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The Dangerous Side of Social Media: Manipulating Bystander Aggression and Support to Cyberbullying Victims Through an Application of Side

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THE DANGEROUS SIDE OF SOCIAL MEDIA: MANIPULATING BYSTANDER
AGGRESSION AND SUPPORT TO CYBERBULLYING VICTIMS THROUGH AN
APPLICATION OF SIDE

by

Clare M. Gross

A Dissertation Submitted in
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ABSTRACT
THE DANGEROUS SIDE OF SOCIAL MEDIA: MANIPULATING BYSTANDER
AGGRESSION AND SUPPORT TO CYBERBULLYING VICTIMS THROUGH AN
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Clare M. Gross

The University of Wisconsin-Milwaukee, 2016
Under the Supervision of Professor Nancy Burrell, Ph.D.

Cyberbullying constitutes a complex social problem that is understudied among college students. A crucial factor contributing to the severity of cyberbullying is the level of bystander (un) involvement, or individuals who witness cyberbullying. A possible explanation for the different behaviors of bystanders is found in the theory of the Social Identity Model of Deindividuation Effects (SIDE), which suggests that CMC alters perceptions of the self and others. The current investigation ($n = 442$) employs an experimental design testing the SIDE model and predicted that individuals in more anonymous conditions would be more likely to adopt a disconfirming or a confirming group norm in the context of an online discussion group. A total of 442 college students participated in the study. Results suggest that the group norm significantly impacts how individuals respond to a cyberbullying victim. Implications of this result and information on the prevalence of cyberbullying in college are discussed. Suggestions for cyberbullying interventions based on these findings are offered.

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The Dangerous SIDE of Social Media: Manipulating Bystander Aggression and Support to Cyberbullying Victims through an Application of SIDE

Cyberbullying is a troubling social problem, demonstrating how the use of computer-mediated communication (CMC) results in complex interactions among users, with the ability to create life-long harm. The severity of cyberbullying has led to its study by scholars across multiple disciplines (Calvete, Orue, Esteves, Villardon, & Padilla, 2010). The public remains aware of the damage cyberbullying causes to victims, with reports of suicides attributed to cyberbullying receiving significant media attention (Roberto, Eden, Savage, Ramos-Salazar, & Deiss, 2014a). The problem of cyberbullying is relatively recent, given prior to 2004, no published studies on the topic existed (Tokunaga, 2010). Over the past decade, with the use of CMC and social media becoming a part of daily life, rates of reported cyberbullying have increased by over 80% across the globe, making it an international problem (Davis, Randall, Ambrose, & Orand, 2015). Yet, despite an increased focus on examining this phenomenon, a lack of consistency exists in defining cyberbullying and understanding what factors cause cyberbullying to increase in severity.

An assumption in much of the cyberbullying research is that CMC, particularly that of social media, is the source of the problem. Scholars also disagree on the definition of cyberbullying, with cyberbullying represented as face-to-face (FtF) bullying that simply occurs through different media (Calvete et al., 2010; Davis, et al., 2015). Attributing the cause of cyberbullying as an effect of communication through CMC devalues the problem of cyberbullying (Tokunaga, 2010). This definition leads researchers to miss how cyberbullying exemplifies an altered process of aggression and

victimization (Runions, & Bak, 2015; Tokunaga, 2010). In addition, studies of cyberbullying that frequently center on minors as the participant population, because research finds that cyberbullying peaks in middle and early high school (Tokunaga, 2010). However, cyberbullying is also a problem among adult populations, particularly among college students (Anderson, Bresnahan, & Musatics, 2014) and more research should examine how cyberbullying functions among adult populations. College students are particularly vulnerable to cyberbullying, as they may be living away from home for the first time and need to develop a new social network (Anderson et al., 2014).

Cyberbullying experienced during personal and relational transition increases the sense of isolation and reduce the ability to cope with a changing life situation. The current investigation assesses how communicating in the context of CMC changes perceptions and facilitates aggression. This study also examines how scholars could approach the problem of cyberbullying from a perspective different than that of FtF bullying.

The current investigation proposes to expand the focus of cyberbullying research through the application of theory. Cyberbullying research lacks a consistent use of theory (Tokunaga, 2010). Inconsistent theoretical grounding has led to research characterized by a lack of hypotheses generated from formal theories, making it difficult for cyberbullying research to be taken seriously (Tokunaga, 2010). Clearly, a more consistent theoretical approach to the study of this social problem is needed. The current investigation applies the theory of the Social Identity Model of Deindividuation Effects (SIDE) to examine how cyberbullying is facilitated through CMC. SIDE forwards that CMC alters perceptions of oneself and others (Postmes, Spears, & Lea, 1998) contributing to conflict

that promotes cyberbullying. The application of SIDE adds cohesion to how communication research can be utilized to address cyberbullying.

Moreover, the current study applies SIDE to one crucial aspect of cyberbullying: the role of bystanders (i.e., individuals who witness cyberbullying acts) (Barlinska, Szuster, & Winiewski, 2013). Cyberbullying is an inherently social process because of the number of bystanders that may witness the bullying actions (Anderson et al., 2014; Barlinska et al., 2013). Bystanders may or may not know victims in the FtF setting, but by action or inaction, bystanders frequently determine the severity of cyberbullying for victims. Bystanders commenting or forwarding a cyberbullying message actively contribute to the bullying process, while bystanders communicating support to the victim may reduce the trauma that the victim experiences (Anderson et al., 2014). Therefore, the goals of the current investigation are to: (a) apply SIDE to assess how CMC alters perceptions to facilitate cyberbullying, (b) examine the conditions that influence disconfirming actions by bystanders, and (c) investigate whether SIDE also applies to bystanders as confirming towards cyberbullying victims.

This study provides an understanding of how disconfirming or confirming interpersonal communication by bystanders contributes to cyberbullying under different circumstances. Expanding the definition of cyberbullying and refining the application of theory increases the understanding of this problem. The application of SIDE to the issue of cyberbullying examines how CMC changes perceptions of identity, increasing the likelihood of acting in ways that differ from normal behavior (Postmes et al., 1998). The following section addresses different elements of cyberbullying and describe why bystanders are the focal population for this cyberbullying research. Next, the theoretical

frame of SIDE is examined, and variables that allow for the measurement of SIDE are explained. Finally, the application of SIDE to different conditions promoting disconfirming or confirming reactions of bystanders are forwarded.

Literature Review

Cyberbullying

CMC allows for simultaneous sharing of messages with a large audience, and individuals often share information about themselves and others in an unrestricted manner (Roberto et al., 2014a). Using CMC exacerbated the problem of bullying for several reasons. First, bullying is not restricted by time and space as in situations of FtF bullying, which thus limits safe space for victims (Davis et al., 2015). Second, the potential anonymity afforded to CMC interactions protects cyberbullies (Davis et al., 2015). Even if the original source of the message is known, many people may view the message and contribute aggressive comments, which makes it difficult to know who to hold accountable for the bullying (Barlinska et al., 2013). The victim also may feel an increased sense of abuse compared to FtF bullying (Davis et al., 2015), because the potential wider public audience witnessing the bullying increases the humiliation for victims (Barlinska et al., 2013). Third, knowing what to do when victimized in the CMC context is difficult, with unclear guidelines about the liability and legality of cyberbullying (Tokunaga, 2010).

Defining Cyberbullying. Research on cyberbullying is plagued by uncertainty regarding how to define cyberbullying (Tokunaga, 2010). While cyberbullying receives extensive coverage in the media (Runions, 2015), the public and scholars alike experience difficulty in providing a consistent description of cyberbullying. A core issue

in studying cyberbullying is the lack of a clear definition of what the phenomenon entails (Davis et al., 2015; Tokunaga, 2010). For example, in a meta-synthesis of cyberbullying studies Tokunaga (2010) found that each study enacts different elements included in the definition of cyberbullying. The way scholars' defined cyberbullying influenced different methods of measuring cyberbullying. The problem leads to an over or under estimation of the prevalence of cyberbullying.

Examining how studies have defined cyberbullying, Tokunaga (2010) describes that common elements of the definition or ("umbrella terms") include "aggressive or hostile behavior" and "intentional" (p. 278). Although these terms may be common across definitions, the definitions themselves reflect different constructs used to make sense of cyberbullying. For example, Calvete et al. (2010) describe cyberbullying as deliberate acts of aggression, but then they expand on the definition to include all types of aggressive online behavior. Cyberstalking is defined as cyberbullying (Calvete et al., 2010), yet the often-intimate relationship between participants in cyberstalking, and associated behaviors and goals of cyberstalkers, vary from those found in cyberbullying.

Conversely, a definition of FtF bullying may be used to explain the phenomenon, adapted to include CMC. Davis et al. (2015) suggest that a common definition of FtF bullying, of repeated behavior designed to intentionally cause harm to victims, characterized by an imbalance of power, can be applied to the CMC context to define cyberbullying. While the behaviors of cyberbullies are defined as intentional, Davis et al. describe the environment of CMC as aggressive, heightening the power imbalance between bullies and victims. Davis et al. argue that aggressive behaviors of bullies and bystanders are more reactive to an aggressive environment facilitated by CMC. The

definitions provided by Calvete et al. (2010) and Davis et al. (2015) highlight differences in the conceptualization of cyberbullying; in one instance CMC is represents a tool used to carry out maladaptive behaviors, and in the other conceptualization, CMC acts as an environment encouraging aggressive behavior.

Scholars responded to the need to define cyberbullying by adapting Olweus' definition of FtF bullying to the cyber context, as Olweus developed several successful programs in the Norwegian school system to reduce bullying (Smith et al., 2008). The definition highlights the social differences between the victim and bully, with the victim at a disadvantage in terms of power. For example, Smith et al. (2008) explain that cyberbullying is “an aggressive, intentional act carried out by a group or individual, *using electronic forms of contact*, repeatedly and overtime against an individual who cannot defend himself or herself” (p. 376). The change in this definition from Olweus' description of FtF bullying is the italicized words focusing on the contact being electronic. However, the last clause of the definition may not adapt well to the cyberbullying context. In the cyber context, victims of bullying may attempt to defend themselves by cyberbullying others, as studies have reported participants as both victims and perpetrators of cyberbullying (Festl, Sharkow, & Quandt, 2014). While research has established overlapping elements between FtF bullying and cyberbullying (Festl et al., 2014; Heirman et al., 2015), there are differences between the two forms of bullying. A victim could experience both FtF bullying and cyberbullying at the same time (Festl et al., 2014). Importantly, the differences in FtF and cyberbullying lead to a need for scholars to clarify how cyberbullying occurs in both contexts.

Variance in the definitions of cyberbullying leads scholars to frame the problem differently, affecting how they conduct research. For example, in a study examining cyberbullying prevention among middle school students, Roberto et al. (2014a) emphasize that cyberbullying is “deliberate and repeated” (p. 1030). Further elaborating on the meaning of cyberbullying, the authors argue that cyberbullying worsens victimization because the behavior is repeated, and occurs through multiple platforms of communicative technologies (Roberto et al., 2014a). The claim that cyberbullying exacerbates the harm of FtF bullying because of the number of people viewing bullying messages and aggressively responding provides a common result of cyberbullying in Tokunaga’s (2010) meta-synthesis. A cyberbully could target a victim once, but the degree of harm from others’ comments could make the situation just as traumatic as if the bullying occurred multiple times. Depending on how scholars define the term “repeated” as being a qualification for cyberbullying affects measurement of cyberbullying.

The age of the sample population affects how cyberbullying is understood. Middle-school students are often the focus of research because FtF and cyberbullying are found to peak during this phase of life (Roberto et al., 2014). While Tokunaga’s (2010) meta-synthesis establishes the prevalence of cyberbullying during middle school, his results suggest cyberbullying is also a problem during different age groups. In addition, the findings that cyberbullying is worse in middle school could be due to many studies using adolescent and teenage sample populations. For example, Roberto, Eden, Savage, Ramos-Salazar, and Deiss (2014b) surveyed college freshmen about the bullying that they experienced during their senior year of high school, and found that in a sample of almost 2,000 students, 35% reported perpetrating cyberbullying during the senior year of

high school. Additionally, studies have shown cyberbullying is a problem in the college setting (Anderson et al., 2014) and cyberbullying could also be a problem among adult populations in the workplace. The literature on cyberbullying should examine how cyberbullying can remain a prevalent problem among different age groups. At the same time, researchers should consider how the age of participants affects study design and influences the findings about the problem of cyberbullying.

The definition and prevalence of cyberbullying varies on a study-to-study basis, and as a result it becomes confusing to define cyberbullying. Scholars have responded by articulating broad definitions of cyberbullying. For example, using the results of the meta-synthesis, Tokunaga (2010) forwards the following definition: “Cyberbullying is any behavior performed through electronic or digital media by individuals or groups that repeatedly communicates hostile or aggressive messages intended to inflict harm or discomfort on others” (p. 278). The broadness of this definition allows scholars to have a wide range of understanding of the problem, but also leads to a lack of detail about what should be the focus of cyberbullying research. As Tokunaga’s (2010) definition describes, cyberbullying can occur once with one individual sending one message to a victim. However, it is the social process of how the audience responds to and shares cyberbullying messages that are the focus of the current study. In the current study, cyberbullying is defined as using CMC to communicate and share messages that attack individuals’ self-worth. This definition takes into account that it is not the intention of audience members that matters. Rather, the outcome that messages have on victims’ self-worth is important. Individuals may share or post messages about victims without awareness of how the victim views the message as aggressive or damaging but the action

counts as cyberbullying if the victims' interpret the message as an attack on their self-worth.

