THE ROLE OF CYBER AND FACE-TO-FACE VERBAL

BULLYING ON ADOLESCENT VICTIMS

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Laura Catherine Farrell

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The Supervisory Committee certifies that this **_disquisition_** complies with North Dakota State University's regulations and meets the accepted standards for the degree of

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ABSTRACT

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The purpose of this study was to examine adolescent verbal bullying across communication media (e.g., face-to-face [F2F], cyber, both). Media Richness Theory (MRT; Daft & Lengel, 1984; 1986) and hyperpersonal communication (Walther, 1996) are the guiding theories in this study. Results suggested three of the four emotional outcomes [happiness, self-esteem, and peer satisfaction] were not significantly different across verbal bullying media, while the fourth emotional outcome [relational victimization] was significantly different. Results also suggested differences in frequency of bullying communication types between bullying media. There was a significant difference in the frequency of bullying type and grade level; however, there were no significant differences in the frequency of bullying medium based upon biological sex. These results indicate a bullied victim is most affected when the verbal bullying occurs though multiple mediums. Directions for future research are also offered.

ACKNOWLEDGMENTS

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CHAPTER 1. INTRODUCTION

In school, children are often taught the nursery rhyme 'sticks and stones may break your bones, but words can never hurt you'. Contrary to this catchy rhyme, words can, and do hurt in many different ways (Brown, Jackson, & Cassidy, 2009). Yet adolescents are expected to deal with emotions resulting from verbal bullying by themselves, because it is 'part of growing up' (Anderson & Sturm, 2007). Despite the potentially serious nature of bullying, it is dismissed as a rite of passage, experienced by all adolescents (Marr & Field, 2001).

Adults are often shocked to discover the extent of verbal bullying that adolescents face in and out of school (Dehue, Bolman, & Vollink, 2008). It seems that the lives of teenagers, and adults' perceptions of their lives, are quite different. Adolescents share the notion that there is nothing they, or anyone else, can do to stop verbal bullying from happening (Dehue et al., 2008). If adolescents do describe instances of verbal bullying, adults often dismiss the confessions as normal behavior. For example, when a teenage girl came home and told her parents that the boys were teasing her with sexual remarks, her parents responded, "Maybe they just have a crush on you" (p. 220).

If verbal bullying is an inevitable part of growing up, then developing prevention methods would appear to be a fruitless exercise. On the other hand, emphasis on understanding the emotional effects of bullying may provide a foundation for developing maintenance strategies for victims. Unfortunately, a problem with this approach is that it is often hard to understand or

methodologically capture how individuals are affected emotionally from verbal

bullying (Dramanduros, Downs, & Jenkins, 2008).

Reason for Concern

Victims' emotions can be displayed through many different behavioral signs

(Anderson & Sturm, 2007). Research has shown that bullied victims often struggle

academically. This may even influence a victim's desire to attend school (Marr &

Field, 2001), as explained by a bullied victim, "I just wanted the bullying to stop.

That is all I ever wanted. I used to love going to school. Now I hate and dread it

because I never know what they are going to say next" (p. 154). Both males and

females can experience depression, anxiety, self-esteem problems, eating disorders,

or even a desire to commit suicide (Kim, 2008).

Some victims may learn how to stand up for themselves or develop

assertiveness. But for many, the 'solutions' to being verbally bullied may include

becoming a bully in response, withdrawing socially, joining a group for defense, or

using (i.e., cigarettes, alcohol, illegal drugs) to try to minimize the pain they

experience (Hinduja & Patchin, 2008). Many repercussions can come with these

behavioral changes.

The behavioral responses that occur among victims are a result of the painful

feelings that develop from verbal bullying (Anderson & Sturm, 2007). In this study

these painful feelings are operationalized as emotional outcome variables including:

self-esteem, self-happiness, satisfaction of peer relationships, and relational

victimization. Both males and females who encounter verbal bullying may be at risk

for experiencing relational victimization, which is a term used to describe when

individuals feel like their peers have taken advantage of them, do not appreciate them, or when their peers make them feel insignificant (Crick, Casas, & Ku, 1999). When a bullied victim experiences relational victimization, it is unclear how other emotional outcomes like self-esteem, self-happiness, and satisfaction with peer relationships may relate. The need to understand bullied victims' emotional outcomes may provide the needed catalyst for parents, administrators, and researchers to further investigate verbal bullying.

