. Cyberbullying bystanders' responses included (a) no response to the cybervictim or cyberbully, (b) confronting the cyberbully, and (c) providing support to the victim.

No response to cyberbully or victim. The majority of participants who witnessed cyberbullying on a SNS admitted that they had an emotional response (e.g., "get angry for the victim," "feel bad," "thought to myself how terrible"), but then did nothing to confront

the cyberbully or victim. One college student (female, 19) disclosed, "I am guilty of just witnessing the injustice, forming my own opinion in my head, but then not doing anything about [the cyberbullying]." Respondents often justified not intervening by explaining that it was not their responsibility to be involved, they did not want to escalate the situation, and that if the bullying was occurring in person (rather than on SNS) they would get involved.

This justification process led some participants to consider and report on how they assessed their responsibility for intervening when they witnessed cyberbullying. The self-assessment process evaluated the severity of the cyberbullying, their knowledge of how to respond or what to do, and the closeness in their relationship with the victim. For instance, a participant (male, 19) detailed:

I have never witnessed any extreme bullying cases online, but I have definitely witnessed many rude, nasty, and unnecessary comments. I have never reported these cases to anyone. I don't know what the right thing to do is in a situation like this, especially when it involves complete strangers. If I ever saw a case of bullying that was severe, I would attempt to report it to somebody.

Another respondent (female, 22) echoed this self-assessment process, ultimately deciding that it was not her responsibility to intervene. She explained, "I did not know the person well enough and I did nothing because there is not much you can do in that situation besides hope the person being bullied knows to block the bully."

Confronting the cyberbully. Participants who witnessed cyberbullying reported confronting the cyberbully privately, publically, or in person. When confrontation occurred privately the witness privately "messaged the person doing the bullying." Public confrontations with the cyberbully took place through commenting on the social media posts asking them to remove their post or challenging their negative behavior. One college student (male, 20) stated that when he witnessed cyberbullying he "posted a comment asking if it was necessary to say mean things." This public confrontation occurred when the witness knew the cyberbully or if the cyberbully was a stranger. For example, a respondent (female, 23) stated, "I commented back to the asshole calling them out and making them feel stupid for being such a jerk to (in lots of cases), complete strangers." Finally, a participant (female, 20) explained how "in person" confrontation of the cyberbully occurred: "I talked to them in person about 'that was not ok." In each of these situations young adults described confronting the cyberbully in an attempt to stop the bullying.

Supporting the victim. Some participants who witnessed cyberbullying articulated the importance of providing support for the victim. One female (23) stated, "I assured my friend it wasn't her problem. That person had an issue—it was their problem. I told her not to take it too seriously and that [the bully] was a coward." Similarly, a male (20) participant shared, "I usually will text the friend and see if they were really hurt by it or not." Respondents described a responsibility to make sure that the victim was not "too hurt." They commonly acknowledged the dangers of cyberbullying and the potential risks for cybervictims. Summarizing these participants' general sentiment, a college student (male, 20) concluded that it was his responsibility to provide support for the victim because "cyberbullying can be bad and causes suicide."

7.4. Research question 4

Participants (n=185) reported their perceptions regarding the responsibility of cyberbullying bystanders on SNS. Two themes were identified through qualitative thematic analysis (Bogdan & Biklen, 2007). First, respondents (70%) explained that the responsibility associated with witnessing cyberbullying on SNS depended on an array of circumstances. Secondly, participants (30%) indicated the responsibility to respond to any witnessed cyberbullying on SNS is consistent for all bystanders, regardless of the circumstances.

Circumstantial responsibility. Participants' evaluated the responsibility associated with witnessing cyberbullying on a case-bycase basis. The circumstances related to personal responsibility assessment included college students' (a) personal connection to the cybervictim, (b) personal morals regarding cyberbullying, and (c) personal capabilities of helping the cybervictim. Participants explained that if there was a personal relationship between the cybervictim and the bystander then the bystander has an increased responsibility to intervene. A college student (female, 20) elaborated:

I believe if the person knows the person being bullied, it is their responsibility to provide them with support by asking if they need to talk. I do not think it is anyone else's responsibility to get involved in any other way besides maybe contacting some sort of authority.

Participants reported that responsibility and decisions to act were influenced by emotional reactions, level of comfort, and moral convictions. Two college students articulated this point when they said, "I think if you feel strongly enough about the issue [of cyberbullying] then you should speak up" (female, 20) and "If the

[bystander] is comfortable maybe step in. This is because bullying is not acceptable, even cyberbullying. We have a duty to step in and stop it" (male, 21). Finally, the capability of the bystander to know how to respond and have the confidence to do so—"If the [bystander] is brave enough, they could 'call out' the person who commented the hurtful comment."