Previous Cyberbullying Research. Cyberbullying research is further complicated by a lack of theoretical application and unclear methodologies. Cyberbullying studies are commonly examined with no deductive theoretical approach, or through grounded theory, and are examined on a case-to-case basis (Tokunaga, 2010). Tokunaga (2010) suggests that the lack of cyberbullying research derived from a consistent theoretical basis is a problem because scholars have difficulty examining the broader process of what is occurring with cyberbullying, resulting in a lack of understanding about the phenomenon. A common approach scholars' start from is identifying how common cyberbullying is and identifying traits about victims, bullies, and bystanders (Heirman et al. 2015). The traits about individuals involved in cyberbullying often center on demographic and individual personality factors that predict victimization or bullying perpetration (Vandeen Abeele & de Cock, 2013). Studies are frequently characterize surveying a group of participants about cyberbullying and uncovering individual level factors among the group of participants that predict the roles (bully, victim, or bystander) in the cyberbullying process (Tanrikulu, & Kinay, 2015; Vandeen Abeele & de Cock, 2013). The results of these studies provide understanding about how the sample population reports experiencing cyberbullying. However, the results of these types of investigations do not explicitly further theoretical perspectives that could be used to understand commonalities about cyberbullying across studies (Heirman et al., 2015).

In addition, the demographic factors or traits examined in one study may not be applicable to another study context (Tokunaga, 2010). For example, Vandeen, Abeele, and de Cock (2013) examined how the personality trait of popularity was an explanation for cyberbullying over the phone among adolescents, and they also included gossiping as a form of cyberbullying. The authors found popular adolescents were more likely to gossip over the phone and send threatening text messages, but less likely to engage in other forms of cyberbullying; however, the findings of this study may not be generalizable to other groups of adolescents, as the social status and qualifications for popularity vary.

Another issue with cyberbullying research is that inconsistent demographic findings are produced about cyberbullying (Slonje, Smith, & Frisen, 2012). Studies frequently examine socio-economic status, gender, and age of participants as factors differentiating victims or perpetrators; however, the findings are unclear (Tokunaga, 2010). For example, Bauman, Toomey, and Walker (2013) claimed cyberbullying would be more common among girls because of characteristics relating to social exclusion in FtF bullying. In contrast, Tanrikulu and Kinay (2015) claimed cyberbullying would be more common among boys because cyberbullying represents direct aggression. However, neither study found gender to be a significant indicator (Bauman et al., 2013; Tanrikulu, & Kinay, 2015). Predicting cyberbullying on the basis of age or gender could lead scholars to miss important situational factors that contribute to the magnitude of cyberbullying. Instead of focusing on demographic factors, scholars should examine social level phenomenon to account for how an audience of bystanders becomes involved in the cyberbullying process.

In contrast, some studies employ a theoretical perspective when examining cyberbullying. Theoretical perspectives have addressed individual communicative factors that might make one more likely to cyberbully, as a way to account for the problem. For example, (Roberto et al., 2014a, 2014b) apply the communicative skills deficiency model to explain why certain individuals are more likely to cyberbully. While research has found support for these personality factors contributing to individuals being cyberbullies, the issue is that focusing on individual traits of cyberbullies may miss the larger process that occurs with cyberbullying. For example, the findings that cyberbullies are more verbally aggressive (Roberto et al., 2014a, 2014b) frame CMC as the tool or outlet for aggressive individuals, but do not account for the social process of bystanders who view, share, and respond to these messages. Similarly, Smith et al. (2008) examined factors that increase victimization, looking at personality factors and the communicative skills of victims. However, investigations focused on solely on victims fails to account for cyberbullying as a prevalent social process.

Recognizing that cyberbullying is a social process, some scholars approach cyberbullying using a network approach. For example, using social dominance theory, Heirman et al. (2015) applied a social network perspective to examine how the social hierarchy of middle school students in the classroom carried over when communicating online outside of school. The authors' found that when power was distributed equally among students in the physical class setting, there was less cyberbullying but did not find inherent support for social dominance theory. Wegge, Vandebosch, and Eggermont (2014) conducted a similar with adolescents. Their results reflected a relationship with being a victim in the FtF and cyberbullying settings but did not find the same pattern with

bullies in both contexts. While victimization in one context was related to victimization in other contexts, FtF bullies and cyberbullies were not the same in both contexts. The study also suggested there was less cyberbullying than FtF bullying, with FtF bullying occurring almost twice as much, limiting support for the network analysis.

Operating from a similar theoretical perspective to the network perspective, Festl et al. (2015) applied a model of social influence to examine how being a victim or perpetrator in the FtF context overlapped with the cyber context. The study found that being a perpetrator of FtF bullying increased the likelihood of being a perpetrator in the cyber context fourfold; however, conflicting support for the theoretical perspective was found when being popular predicted being both a victim and perpetrator of cyberbullying. The application of social and network perspectives suggests there could be some relationship, between the roles of a victim or a bully in both the FtF and cyber contexts. However, the support of theories from these perspectives is limited, yet the studies show important differences between bullying by context. For example, a limitation of research applying the network perspective and the social influence model is that not every cyberbully personally knows victims, and some bystanders respond aggressively or disconfirmingly to victims that they do not know (Festl et al., 2015; Heirman et al., 2014; Wegge et al., 2014). Importantly, individuals who know each other in the FtF context may behave differently in the cyber context.

In summarizing the different theoretical approaches to cyberbullying research, some problematic factors emerge. The methodological approaches of cyberbullying studies are frequently subjective (Tokunaga, 2010). Suggestions for how to define cyberbullying often relate to the context of individual studies, and this limits

generalizability of scholarship to address the problem (Tokunaga, 2010). The demographic findings about the prevalence of cyberbullying, the different roles involved, and the application of varying theoretical perspectives show a need to clarify the problem of cyberbullying. Previous theoretical perspectives used in cyberbullying research suggest that understanding of both individual and social factors is needed to examine cyberbullying. In addition, the social context created through CMC and the effects of this context on how individuals respond to cyberbullying messages should be examined, as previous research indicated the context of CMC differs from the FtF context. The current investigation addresses some of the methodological issues of previous cyberbullying studies by utilizing theory and using an experimental design. The following section addresses a key aspect contributing to the problem of cyberbullying that can be examined through theory, the role of bystanders.

Impact of Bystanders

CMC allows for roles involved in cyberbullying to be more fluid than in FtF bullying, with individuals having increased ability to shift from perpetrators, bystanders, and victims (Tokunaga, 2010). Bystanders have the potential to significantly affect the cyberbullying process, as they are individuals witnessing bullying, and can choose to respond in varied ways (Barlinska et al., 2013). Bystanders can respond to bullying situations by offering support, which constitutes a confirming response to victims, alleviating the degree of harm victims experience from bullying (Low, Frey, & Brockman, 2010). Conversely, bystanders could join in the bullying or express support for the bully's messages. Bystanders that avoid responding indicate solidarity with bullies, or join in the aggressive behavior respond disconfirmingly to victims, worsening

the degree of harm that victims experience (Barlinska et al., 2013, Fawzi & Goodwin, 2011). Interestingly, the behavior of bystanders varies in different types of bullying contexts.

Research on the role of bystanders in FtF situations of bullying often addresses how to elicit positive responses that support bullying victims. School programs in bullying intervention focus on teaching bystanders to respond in helpful ways to victims when bullying occurs, including: being confirming in communication to victims, reporting the situation, or getting help from an adult (Bauer, Lozano, & Rivera, 2007; Salmivalli, & Poskiparta, 2012). For example, in elementary and middle schools, several institutions have adapted some form of the Olweus (1994) bullying prevention program that focuses on getting the whole school involved to actively intervene in support of bullying victims. The logic behind the approach is that through inaction, bystanders may reward bullying in the eyes of bullies, as failure to get involved communicates acceptance of the behavior (Low et al., 2010). On the other hand, bystanders that speak out or behaviorally intervene during bullying episodes communicate to the bully that bullying is unacceptable (Low et al., 2010). However, in cyberbullying it becomes more difficult to examine the role of bystanders and how their behavior communicates support or increases a sense of abuse for victims, as bystanders witness and respond to cyberbullying often from personal communicative technologies.

The role of bystanders is often viewed as one that is detrimental to victims in cyberbullying studies. Research on cyberbullying finds that bystanders play a key role in perpetuating the problem of cyberbullying (Barlinska et al., 2013). Namely, the negative impact of cyberbullying would be drastically reduced if no one viewed, responded, or

forwarded cyberbullying messages. Bystanders constitute the main factor in intensifying the harm victims experience from cyberbullying (Fawzi & Goodwin, 2011).

In interviews with participants ages 15-24 about the effects of cyberbullying, bystanders was described as a key factor that exacerbated the abuse for victims, due to negatively impacting victims' self-esteem (Dredge, Gleeson, & de la Piedad Garcia, 2014). For example, one participant said that the direct input of bystanders was damaging because "everyone was getting involved and having their input when it wasn't needed. It made the situation 10 times worse" (Dredge et al., 2014, p. 289). Participants described that knowing the number of people that viewed a bullying message, and who did nothing, worsened the sense of abuse. Barlinska et al. (2013) suggests that the role of bystanders is important to study in cyberbullying research because of how they contribute to the severity of cyberbullying, yet difficult because of the shifting roles involved in cyberbullying. In other words, the roles of cyberbullying overlap, with the same individual experiencing the role of a victim, bully, or bystander at different points. This presents a challenge to cyberbullying research, as individuals may not readily identify themselves as cyberbullies.

Similarly, Fawzi and Goodwin (2011) suggest that individuals fail to comprehend what a bystander in cyberbullying entails. For example, school anti-bullying programs teaching students how to intervene or get assistance when they witness FtF bullying at school, but students lack instruction from parents and school officials about how they to respond when witnessing cases of cyberbullying. As a result, Fawzi and Goodwin (2011) suggest that individuals perceive the role as passive, or not as a bystander, in cases of cyberbullying; however, the authors point out that there are no passive roles in

cyberbullying. Simply being aware that a number of people have viewed or read a derogatory message makes the abuse worse for victims.

For victims, the knowledge that many people have viewed a message through cyberspace is profoundly damaging (Barlinska et al., 2013), and bystanders in cyberbullying often do not behave in a neutral way (Anderson et al., 2014). Instead of witnessing the act, many bystanders get involved in the process, by responding to the cyberbullying message, or forwarding the message to others (Anderson et al., 2014). However, bystanders commenting to refute the message and offer supportive messages to victims may reduce the harm victims' experience. For example, Anderson et al. (2014) describe that through taking an active role in defense of cyberbullying victims, bystanders may reduce the length of time the message circulates, lessening the severity of cyberbullying. Examining the actions of bystanders in cyberbullying research points to different actions they may take part in, leading to a need to more fully understand the actions of bystanders in cyberbullying research. For example, in a survey of adolescent bystanders who had witnessed cyberbullying, Fawzi and Goodwin (2011) found that only 5% of adolescents reported that they would respond to a cyberbullying message in a way that was disconfirming to victims. However, at the same time, only 17% of the sample reported telling an adult about cyberbullying they encountered. While several bystanders did not admit to responding disconfirmingly to cyberbullying victims, perhaps out of concern over social pressure, they also did not report directly intervening to get help for victims. Problematically, this inaction of bystanders limits support for bullying victims.

Certain characteristics about the bullying situation could make bystanders more likely to respond confirmingly or disconfirmingly to cyberbullying victims. Studying the

different actions of bystanders in FtF versus CMC bullying contexts, Barlinska et al. (2013) conducted multiple studies with adolescents to examine conditions that would lead them to respond differently to victims. Barlinska et al. (2013) found that three factors increased the likelihood of negative bystander behaviors, or bystanders responding in a disconfirming way to victims: (a) the bullying occurring in the CMC context, (b) perceiving the communication context as more private, which decreases the risk of others finding out about the disconfirming response, and (c) having committed cyberbullying in the past. The authors' also examined factors that could lead bystanders to be more supportive or confirming towards bullying victims, and found that a stimulus designed to elicit both cognitive and affective empathy decreased negative bystander actions. Surveying middle-school and high-school students, Hinduja and Patchin (2013) found that if the peer group was perceived as likely to bully others online, and if students perceived few sanctions by parents or school officials, students were more likely to report bullying others. Identifying factors contributing to bystanders' responses has important implications for reducing the problem of cyberbullying. A related issue is how a neutral bystander shifts into one that responds in a disconfirming way to a victim.

For example, a bystander that communicates support of the cyberbullying message, with a derogatory comment towards the victim, joins the bullying process (Davis et al., 2015). Indeed, even liking a disconfirming message on *Facebook* and sharing the message with others furthers the extent of the bullying. Bystanders may possess little or no previous contact with the victim, yet still respond aggressively, or in a way that furthers the victim's humiliation (Davis et al., 2015).

Scholars have offered different explanations for why bystanders respond detrimentally to cyberbullying victims. Calvete et al. (2010) forwards that cyberbullying should be understood as communicating different types of aggressive behaviors, with one type being reactive aggression. From this perspective, bystanders respond to the environment, reacting aggressively (Calvete et al., 2010). In contrast, Runions (2015) suggests that CMC alters views towards victims, with the removal of FtF contact with victims; bystanders experience moral disengagement from their normal values. The ambiguity created by CMC alters perceptions of blame and empathy, with bystanders justifying their reactions by perceiving the victim as somehow to blame for the situation (Runions, 2015). Despite differing perspectives, a trend emerges from previous research studying bystanders in cases of cyberbullying. Bystanders get involved in instances of cyberbullying at a greater rate compared to FtF bullying, and they directly alter the bullying experience through their involvement (Anderson et al., 2014; Barlinska et al., 2013; Runions, 2015). The process of communicating through CMC may alter the social context or way that bystanders would interact with bullying victims (Calvete et al., 2010). Bystanders may react to an environment that models aggression, responding disconfirmingly to victims, or they may also experience a change in perception that leads them to respond in a manner that is supportive or confirming towards victims (Anderson et al., 2014; Davis et al., 2015). A theoretical perspective that offers explanation for the change in social context during CMC interactions, leading to circumstances that could facilitate cyberbullying, is SIDE.

SIDE

SIDE theory suggests that when individuals communicate through CMC a change

in perception occurs. SIDE examines how the medium of communication and the social context interact to produce effects (Postmes et al., 1998). Postmes et al. (1998) argue that “the particular social definition” participants give to a context affects how they communicate with each other through CMC, and the features of CMC may in turn influence how the communicative interaction unfolds (p. 691). Postmes and Baym (2005) suggest that while the use of CMC does not lead to the same effect across situations, the medium is not entirely neutral. In other words, technology does not determine interpersonal interactions, but it does have an influence on an individual and social level (Postmes & Baym, 2005).