Taking Verbal Bullying to Another Medium

To understand verbal bullying among the current adolescent generation, the topic becomes even more complex when taking into account the use of technology to communicate. The current generation of teenagers is unique in that it has access to a wider variety of communication technologies than previous generations. Some common communication technologies used by adolescents include cell phones (e.g., phone conversation, text message), Facebook (e.g., wall posts, messages, chat), e-mail, and instant messaging, to name a few. With this increase in technology access, channels of communication between teenage peers have shifted from predominantly face-to-face (F2F) to include cyber-communication (Beran & Li, 2005). This shift in communication media makes verbal bullying present among teenagers in both F2F and cyber-communication.

With the increase in technology access, the option to bully through mediated communication is growing in popularity among teenagers, and has become a concern for parents and teachers (Geach & Haralambous, 2009). School safety websites may address the issue of bullying, but may not explore how emotional

outcomes of F2F and cyberbullying may differ. For example, The National School Safety website, the primary reference for public school system safety, addresses F2F bullying as a serious issue, worthy of attention, awareness, and action (N.S.S.S.C., 2009). However, they fail to acknowledge the generational trend of increased cyber-communication and its role within bullying. National School Safety programs encourage schools to focus primarily on traditional bullying inside the school grounds. The N.S.S.S.C. noted that bullying, in general, occurs in predictable locations within schools, specifically unmonitored areas such as hallways, restrooms, stairwells, and playgrounds. The website also suggested that schools could limit traditional forms of bullying by identifying specific 'hotspots' within the school where students feel bullying is likely to occur. These suggestions do not account for the complex nature of verbal bullying that takes place outside school grounds, through Facebook, text messages, and other communication media. While school officials and teachers are monitoring 'hotspots', bullying is still taking place online (Shariff, 2008).

Verbal bullying occurrences both F2F and through cyber-media are not obvious to adults, and parents are often shocked to find out what their children experience at school. The elusive nature of cyberbullying makes it more difficult to identify, and cyberbullying can undermine school climate, interfere with school functioning, and put some students at risk for serious mental health and safety problems (Smith, et al., 2008). According to Bullying Statistics, students seem to agree that their schools are not safe (2009). Survey research with college students revealed that many students experienced verbal bullying when they were attending

high school but never told their parents (Dehue, Bolmna, & Vollink, 2008). For example, 51 percent of the males said that while they were in high school they felt threatened by verbal bullying at school, and 46 percent said their parents did not know.

The Center for Safe and Responsible Internet Use suggests that resulting emotional outcomes may be different when cyberbullying is the medium of choice; however, this is just speculation. As mentioned previously, victims of verbal bullying may experience depression, anxiety, problems concentrating, failing in school, or school avoidance, but verbal bullying can also lead to severe dysfunctions, external violence, and even suicide (Willard, 2007). These behavioral issues have resulted from both F2F and cyberbullying, but specific differences in emotional outcomes unique to each medium remain undefined. With such different characteristics involved with each medium, it is possible different emotional outcomes could result. For example, cyberbullies can remain anonymous, and can transmit their messages broadly and instantaneously. F2F bullies may feel more protected from consequences of being caught because of the lack of proof associated with F2F messages.

Rationale for the Study

The purpose of this research study is to identify the emotional outcomes of bullying messages through F2F and cyber-mediums (i.e., Facebook, instant message, text message, email) uniquely. This issue is in need of academic analysis so that emotional outcomes bullied victim's experience, in respect to the media used, can be more clearly understood. Scholars have found three primary reasons for concern:

First, studies show the frequency of bullying is increasing; second, alternative media are being used to bully; third, emotional outcomes of bullying are not clearly understood in respect to these alternative media ('Enough is Enough', 2006; Marr & Field, 2001; Shariff, 2008).

Previous literature on bullying has focused primarily on F2F interaction and emotional outcomes, specifically neglecting how emotional outcomes of cyberbullying may differ. This study seeks to differentiate emotional outcomes of bullying through both F2F and cyber-mediums, looking specifically at happiness, self-esteem, peer-relationship satisfaction, and relational victimization. Examining these emotional outcomes across different media will illustrate the influence of the media choice, and subsequently, differences in F2F and cyberbullying.

