Cyberbullying Versus Face-to-Face Bullying

A Theoretical and Conceptual Review

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Abstract. Cyberbullying has been described as a type of electronic bullying and has recently been subjected to intense media scrutiny largely due to a number of high profile and tragic cases of teen suicide. Despite the media attention relatively little is known about the nature of cyberbullying. This is, at least in part, due to a lack of theoretical and conceptual clarity and an examination of the similarities and differences between cyberbullying and face-to-face bullying. This paper reviews the limited theoretical and empirical literature addressing both cyberbullying and face-to-face bullying, using some specific examples from a qualitative study for illustration. We compare and contrast individual factors common to cyber and face-to-face bullying. We then examine social information processing factors associated with face-to-face bullying and present a discussion of the similarities and differences that may characterize cyberbullying.

Keywords: cyberbullying, face-to-face bullying, theory

To date cyberbullying has received significant media attention driven by some recent cases resulting in criminal or civil lawsuits filed against the perpetrator as well as, in some incidences, the school. Despite this attention, many questions about cyberbullying are yet to be answered. For example, is cyberbullying analogous to face-to-face bullying? Are cyberbullying and face-to-face bullying conceptually and theoretically similar? We review the cyberbullying literature, examining the conceptual and theoretical similarities and differences between cyberbullying and face-to-face bullying.

While this paper treats those who engage in cyberbullying or face-to-face bullying behaviors as two distinct groups, we acknowledge the evidence indicating the overlap between them (e.g., Raskauskas & Stoltz, 2007). However, to examine cyberbullying and face-to-face bullying it is necessary to describe and compare the "discrete" forms as distinct behaviors enacted by different people. This should not be interpreted as meaning that individuals cannot or do not engage in both forms of the behavior. This paper aims to start a dialog to improve our conceptual understanding of cyberbullying and henceforth approaches to measurement and the development of prevention/intervention strategies.

Given that the theoretical discourse regarding cyberbullying is limited, we draw on available empirical literature for illustration. In addition we use some qualitative data, collected by the second author via face-to-face interviews, e-interviews, and focus groups. Participants were Polish university students aged 12–25. The interviews and focus group sessions addressed: general use patterns of communication technologies and their role in daily life, the role of communication technologies in building and maintaining relationships, the bullying concepts of repetition of behaviors and imbalance of power, as well as experiences as a victim, perpetrator, or witness of cyberbullying. Quotations obtained during these sessions are used to illustrate examples of various aspects of bullying behaviors.

Definition

Bullying is usually defined as aggression that is intentionally carried out by one or more individuals and repeatedly targeted toward a person who cannot easily defend him- or herself (e.g., Olweus, 1993). Olweus identified two factors crucial to differentiating between aggression and bullying: aggression is a single act whereas bullying comprises repeated acts; and bully-victim relationships are characterized by an imbalance of power while aggression can be between two persons of equal power. Finally, including intentionality in the definition excludes acts bereft of malice.

To date, cyberbullying has been difficult to define and compare because, as Kowalski, Limber, and Agatston (2008) noted, the methods employed are varied. However, cyberbullying has generally been defined as bullying using an electronic medium, adopting the definition of Olweus, or something similar. Smith et al. (2008, p. 376) defined cyberbullying as "an aggressive, intentional act carried out by a group or individual, using electronic forms of contact, repeatedly and over time against a victim who cannot easily defend him or herself." Major components to this definition

are that the act must be *aggressive, intentional, repetitive,* and with a *power imbalance*. Belsey (2004) defined cyberbullying as "the use of information and communication technologies to support deliberate, repeated, and hostile behavior by an individual or group that is intended to harm others." Note the absence of a power imbalance, suggesting that online power is not a necessary component. Alternatively, Wolak, Mitchell, and Finkelhor (2006, 2007) suggest that it is more accurate to consider repeated acts of online aggression as *online harassment*. Further, Wolak et al. (2006) argued that, as negative online interactions can be easily terminated, the victim is in a position of power they would not have if the bullying occurred in the schoolyard from which they cannot easily escape. However, Wolak et al. (2007) note that there are instances of online victimization that cannot be easily terminated, such as the difficulties associated with removing information (e.g., on websites) from the Internet.