Namely, the features of CMC highlight certain aspects of identity during CMC interactions, creating a shift in perceptions that can alter communication (Postmes et al., 1998). In other words, CMC does not cause individuals to act in a certain way, but through its features, the altered context created by CMC leads certain elements of interactions to become more or less salient (Postmes et al., 1998). The noticeable effects of this salience are a change in perceptions of individual identity compared to social identity (Postmes, Spears, Sakhel, & de Groot, 2001). Postmes and Baym (2005) suggest that when communicating with others, individuals retain a sense of personal identity, but also have a perception of social identity, or a sense of belonging to a group. SIDE forwards that the features of CMC heighten awareness to the social context or group (Postmes & Baym, 2005). Accounting for why individuals place importance on social identity in the CMC environment, Moral-Toranzo, Canto-Ortiz, and Gomez-Jacinto (2007) explain that it fulfills needs of belonging and is tied to self-satisfaction. The heightened awareness to the group, or the disconfirming comments and lack of

confirming comments to a cyberbullying victim could influence bystanders' perceptions when considering whether and how they should respond to a cyberbullying message.

Increased focus on social identity can influence how individuals behave in CMC interactions. For example, individuals engage in self-stereotyping, reinforcing their characteristics and opinions based on the predominant views of the group (Postmes & Spears, 2002). As the group identity becomes more salient, individuals will be more likely to adhere to group norms (Moral-Toranzo et al., 2007). Interestingly, group norms in the CMC context remain salient if the group interacts in the FtF setting (Walther & Bazarova, 2007). Walther and Bazarova found that participants were more likely to blame group members for bad decisions when they interacted through a CMC-only condition compared to situations with mixed CMC and FtF interaction. As an examination of cyberbullying perpetration, Festl et al. (2015) assessed how the social context within the classroom carried over to the CMC environment. The researchers found that only 5% of online victimization was related to the social context established by FtF classroom interactions. Potentially, the results were non-significant because the social context changes as perceptions are altered through the features of CMC. The sense of group belonging may carry over to FtF situations (Walther & Bazarova, 2007), yet individuals perceive there is a degree of anonymity when they communicate online, even though they know each other and interact in FtF settings (Moral-Toranzo et al., 2007). Applied to bystanders in cyberbullying, individuals might be more likely to comment in a certain way or avoid supportive actions towards victims than they would engage in within the FtF context.

In addition, SIDE explains that when communicating through the CMC context,

perceptions of individual identities are reduced (Postmes & Baym, 2005). The process is called deindividuation, and can be used to explain why bystanders might get directly involved in responding to cyberbullying messages (Barlinska et al., 2013). Due to a shift in perception that occurs when communicating through CMC, bystanders may feel a need to respond in a way that reinforces social identity (Barlinska et al., 2013). Individuals consider how comments fit in with the social group viewing the message (Postmes & Baym, 2005), and lose awareness of comments being directly received by the victim, with a lack of understanding of how the victim is adversely affected. The following sections describe the process of deindividuation, and factors involved in deindividuation that affect how bystanders respond to cyberbullying.

Deindividuation. Deindividuation occurs when individuals experience reduced awareness of themselves and of others (Postmes et al., 1998). SIDE suggests that anonymity is a key factor in determining how deindividuation occurs (Postmes et al., 2001). Postmes et al. (1998) argue that the way communication unfolds through CMC can lead to a change in cognitive processing. A typical response to an interpersonal situation changes as anonymity reduces perceptions of personal identity and magnifies views of group identity (Yun et al., 2013). Postmes and Baym (2005) suggest that in social interactions, individuals have a sense of both individual and social identities. Group membership is often exaggerated in a CMC setting (Walther & Bazarova, 2007). The asynchrony of communication and ability of several others to respond to a message facilitates the perception of communicating with a group even if a message is directed to one member (Postmes & Baym, 2005). As a result, when a bystander views a cyberbullying message disconfirming to a victim, the communication may be considered

as reflective of the group, rather than one's own communication. A bystander that experiences deindividuation would pay more attention to the social context, or the comments of others, rather than considering how the response, or lack of a supportive response, directly impacts the victim.

Deindividuation increases in situations with greater anonymity (Postmes et al., 2001). A lack of distinguishing features alters perceptions of the self and of others as individuals (Postmes & Baym, 2005). The reduction of an awareness of the personal identity of the self and others created implications for interactions (Postmes & Baym, 2005). Illustrating this point, Postmes and Spears (2002) examined how anonymity influenced gendered stereotypes when communicating through CMC. The authors found increasing anonymity by manipulating perceptions of personal identity led to a greater use of gendered stereotypes (Postmes & Spears). Instead of anonymous situations creating equalized perceptions of gender, participants relied on stereotypes to fill in missing information, and exhibited little concern about comments tracing back to them (Postmes & Spears). Deindividuation leads to a perception of a breakdown of traditional social barriers (Postmes et al., 2001). As a result, individuals may feel emboldened in their actions, behaving without inhibitions or communicating antisocially, different from how they normally would in the FtF context (Postmes et al., 2001).

Research on deindividuation was prevalent in examining how people behaved as a result of mob mentality (Postmes et al., 1998, Runions, 2013). Examining deindividuation in FtF interactions, Zimbardo found that situations of anonymity decrease fear of accountability for maladaptive behaviors, emboldening individuals to act aggressively (Runions, 2013). Situations characterized by anonymity appear to change

social barriers by facilitating more negative behaviors, instead of promoting equality. In the case of cyberbullying, bystanders may feel emboldened to like, share, or leave disconfirming messages for victims.

SIDE and cyberbullying. Studies of SIDE have found anonymity has a similar effect on deindividuation when individuals interact through CMC (Lee, 2008; Postmes et al., 1998; Postmes & Spears, 2002). For example, Slonje, Smith, and Frisen (2012) applied the concept of deindividuation to explain why adolescents would act as cyberbullies. The authors suggested that deindividuated cyberbullies would feel less guilt and remorse for actions, because the perception of directly bullying another individual is reduced in a cyber context. Similarly, bystanders may feel a lack of remorse about disconfirming actions or inaction to support cyberbullying victims as a result of being deindividuated.

Anonymity in cyberbullying reduces pressure and constraints when communicating with victims (Calvete et al., 2010). When CMC alters social cues and offers a sense of protection through anonymity, bystanders may feel emboldened to give a disconfirming response to victims, similar to the findings of anonymity in situations of mob mentality (Calvete et al., 2010; Runions, 2013). Barlinska et al. (2013) suggests that the sense of deindividuation is furthered by a lack of direct feedback from victims. In other words, without victims articulating the harm experienced, the sense of one's actions disconfirming another is lessened. Bystanders experience reduced responsibility for behaviors. Anonymity is an influential aspect accounting for cyberbullying, and SIDE provides a framework showing the effects of anonymity on the process of deindividuation.

Another aspect of deindividuation should be considered when examining cyberbullying, and that is the way individuals communicate out of consideration to group norms. Besides anonymity emboldening negative responses to others, deindividuation enhances the salience of group identity (Postmes et al., 1998). Individuals emphasizing social identity and increasing integration within a group, starts to mirror the sentiment of the group in communication (Carr, Vitak, & McLaughlin, 2011). The increased salience of social identity leads individuals to care about self-presentation in relation to the group (Lee, 2007). Individuals experience pressure to communicate within the normative boundaries of the group (Postmes et al., 1998).

In other words, when personal identities are reduced, individuals consider social identities to be more important (Postmes & Baym, 2005). As a result, individuals strive to coincide with the group identity, reflecting perceived group norms (Postmes & Baym, 2005). Communication is altered, responding in ways that align with their perceptions of group identity (Postmes & Baym, 2005). Individuals may not be directly aware of their desire to communicate in ways that mirror group norms, a factor that could contribute to disconfirming communication displayed in the CMC context (Yilmaz & Pena, 2014). When group identity is heightened, perception changes, and individuals may become closer to those perceived to be in the group (Yilmaz & Pena, 2014). The need to adhere to group norms helps to explain why bystanders would comment disconfirmingly or share a cyberbullying message.

Postmes et al. (2001) conducted a two-part experiment examining how individuals responded to a group identity prime, manipulating anonymity. In the first study, individuals were primed to exhibit more efficient or pro-social sentiments as

valued characteristics of group membership. Individuals acted in ways that were consistent with primes, and anonymous conditions increased adherence to group norms (Postmes et al., 2001). The second part of the study found that when interacting with group members anonymously through CMC, even non-primed members responded by imitating the values articulated by online groups (Postmes et al., 2001). Perhaps bystanders respond in a way to coincide with group norms, without being directly aware of displaying group norms through behavior.

Prior studies of SIDE have mainly examined how deindividuation leads to problematic situations (Lee, 2007; Postmes & Baym, 2005). Few studies have examined how SIDE facilitates pro-social situations. For example, Brunsting and Postmes (2002) examined whether enhanced social identity could promote positive online social action for an environmental group. The study found that members with strong identification participated in significantly more actions to promote environmental protection than members who did not strongly identify with the group (Brunsting & Postmes, 2002). However, more research is needed to understand if increased salience of social identity also leads to pro-social responses.

Applied to the problem of cyberbullying, an understanding of how deindividuation contributes to this phenomenon emerges. Bystanders could perceive actions as acceptable based on the perception of the group (Postmes et al., 2001). The perception of the victim as an individual is reduced in anonymous situations, and bystanders may underestimate the degree of harm victims experience from disconfirming messages (Barlinska et al., 2013). The group norm made salient to deindividuated bystanders could dictate how the response to the cyberbullying messages. In a study

attempting to create situations of bystanders violating a group norm, and speaking out against a situation of weight-based cyberbullying, Anderson et al. (2014) created a simulated *Facebook* page. The authors manipulated group norms with participants viewing comments that either refuted the cyberbullying message or did not. Results indicated that bystanders increased refutation of the negative cyberbullying message in situations where other commenters were confirming to the victim (Anderson et al., 2014). These results suggest that group norms influence how bystanders respond to cyberbullying. However, little research examines the impact of group norms affecting bystander responses (Anderson et al., 2014), and research provides little understanding of how bystanders contribute to cyberbullying situations (Barlinska et al., 2013). Furthermore, adherence to group norms influencing bystander responses represents a more complex process than exposure to a certain type of message.

Research Questions and Hypotheses

The investigator proposes to expand research on the behaviors of bystanders in cyberbullying situations through an application of SIDE. Since research on cyberbullying bystanders is limited (Anderson et al., 2014; Barlinska et al., 2013), and the use of the SIDE model has not previously been applied to this area, this study examines the phenomenon of cyberbullying from a new perspective. The study investigates deindividuation through anonymous and non-anonymous conditions. In addition, the adherence to two different group norms, of disconfirming or confirming bystander responses, is examined.

First, based on previous SIDE research (Postmes et al. 2001; Postmes et al. 1998), it is expected that bystanders are most likely to respond negatively to a cyberbullying

victim in situations where disconfirmation toward the victim establishes a group norm and anonymity is high. The first hypothesis assesses this prediction with two types of bystander behaviors:

H 1 a: In conditions where disconfirmation is established as the group norm, and anonymity is high, individuals will respond disconfirmingly to a cyberbullying victim.

H 1 b: In conditions where disconfirmation is established as the group norm, and anonymity is high, individuals will indicate that they would share a cyberbullying message.

Based on the premise of SIDE, although the group norm has an influence on how participants respond, conditions that are more anonymous should lead to a greater adherence to the group norm (Postmes & Baym, 2005). The second hypothesis examines this principle:

H2: In conditions where disconfirming comments are established as the group norm but anonymity is low, participants are less likely to respond disconfirmingly to a cyberbullying message than when anonymity is high.

While supportive stimuli have been found to increase bystander support of cyberbullying victims (Anderson et al., 2014), it is unclear from previous research on SIDE (Brunsting & Postmes, 2002) whether deindividuation will make participants more likely to adopt pro-social group norms. In order to examine these points, the following research questions are proposed:

RQ1: How does a group norm of confirmation and high anonymity impact bystanders in their responses to cyberbullying victims?

RQ 2: Under what conditions of anonymity and group norms are bystanders most likely to respond in ways that are confirming towards cyberbullying victims?

Finally, the goal of this investigation is not only to apply SIDE to cyberbullying, but also to increase understanding of the problem of cyberbullying itself. Communication scholars can bring cohesion to the study of cyberbullying by refining the definition of this phenomenon and examining how bystanders understand their role in the process of cyberbullying (Tokunaga, 2010). The final research questions address these points:

RQ 3: What are bystanders' intentions to share disconfirming messages?

RQ 4a: What are participants' experiences as cyberbullies?

RQ 4b: In what situations have participants witnessed cyberbullying?

Method

The current study examines how bystanders contribute to the cyberbullying process, by engaging in confirming or disconfirming responses to cyberbullying victims. This study employed an experimental design to assess conditions under which bystanders are likely to respond disconfirmingly or confirmingly to a cyberbullying message based on the theoretical perspective of SIDE.

Participants

After obtaining IRB approval, participants were recruited through communication courses at a large Midwestern university. Recruitment consisted of communication instructors forwarding an email about the study and electronic link to the online experiment. Participants received extra credit based on their instructor's policy. A total of 442 individuals participated in the study. The ages of participants ranged from 18-54 years, with an average age of 22 ($M = 22$, $SD = 4.95$, $N = 436$). Participants described themselves as: 15.3 % ($n = 67$) freshmen, 28% ($n = 123$) sophomores, 27.3% ($n = 120$) juniors, and 29.2% seniors ($n = 128$). A total of 68.6% ($n = 299$) of participants identified as female, while 31.4% ($n = 137$) identified as male. The ethnicity participants reported was: 66.8% ($n = 179$) white, 10.1% black ($n = 27$), 9.0% ($n = 24$) Asian, 8.6% ($n = 23$) Hispanic, and 5.6% ($n = 15$) identified as other (data on ethnicity was missing from 268 participants due to a problem with the survey instrument).