Computer-mediated communication (CMC) theories provide a framework for this study. First, media richness theory (MRT; Daft & Lengel, 1984, 1986) suggests messages through mediated channels (i.e., text message, Facebook, instant message, email) will be less effective than F2F messages. This study operationalizes the effectiveness of a message by measuring emotional outcomes of bullied victims through various media (e.g., F2F, cyber, both). Media richness theory also explains that a sender may select a specific medium based on desired effectiveness of the message, which could be dictated by whether the message is positive or negative. Second, Walther's (1996) hyperpersonal communication theory presents a newer argument that extends theoretical underpinnings of MRT. Hyperpersonal communication suggests that leaner mediums may create an effect known as overdramatization. Walther describes an overdramatized message as being an

exaggerated version of the intended message (misinterpreted by the receiver) because of the associated ambiguity with a leaner medium (1996). A combination of these theories will provide the framework for emerging research questions.

Preview

The next chapter examines the link between aggressive communication and verbal bullying, emotional outcomes of verbal bullying, and an investigation of verbal bullying media (F2F, cyber). Then an overview of CMC theories, specifically highlighting MRT (Daft & Lengel, 1984, 1986) and Walther's (1996) hyperpersonal communication will provide a theoretical framework for the study. Research questions emerge after the review of literature. In conclusion, practical and theoretical implications of emotional outcomes of verbal bullying, based on media choice, will be addressed.

CHAPTER 2. REVIEW OF LITERATURE

Verbal bullying is increasingly common among teenagers (Crick et al., 2001; 'Enough is Enough', 2006; Galen & Underwood, 1997; Marr & Field, 2001; Shariff, 2008). The first academic analysis of bullying was forty years ago with the work of Olweus (Michaud, 2009). Verbal bullying has aroused interest in public health as educators, physicians, and health scientists realize the potentially negative role bullying can play on the emotional development of teenagers (Rigby, 2003). Due to this concern, researchers have devoted more attention to bullying as well (see Beran & Li, 2005; Campbell, 2005; Crick & Bigbee, 1998; Dempsey & Storch, 2008; Kim, 2008; Marr & Field, 2001; Willard, 2007).

This chapter provides an overview of pertinent literature to this study. First, unique aspects of verbal bullying are linked to destructive aggressive communication. Second, previous research on emotional outcomes resulting from verbal bullying is addressed. Third, different bullying mediums are identified. Fourth, a look at CMC theories, the development of MRT (Daft & Lengel, 1984; 1986), and the extension of hyperpersonal communication theory, will provide a theoretical lens for the study. After this discussion of literature, four research questions are presented, followed by the method, presented in the third chapter.

Aggressive Communication within Bullying

Verbal bullying is a powerful communicative act, which creates a variety of different emotional outcomes in a victim that can lead to an array of behavioral changes. Bullying can be separated into two categories: overt and relational. Although bullying is often thought of as a physical act (overt), this study addresses

the relational aspect of bullying which stems from verbally aggressive communication. Verbal bullying is more clearly defined as a subset of relationally aggressive communication, which has been studied in great depths (Kuhn & Poole, 2000; Rancer & Aytgis, 2006). As a whole, aggressive communication involves one person applying force to another verbally; typically individuals that engage in aggressive communication are more active than passive, and they often adopt the 'attack' and 'defend' modes of thinking and action (Rancer & Aytgis, 2006).

Researchers have identified aggressive communication as being both positive and negative, categorizing the two as constructive and destructive (Rancer & Aytgis, 2006). An example of constructive aggressive communication is argumentativeness, which is often a successful tactic in conflict resolution (Kuhn & Poole, 2000; Rancer & Aytgis, 2006). Research has shown that individuals who approach conflict from an argumentative stance are seen as more credible, eloquent, creative, and self-assured, and are more likely to be viewed as leaders (Kuhn & Poole, 2000). Verbal bullying is defined in this study by looking at destructive aggressive communication, which is described as hostile (i.e., the expression of negativity, resentment, and suspicion) and relationally aggressive (i.e., communicating with the intent to inflict psychological pain, such as humiliation, embarrassment, and other negative feelings about the self) (Rancer & Aytgis, 2006).

Specifically, the destructive form of aggressive communication applies techniques like guilt, manipulation, rumors, exclusion, or name-calling (McCroskey et al., 1977). Researchers have identified that positive emotional outcomes (self-esteem and happiness) of recipients of destructive aggressive communication are

often low, while negative emotional outcomes (anxiety and depression) are often high (McCroskey et al., 1977). However, specific techniques (guilt, manipulation, rumors, exclusion, name-calling) used to verbally bully, in respect to emotional outcome differences, have not been investigated.