Clear level of responsibility. Some participants (30%) described that a bystander's responsibility after witnessing cyberbullying was clear and straightforward. Of these straightforward responses, 90% advocated for a responsibility to act while 10% declared that the cyberbullying bystander had no responsibility to act whatsoever. Participants who believed it was the responsibility of a bystander "to do something about [the cyberbullying]" (male, 20) indicated that a bystander should confront the bully directly—"stand up to the bully" (female, 19), support the victim—"you should directly contact [the victim] and ask how they are" (female, 22), and finally report the bullying—"report the bully to the operators of the social networking sites" (female, 22). In contrast, some participants explained that a cyberbully bystander had "no responsibility" (female, 24) and should "just ignore [the bullying] and move on to the real world" (male, 23).

8. Discussion

The current study aimed at identifying the experience of cyberbullying on SNS among college students. Participants reported that cyberbullying does occur on SNS and they provided descriptions of what cyberbullying on SNS looks like. College students who had experienced cyberbullying or had witnessed someone being cyberbullied on SNS described how they responded to the situation. Finally, participants shared their perceptions regarding a bystander's responsibility when they witness cyberbullying on SNS.

8.1. Conceptualization of cyberbullying on SNS

Tokunaga (2010) indicated that several definitions of cyberbullying have been used in empirical investigations. After reviewing several studies Tokunaga proposed the following definition: "Any behaviour performed through electronic media by individuals or groups of individuals that repeatedly communicates hostile or aggressive messages intended to inflict harm or discomfort on others" (p. 278). Participants' conceptualizations of cyberbullying on SNS in this study were largely consistent with this definition. College students in this study used several negative descriptive words to indicate that cyberbullying messages were "hostile or aggressive." The "any behavior" portion of the definition is inclusive of college students' reports of cyberbullying occurring in both public versus private methods (e.g., private messages, posting pictures, commenting, etc.) and that posting content without permission on SNS is also evidence of cyberbullying. Further, a larger portion of college students indicated that cyberbullying was an intentional behavior, but a few indicated that it could be unintentional (e.g., humor taken the wrong way). Diverging from Tokunaga's (2010) definition, only a small portion of participants conceptualized cyberbullying on SNS as a continual or repeated event, implying that cyberbullying on SNS may be inclusive of instances of one-time cybervictimization. Crosslin and Golman (2014) reported that college students do not have a clear understanding of cyberbullying and there was a small portion of participants in this study who echoed this sentiment.

8.2. Cyberbullying: perpetration and victimization on SNS

As college students have increased their use of SNS,

cyberbullying has concurrently grown as an area of concern in society (Crosslin & Golman, 2014). College students in this study self-reported more perpetration of cyberbullying on Twitter when compared to Facebook, Instagram, and YouTube. Twitter is not the most used SNS among young adults—less than half (37%) of young adults report using Twitter (Duggan et al., 2015). Xu, Jun, Zhu, and Bellmore (2012) reported that thousands of bullying (i.e., people report about bullying, accuse people of bullying, talk about their own experience with bullying, and directly cyberbully) themed tweets (i.e., 140 character post on Twitter) are posted daily on Twitter. Twitter as a platform for cyberbullying among college students warrants additional research attention.

In terms of participants' reports of victimizations on specific SNS, results indicated that more college students reported that they had experienced cyberbullying on Facebook when compared to Instagram, Facebook, and YouTube. In Walker's et al. (2011) study, college students reported knowing more people who had been bullied on Facebook when compared to a variety of other technology platforms. Facebook is the most utilized SNS by young adults (Duggan et al., 2015) and higher use may be related to higher incidences of cyberbullying.

College students in this study were also asked to report if they had been cyberbullied on any SNS and then to explain how they responded to the experience. In total, 19% of participants had been bullied on a SNS and this percentage was similar to previous reports of 19%-22% self-reported cybervictimization among college students (Macdonald & Roberts-Pittman, 2010; Zalaquett & Chatters, 2014). Victims most often discussed their treatment of the bully. Treatment varied from blocking the bully on the SNS, confronting the bully directly and asking them to remove content, and taking a hiatus from the SNS as not to cause more problems by blocking or defriending the bully. Previous research has indicated that there is a stigma associated with reporting cyberbullying among college students (Crosslin & Golman, 2014). Participants in this study indicated that they made the decision to reach out to someone based on how it would influence their self-preservation. Some thought getting more people involved would complicate the situation, while others reached out to friends, family, and school administrators for support. Additional, research is needed to explore how these approaches influence outcomes for the victim of cyberbullying.