Procedures

After selecting the link in the recruitment email, participants completed the electronic informed consent document. Participants were informed that the study would

that they could discontinue the survey at any time if feeling uncomfortable. The survey took around 10-15 for participants to complete. The study assessed different experimental conditions by having participants complete one of four versions of an online survey. After completing the informed consent, participants were randomly assigned to one of four experimental stimulus conditions characterized by a disconfirming or confirming group norm, and low or high anonymity. The number of participants that completed each version of the survey was: $n = 109$ in the disconfirming and low anonymity condition $n = 106$ in the confirming and low anonymity condition $n = 114$ in the disconfirming and high anonymity condition, and $n = 109$ in the confirming and high anonymity condition. (See the Appendix).

The study procedure consisted of three steps: (a) participants were exposed to a manipulation to develop a confirming or disconfirming mindset towards cyberbullying victimization, (b) participants were exposed to the experimental stimulus (one of four conditions) and left an open-ended response as part of the online discussion (c), and participants answered survey questions about their likelihood of sharing the cyberbullying message, and experiences as cyberbullies and witness of cyberbullying.

Manipulation

The current study attempted to have participants associate with confirming or disconfirming group norms as bystanders to cyberbullying. Confirming group norms were characterized by responses to a cyberbullying message that disagreed with the posting of the bullying message and offered support to the victim. Disconfirming responses agreed with the original poster of the cyberbullying message and further attacked the self-image of the victim. Before being exposed to each condition,

participants read five questions that asked them to indicate disagreement or agreement (on a one-five point Likert scale) of how people should communicate through social media.

Questions in the disconfirming condition were phrased so that participants read statements that excused cyberbullying if the victim acted inappropriately or irresponsibly, or downplayed cyberbullying as a problem. For example, questions in the disconfirming condition included, “People who act inappropriately shouldn’t be surprised when their pictures end up online,” and “Using social media to share pictures, messages, or texts containing negative information about a person isn’t a big deal.” The Cronbach’s alpha for the disconfirming condition was ($\alpha = .66$, $M = 12.58$, $SD = 3.50$). In the confirming condition, participants read the same questions b phrased to be confirming to cyberbullying victims: “People should refrain from posting inappropriate pictures of others online,” and “Using social media to share pictures, messages, or texts of a person in a negative situation is a harmful aspect of social media.” The Cronbach’s alpha for the confirming condition was ($\alpha = .60$, $M = 18.88$, $SD = 3.01$).

Experimental Design

A 2 x 2 experimental design was employed and assessed how participants adhered to disconfirming or confirming group norms towards cyberbullying victims. According to SIDE, participants should be more likely to respond in accordance to the group norm in situations characterized by higher anonymity (Postmes et al., 1998). Figure 1 presents a model of the experimental design with the expected findings.

Cyberbullying message. After completing the manipulation check items, participants were presented with an online group discussion. The current study used an

issue of gender as the cyberbullying stimulus based on earlier investigations (Zalaquett & Chatters, 2014). The topic of the cyberbullying message is a picture of a woman with masculine physical characteristics. The picture displays the roommate's gender as ambiguous, with no makeup, and long underarm hair. Participants read the message "OMG rooming with mansquatch this semester. freaked (sic) out feeling 'her' eyes on me when I change." Participants were presented with the message and told that this was the original post, stimulating the responses in the discussion forum. The picture and cyberbullying message remained constant across the four conditions. After exposure to the cyberbullying stimulus and staged discussion forum, posttest survey questions assessed the manipulation of the group norms and the manipulation of anonymity.

Manipulation of group norms. Following the cyberbullying stimulus, participants answered nine items to assess if they agreed with the group norm of confirmation or disconfirmation. The items range from strong disagreement to strong agreement on a five-point Likert scale. The comments were valenced to coincide with the disconfirming or confirming group norm that participants encountered in the online discussion. For example, in the disconfirming conditions questions included, "The responses of the people in the discussion about the roommate were appropriate," and "People shouldn't feel like they have to restrict their comments online." In the confirming conditions, questions included, "The responses of the people in the discussion about the roommate were affirming," and "People should restrict negative comments about others online." The items were initially analyzed for reliability, and two items ("I thought the messages of the people in the discussion group were sympathetic towards the roommate," and "Supportive comments towards the roommate were appropriate") were deleted

because they did not contribute to the reliability of the scale in either the disconfirming or confirming conditions.

In order to assess if the manipulation to the group norm was successful, the group norm items were combined into a scale identified as the manipulation check ($\alpha = .93$). Cronbach's alphas were also computed separately for the confirming and disconfirming norms to make sure the items were reliable in both conditions. The Cronbach's alphas for the confirming group norm ($\alpha = .77$), and ($\alpha = .80$) for the disconfirming group norm were acceptable. Next, an independent samples *t*-test comparing the group norms conditions was conducted on the manipulation check. The *t*-test revealed that the confirming group norm ($M = 13.60$, $SD = 4.10$, $n = 214$) was significantly different ($t(433) = 34.23$, $p < .001$) from the disconfirming group norm ($M = 27.46$, $SD = 4.34$, $n = 221$). The findings suggest that the experimental manipulation was successful in participants adopting a group norm of disconfirmation or confirmation.

Anonymity. The experiment manipulated deindividuation through conditions of low and high anonymity. In both conditions, the responses of each discussion board commenter were arranged using indentation to model replies on an online discussion forum. However, in the low anonymity conditions, participants viewed profile pictures next to each of the eight comments. The pictures portrayed college-aged individuals of varying racial backgrounds (four women and four men). A personalized profile name was associated with each respondent in the low-anonymity conditions. Based on the profile picture, the profile names suggested that they contained part of the respondents' personality characteristics (for example, "LiveSmart," "Ben27Snap," "Partiesca23"). The profile names were designed to call to mind personality traits of the discussion posters

(i.e., smart, a first name, a person that enjoys partying) to encourage participants to identify the discussion posters as individuals. The high-anonymity condition did not contain pictures of the commenters, and used a grey outline of a generic face to mimic anonymous identity. The profile names in the anonymous condition consisted of general names that could reflect any college student to limit identification (for example, General72, Student57, Random12).

The manipulation of the anonymous and non-anonymous conditions was measured using an adapted version of Postmes and Spears (2002) three-item scale of group identification. The items included, “I could form an impression of the people in the discussion,” “The others in the discussion were personally identifiable to me,” and “I could not form a picture of the people in the discussion” (recoded). The items measure group identification, to assess if deindividuation has occurred on a five-point Likert scale, ranging from strong disagreement to strong agreement (Cronbach’s alpha, $\alpha = .84$). Furthermore, four additional items about group identification were included. Examples of the added questions included: “I could identify the various attitudes of the people in the discussion,” and “I agree with the views of the people in the discussion group.” The eight items were recoded so that a higher score represented high anonymity and combined into a scale named identity check. A reliability analysis indicated that all items reliably fit as a scale, with a Cronbach’s alpha of $\alpha = .78$.

Failed anonymity manipulation. In order to determine if the manipulation of anonymity was successful, a t-test was conducted between the scale identity check and the low and high anonymity conditions that participants encountered. The t-test did not indicate that low anonymity ($M = 25.67$, $SD = 5.62$, $n = 211$) was significantly different (t

(434) = $-.062$, $p > .05$) than high anonymity ($M = 25.70$, $SD = 5.48$, $n = 217$). This finding indicates that the experimental manipulation for identity failed.

Analyses for Hypotheses. Apparently, participants did not perceive there to be a difference in the low or high anonymity discussion group conditions. The failed manipulation of anonymity affects half of the experimental design. Conceptually, anonymity was treated the same way as the group norm. The proposed hypotheses and research questions were as a result. Specifically, hypothesis 1a and *RQ 1* were revised to the following:

H 1: Individuals will be more likely to intend to share a cyberbullying message in disconfirming rather than confirming conditions.

H2: Participants in a confirming group norm will be more likely to respond confirmingly to a cyberbullying message than participants in a disconfirming group norm.

RQ 1: How do bystanders comment in ways that are confirming or disconfirming towards cyberbullying victims?

RQ 2: What are bystanders' intentions to share disconfirming messages?

RQ 3a: What are participants' experiences as cyberbullies?

RQ 3b: In what situations have participants witnessed cyberbullying?

Analyses for Research Questions. Following the cyberbullying message and discussion posts, participants were asked to enter their own comment as part of the online discussion in a large text box following the prompt, "Considering the original message and the discussion group, please enter your comment as part of the discussion here." In order to answer the first research question, the open-ended responses to the cyberbullying

discussion were analyzed to examine if they were confirming or disconfirming towards the cyberbullying victim. Responses that did not provide information that was valenced towards the cyberbullying victim were coded as other. Two researchers independently coded 30% of the data. Cohen's kappa was computed and there was acceptable agreement between the coders, $\kappa = .730$, (95% CI) $p < .001$.

In order to answer the second research question, participants were asked how likely they would be to share the original message about the roommate with others (for example: "I would share the original message about the roommate with others," 1 = strongly disagree - 5 = strongly agree). A one-sample t-test was used to examine how agreement or disagreement with this statement compared with intentions of sharing the cyberbullying message.

Answering *RQ 3a*, exploratory questions were provided to measure how participants have experienced cyberbullying. Participants were asked if they thought they had ever acted as a cyberbully and if they had, participants were asked to account for why they acted the way they did among the following options: "peer pressure," "didn't understand what I was doing," "wanted to be liked/popular," "the person (i.e. the victim) deserved it," "revenge," and "other." In addition, if participants' reported acting as a cyberbully, they were asked to identify the context, or the medium they used to cyberbully others, choosing among the options of: "over the phone (via text)," "through social media," "through an online discussion board or blog," and "other." Finally, participants were asked to identify the situation where they bullied another person, selecting from the options: "high school," "college," "the workplace," or "other." Frequencies were used to analyze the responses to participants' cyberbullying experiences.

In response to *RQ 3b*, participants were asked if they had ever witnessed a situation of cyberbullying to identify if they had experienced being a bystander. Participants that identified as previously witnessing a situation of cyberbullying were asked to select the context that they observed or witnessed the cyberbullying in, selecting from the options of: “over the phone (via text),” “through social media,” “through an online discussion board or blog,” and “other.” Frequencies were used to analyze the response to this item. The following section explains the findings of the hypotheses and research questions.

Results

Overview

The reformulated hypotheses assessed differences based on the group norm conditions of confirmation and disconfirmation. In order to address how the experimental manipulation of the group norm affected participants' responses and behavioral intentions, the open-ended responses to the bullying message were coded. Numerical categories were assigned into the variable bullying response code in order to conduct t-tests. Answering the research questions, descriptive statistics and frequencies were used to understand how participants responded to cyberbullying in addition to participants' experiences as cyberbullies and witnesses to a cyberbullying event.

Hypothesis 1. The first hypothesis predicted that participants would be more likely to intend to share a cyberbullying message in conditions with a group norm of disconfirmation. In order to address this hypothesis, t-tests were conducted comparing the group norm (confirmation or disconfirmation) on the intention to share the original bullying message with others. The t-test did not indicate the intention to share the original bullying message with others based on group norm condition of disconfirmation ($M = 1.72$, $SD = .949$, $n = 225$) was significantly different ($t(440) = -.323$, $p > .05$) than confirmation ($M = 1.69$, $SD = .935$, $n = 217$). The first hypothesis was not supported; the group norm did not create a significant difference in participants' intentions to share the cyberbullying message.

Hypothesis 2. The second hypothesis predicted that the manipulation of the group norm would significantly impact how participants responded to the cyberbullying message. Specifically, the hypothesis stated that participants in the disconfirmation group

would respond in ways that were disconfirming to the cyberbullying victim. The t-test revealed the confirming group norm ($M = 2.68$, $SD = .701$, $n = 213$) was significantly different ($t(427) = 1.77$, $p < .05$) from the disconfirming group norm ($M = 2.56$, $SD = .764$, $n = 216$) in responses to a cyberbullying victim. In other words, the experimental manipulation of the group norm significantly impacted how participants responded in ways that were confirming or disconfirming towards the cyberbullying victim, and the second hypothesis was supported.

Research Question 1. The first research question examined how bystanders commented in ways that were confirming or disconfirming to a cyberbullying victim. The open-ended responses that participants entered as part of the cyberbullying discussion were examined and coded for the valence towards the cyberbullying victim. The coded categories were assigned numerical value (1 = “other,” 2 = “disconfirming,” and 3 = “confirming”) and entered into SPSS.

Frequencies revealed that out of 429 open-ended responses, 76.9% were confirming towards the cyberbullying victim ($n = 330$). For example, a comment in the confirming category was: “You are all very disrespectful and nasty people, you don't even know her yet you think you know what her actions will be. You should all be ashamed.” Another participant commented, “I feel as though I agree with the comments in which were already posted. This is disgusting and inappropriate and embarrassing to the person in which is in the picture.” In the confirming responses, participants communicated confirmation by disagreeing with the group comments in the disconfirming conditions, and in agreeing with the comments of the discussion group in the confirming conditions.

A total of 15.2% of responses were identified as other ($n = 65$). Responses in this

category did not have information representing a valence towards the cyberbullying victim. For example, comments in the other category consisted of: "It is super damn to share personal stuff online," "I wish I would have never seen this" and "why?"

Frequencies found that only 7.9 % ($n = 34$) were disconfirming towards the cyberbullying victim (in addition, a total of 13 responses were missing). However, the anticipated pattern based on the group norm was followed, with 24 out of the 28 disconfirming responses occurring in the disconfirming conditions. Examples of responses that were disconfirming towards the cyberbullying victim were: "Lol looks like the samsquanch from trailer park boys, " "haha that freaks me out. I don't know you but still haha," and "Guard your deodorant with your life lol." Overall, participants responded in ways that were confirming towards the cyberbullying victim, even when it was expected that they would be disconfirming, given the group norm.