To proceed with uniformity the core components of cyberbullying must be identified. Vandebosch and van Cleemput (2008) conducted focus groups with 10–19 year olds in Belgium about their experiences with information and communication technology (ICT) and cyberbullying. These data suggested that cyberbullying behavior must be intentional, repetitive, and characterized by a power imbalance – the same factors considered central to face-to-face bullying, and suggested that the behavior not the medium is important. Similarly, Kowalski et al. (2008) suggested that cyberbullying is the electronic form of face-to-face bullying rather than a distinct phenomenon. However, considering cyberbullying as merely the electronic form of face-to-face bullying may overlook intricacies of these behaviors. As bullying (and cyberbullying) behaviors are, by almost all definitions, intentionally hurtful, the next section will focus on the more contentious issues of repetition and power imbalance.

Repetition

Olweus (1993) argued that repetition is necessary in the definition of bullying, in order to exclude occasional acts of aggression directed at different people at different times. Nonetheless, it is feasible that multiple acts of aggression by a single person toward numerous individuals may be considered bullying independent of whether the person being aggressed is considered a victim of bullying. The repetitive nature of the aggressive behavior can be used to instill fear, thus causing psychological harm to a victim. As bullying behaviors take many forms (e.g., physical hitting and gossiping) it is argued that it is the repetitive nature of acts intended to harm that is crucial and not necessarily the nature of the behavior itself.

Although the inclusion of repetition in the definition is generally accepted, debate continues about its nature and importance. For example, Tattum (1989) argued that ongoing feelings of stress about an incident may be considered repetitive even though the act occurred only once. Similarly, Guerin and Hennessy (2002) found that over 50% of their sample of children did not consider the frequency of occurrence to be important, with over 40% of those believing that an act that occurred once or twice could still be bullying.

Repetition in cyberbullying is especially problematic to operationalize, as there can be differences between the perpetrator and victim in terms of perceptions of how many incidences occur and the potential consequences. While repetition is clear when a perpetrator sends numerous phone text messages or e-mails (e.g., Slonje & Smith, 2008), it is not so clear when a bully creates a single derogatory website, or a message on a website, which many people can access (Leishman, 2005). A single aggressive act such as uploading an embarrassing picture to the Internet can result in continued and widespread ridicule and humiliation for the victim. Whereas the aggressive act is not repeated the damage caused by the act is relived through the ongoing humiliation.

If it is assumed that not all forms of cyberbullying are equal in terms of victim impact (Smith et al., 2008), such that the effect of receiving a threatening text message is not the same as receiving a threatening message in an online chatroom, then it follows that some acts may not need to be repeated (or repeated as often) to inflict harm. Further, Vandebosch and van Cleemput (2008) noted that a single cyber act could be sufficient to be considered bullying, especially if this act followed on from a series of offline acts of bullying. Along these lines, Fauman (2008) suggested that as information posted online can be widely disseminated, the repetitive nature of the act by the person bullying may not be as important as in face-to-face bullying.

The relative permanence of pictures or videos posted online for anyone to view is likely to have a similar effect (or possibly worse) than an offline act. Having an embarrassing picture posted on the Internet has the potential for significant and long-lasting social and emotional harm. This is illustrated in an interview with a 22-year-old girl whose drunk behavior at a party was video recorded and then posted on the Internet. She reported feeling like the act was being repeated as she watched the number of website hits increase. Slonje and Smith (2008) found that cyberbullying using picture/video clips was perceived by students as being more severe than other forms of cyberbullying primarily due to the large potential audience and because they can be identified. Therefore, it appears that the damage experienced in cyberbullying may be largely social and emotional in nature and is exacerbated by the potential scale of the damage inflicted.

Power Imbalance

An imbalance in power between perpetrator and victim has been described as a fundamental aspect of bullying that permits the distinction between acts of aggression and bullying. Aalsma and Brown (2008) use the example of a sixth grade boy being kicked on the bus every day by a smaller, emotionally impaired second grader suggesting that bullying did not occur because the second grade child was smaller (and less physically powerful) than the sixth grade child. However, implicit in their example is that a sixth grader

should not be afraid of a smaller second grader which, of course, is not necessarily always the case. The assessment of power imbalance is complicated because it is difficult to assess, especially in younger populations (Mishna, 2004, 2006). The issue of power is further complicated as power can be social, psychological, or physical in nature (Monks & Smith, 2006). Olweus (1997) has made reference to the "weak" victim, meaning not merely physically weak but also mentally weak. The acknowledgment that aggression (and bullying) can be enacted to damage a person's social and relational status indicates that power can come in many forms. In fact, Rigby (2007, p. 19) noted that "wherever there is a power imbalance, whatever its source, an individual can be reduced in status."