8.3. Cyberbullying bystanders on SNS

Approximately half (46%) of college students in this sample had witnessed someone who had been bullied on a SNS. The majority of participants who witnessed cyberbullying in this study reported that they did not intervene, which is consistent with Shultz et al.'s (2014) study regarding college student cyberbullying bystander responses. Consistent with research on cyberbullying bystander behavior among adolescents (DeSmet et al., 2014; Macháčková et al., 2013; Thornberg et al., 2012), college student bystanders assessed their responsibility to respond in terms of (a) the severity of the bullying, (b) their relationship with the victim, and (d) their knowledge of how to respond. These components reemerged when college students were asked to explain the responsibility of a cyberbullying bystander with the addition of considering the bystanders personal values relating to cyberbullying. This assessment process was used by college students to justify their lack of involvement when they witnessed the cyberbullying.

A smaller portion of the college students who witnessed cyberbullying described engaging in positive cyberbullying bystander behaviors (Shultz et al., 2014) by confronting the bully or supporting the victim. Participants indicated that confronting the cyberbully could occur in private, public, and in person. A minority

of college students in this study reported that there is clear responsibility for a bystander to intervene using positive bystander behaviors, while an even smaller portion of the sample stated that cyberbullying bystanders have no responsibility at all.

9. Limitations and conclusions

The current study was not without limitations; the predominately Caucasian and female sample from one university limits the generalizability of the results. University students from other regions and from different ethnicities may have diverse experiences with cyberbullying victimization and bystander behavior on SNS. However, this study contributes to the literature the much needed college student descriptions of actual experiences (Rafferty & VanderVen, 2014) with the phenomenon of cyberbullying on SNS. Participants indicated in this study that cyberbullying does occur on SNS. Unique to this study was a more holistic approach to studying cyberbullying (Paullet & Pinchot, 2014)—investigating both victimization and bystander reports. Few studies have investigated cyberbullying bystander behavior, and the current study indicated that many college students who witnessed cyberbullying on SNS did nothing to intervene. It appears that there is ambiguity (or flexibility) in cyberbullying bystander responsibility on SNS. When college students talked about how they assessed their responsibility as a bystander they reported considering how they could respond and their capability to respond. It seems logical to empirically pursue successful ways bystanders could respond to cyberbullying on SNS and then identify ways to educationally raise awareness and skills for college students who may become bystanders (increasing capability). As a beginning point, we suggest conducting research studies identifying how college students have successfully navigated the experience of being cyberbullied. These studies should take a holistic approach, collecting information from the cyberbully victim, but also from those that also aided the victim in successfully coping with the victimization. This may include bystanders, college administrators, and family. This could highlight existing resources and methods that are beneficial for victims and potentially identify the appropriate role of bystanders and institutions.

References

Balakrishnan, V. (2015). Cyberbullying among young adults in Malaysia: the role of gender, age, and internet frequency. *Computers in Human Behavior*, 46, 149–157. http://dx.doi.org/10.1016/j.chb.2015.01.021.

Barlińska, 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. http:// dx.doi.org/10.1002/casp.2137.

Bastiaensens, S., Vandebosch, H., Poels, K., Van Cleemput, K., DeSmet, A., & De Bourdeaudhuij, I. (2014). Cyberbullying on social network sites. An experimental study into bystanders' behavioural intentions to help the victim or reinforce the bully. *Computers in Human Behavior*, 31, 259–271. http://dx.doi.org/10.1016/j.chb.2013.10.036.

Bogdan, R. C., & Biklen, S. K. (2007). *Qualitative research for education*. Boston: Allyn and Bacon.

Bonanno, R. A., & Hymel, S. (2013). Cyber bullying and internalizing difficulties: above and beyond the impact of traditional forms of bullying. *Journal of Youth and Adolescence*, 42(5), 685–697. http://dx.doi.org/10.1007/s10964-013-9937-1.

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. http://dx.doi.org/10.1016/j.chb.2014.09.007.

DeSmet, A., Veldeman, C., Poels, K., Bastiaensens, S., Van Cleemput, K., Vandebosch, H., et al. (2014). Determinants of self-reported bystander behavior in cyberbullying incidents amongst adolescents. Cyberpsychology, Behavior, and Social Networking, 17(4), 207–215. http://dx.doi.org/10.1089/cyber.2013.0027.

Doane, A. N., Pearson, M. R., & Kelley, M. L. (2014). Predictors of cyberbullying perpetration among college students: an application of the theory of reasoned action. *Computers in Human Behavior*, 36, 154–162. http://dx.doi.org/10.1016/ j.chb.2014.03.051.

Duggan, M., Ellison, N. B., Lampe, C., Lenhart, A., & Madden, M. (2015). Frequency of social media use. Pew Research Center. Retrieved from http://www.pewinternet.