Research Question 2. The second research question asked what the intentions of bystanders were to share the cyberbullying message. In order to answer RQ 2, the responses to the question, "I would share the original message about the roommate with others," was examined, as the question asked participants how much they disagreed or agreed with the statement (1 = strongly disagree - 5 = strongly agree). Descriptive statistics indicated that participants disagreed with this statement ($M = 1.70$, $SD = .941$, $N = 442$). A one-sample t-test was conducted to assess if participants' disagreement with this statement was significantly related to their behavioral intentions of sharing the original bullying message. The t-test indicated that participants' behavioral intentions to avoid sharing the bullying message were significant ($t(440) = 27.33$, $M = 1.70$, $SD =$

1.00, $N = 442$). In other words, participants significantly disagreed with the statement of being likely to share the original bullying message with others.

Research Question 3a. The third research question examined participants' experiences as cyberbullies. First, if participants felt they had acted as a cyberbully, they were asked to account for the reason they cyberbullied. Frequencies showed that the most common reason for acting as a cyberbully identified by 30.5% ($n = 131$) was "other." While participants could enter a reason if they selected the "other" category, most left this option blank, and there was not enough data to code the reasons for other. The next most predominate category selected as a reason for cyberbullying "didn't understand what I was doing," identified by 28.2% ($n = 121$) of participants. The other reasons for cyberbullying varied, with 12.8 % ($n = 55$) identifying "wanted to be liked/popular," 11.9% ($n = 51$) identifying "revenge," 9.3% ($n = 40$) identifying that "the person (i.e. the victim) deserved it," and 7.2% ($n = 31$) identifying "peer pressure" as the reasons accounting for cyberbullying others (13 responses were missing).

In addition, if participants reported acting as a cyberbully, they were asked to identify the context, or the medium they used to cyberbully others. Frequencies showed that the most common context reported to cyberbully through was: "social media," identified by 37.7% ($N = 148$) of participants, "other," identified by 29.3% ($N = 113$) of participants, "over the phone (via text)," identified by 27.7% ($N = 109$) participants, and "through an online discussion board or blog," identified by 5.3% ($N = 21$) of participants (a total of 49 responses were missing). Similar to the medium used to cyberbully another person, participants that reported acting like a cyberbully at one point were also asked to identify the situation where they bullied another person, selecting from the options: "high

school,” “college,” “the workplace,” or “other.” Frequencies showed that the majority of respondents, or 58.2% ($N = 196$) selected “high school” as the most common situation where they acted as a cyberbully, followed by “other,” identified by 29.4% ($N = 99$) of participants, while 11.3% ($N = 38$) participants identified “college,” and 1.2% ($N = 4$) identified “the workplace” (a large number of responses, 105, were missing).

Research Question 3b. Responses to the third research question (3b) examined situations where participants had witnessed cyberbullying in order to identify if they had experienced being a bystander in the past. Frequencies found that the most common context reported to cyberbully through was: “social media,” identified by 75% ($N = 312$) of participants, “over the phone (via text),” identified by 9.9% ($N = 41$) participants, and “through an online discussion board or blog,” identified by 7.7% ($N = 32$), and “other,” identified by 7.5% (31) of participants (a total of 26 responses were missing). (The findings of RQ 3a and RQ 3b are depicted in Tables 1-4). The following section discusses the implications of the findings of the current study.

Discussion

Original design and manipulation

The current study expanded cyberbullying research by examining how bystanders become involved in cyberbullying using SIDE. The theory of SIDE was applied through an experimental design, manipulating the degree of confirmation as a group norm and assessing deindividuation through conditions of anonymity. Originally, the study predicted that both the group norm and anonymity would interact to influence responses to a cyberbullying message. The initial hypotheses suggested that conditions of higher anonymity would increase disconfirming responses to a cyberbullying victim, based on previous SIDE research. Studies reveal deindividuated individuals are likely to respond in negative ways or participate in deleterious behaviors (Alvídrez, S., Piñeiro-Naval, V., Marcos-Ramos, M., & Rojas-Solís. 2015; Lee, 2007). The initial research questions also examined how group norms that were confirming towards a cyberbullying victim would interact with anonymity, as SIDE has infrequently been examined in pro-social situations (Postmes & Spears, 2002). However, the experimental manipulation for anonymity was unsuccessful, resulting in a partial measurement of SIDE that examined the impact of group norms on responses to a cyberbullying message. The following sections report the findings of the current study regarding the hypotheses, research questions, impact of group norms, and contribution to cyberbullying research.

Summary of hypotheses. The first hypothesis predicted that the group norm would influence the behavioral intentions of participants, with participants more likely to share the cyberbullying message in disconfirming conditions. The results were non-significant for this hypothesis. Instead, the findings indicate that although participants

were sensitive to the different group norms in the experimental manipulation, this did not influence their behavioral intentions. Alternative explanations could account for this finding. According to SIDE (Postmes et al., 1998) group norms by themselves may not be enough to influence behavior. As the manipulation of anonymity was unsuccessful, the experimental manipulation may not have been sufficient to influence participants' behavioral intentions. However, the behavioral intention measured may also have accounted for this result. Participants may have been sensitive to responses to cyberbullying, and would be unlikely to report that they intended to engage in this malevolent behavior. This could reflect social desirability bias, of altering responses in order to please the researcher or being unwilling to disclose participating in a behavior with a strong negative connotation (De Jong, Pieters, & Fox, 2010). In the current study, participants may not have wanted to be perceived as cyberbullies.

In contrast, the second hypothesis was supported. The second hypothesis indicated that the group norm would significantly impact the level of confirmation in the open-ended responses to a cyberbullying message. Participants adhered to the experimental manipulation of the group norms. The content of the open-ended responses was more confirming to a cyberbullying victim in situations with a confirming group norm, and comments were more disconfirming in situations with a disconfirming group norm, indicating that a group norm when communicating through CMC could influence how individuals respond. According to SIDE, the group norm is important in understanding how CMC facilitates a change in self-identity, with individuals having a heightened awareness of the views of the group (Postmes & Baym, 2005). Although this accounts for half of the SIDE model (Postmes et al., 1998), the results suggested that the

group norm is impactful in understanding how bystanders respond to a cyberbullying message. The results of this hypothesis have important implications for understanding how individuals respond to situations of cyberbullying and the findings of the research questions shed further insight into how cyberbullying is examined by researchers.

Key findings of the research questions. The findings of the first research question describe the valence of the open-ended responses participants left as part of the online discussion group. Examining the valence of the comments by themselves shows that the majority of the comments were confirming. Although more comments were confirming rather than disconfirming, the valence of the comments was still in the anticipated direction, with frequencies showing that 1.8% of responses reported as disconfirming towards the cyberbullying victim in the confirming group norm. The percentage of comments that was valenced as disconfirming to the cyberbullying victim increased to 10.8% under the disconfirming group norm. Similar to the findings of the second hypothesis, the results of the first research question suggest that the group norm does have an impact on how individuals respond to a cyberbullying message. However, the results were non-significant.

Yet, the influence of the group norm may not translate into reporting that one would engage in cyberbullying. Reiterating the findings of the first hypothesis, the second research question asked participants how likely they would be to share the original cyberbullying message with others. Assessing the behavioral intentions of participants on a five-point scale, most participants reported that they either strongly disagreed with the behavioral intention to share a cyberbullying message. The findings of the t-test indicated that the behavioral intention to avoid sharing the original

cyberbullying message was significant. Considering the findings of the first two hypotheses and research questions, perhaps participants are less aware of how comments are potentially influenced by a group norm but are more aware of acting as a cyberbully by sharing the original message. In addition, participants could have perceived as the socially acceptable behavior to support.

The remaining research questions provided insight regarding how participants experienced cyberbullying. Over half of the participants identifying cyberbullying in the past did not acknowledge a direct reason for cyberbullying actions. The context used to cyberbully varied, suggesting cyberbullying occurs through different mediums. The majority of participants reported acting as cyberbullies in high school but the findings suggest cyberbullying occurred outside of the high school setting. Finally, participants reported witnessing cyberbullying mainly in the context of social media. The findings of the research questions reinforce the results of previous cyberbullying research but point to some important differences (Roberto et al., 2014b; Tokunaga, 2010). The following sections describe impactful findings of the study in more detail.

Measurement Issue

The failed manipulation of anonymity is an important finding of the current study, suggesting a measurement issue. The use of anonymity to measure deindividuation was based on a three-item scale used by Postmes and Spears (2002). This scale was used in revised form by subsequent research (Lee, 2008). The scale measures if individuals identify with their group, to assess if deindividuation has occurred. The current study added five similar items to the scale and although the eight items reliably fit as a scale, the non-significant t-test suggests an issue with the items. Interestingly, even when

looking at the results of the original three items of Postmes and Spears (2002), the t-test was still non-significant. A possible explanation for this finding is an issue with the items used to measure deindividuation.

Specifically, the scale used by Postmes and Spears (2002) to assess group identification may not actually measure deindividuation. Instead, the measurement of group identification may be a different occurrence than that of deindividuation. For example, Lee (2004) examined SIDE in a two-part study and measured deindividuation by manipulating anonymity in an online discussion, where some respondents had a visual cue next to their comment and others were anonymous. The study found an interesting effect with the use of anonymity. The degree of anonymity related to how strongly participants agreed with the arguments of the discussion group members but failed to influence how participants viewed themselves as group members. Lee (2004) suggests anonymity and group identification may measure two different constructs. In another study, Lee (2008) found partial support for the prevalence of deindividuation as articulated by SIDE. While participants' abilities to process arguments were influenced by an anonymous or non-anonymous condition, Lee (2008) found that group identification failed to reduce private self-awareness.

According to a classical theoretical approach to deindividuation in FtF settings, adherence to group norms is increased in anonymous situations because of a loss of self-awareness and increased sense of group-awareness (Postmes & Spears 1998; Lee, 2008). However, applying SIDE to CMC, Lee (2008) suggests a two-part process could occur with deindividuation. A difference could exist between the perception of the group and how individuals perceive themselves in relation to the group. In other words, instead of

deindividuation being determined by anonymity, perceptions of group identification and anonymity could shape perceptions differently (Lee, 2004; Lee, 2008). Applied to the current study, the manipulation of anonymity may have failed due to a perceptual difference between perceiving the self as anonymous and identifying with the group. Since the scale items in the current study assessed group identification, perhaps individuals identified with the group and not as anonymous. As a result, participants may not have been fully deindividuated.

Another possible reason for the failed manipulation of anonymity could indicate a deeper problem with the measurement of deindividuation. The measurement of deindividuation is difficult to establish, even in studies examining deindividuation from a classical perspective using FtF studies (Lee, 2008; Postmes & Spears, 1998). Postmes and Spears (1998) conducted a meta-analysis, measuring the prevalence of deindividuation, noting inconsistent empirical support for deindividuation. Postmes and Spears (1998) found a small but significant influence for deindividuation ($r = .09$) on anti-normative behavior across 60 studies. Looking at the influence of moderating variables; however, the authors found that studies attempting to manipulate private self-awareness produced no significant effect for deindividuation influencing behaviors. While deindividuation had a significant effect for influencing adherence to the group norm, the influence of deindividuation on self-perceptions is unclear, and this continues to be an issue for current research of SIDE (Carr et al., 2008; Lee, 2008). In sum, the way deindividuation is measured may not accurately capture what occurs in this process, which accounts for the failed anonymity manipulation of the current study.

The use of anonymity to measure deindividuation may not accurately capture degrees of deindividuation, as self-awareness and perceptions of the group's identity could be different constructs (Kim & Park, 2011). Although aspects of the self and other's identity may change, perhaps the perception of change occurs in degrees, with different outcomes on behavior. Examining degrees of deindividuation in an experiment testing the influence of visual anonymity, Kim and Park (2011) found evidence that increasing visual similarity between the self and group members increased group identification as predicted by SIDE. However, as group identification increased, participants reported that perceptions of unique personalities decreased. Participants perceiving a greater sense of deindividuation were less likely to agree with others, contrary to what was expected. The role of deindividuation as explained by SIDE may need to be re-conceptualized as more complex, needing a different form of measurement.

In the current study, perhaps participants had some degree of identification with the discussion group members but not enough to shift self-perceptions and change their behavioral intentions. Manipulations of anonymity could increase perceptions of public self-awareness but at the same time the manipulation may not be strong enough to reduce private self-awareness. In other words, identifying the views of the group and feeling like you understand the group members is not the same as having reduced self-identity. Research that has found varying significance or unexpected effects measuring deindividuation in the context of SIDE (Carr et al., 2011; Kim & Lee, 2011; Lee, 2004, Lee, 2008) offers support for the need to measure deindividuation in a different way.

To understand how deindividuation could occur in different degrees, the construct of depersonalization is useful. The salience of group identity may be more important than

a loss in explaining how identity shifts impact behavior in the context of SIDE (Carr et al., 2011; Lee, 2004). Specifically, Carr et al. (2011) suggest that a more accurate understanding of the change in identity that can occur through CMC is depersonalization, rather than deindividuation. The explanation of depersonalization centers on cues that identify group members as being more similar, and increased polarization of outgroup members (Carr et al., 2011). Perhaps the level of anonymity is not important, but the degree of similarity with group members that explains different degrees of deindividuation. In the current study, participants could have understood the views of the group members (as the high Cronbach's alpha for the anonymity scale suggested) but may not have perceived high degrees of similarity with them in either the anonymous or non-anonymous condition. In addition to issues with the scale items used to measure anonymity, there may have been an issue with the study design creating difficulty for participants to assess anonymity.

Confounding anonymity and confirmation

The non-significant t-test for the differences between the non-anonymous and anonymous conditions suggests there could have been a problem with anonymity beyond the scale issue. Participants may not have registered the anonymity manipulation itself. Two potential reasons could be the cause for this issue. First, participants may not have perceived a difference between the use of profile pictures and screen names to establish anonymity. The discussion conditions were designed to create different perceptions of anonymity. Based on the experimental manipulation, participants should have identified with discussion group members in the non-anonymous condition. The use of a generic grey outline of a person and general label as a screen name (e.g. "Random12") was

designed to facilitate perceptions of anonymity but this may not have occurred. Instead, the use of visual identification of group members and screen names may not have been sufficient enough to create perceptions of non-anonymity.