Conceptualizing and assessing power imbalance in cyber-based interactions is even more complicated than in traditional forms of bullying. With Rigby's comment in mind, power in online relationships can be interpreted as more advanced technological skills. However, it does not require an advanced skill set to take a picture using a mobile phone camera and send it to others. Similarly, posting a picture online or creating a fake social network site profile requires only a basic skill set. Other more complicated forms of cyberbullying (e.g., manipulating and modifying pictures) require more advanced skills but these forms are relatively less common (Smith et al., 2008).

It has been suggested that one of the distinguishing features of cyberbullying is the inability of victims to get away from it (Slonje & Smith, 2008). Unlike with face-to-face bullying, there is potentially no reprise from technology-based interactions as they can be received at any time of the day or night. In this sense, the inability to have any control over acts of bullying may result in feelings of powerlessness in the person being bullied.

To date, few have explicitly measured the nature of power imbalance in online interactions. Vandebosch and van Cleemput (2008) reported that those who engaged in cyberbullying behaviors acknowledged that many of/most of their victims knew them in the real world (although the perpetrators concealed their identity) and that the victims were perceived as being of more, less, or equal strength. Interestingly, students in this study indicated that the weaker victims were also often the victims of face-to-face bullying whereas

those considered more powerful in the real world were bullied due to the anonymity that ICT affords. More importantly, cybervictims reported that not knowing the identity of the bully increased feelings of frustration and powerlessness. Consistent with this, Fauman (2008) suggested that the ability to remain anonymous may minimize the necessity for those who bully to be more powerful than victims.

Given that most victims are cyberbullied by either another student at school or a stranger (Kowalski & Limber, 2007) the anonymity afforded to perpetrators is an important issue. Smith et al. (2008) reported from focus groups that students believed phone text messaging was the most common form of cyberbullying as it enabled those who bully to remain anonymous. Consistent with this, we noted a male participant (17 years old) in a focus group, who encouraged his peers to send threatening phone text messages from many unknown numbers, openly expressed such awareness by commenting that the victim "is in real trouble … he doesn't know who is sending this – doesn't know what can happen – it's better when he's uncertain what can happen…" Similarly, in a face-to-face interview a 15-year-old girl described receiving a series of anonymous phone text messages criticizing her harshly. She reported that it was not the content of messages but the anonymity of the author that was the most threatening. Anonymity appears to be an important feature of cyberbullying for perpetrators who report that they would not engage in offline bullying (Vandebosch & van Cleemput, 2008). This highlights the potential for growth in cyberbullying, given that many more people could engage in this behavior than would normally engage in face-to-face bullying.

Table 1 outlines how the two primary constructs (imbalance of power and repetition) relate to face-to-face and cyberbullying contexts. The relationship between anonymity and power in cyberbullying behavior has yet to be thoroughly addressed and may reveal important differences between cyber- and face-to-face bullying, especially in relation to how information is processed in cyberbullying interactions. Before addressing the information processing patterns that characterize bullying behaviors, we examine if bullying presents in different forms which will further enable the identification of cognitive motivations that characterize these forms.

Table 1. The constructs of imbalance of power, and repetition, in relation to face-to-face and cyberbullying

	Face-to-face bullying	Cyberbullying
Imbalance of power	Usually connected to the features of perpetrators and their relative physical and/or psychological power in a real world	May be related to the features of perpetrators, but often to "a power of technology" and the features of the content published on the Internet or features of computer mediated communication (e.g., anonymity)
		May be based on a victim's lack of power as opposed to a perpetrator's possession of power
Repetition	Based on behavioral repetition over time conducted by perpetrators	May be based on technology and the specific features of the content published – not initial perpetrator's intentions and behavior

Forms of Bullying

Early researchers primarily focused on physical and verbal aggression that characterized bullying interactions. In the 1990s researchers recognized that other more subtle forms of aggression were also being used, such as relational aggression, characterized by attempts or threats to damage relationships (e.g., Crick & Grotpeter, 1996). Relational aggression consists of subtle behaviors (e.g., gossiping) which are more frequently observed in women (Coyne, Archer, & Eslea, 2006). Underwood (2003) also described social aggression, which was a broader form of aggression than relational aggression, where many tactics were employed in an attempt to destroy all types of social relationships as well as a person's self-esteem and social status.