- org/2015/01/09/frequency-of-social-media-use-2/.
- Gibb, Z. G., & Devereux, P. G. (2014). Who does that anyway? predictors and personality correlates of cyberbullying in college. *Computers in Human Behavior*, 38, 8–16. http://dx.doi.org/10.1016/j.chb.2014.05.009.
- Gini, G., Albiero, P., Benelli, B., & Altoe, G. (2008). Determinants of adolescents' active defending and passive bystanding behavior in bullying. *Journal of Adolescence*, 31, 93–105. http://dx.doi.org/10.1016/j.adolescence.2007.05.002.
- Hsieh, H. F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. Qualitative Health Research, 15, 1277–1288. http://dx.doi.org/10.1177/ 1049732305276687.
- Latane, B., & Darley, J. M. (1970). The unresponsive bystander: Why doesn't he help? New York, NY: Appleton-Century-Crofts.
- Macdonald, C. D., & Roberts-Pittman, B. (2010). Cyberbullying among college students: prevalence and demographic differences. *Procedia Social and Behavioral Sciences*, 9, 2003–2009. http://dx.doi.org/10.1016/j.sbspro.2010.12.436.
- Macháčková, H., Dedkova, L., Sevcikova, A., & Cerna, A. (2013). Bystanders' support of cyberbullied schoolmates. *Journal of Community & Applied Social Psychology*, 23, 25–36. http://dx.doi.org/10.1002/casp.2135.
- Moore, K. (2011). 71% of online adults now use video sharing sites. Pew Research Center. Retrieved from http://www.pewinternet.org/2011/07/26/71-of-online-adults-now-use-video-sharing-sites/.
- Paullet, K., & Pinchot, J. (2014). Behind the screen where today's bully plays: perceptions of college students on cyberbullying. *Journal of Information Systems Education*, 25(1), 63.
- Rafferty, R., & VanderVen, T. (2014). I hate everything about you: a qualitative examination of cyberbullying and on-line aggression in a college sample. *Deviant Behavior*, 35, 364–377. http://dx.doi.org/10.1080/01639625.2013.849171.
- Schenk, A. M., & Fremouw, W. J. (2012). Prevalence, psychological impact, and coping of cyberbully victims among college students. *Journal of School Violence*, 11, 21–37. http://dx.doi.org/10.1080/15388220.2011.630310.
- Schenk, A. M., Fremouw, W. J., & Keelan, C. M. (2013). Characteristics of college cyberbullies. *Computers in Human Behavior*, 29(6), 2320–2327. http://dx.doi.org/10.1016/j.chb.2013.05.013.
- Schultz, E., Heilman, R., & Hart, K. J. (2014). Cyber-bullying: an exploration of

- bystander behavior and motivation. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace*, 8. http://dx.doi.org/10.5817/CP2012-4-3.
- Subrahmanyam, K., Reich, S. M., Waechter, N., & Espinoza, G. (2008). Online and offline social networks: use of social networking sites by emerging adults. Journal of Applied Developmental Psychology, 29, 420–433. http://dx.doi.org/10.1016/j.appdev.2008.07.003.
- 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), 247–252. http://dx.doi.org/ 10.5811/westiem.2012.3.11792.
- Tokunaga, R. S. (2010). Following you home from school: a critical review and synthesis of research on cyberbullying victimization. *Computers in Human Behavior*, 26(3), 277–287. http://dx.doi.org/10.1016/j.chb.2009.11.014.
- Van Cleemput, K., Vandebosch, H., & Pabian, S. (2014). Personal characteristics and contextual factors that determine "helping," "joining in," and "doing nothing" when witnessing cyberbullying. Aggressive Behavior, 40(5), 383–396. http://dx.doi.org/10.1002/ab.21534.
- Vaterlaus, J. M., Jones, R. M., Patten, E. V., & Cook, J. L. (2015). An exploratory study of time spent with interactive technology and body mass among young adults. Computers in Human Behavior, 52, 107–114. http://dx.doi.org/10.1016/ i.chb.2015.05.035
- Walker, C. M., Sockman, B. R., & Koehn, S. (2011). An exploratory study of cyber-bullying with undergraduate university students. *TechTrends*, 55, 31–38. http://dx.doi.org/10.1007/s11528-011-0481-0.
- Wong-Lo, M., & Bullock, L. M. (2014). Digital metamorphosis: examination of the bystander culture in cyberbullying. Aggression and Violent Behavior, 19(4), 418–422. http://dx.doi.org/10.1016/j.avb.2014.06.007.
- Xu, J., Jun, K., Zhu, X., & Bellmore, A. (2012). Learning from bullying traces in social media. Conference of the North American Chapter of the Association for Computational Linguistics: Human language technologies (pp. 656–666). Montréal, Canada: Association for Computational Linguistics.
- Zalaquett, C. P., & Chatters, S. J. (2014). Cyberbullying in college. Sage Open, 4, 1–8. http://dx.doi.org/10.1177/2158244014526721.