Based on previous SIDE research; however, visual cues have created a difference in participants' perceptions of anonymity (Lee, 2004; Kim & Park, 2011). For example, Kim and Park (2011) found visual cues increased perceptions of similarities between participants and discussion group members. In the current study, participants were told that they were communicating as part of a discussion group but the discussion group members were not real. Possibly, even in the non-anonymous conditions, participants did not perceive themselves to be in an active discussion since the communication did not occur in real time. The lack of real time could account for limiting the ability to identify with the group in the non-anonymous condition. Alternatively, in the anonymous condition, the discussion may not have created a perception of anonymity. Although there was no identifying information of discussion members, perhaps participants did not feel like they were anonymously commenting to an online group discussion.

The second explanation for why participants may not have registered the anonymity manipulation could be indicative of a deeper issue. Participants may have had difficulties distinguishing between anonymity and confirmation. Participants may perceive a confirming response to the cyberbullying victim as making a personal statement against the cyberbullying message. Responding confirmingly may be associated with asserting personal identity. Triggering a confirming response could be associated with triggering non-anonymity, confounding the two concepts. A confirming response would therefore lead to a perception of a non-anonymous environment.

In addition, perhaps participants perceived it to be more socially appropriate to respond confirmingly to the cyberbullying victim. The current study may have triggered a need for conformity. For example, Asch (1955) conducted experiments on the power of social pressure limiting how individuals are willing to communicate dissent from a group. Specifically, Asch (1955) found that even when individuals knew the group had given a wrong answer, they were likely to go along with the wrong answer rather than communicating dissent. Perhaps the adherence to the group norm in the current study is similar to Asch's findings of the need to conform to the group, and this could have implications for understanding how bystanders communicate disconfirmingly in situations of cyberbullying. Future research should examine how issues of conformity can change the valence of messages towards cyberbullying victims.

Tendency towards confirmation

A central finding of the present study was the successful manipulation of the group norm. In support of Hypothesis 2, the t-test indicated a significant difference between the confirming and disconfirming group norms. While the finding has important implications for cyberbullying research and is discussed later, it is important to note that a distinct trend towards confirmation was present. Out of a total of 431 responses that were codeable, 76.2% ($n = 337$) were confirming, and 6.3% ($n = 28$) were disconfirming. The amount of confirming responses in the open-ended data surpasses what was expected, as responses in the disconfirming conditions were more confirming.

Possible speculations for this result could be found in SIDE research. Postmes et al. (1998a) suggest when individuals are deindividuated, the adherence to the group norm increases. Classical literature on deindividuation in FtF settings claimed that when

individuals experienced a lessened sense of responsibility they were more likely to engage in socially undesirable behavior (Postmes & Spears, 1998). In the current study, perhaps it was more difficult for individuals to respond in ways that were disconfirming towards a cyberbullying victim if they were not fully deindividuated.

For example, in the disconfirming conditions, participants directly disagreed with the disconfirming group norm in their open-ended responses as part of the discussion. One participant replied, *@letsjustbefriends* “There's nothing nasty about natural body appearances. They have pretty blue eyes.” The participant offers a confirming response by complimenting the cyberbullying victim and refuting the disconfirming group norm. Interestingly, this participant created a screen name in the response, and the name of *@letsjustbefriends* suggests that they refuted the norm in the disconfirming discussion. Another participant said, “You all are rude. Maybe she just doesn't like shaving that's her business. And don't flatter yourself you're probably not even her type.” The participant identifies the discussion group participants as rude and offers an insult to the discussion group in defense of the cyberbullying victim. The data indicates participants describing the disconfirming group norm and then rejecting the norm, with responses that were confirming towards the cyberbullying victim. While the findings of hypothesis two suggest that the group norm was impactful, the impact of the group norm may not have been strong enough to elicit disconfirming responses.

Although multiple speculations exist about why participants may have only been partially deindividuated, the data suggests the most likely reason was a measurement issue. In addition, despite the amount of confirming responses to the cyberbullying message across the four experimental conditions, participants were more likely to

respond confirmingly to the cyberbullying victim in the confirming conditions. A total of 25 out of the 28 disconfirming comments were present in the disconfirming conditions. The finding that most of the disconfirming responses occurred in the disconfirming group norm conditions points to important information about the influence of group norms in situations of cyberbullying.

Expansion of cyberbullying research

The current study provided important information about the prevalence of cyberbullying and offers evidence that cyberbullying is a complicated problem. Research questions added an understanding of how cyberbullying occurs among different situations. While the highest percentage of participants reported acting as a cyberbully in high school, 11.3% of participants reported acting as a cyberbully in college. These findings support other research that bullying is not only a problem among children and adolescents but in college as well. For example, Chappell et al. (2004) surveyed 1,025 college undergraduates and found that 18.5% reported being bullied once or twice in college by another student. Previous research findings were supported showing that cyberbullying is a predominant problem in high school, as over half of participants reported that high school was the situation where they bullied others (Roberto et al., 2014b).

Cyberbullying victimization at earlier points in an individual's life could continue to have adverse effects into college, as researchers have found this pattern to exist with FtF bullying (Chapell et al., 2006). For example, Chapell et al. (2004) found that although bullying tended to decrease with age, there were significant positive correlations between being a victim and elementary, high school, and college with the same pattern

existing for bullying perpetrators. Similarly, Goodboy, Martin, and Glodman (2016) found evidence that being bullied in high school provides adverse effects that carry over into victims' first semester of college. Goodboy et al. (2016) found that students bullied in high school had problems with motivation and adjustment in their first semester of college. Victims of bullying in high school have also reported feeling alone and isolated in college, having difficulties making friends in the new college environment (Adams & Lawrence, 2011). The current study offers evidence that cyberbullying is a problem in college, and potentially the same issues resulting from being bullied in the FtF setting in high school carrying over into college could result from cyberbullying in high school.

Examining the findings of the medium used to cyberbully others; participants reported variation among the mediums used. However, when looking at how participants witnessed cyberbullying, the overwhelming finding reported by 75% of participants was witnessing cyberbullying through social media. As college students continue to use social media, both as a way to maintain and establish friendships, cyberbullying could impact college adjustment (Anderson et al., 2014). The impact of cyberbullying not only on adjustment but also on maintaining relationships and motivation over the entire undergraduate college experience should be examined. For example, Goodboy et al. (2016) found that the impact on motivation in college was not as severe among victims of cyberbullying compared to victims of FtF bullying. The authors suggest differences on college motivation occur because cyberbullying occurs over an impersonal medium, while FtF bullying directly occurs in the academic environment and may lead individuals to stigmatize academic settings. However, individuals may link the CMC and FtF environment together when thinking about the college community.

Another interesting finding was found in the reported reasons for acting as a cyberbully. The most prevalent categories selected did not give a direct explanation. Slightly over 30% of participants selected the “other” category as an explanation for why they had acted as a cyberbully, yet often did not enter a reason for cyberbullying in order to refine the “other” category. Additionally 28% of participants selected not understanding what they were doing when cyberbullying. Perhaps the selection of these vague categories by participants reflect social desirability bias (De Jong et al., 2010), as they did not want to portray themselves in a negative light to the researcher by giving the honest reason for engaging in a behavior culturally defined as negative.

However, the responses could reflect the honest viewpoints of participants, suggesting a more serious issue. Research on cyberbullying suggests individuals often get caught up in the process, moving from a bystander to a cyberbully (Barlinska et al., 2013). For example, Davis et al. (2015) describe that individuals may cyberbully because as a reaction to an aggressive environment modeled through CMC. The findings of the current study could relate to the significant result of the impact of group norms. The lack of a direct reason for acting as a cyberbully could represent that individuals were not fully aware of why they cyberbullied, as a result of getting caught up in the aggressive process occurring among a group of individuals when communicating through CMC.

Implications of group norms

The findings of the current study indicate problematic features of cyberbullying making it difficult to confront. Specifically, findings suggest cyberbullying differs from FtF bullying, with an enhanced consideration of the group norm. The significant differences between the group norms suggest the normative environment may influence

perceptions, affecting how individuals respond to cyberbullying. Problematic norms could exist over social media, as the majority of participants described witnessing cyberbullying through social media. Anderson et al. (2014) found that individuals had difficulty responding to a cyberbullying message in a way that violated the normative comments of other respondents. Similarly, the results of this study suggested that the group norm influences responses to cyberbullying. One problematic aspect of the group norm contributing to cyberbullying is that individuals may lack awareness of how communication is influenced by the communication of others. Individuals may lack the ability to contextualize messages or fail to realize the additive impact of messages.

Another problematic aspect of the group norm includes bystanders may have a reduced awareness of the victim. For example, Barlinksa et al. (2013) suggests that bullying should be perceived as a dyadic process, where the roles of being a victim, bystander, and bully overlap. Bystanders not only consider the cyberbullying message but also the comments of other individuals that have posted about the message. The consideration of others' responses and could lead to a minimization of the degree of harm that the victim experiences. The emphasis put on the group norm could increase perceptions of being in the moment and responding to the group, rather than considering how comments are valenced towards the victim. Brody and Vangelisti (2016) examined cyberbullying among college students and found that situations characterized by higher anonymity and with a greater number of bystanders decreased the defending behaviors in support of bullying victims. Although the manipulation of anonymity in the current study failed, the importance of the group norm relates to the findings of Brody and Vangelisti (2016) about the number of bystanders. As perceptions of the social group increase,

considerations toward the victim may decrease. Individuals may trivialize comments to a cyberbullying message, even if the content of the message is identified as disconfirming, because the comment is not perceived as having a major impact on the victim in relation to the number of other responses.

The failure of the anonymity manipulation could also point to the importance of the group norm in situations of cyberbullying. While several reasons could account for the failed anonymity manipulation, perhaps anonymity is not the most important factor in understanding how bystanders react to a cyberbullying message. In other words, bystanders may not care about anonymous situations when commenting in a confirming or disconfirming way. Carr et al. (2011) emphasizes the importance of depersonalization over deindividuation to understand SIDE, and the findings of the current study may offer support for this perspective. Communicating through CMC, individuals may not believe themselves as anonymous. For example, Brody and Vangelisti (2016) suggest that SIDE has limitations when understanding cyberbullying that occurs on social network sites such as *Facebook*. Specifically, the authors describe deindividuation does not fully occur since other commenters and the victim remain personally identifiable based on the pictures and personal information on profile pages.

Further research is needed to assess why the anonymity manipulation in the current study failed, and to determine if deindividuation occurs through a personalized social media site like *Facebook*. However, perhaps individuals do not need to be fully anonymous for a sense of depersonalization to occur. Rather than needing to be perceived as anonymous, individuals may comment on a cyberbullying message regardless. The determination of the valence of the comment towards the cyberbullying victim could

have a greater likelihood of being influenced by the group norm. Interventions and attempts to reduce cyberbullying should consider the importance of group norms.

Group norms could have both a helpful and harmful impact on how individuals respond to a cyberbullying message. Interestingly, in the current study, more respondents were confirming than disconfirming to the cyberbullying victim. While more respondents were confirming, perhaps the pro-social elements of confirmation made increased the ease of adhering to the group norm. Research on SIDE finds that anti-normative behaviors are more likely to be the result of deindividuation as opposed to pro-social behaviors (Postmes & Spears 2002). However, in the case of cyberbullying, increased awareness of the group norm may be more important rather than perceived anonymity, and different factors could influence responses to group norms. Potentially, individuals could have experienced ease with adhering to the group norm in more pro-social situations provided by the confirming conditions.

Applications for cyberbullying interventions

The open-ended responses to the confirming conditions were characterized by agreement to the discussion group participants in defense of the cyberbullying victim. Particular comments directly referenced other discussion group participants, echoing to remove the cyberbullying message and referencing the same language in affirmation of the victim. Interventions could focus on creating an environment that is confirming, offering support to a cyberbullying victim. In a cyberbullying intervention program for middle school students, Roberto et al. (2014a) focused on teaching students to adopt different practices in internet safety overall. The intervention showed students the ease of finding personal information online, and showed how common practices of

communicating through social media were problematic. While interventions teaching individuals to speak out against a bully that has been effective in situations of FtF bullying (Olweus, 1994), cyberbullying interventions may need a different focus. Bystanders in situations of cyberbullying may experience difficulty communicating in opposition to the group norm, especially when a large group has commented in a particular disconfirming fashion.

Rather, interventions focusing on altering the group norm overall may be more effective. As Barlinska et al. (2013) describes, if cyberbullying is conceptualized as more of a group and cultural process, changing the expectations about how communication should or should not occur through CMC may be a more effective method of intervention. The adherence to the confirming group norms in the current study may reflect an opportunity of how interventions could elicit supportive responses to bullying victims. Thus, the finding that group norms are influential in bystander responses to cyberbullying, whereas anonymity may not be important, is a crucial finding of the current study. Adherence to the group norm has the potential to be both helpful and harmful in situations of cyberbullying, and could be researched in more detail in an attempt to understand factors that would increase the likelihood of success in cyberbullying intervention programs.

The current study provides information on how cyberbullying intervention programs could be more beneficial by emphasizing the impact of disconfirming messages on victims. While some of the open-ended responses to the cyberbullying message were directed towards the individuals in the discussion group, others directly referenced the cyberbullying victim and the person that originally posted the cyberbullying message. For

example, one participant commented, *@Original Poster* “It is interesting that you feel social media is an appropriate place to talk about people behind their backs. Please try to understand how cyberbullying is the same as regular bullying- only easier. Words DO hurt.” The respondent starts the reply by referencing the initial poster, yet no information on the original poster was included in the discussion. The response is clearly directed to the initial poster, calling them out by classifying the behavior as cyberbullying and elicits empathy for the victim through the description of how the post is directly harmful to the victim. While both FtF and cyberbullying intervention programs focus on teaching bystanders to be empathetic towards victims (Barlinska et al. 2013; Bauer et al., 2007), interventions that target empathy and responsibility towards an individual may be more effective in the cyberbullying setting. The results of the current study suggest that the group norm is impactful regarding how individuals respond to cyberbullying situations. Teaching bystanders to increase the focus on the victim and to recognize the harm disconfirming messages cause may help to de-emphasize the focus on the group norm.