Emotional Outcomes of Bullying

Emotional outcomes of verbally bullied victims, which may cause behavioral changes, are the primary cause for concern among parents, teachers, and researchers. As described in the previous chapter, these behavioral changes can range from not wanting to attend school (Marr & Field, 2001) to thoughts of suicide (Kim, 2008). The emotional outcomes of verbal bullying have been studied in a variety of ways. Investigations have analyzed whether certain variables affect the level of emotional outcomes bullied victims experience. Several gaps emerge among findings related to how biological sex and grade level affects victims' emotional outcomes. Each of these will be discussed in turn. Note that the majority of previous research look at only one emotional outcome at a time.

Studies looking at biological sex and resulting emotional outcomes primarily investigate relational victimization. Further, there are inconsistencies across studies concerning the role that biological sex plays within verbal bullying and resulting levels of relational victimization. Several studies (Crick & Bigbee, 1998; Crick, Casas, & Nelson, 2002; Crick & Werner, 1998) investigating biological sex differences among elementary age children indicated that girls tend to be more relationally victimized, whereas boys were more overtly victimized. The studies suggest this is because of the difference in emotional versus physical emphasis on interactions. In

other words, traditionally girls interact on a more emotional level than boys, leaving them more vulnerable to relational victimization. Oleuws (1993) identified that girls are more likely than boys to be relationally aggressive or victimized, and that female relational victims may be likely to retaliate through relational aggression. Contrasting studies found no sex differences in the case of relational victimization (Cillessen & Mayeux, 2004; Crick & Grotpeter, 1996), suggesting that interactions are not solely determined by biological sex. This demonstrated that verbal bullying may or may not be considered 'only female'.

A grade level comparison addressed negative emotional outcomes of bullying in a longitudinal study (Crick et al., 2006), looking specifically at happiness and peer satisfaction. Children's social-psychological adjustments identified predictors of these emotional outcomes among third and fourth graders (Crick et al., 2006). Those children that showed frequent verbal aggression were often later found to have lower levels of happiness and peer satisfaction, and showed this through behaviors like withdrawal, depression, and anxiety. Although this study provides a connection to verbal bullying and negative emotional outcomes among elementary students, the grade level comparison has not been extended to a high school setting. It would be beneficial to understand the link between verbal bullying and emotional outcomes at a high school level as well. The characteristics of social interaction in high school compared to elementary school should be different, due to the difference in developmental stage (Shariff, 2008).

Understanding emotional outcomes is an important aspect of verbal bullying, yet it is not enough to only understand this component. As discussed in the previous

chapter, the present adolescent generation has access to more technology than previous generations. Therefore, mediated forms of communication can be used to accomplish both positive and negative social goals (Geach & Haralambous, 2009). This trend speaks to the increasing occurrence of cyberbullying (Wolak et al., 2007). A closer look at media choices used in verbal bullying will be addressed in this next section.

Medium Choices in Bullying

The importance of different communication media, specifically in regard to computer-mediated communication, is an increasingly popular area of research. People communicate differently when having F2F conversations than they do through text message or email. Medium choices of bullying have been acknowledged in several studies (Beran & Li, 2005; Rigby, 2003; Slonje & Smith, 2008), yet links to emotional outcome differences between these media choices are not clearly defined. This section provides a closer look at pertinent literature of media choices used during verbal bullying.

Face-to-face bullying among peers in school has been identified as a frequent experience for teenagers (Genta et al., 1996; Kumpulainen et al., 1998; Whitney & Smith, 1993). Beran and Li (2005) have investigated verbal bullying through cyber media, finding the majority of students who experience F2F bullying were also subject to cyberbullying, with a range of severity levels. Beran and Li suggest that bullying begins at school and then extends into the home. Further, they claim that two-thirds of students are aware of cyberbullying, one-quarter of those students experienced cyberbullying several times or more, and about one-quarter of those

students admitted to cyberbullying their peers (Beran & Li, 2005). Just as victims of F2F bullying report distress (Rigby, 2003), victims of cyberbullying indicated feelings of sadness, anger, anxiety, and fear that may have impaired their ability to concentrate and succeed in school (Beran & Li, 2005).