These forms of aggression can be either direct or indirect in how they are enacted (e.g., Björkqvist, Österman, & Kaukiainen, 1992). For example, direct forms would include telling someone they cannot join in a game or by being verbally aggressive whereas indirect forms would include gossiping or spreading nasty rumors. The primary difference is that direct aggression is enacted directly toward the victim (so the victim is aware who the aggressor is) while indirect aggression is directed at the victim via a third (or more) party so it is not always possible to identify the aggressor (i.e., the person who started the rumor). Additionally, bullying has also been described in terms of reactive (i.e., emotionally volatile and explosive) versus proactive (i.e., planned and controlled aggression designed to dominate others or to acquire tangible objects such as lunch money). To date, much research has focused on the reactive/proactive aggression dichotomy especially in relation to the cognitive motivations that drive these forms of aggression (e.g., Fontaine, 2007).

Smith et al. (2008) described seven modes of cyberbullying: phone call, mobile phone text messaging, e-mail, picture/video clip, instant messaging, website, and chatroom. Clearly, there are distinct differences between some of these media in terms of the nature of contact between the bully and the victim (e.g., phone call requires the bully to speak to the victim while e-mail requires no "direct" contact) as well as the level of technological skills required (e.g., the skills required to set up a website are more complex than the skills required to send a mobile phone text message). Smith and colleagues (Slonje & Smith, 2008; Smith et al., 2008) demonstrated the differential impact of each of these types of cyberbullying in comparison with face-to-face bullying. In general, the impact of picture/video clip bullying was considered worse than face-to-face bullying, while the impact of phone call and text messaging bullying (Smith et al., 2008) or of text message and e-mail bullying (Slonje & Smith, 2008) was considered better (i.e., less damaging) than face-to-face bullying. Clearly, the different types of cyberbullying are not equal in terms of the skills needed to engage in the behavior as well as the impact they have on victims. It would be interesting to determine if there is an association between a perpetrator's motivation (e.g., revenge vs. fun) and the type of media used to cyberbully.

Although both the mobile phone and Internet lend themselves to verbal threats and insults the anonymity afforded by these forms of cyberbullying makes the classification more complex. For example, it is possible to directly aggress toward a person in an online chatroom or via text message (i.e., being verbally aggressive) but this could be considered indirect aggression as the identity of the perpetrator is concealed. Therefore, the same act of aggression can have both direct and indirect components to it. In relation to proactive aggression, the use of aggression is considered a means of interpersonal dominance (i.e., getting others to do what you want them to) or of object acquisition (Pepler, Jiang, Craig, & Connolly, 2008). This type of aggression has often been associated with bullying, especially in relation to its instrumental motives (see Fontaine, 2007, for a detailed discussion of the differences between proactive/instrumental and reactive aggression).

Although the literature is sparse it can be concluded that the motives for engaging in these acts of aggression are primarily focused on inflicting harm and fear. Vandebosch and van Cleemput (2008) reported that students indicated that revenge for being bullied in real life was a primary motivation for some. Similarly, Raskauskas and Stoltz (2007, p. 570) found that 25% of those who cyberbullied others engaged in aggressive behaviors to "get back at someone they're mad at." For others, cyberbullying was in reaction to a previous argument or was a means for the person bullying to display their technological skills; and almost 40% of those who cyberbullied others reported engaging in online aggression for fun. Given this, it is highly likely, as suggested by Slonje and Smith (2008), that not having to see the fear in a victim's eyes and being less aware of the consequences reduces the potential for empathy and remorse – factors which would lessen the likelihood of future acts of aggression and bullying. However, these reasons offer only anecdotal evidence and, to date, no studies have thoroughly assessed the motivation that drives cyberbullying and whether it is different than for face-to-face bullying. One method of understanding the motivations for bullying behaviors is to examine the patterns of information processing associated with these behaviors.