Interventions that focus teaching empathy on an individual rather than a group level may be more beneficial in situations of cyberbullying and may be different than the focus of bullying intervention programs in the FtF setting. For example, a common bullying intervention program, adapted by several countries, is Olweus’ (1994) whole school bullying intervention program that focuses on school-wide empathy and teaching all students that it is important to get engaged when they witness bullying.

However, trying to elicit empathy by focusing on how all responses to cyberbullying are harmful may be difficult because of the emphasis on the group norm. For example, Gini, Albiero, Benelli, and Altoe (2011) examined how effective empathy

was at influencing bystander responses in defense of bullying victims in the FtF setting. Gini et al. (2011) found that empathy was not strong enough to lead bystanders to take an active role in defense of victims. Rather, the authors found employed a combination of empathy and self-efficacy.

In situations of cyberbullying where the group norm is perceived to have greater importance, individuals may also need self-efficacy in addition to empathy towards the victim. CMC has an influence on perception, and may lead bystanders to reduce the focus on the effects on the victim and lead bystanders to trivialize how their individual comments contribute to the cyberbullying process. Cyberbullying interventions improve effectiveness by focusing on the responsibility of the poster to the victim. Interventions that teach bystanders to be empathetic with victims might make bystanders more aware of how individual comments directly harm or offer support to victims. Bystanders that find difficulty with contradicting the group in their responses could learn to show a simple form of confirmation towards the victim. For example, bystanders could comment to a disconfirming post using the emoji that shows one is witnessing an example of cyberbullying, for example “I am a witness” emoji by ios 9.1

(<http://iwitnessbullying.org>). Without directly confronting others about disconfirming messages, this response communicates confirmation for victims.

The results of this study suggest that CMC alters perceptions when responding to a bullying message. Therefore, intervention programs should specifically focus on understanding how bystanders may need different techniques to show support to victims in the CMC context as compared to the FtF setting. Simply adapting FtF interventions to the CMC context may not be effective. The following section summarize the limitations

of the current study, and discusses the direction future research on cyberbullying should take.

Limitations and future directions

The current study assessed how CMC alters perceptions and influences bystander responses to cyberbullying. A benefit of the current study is the contribution to cyberbullying research by applying a theoretical perspective to understand the social problem. The application of SIDE suggested that group norms are impactful in understanding bystander responses to situations of cyberbullying. A limitation of the current study involved the failed anonymity manipulation. Other research reports issues with the measurement of anonymity (Carr et al., 2011; Lee 2004, Lee, 2008), and this may not be so much of a limitation as an indication of a need to alter how deindividuation is measured by SIDE research.

While the items used to assess deindividuation may not have been effective, another possibility is that the experimental model did not accurately separate the two constructs. Future research could examine both possibilities. Specifically, future studies could examine the scale of group identification used by Postmes and Spears (2002) in order to clarify if the scale fails to measure anonymity. Additional studies that find a failed anonymity manipulation would provide evidence that there is a scale issue with the measurement of anonymity. Future assessments of anonymity should measure how anonymity can be present in degrees and should examine how degrees of anonymity influence deindividuation overall. A more accurate way to understand the change in identity that occurs through CMC may be depersonalization rather than deindividuation.

The increased awareness of the group may be more important than a loss of personal identity in situations of cyberbullying.

Future research on the role of anonymity in responses to cyberbullying is also necessary to understand if participants confounded anonymity with being confirming. Perhaps individuals are more inclined to communicate positively and future studies could examine confirming responses to cyberbullying in more detail to see whether consistency with participants asserting their individual identities in these situations.

In addition, future research is needed to elaborate on the influence of anonymity in CMC, particularly when communicating in a disconfirming way through social media. Anonymity may not be an important consideration to individuals when they respond to a cyberbullying message. The stronger influence could be the group norm inferred from the responses of others. Perhaps individuals are desensitized when they communicate through social media and do not care about anonymity. While the current study expanded cyberbullying research by applying SIDE, part of the theory was unsupported. The findings may indicate that the entire theory of SIDE may not be enough to account for the problem of cyberbullying. Thus, future research could examine other theoretical perspectives to understand how the problem of cyberbullying may be explained by communication research. A combination of theoretical perspectives may be needed to account for the multi-faceted process that occurs in interpreting and responding to a cyberbullying message.

An additional limitation may involve the study design. While the current study attempted to create manipulations that echoed an online discussion that could be found on any social media site, this may not have created a realistic environment for participants.

Potentially, creating the discussion to model a particular social media site could increase respondents' perceptions of participating in an actual discussion through CMC, and future research should examine this possibility. Furthermore, the discussion did not occur with real individuals and some participants may have identified this fact. The purpose of using fake individuals in the online discussion was to gain IRB approval and to avoid issues of confidentiality. However, this may have weakened the application of SIDE and could have lowered the effectiveness of the experimental manipulation. For example, the conversation did not occur in real time and this could have weakened the sense of group identification. Future research should attempt to facilitate an actual discussion in response to a cyberbullying message to see if this alters adherence to the group norm or leads to a successful manipulation of anonymity.

Finally, future research should examine if the findings of the current study are applicable to cyberbullying interventions. Scholars could examine if adherence to the group norm limits how individuals perceive the ability to differ from the group norm when communicating through CMC. In addition, the role of empathy and self-efficacy when communicating through CMC should be examined. Potentially, the emphasis on the group norm could influence perceptions of self-efficacy and the ability of empathetic communication to be effective in reducing harm from disconfirming messages. Finally, future research should examine if focusing on the victim in situations of cyberbullying elicits more empathetic responses.

Conclusion

Cyberbullying remains a predominant social problem and the behaviors of bystanders are key in understanding the magnitude of this problem. The current study

sheds light on how the process of cyberbullying unfolds, in order to understand why bystanders might be more or less likely to communicate in ways that are confirming or disconfirming to cyberbullying victims. The findings of the current study provide evidence on the importance of conceptualizing cyberbullying as a group process, as the group norm led to a significant difference in how bystanders responded to a cyberbullying message. However, the current study provided only partial support in the application of SIDE, suggesting that additional research is needed in order to better find a theoretical perspective to account for cyberbullying.

The findings of the current study provide information on where cyberbullying research should go in the future. Group norms have the potential to influence how bystanders respond to victims in situations of cyberbullying. Cyberbullying interventions should consider this aspect in trying to change disconfirming responses to victims and future studies should address the impact of the group norm in cyberbullying situations.

Figure 1

Experimental Model

	Group Norms	
Deindividuation	Disconfirming	Confirming
High Anonymity	<i>Highly disconfirming responses to cyberbullying victim</i>	<i>Highly confirming responses to cyberbullying victim</i>
Low Anonymity	<i>Mildly disconfirming responses to cyberbullying victim</i>	<i>Mildly confirming responses cyberbullying victim</i>

Table 1

Reasons for cyberbullying others

	Percentage	<i>N</i>
Other	30.5%	131
Didn't understand what I was doing	28.2%	121
Wanted to be liked/popular	12.8%	55
Revenge	11.9%	51
The person (i.e. the victim) deserved it	9.3%	40
Peer Pressure	7.2%	31

Table 2

Medium used to cyberbully others

	Percentage	<i>N</i>
Social Media	37.7%	148
Other	29.3%	113
Over the phone (via text)	27.7%	109
Online discussion board or blog	5.3%	21

Table 3

Situation where one acted as a cyberbully

	Percentage	<i>N</i>
High school	58.2%	196
Other	29.4%	99
College	11.3%	38
Workplace	1.2%	4

Table 4

Situations where cyberbullying was witnessed

	Percentage	<i>N</i>
Social media	75%	312
Over the phone (via text)	9.9%	41
Online discussion board or blog	7.7%	32
Other	7.5%	31

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Appendix

Survey & Experimental Stimulus

General Instructions

This study examines how people communicate through social media.

Part 1

Disconfirming Manipulation

Please read the following statements about how people should communicate through social media. Please indicate how much you agree or disagree with the following statements (1 = strongly disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree, 5 = strongly agree)

1. People who act inappropriately shouldn't be surprised when their pictures end up online.
2. People who are irresponsible regarding their behavior in public deserve to have their actions talked about online.
3. Using social media to share pictures, messages, or texts containing negative information about a person isn't a big deal.
4. Social media is a place to honestly report our opinions about other people.
5. People shouldn't be surprised when others call them out for their actions through social media.

Confirming Manipulation

Please read the following statements about how people should communicate through social media. Please indicate how much you agree or disagree with the following statements (1 = strongly disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree, 5 = strongly agree)

Confirming Condition Manipulation Questions

1. People should refrain from posting inappropriate pictures of others online.
2. Even people who behave irresponsibly in public do not deserve to have their actions talked about online.
3. Using social media to share pictures, messages, or texts of a person in a negative situation is a harmful aspect of social media.
4. Social media is a place to avoid sharing our honest opinions about others.
5. People deserve support rather than being called out for inappropriate behaviors by others through social media.

Part 2 (experimental condition, separated by non-anonymous and anonymous

discussion, with a disconfirming or confirming group norm)

1. Disconfirming & Low Anonymity Condition

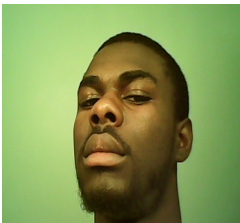
Cyberbullying message of gender ambiguous roommate:



Original response

"OMG rooming with mansquatch this semester. freaked out feeling 'her' eyes on me when I change."

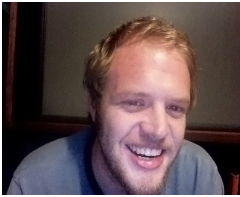
Disconfirming messages



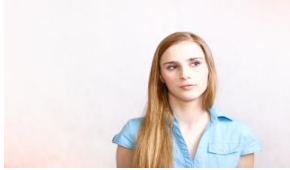
SuperRunner: Is your roommate a woman or a man? Just saying



Partiesca23: OMG. Who let the man-gina in here?



FootballMetall: BWWWAAAAHAHAHAHA. At least you won't have any competition for guys.



LiveSmart: Watch out, thought my roommate last semester was butch but she turned out to be a boyfriend stealing ho.



Photossa: Like these people make me feel awkward enough, how are you supposed to actually LIVE with one of them?



Ben27Snap: I'm forwarding this to my frat page for nastiest roommate award. But do I put her on the man or woman page?



Chillen22: If you requested a FEMALE roommate for your first semester in college, then college should give you a FEMALE roommate. You should forward this to your parents before you get molested or something.

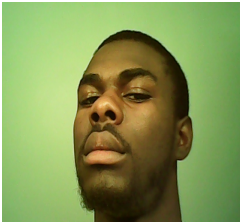


Gamescaud: Lol don't trip in the dark you don't know what you're going to end up in.

Please enter your comment as part of the discussion here:

2. Condition 2: Confirming & Low Anonymity Condition

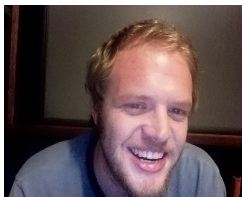
Confirming messages



SuperRunner: Fucken grow up who cares what your roommate looks like.



Partiesca23: Why do you care if your roommate likes girls or guys?



FootballMetall: Yeah, take it as a compliment if they find you attractive.



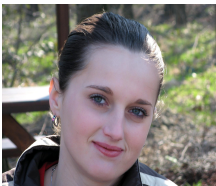
LiveSmart: Could be a nice person, if you gave them a chance. Who cares, the only thing that matters in roommate is that she's quiet and cleans up after herself.



Photossa: What the hell is wrong with you. You're way out of line calling your roommate "man-squatch" Don't you think your roommate has probably dealt with enough nasty comments?



Ben27Snap: People need to stop freaking out if you can't tell someone is a man or a woman. why would you care?



Chillen22: It doesn't matter what they are, no one deserves to be called out like this online.



Gamescaud: You should take this shit down.

1. Considering the original message and the discussion group, please enter your comment as part of the discussion here:

2. Please answer the following statement:

I would share the original message about the roommate with others.

(1 = strongly disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree, 5 = strongly agree)

3. Looking back at the discussion comment you entered, do you think it is:

1. Positive towards the roommate in the original message
2. Negative towards the roommate in the original message
3. Other: please explain

3. Condition 3: Disconfirming & High Anonymity Condition

Disconfirming messages

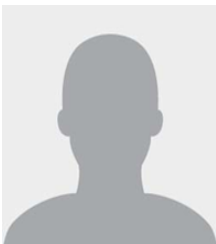
Cyberbullying message of gender ambiguous roommate:



Original response

"OMG rooming with mansquatch this semester. freaked out feeling 'her' eyes on me when I change."

Disconfirming messages





(random, general) Anonymous 1: Is your roommate a woman or a man? Just saying

Anonymous 2: OMG. Who let the man-gina in here?

Anonymous 3: BWWAAAAHAHAHAHA. At least you won't have any competition for guys.

Anonymous 4: Watch out, thought my roommate last semester was butch but she turned out to be a boyfriend stealing ho.

Anonymous 5: Like these people make me feel awkward enough, how are you supposed to actually LIVE with one of them?

Anonymous 6: I'm forwarding this to my frat page for nastiest roommate award. But do I put her on the man or woman page?

Anonymous 7: If you requested a FEMALE roommate for your first semester in college, then college should give you a FEMALE roommate. You should forward this to your parents before you get molested or something.

Anonymous 8: Lol don't trip in the dark you don't know what you're going to end up in.

Please enter your comment as part of the discussion here:

4. Condition 4: Confirming & Low Anonymity Condition

Confirming messages

Anonymous 1: Fucken grow up who cares what your roommate looks like.