Students identify cyberbullying occurrences through a variety of mediated channels. Seven channels frequently used to cyberbully include: email/instant messaging, Internet, chatrooms, web pages, cell phone/text message, video clips, and photographs (Beran & Li, 2005), with some channels being described as more harmful than others. Slonje and Smith identify photographs and video clips as the most harmful form of cyberbullying (2008), and Beran and Li's (2005) study identified email as the most common type of bullying. However, with the rapid development of technology, these findings may be different among the current generation of adolescents.

Verbal bullying occurs F2F through five common communication types, including: spreading rumors, exclusion, ignoring, divulging information (secret-sharing), and being ridiculed (name-calling) (Beran & Li, 2005). These communication types can also be strategically used via cyber media. Slonje and Smith (2008) suggest that the use of specific media to bully (i.e., F2F or cyber) may play a role in determining the bullying communication type chosen. This is similar to bullying research found in other countries (Campbell, 2005; Li, 2006; Smith et al., 2008).

A combination of two communication theories offer a lens to investigate verbal bullying, through F2F and cyber media. An overview of CMC theories will

provide the necessary background for these two theories: MRT (Daft & Lengel, 1984, 1986) and Walther's (1996) hyperpersonal communication. After highlighting these theories, four research questions emerge.

Computer-Mediated Communication Theoretical Background

Mediated communication has been studied in a variety of contexts using computer-mediated communication theories (CMC). CMC is defined as any communicative transaction that occurs through the use of two or more networked computers (Denis, 2005). While the term has traditionally referred to those communications that occur via computer-mediated formats (e.g., instant messages, e-mails, chat rooms), it has also been applied to other forms of text-based interaction such as text messaging (Thurlow, Lengel, & Tomic, 2004). Research on CMC focuses largely on the social effects of computer-supported communication technologies.

Scholars study CMC theory in a variety of ways (Garcia & Jacobs, 1999; Haythornthwaite & Welman, 2002; Walther, 1996; Walther & Burgoon, 1992). For example, many take a sociopsychological approach to CMC by examining how humans use media to manage interpersonal interaction, form impressions, and form and maintain relationships (Walther, 1996; Walther & Burgoon, 1992). Another approach to CMC research supports the view that CMC should be studied as embedded in everyday life (Haythornthwaite & Wellman, 2002). A branch of CMC research examines the use of features like emoticons and turn-taking (Garcia & Jacobs, 1999), sequential analysis and the organization of talk (Herring, 1999; Markman, 2006), or the various sociolects, styles, or terminology (i.e., l33t) specific

to these environments (Mitchell, 2006). The study of language in these contexts is typically based on text-based forms of CMC (Herring, 2004).

CMC is examined and compared to other communication media through a number of characteristics thought to be universal to all forms of communication, including (but not limited to) synchronicity, persistence or 'recordability', and anonymity. Popular forms of CMC include e-mail, video, audio, or text chat (i.e., text conferencing, instant messaging), bulletin boards, and blogs. These settings are changing rapidly with the development of new technologies. The association of these characteristics with different forms of communication varies widely. For example, instant messaging is synchronous in that users can converse by turn-taking with little wait time. E-mail and message boards, on the other hand, are low in synchronicity since response time varies, but high in persistence since messages sent and received are saved.

Properties that separate CMC from other media also include transience, its multimodal nature, and its evolving codes of conduct (Denis, 2005). CMC is able to overcome physical and social limitations of other forms of communication and therefore allows the interaction of people who are not physically sharing the same space. Anonymity, and in part privacy and security, depends more on the context and particular program being used or web page being visited. However, most researchers in the field acknowledge the importance of considering the psychological and social implications of these factors alongside the technical 'limitations'. Communication occurring within a computer-mediated format has an effect on many different aspects of an interaction. Some of these aspects of

interaction that have received attention in the scholarly literature include impression formation, deception, group dynamics, disinhibition and especially relationship formation.

Media Richness Theory.

Media Richness Theory was proposed by Daft and Lengel (1984, 1986), to study the effectiveness of media and aid in reducing uncertainty and ambiguity of a message. The theory was developed to describe organizational communication channels by using characteristics that determine each channel's capacity to carry richer, more personal information. The original understanding of MRT assumed the richest medium should be chosen to most effectively communicate a message. This study uses MRT in a new way, operationalizing effectiveness of a message by measuring emotional outcomes of bullied victims through various media (e.g., F2F, cyber, both). For example, if a message sent F2F is most effective, it should theoretically have the highest emotional outcomes. Further, MRT suggests a richer medium be used for tasks with high levels of uncertainty and ambiguity. Additionally, a leaner medium may decrease understanding and increase uncertainty and ambiguity. Daft and Lengel (1984) suggest the complexity of the message should determine the medium, however familiarity of a medium and strategy may also play a role in the medium choice.