Information Processing and Bullying

A number of theoretical models have been proposed to describe and explain the processing of social information that drives aggressive and bullying behaviors. To date, the most empirically supported model was proposed by Crick and Dodge (1994). The social information processing (SIP) model describes five interrelated cognitive processes believed to underlie social behaviors: (1) internal and external stimuli are encoded; (2) encoded information is interpreted and attributions of intent and causality are made; (3) a social goal is generated; (4) responses are generated that will lead to its attainment; and (5) the response that is attributed the highest overall value is chosen (Fontaine & Dodge, 2006). In terms of aggression research, the stages of attribution (Stage 2) and response decision (Stage 5) are the most frequently addressed.

One of the most consistent findings in the SIP and aggression literature is the association between reactive aggression and the tendency toward attributing hostile intent in ambigu-

ous social interactions (e.g., Crick & Dodge, 1996; Hartman & Stage, 2000; Orobio de Castro, Veerman, Koops, Bosch, & Monshouwer, 2002). Unlike reactive aggression, proactive aggression has been associated with differences in latter stages of the SIP model. The most consistent finding is the association between proactive aggression and the response decision stage of the SIP model (e.g., Crick & Dodge, 1996; Schwartz et al., 1998). For example, Crick and Dodge (1996) reported that proactively aggressive children were more likely to anticipate positive outcomes for their aggressive behavior. Similarly, Schwartz et al. (1998) reported that high rates of proactive aggression were associated with positive outcome expectancies for aggressive behavior. Thus, examining the patterns in which information is processed during social interactions has provided a means to distinguish between different forms of aggressive behavior and has provided important insights into the cognitive motivations that drive these behaviors (e.g., Camodeca & Goossens, 2005).

To date, no studies have examined SIP in relation to cyberbullying. We are not suggesting that the patterns of information processing associated with cyberbullying behavior will be totally distinct from what has been reported in relation to, for example, proactive aggression. However, given the media typically used to engage in cyberbullying and that those who engage in cyberbullying behaviors do not necessarily engage in face-to-face bullying, we suggest there may be some subtle differences between how information is processed in these interactions. For example, the expectation of positive outcomes after aggressive behavior (a finding primarily related to those who bully either getting people to do what they want or acquiring an object) may be the same for the cyberbully but, importantly, the goal toward which the behavior is directed may differ. If, as was suggested by Vandebosch and van Cleemput (2008), those who cyberbully others are more motivated by revenge then the explicit goal is to hurt rather than to dominate or to acquire.

However, due to the nature of the medium in which cyberbullying is enacted, those who bully are no longer reinforced for their behavior in the traditional manner. For example, if a person engaging in face-to-face bullying behaviors is motivated (and goal oriented) to inflict harm primarily using fear, then they will likely be reinforced for this behavior by the body language and facial expression (as well as the verbal response) of their victim. The reinforcement is immediate and tangible. In contrast, a person engaging in cyberbullying behaviors who is motivated to socially hurt others may have to wait for a period of time before the impact is apparent (at least until the text message, picture, or other material is distributed among the group).

Similarly, the person engaging in cyberbullying behaviors who is motivated to inflict harm using fear has limited external sources of reinforcement and may have to, at least initially, rely on their own reactions to their acts. The reward for engaging in some forms of cyberbullying could be based to a larger extent on the expectations the person engaging in bullying behaviors has for how the target person *will* react versus how the target person *is* reacting, than is the case with face-to-face bullying. This delay between the act (i.e., creating a fake website) and the outcome (i.e., sharing secrets with the school) would likely result in a heightened sense of expectation and a built-up level of excitement and anticipation for the time when the target person realizes what has been done. Thus, it is feasible that a difference exists between those engaging in cyberbullying behaviors versus face-to-face bullying behaviors according to the generation of goals and the expectations related to the outcome of an interaction. It may be the case that these differences are only observed in relation to different types of cyberbullying.