Anonymous 2: Why do you care if your roommate likes girls or guys?

Anonymous 3: Yeah, take it as a compliment if they find you attractive.

Anonymous 4: Could be a nice person, if you gave them a chance. Who cares, the only thing that matters in roommate is that she's quiet and cleans up after herself.

Anonymous 5: What the hell is wrong with you. You're way out of line calling your roommate "man-squatch" Don't you think your roommate has probably dealt with enough nasty comments?

Anonymous 6: People need to stop freaking out if you can't tell someone is a man or a woman. why would you care?

Anonymous 7: It doesn't matter what they are, no one deserves to be called out like this online.

Anonymous 8: You should take this shit down.

1. Considering the original message and the discussion group, please enter your comment as part of the discussion here:

2. Please answer the following statement:

I would share the original message about the roommate with others.

(1 = strongly disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree, 5 = strongly agree)

3. Looking back at the discussion comment you entered, do you think it is:

1. Positive towards the roommate in the original message
2. Negative towards the roommate in the original message
3. Other: please explain

Part 3: Survey questions post-manipulation

Sharing cyberbullying message

Consider the previous message about the roommate and the responses of the people in the discussion group. Answer the following questions:

Postmes & Spears (2002) adapted scale measuring identification with others (5 pt. Likert scale, 1 = strongly disagree, 5 = strongly agree), Cronbach's α = .84

Please answer the following questions about the other people in the online discussion:

1. I could form an impression of the people in the discussion
2. The others in the discussion were personally identifiable to me
3. I could not form a picture of the people in the discussion (recoded)

My items about identification (5 pt. Likert scale, 1 = strongly disagree, 5 = strongly agree)

4. I understood the opinions of the people in the discussion.
5. I could identify the various attitudes of the people in the discussion.

6. The opinions of the people in the discussion group were reasonable.
7. Overall, I agreed with the statements of the people in the discussion group.
8. I agreed with the views of the people in the discussion group

Questions measuring adherence of group norm, based on disconfirming or confirming condition

Please consider the picture and original message of the roommate. Thinking about your opinions of the other people in the discussion board, please answer the following questions:

Disconfirming Condition: (5 pt. Likert scale, 1 = strongly disagree, 5 = strongly agree).

1. I thought the messages of the people in the discussion group were disconfirming towards the roommate. (agree-disagree)
2. The responses of the people in the discussion about the roommate were acceptable. (agree-disagree)
3. The comments directed towards the roommate were appropriate. (agree-disagree)
4. People who act weird and make others feel uncomfortable deserve to have their pictures posted online. (agree-disagree)
5. People should be allowed to honestly comment about others' questionable traits online. (agree-disagree)
6. People shouldn't feel like they have to restrict their comments online. (agree-disagree)
7. The comments in the discussion group are similar to what would be found on social media. (agree-disagree)
8. Social media is a place where people can give honest opinions about the others, even if those opinions are negative. (agree-disagree)
9. The negative comments towards the roommate were appropriate. (agree-disagree)

Confirming Condition

1. I thought the messages of the people in the discussion group were sympathetic towards the roommate. (agree-disagree)
2. The responses of the people in the discussion about the roommate were affirming. (agree-disagree)
3. The original poster's comments about the roommate's appearance were inappropriate. (agree-disagree)
4. People do not deserve to have pictures of them shared online in a negative way. (agree-disagree)
5. People should avoid pointing out negative opinions of others' characteristics online.
6. People should restrict negative comments about others online. (agree-disagree)

7. The comments in the discussion group are similar to what would be found on social media. (agree-disagree)
8. Social media is a place where people should refrain from voicing derogatory opinions about others. (agree-disagree)
9. Supportive comments towards the roommate were appropriate (agree-disagree)

Experience with cyberbullying questions

Cyberbullying is a social problem that is highly discussed. Despite the focus on cyberbullying, little agreement exists as to what it is, whom it affects, and how much of a problem it is. To help add clarity about the problem, please provide answers about your experience with cyberbullying.

1. Reasons for cyberbullying vary, with some people not aware that they were cyberbullying another person at the time. If you feel like you may have been a cyberbully, why do you think you acted in the way you did:
 - a. Peer pressure
 - b. Didn't understand what I was doing
 - c. Wanted to be liked/popular
 - d. The person deserved it
 - e. Revenge
 - f. Other (please describe)
2. If you have ever acted like a cyberbully, please describe how (i.e. the context) you bullied another person:
 - a. Over the phone (via text)
 - b. Through social media (please specify source)
 - c. Online discussion board or blog
 - d. Other (please specify)
3. If you indicated that you had ever been a cyberbully, please identify the situation that you bullied another person in
 - a. High school
 - b. College
 - c. The workplace
 - d. Other (please explain): make checkboxes so they can select more than 1
4. Is there anything you would like to add about cyberbullying?

Demographic Questions

1. What is your age? (open-ended)

2. What is your gender? (open-ended)
3. What year of college are you currently in?
 - a. Freshman
 - b. Sophomore
 - c. Junior
 - d. Senior
 - e. Graduate Student
5. What ethnic/cultural groups do you identify with, if any? (open-ended).

Debriefing

Thank you for your participation. Your responses provided important information to help researchers examine cyberbullying. If the study brought up any uncomfortable past experiences with cyberbullying, you have the option of contacting Norris Health Center at: <http://www4.uwm.edu/norris/>

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EDUCATION

Ph.D. Communication (Dissertation Title: The Dangerous SIDE of Social Media: Manipulating Bystander Aggression and Support to Cyberbullying Victims through an Application of SIDE)
University of Wisconsin-Milwaukee, Projected Graduation: May 2016
Emphasis: Interpersonal communication with emphasis in conflict management, relational communication, CMC

M.A. Applied Communication Theory & Methodology (Thesis Title: Influencing faculty willingness to participate in learning communities)
Cleveland State University, Graduated: December 2009

B.A. English
Cleveland State University, Graduated: May 2007

TEACHING EXPERIENCE

University of Wisconsin-Milwaukee

COM 363 "Communication in Human Conflict" 2014-Present

- Instructor of upper division course examining conflict and relational challenges.
- Explores concepts of conflict and interpersonal communication theories, focusing on student application of concepts through paper writing.
- Challenges students to examine relational conflicts and collaborate on group projects and presentations, preparing them for 400 level coursework.
- Facilitates class exercises and encourages students to engage in small group activities and discussions.

COM 105 "Business & Professional Communication Online" 2014-Present

- Instructor of a stand-alone online class in fall, spring, winter, and summer semesters, adapting course content to different formats.
- Explores key skills needed for professional job search and focuses on presentational skills and writing, involving students in online discussion and sharing of ideas.
- Introduces students to interpersonal and organizational communication topics to

- promote competence when communicating in the professional setting.
- Challenges students to work on a team completing a fundraising proposal.

COM 201 “Introduction to Conflict Resolution & Peace Studies” 2013-2014

- Stand alone instructor, examined conflicts on a societal level.
- Engaged students to apply communication theory to issues of social justice.
- Integrated different peaceful solutions to face societal conflicts.
- Challenged students to discuss views of societal conflicts in student led presentations at the start of each class.
- Encouraged student collaboration through group papers focusing on conflict in popular culture and opportunities to create constructive change.

COM 101 “Introduction to Interpersonal Communication” 2012-2013

- Discussion leader of three sections.
- Implemented classroom exercises and discussions to facilitate the understanding of course content.
- Introduced students to the principles of interpersonal communication and its relevance in their relationships.
- Graded assignments and created exam questions.

Cleveland State University, Lecturer

COM 242 “Public & Professional Speaking” 2010-2012

- Stand-alone instructor facilitating the presentation skills and professional development of students.
- Instructed students in the components of speech construction in different contexts.
- Focused on building confidence when speaking in public and interacting with the audience.
- Facilitated peer evaluations, teaching students how to analyze the quality of speeches according to communication principles.

COM 101 “Principles of Communication”

- Stand-alone instructor examined multiple areas in communication theory, practice and research, including: interpersonal communication, organizational communication, and media studies.
- Emphasized student understanding of these areas, encouraging them to focus on an interest through class discussions, activities, and a course paper.

COM 101 “Small Group Leader” Spring 2009

- Graduate teaching assistant discussion leader, assisted students in developing verbal communication skills.
- Conducted activities and graded student journals.

RESEARCH

PUBLICATIONS

- Burrell, N. & Gross, C.M. (in press). Controversial experiments. *The SAGE encyclopedia of communication research methods*.
- Burrell, N. & Gross, C.M. (in press). The purpose of quantitative research. *The SAGE encyclopedia of communication research methods*.
- Burrell, N. & Gross, C.M. (in press). T-tests. *The SAGE encyclopedia of communication research methods*.
- Burrell, N., & Gross, C.M. (2014). An overview of conflict research and meta-analysis. In N. Burrell, M. Allen, B.M. Gayle, & R.W. Preiss (Eds.) *Managing interpersonal conflict: Advances through meta-analysis*, (pp. 3-6), New York: Routledge.
- Gross, C. M., Whitbred, R., Skalski, P., & Liu, Y-I. (2013). Influencing faculty willingness to participate in learning communities. *Florida Communication Journal*, 41, 1-15.
- Allen, M., Bourhis, J., Burrell, N., Mukrram, A., Blight, M., Gross, C.M., Lambertz-Berndt, M., & Anderson, C. (in press). Examining 100 communication programs: Mission statements, assessment plans, and assessment evaluations. *Journal of the Association for Communication Administration*.

UNDER REVIEW

- Gross, C.M. & Jagiello, K. Who would you let your child play with: An exploration of parental and non-parental attitudes toward same sex parents. Manuscript submitted to the *Journal GLBT Family Studies*.
- Ruppel, E.K., Kim, S.Y., Gross, C.M., Peck, B.S., Stoll, A., & Allen, M. (revise & resubmit). Reflecting on connecting: Meta-analysis of the differences between mediated and face-to-face self-disclosure. Manuscript submitted to *Journal of Computer Mediated Communication*.

MANUSCRIPTS IN PROGRESS

- Gross, C.M. Field experiments. *The SAGE encyclopedia of communication research methods*.

Gross, C.M. & Fisher, V.A. Weathering the storm: The association between uncertainty reduction and coping with a major life stressor for married individuals.

Rudd, J.E., Gross, C.M., & Johnson, T. The voice of the incarcerated mother: An exploratory study of the communication in the mother-child relationship.

Zmyslinski-Seelig, A., Gross, C.M., & Fisher, V.A. Honey, take out the trash
Types of demand/withdraw in marital relationships.

COMPETITIVELY SELECTED CONFERENCE PAPERS

Ruppel, E.K., Kim, S.Y., Gross, C.M., Peck, B.S., Stoll, A., & Allen, M. (2015). *Reflecting on connecting: Meta-analysis of the differences between mediated and face-to-face self-disclosure*. Paper accepted for presentation at National Communication Association Convention at Las Vegas, NV.

Gross, C.M. & Fisher, V. (2015). *Weathering the storm: The association between uncertainty reduction and coping with a major life stressor for married individuals reduction and the ability to cope*. Paper presented at Central States Communication Association Convention, Madison, WI.

Gross, C.M. & Jagiello, K. (2015). *Who would you let your child play with: An exploration of parental and non-parental attitudes toward same sex parents*. Paper presented at Central States Communication Association Convention, Madison, WI.

Gross, C.M. (2014). *A lifelong experience: Bullying victims and the role of imagined interactions*. Paper presented at the National Communication Association Convention, Chicago, IL.

Allen, M., Bourhis, J., Burrell, N., Gross, C.M., Fetherston, M., Lambert, M., Blight, M., & Anderson, C. (2014). *Examining 100 communication programs: Mission statements, assessment plans and assessment evaluations*. Poster presented at the National Communication Association Convention, Chicago, IL.

Gross, C.M. (2013). *Examining the social problem of cyberbullying: Bullies, victims, and the role of information technologies*. Poster presented at the National Communication Association Convention, Washington, D.C.

Zmyslinski-Seelig, A., Fisher, V., & Gross, C.M. (2013) *Honey, take out the trash: Types of demand/withdraw in marital relationships*. Paper presented at the International Association for Relationship Research Conference, Louisville, KY.

Burrell, N., Maier, M., Priddis, D., Victor, A., Jackl, J., & Gross, C.M. (2013). *Emotional intelligence: A framework for examining bullying in schools*. Paper

presented at the International Communication Association Convention, London, England.

Romano, A., Rudd, J., Neuendorf, K., & Gross, C.M. (2013). *Incarcerated mothers: An examination of parenting style and attitude*. Poster presented at the International Communication Association Convention, London, England.

Rudd, J.E., & Gross, C.M. (2012). *Aggressive communication profile of a domestic violent male offender*. Paper presented at the National Communication Association Convention, Orlando, FL.

Gross, C.M., Rudd, J.E., Franz, J.M., Romano, A.F. & Palisin, P. (2011). *The voice of the incarcerated mother: An exploratory study of the communication in the mother-child relationship*. Paper presented at the National Communication Association Convention, New Orleans, LA.

GRANTS

Cleveland State University

December 2009-May 2010

- Faculty Research Development Grant (awarded \$9,000) 2009-2010. Incarcerated women conflict management parenting skills. (Co-Investigator). Interdisciplinary study with criminology center.

DEPARTMENTAL SERVICE

UWM Public Speaking Showcase

2013-Present

UWM CGSC (Communication Graduate Student Council)

- Ph.D. Mentorship Co-Director 2013
- Fundraiser/Treasurer 2013

COMMUNITY SERVICE

Volunteer, Our Next Generation Program

January-May 2014

- Worked with underprivileged elementary school children.
- Focused on teaching basic reading skills, mentoring, and leading group activities.

PROFESSIONAL AFFILIATIONS

- Member, National Communication Association
- Member, Central States Communication Association
- Member, International Communication Association
- Member, Key National Honor Society, Cleveland OH

PROFESSIONAL REFERENCES

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