According to MRT (Daft & Lengel, 1984), F2F communication would be an example of the richest form of media. In comparison, mediated communication technology, such as email or text messages, would be classified as lean media. Figure

1 illustrates the continuum of effectiveness in comparison with different

communication media.

More	Richer Media

F2F

Skype/Video Conference

Telephone

Effectiveness of Communication

Instant Messenger

Text Message

Twitter

Addressed Mail/Email

Bulk

Less Effective	Leaner Media
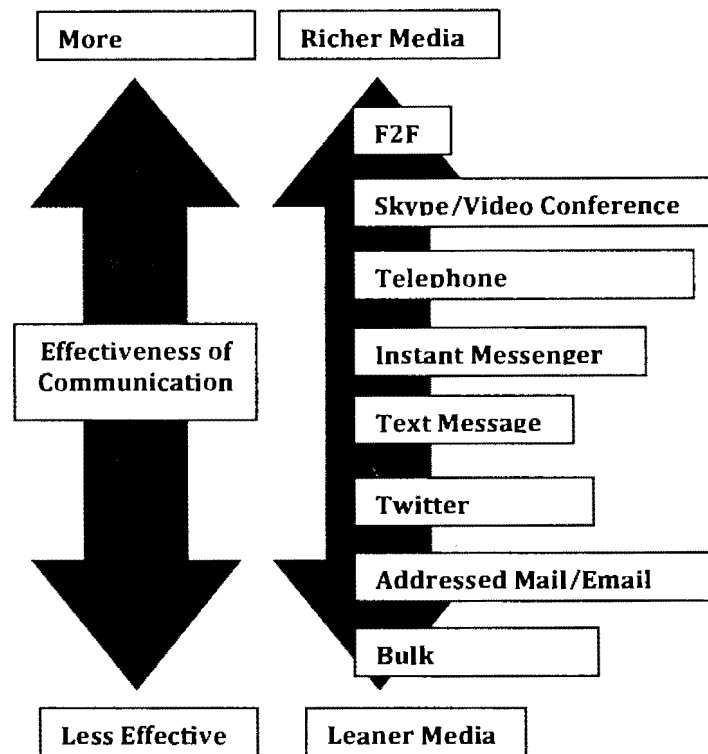
Figure 1. MRT highlights the difference in effectiveness of specific mediums. It categorizes mediums through continuum where the richest medium (e.g., F2F) is most effective, and the leanest medium (e.g., unaddressed documents) is least effective.

(Adapted from: Daft and Lengel, 1986)

Rich and lean media are classified by a series of characteristics, described by

Daft and Lengel (1984, 1986). Four factors associated with media richness include:

immediacy, multiple cues, language variety, and personal source. *Immediacy* refers

to the ability of media to provide timely feedback (Daft & Lengel, 1984). *Multiple*

cues refer to the ability to convey messages through different cues such as body,

language, voice, and tone. *Language variety* refers to the use of different words to

increase understanding (i.e., a text message might read 'R u goin b4 2?' using l33t

language, but actually means 'Are you going before two?'), and *personal source*

refers to the ability to convey feelings and emotions (Daft & Lengel, 1984). Each

communication medium falls within the continuum of rich or lean media based on

the medium's immediacy, multiple cues, language variety and personal source

factors (Newberry, 2001), as shown in Figure 2.

Media Effectiveness (across) Criteria (down)	High Effectiveness	Medium Effectiveness	Low Effectiveness
Immediacy	F2F, skype, video conference, telephone,	Instant messanger, text message	Email, facebook wall posts, twitter
Multiple cues	F2F	Skype, video conference	Telephone, instant messanger, email, , facebook wall posts, twitter, text message
Language Variety	Instant messanger, twitter, facebook wall posts, text message	Skype,video conferencing, telephone, email	F2F
Personal Source	F2F	Skype, Video conferencing, telephone, text message	Instant messanger, email,

Figure 2. The different types of communication media are illustrated. This figure shows whether each communication medium has a high, medium, or low ability to carry each of the four factors (e.g., immediacy, multiple cues, language variety and personal source).