Gender Differences

One of the most interesting aspects of the bullying/cyberbullying debate relates to gender differences in the rates of these behaviors. Traditionally, men engage in more bullying behaviors than women (Forero, McLellan, Rissel, & Baum, 1999; Nansel et al., 2001; Sourander, Helstela, Helenius, & Piha, 2000). However, Blair (2003) reported that women are more likely to communicate using text messaging and e-mail than are men; this, combined with the more covert (and social) nature of cyberbullying, would make it reasonable to expect that the gender differences demonstrated in face-to-face bullying are, at the least, not as strong in cyberbullying. Indeed, some have reported that men and women were equally likely to report harassing others online (Williams & Guerra, 2007; Ybarra & Mitchell, 2004). Similarly, Slonje and Smith (2008) reported no gender differences in the self-reported rates of being either engaging in or being the target of cyberbullying behaviors (a trend suggesting boys engaged in more acts of cyberbullying than girls was not statistically significant). In contrast, Li (2006) reported that men were more likely to engage in cyberbullying behaviors than their female counterparts. Although these results do not suggest that women engage in more cyberbullying than men they do indicate that the gender differences reported in relation to face-to-face bullying are not as strong. Further, girls tend to have more close-knit relationships/friendships and therefore more readily exchange intimate details and personal secrets whereas boys socialize in larger groups and share fewer details. That girls use text messaging and e-mail more than boys may result in more opportunities to spread secrets and have their secrets spread online.

Group Effect

It has been noted that one of the most distressing aspects of traditional face-to-face bullying is the effect of the group, an effect which perpetuates and sustains the abuse of the target of the bullying behaviors (Bukowski & Sippola, 2001; Crick, Grotpeter, & Bigbee, 2002; Salmivalli, 2001). Sutton, Smith, and Swettenham (1999) cautioned against overlooking the importance of the group and social aspects of bullying over and above the internal cognitive processing patterns that characterize other forms of aggression (i.e., hostile attribution of intent patterns observed in reactively aggressive individuals; Orobio de Castro et al., 2002). Further, Shariff (2008) commented that the need for power and recognition in those who bully is satisfied by the recruitment of others in the victimization of an individual. Support for this can be

found in the research examining the effect of proactive aggression (the type of aggression considered typical of bullying interactions). Proactively aggressive children are seen as positive leaders with a good sense of humor, high self-esteem qualities and positive early friendship qualities, and high social status (Dodge & Coie, 1987).

This aspect of face-to-face bullying may have significant similarities with cyberbullying in that the bullying behavior (e.g., taking an embarrassing picture) becomes much more serious when viewed by a large group of schoolchildren. In fact, given how quickly and extensively images can be distributed to groups using mobile phones or the Internet, it is not surprising that the effect of such an act would be more distressing and damaging to a victim than being bullied in a face-to-face interaction which only a small group of individuals would observe. In essence, the effect of the cyber group far surpasses the schoolyard group given that the former is not bound by the school walls and the potential audience is limitless.

Conclusion

Cyberbullying comprises a set of aggressive behaviors that are enacted via electronic media. This is a relatively new form of bullying that is receiving more and more attention in the research literature. Relatively little is still known about some aspects of cyberbullying, for example, the motivations and goals of those who cyberbully, the long-term impact of being cyberbullied, and the extent of the differences between cyberbullying and face-to-face bullying. This in turn makes it difficult to develop interventions to address this behavior with students who bully. As outlined above, several definitions of cyberbullying have been proposed, primarily based on the concept of face-to-face bullying. However, to date, there has been little or no discussion of the theoretical construct of cyberbullying and whether using electronic media to engage in acts of aggression is the same (or very similar) to engaging in aggressive acts in face-to-face interactions. In addition, to date no research has examined the nature of how information is processed in cyber interactions. Given that a large amount of cyberbullying is text based (i.e., sending text messages or e-mails), how this information is processed and how this differs from processing information in real-time social interactions are unclear. The reward for engaging in cyberbullying is often delayed (in contrast to face-to-face interactions), and this is anticipated to have an effect on how goals for these aggressive interactions are formed and pursued. With the increasing availability, use and reliance on electronic technology, the issues outlined here are going to become more important and are clearly worthy of far greater understanding. There is a clear need for further in-depth research addressing issues of power, motivation, and repetition in cyberbullying episodes.

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