(Adapted from: Newberry, 2001)

While Trevino, Lengel, and Daft (1987) support the concept of media

richness, other studies (Dennis & Kinney, 1998; Markus, 1994) recognize that the

concept of media richness theory was developed at a stage when modern

communication technologies (i.e., email, Facebook) did not exist as a means of

communication. Inconsistent findings have resulted with the introduction of new media (Fulk & Ryu, 1990; Markus, 1988, 1994; Rice & Shook, 1989; Trevino, Lengel, Bodensteiner, Gerioff, & Muir, 1990; Webster & Trevino, 1995), which have encouraged a reconsideration of the descriptive and predictive validity of MRT.

Consequently MRT was updated in the early 90s so that it could take into account modern communication technologies of the time (Sproull, 1991; Valacich, Paranka, George, & Nunamaker, 1993). Updates included several additional concepts: multiple addressability, external recordability, computer processable memory, and concurrency. *Multiple addressability* refers to the ability to communicate information simultaneously to multiple users. The concept of *external recordability,* relates to the ability of media to provide a record of the communication. This involves being able to document as well as modify the process of communication. *Computer processable memory,* on the other hand, refers to the organization and manageability of communication electronically such that searches can be undertaken on them. The final concept, *concurrency,* is similar to multiple-addressability, but is interactive in that it allows users to respond simultaneously (i.e., chat room). These four additional concepts extend current understandings of MRT by being able to more specifically categorize rich and lean media, and are still useful in new media today. They acknowledge the complex communication elements new media introduces.

People have the ability to choose how much association they desire when sending a message. A deeper look at MRT suggests that when a message is positive, the richest medium is often chosen, but when messages are negative, strategy is

imposed in media choice (Sheer, 2004). For example, if an individual wants to verbally bully a peer, he or she has to decide a medium to use (i.e., F2F, text message, or Facebook). In selecting the medium, the individual weighs the consequences associated with each medium. The message is negative, so if it is done F2F there is a chance for immediate feedback, which may not be desired in this situation. If a bullying message is sent as a Facebook wall post, it becomes public on the Facebook page of the receiver. This message is also filtered through newsfeed, a unique feature of Facebook. Newsfeed is a page shared by all friends on Facebook, where friend status updates, new photos, wall messages, and other wall conversations are filtered. Due to this function, a message posted on a Facebook wall will become even more public after it is sent through newsfeed. The risk of recordability is associated with text message or Facebook news feed. All of the rich and lean characteristics of mediums play a role in which one is selected. Early understandings of MRT suggest the richest mediums should ideally be used, but research (Sheer, 2004) shows that strategy can influence which medium is considered 'ideal', depending on whether the message is positive or negative. Media richness theory has been studied in a variety of contexts (Daft et al., 1987; Jones, Saunders, & McLeod, 1988-89; Kraut, Galegher, Fish, & Ghalfonte, 1992), and it also provides a lens to investigate 'rich' and 'lean' mediums associated with verbal bullying F2F and through cyber mediums.

An interesting component of MRT explains that a medium can become increasingly rich based on familiarity with that medium and its characteristics. As mentioned earlier, the current generation of teenagers is unique in that it has access

to a wider variety of communication technologies than previous generations, and the channels of communication have shifted from predominantly F2F to cyber-communication (Beran & Li, 2005). As individuals develop experience communicating with others using a specific medium (i.e., text message), they may develop a knowledge base for more effectively communicating (Sproull, 1991). Given this increasing ability to communicate effectively through various media, people begin to perceive the medium as increasingly rich. For example, text-messaging users may become aware of how to craft messages to convey differing levels of formality or how to use channel-specific language to communicate emotions. Similarly, these individuals also are likely to interpret messages received on this channel more richly because they can interpret an increasing variety of cues.

Hyperpersonal Communication.

The familiarity (of a medium) described by MRT is extended through a concept called hyperpersonal communication. By using the lens of hyperpersonal communication, Walther (1996) has furthered the idea that CMC lacks interpersonal qualities present in rich media like F2F communication, but there are instances where CMC has the ability to equal, and possibly even surpass, the level of effectiveness and emotion of a parallel F2F interaction. The possibility that lean media may have the ability to surpass F2F emotional outcomes takes place not only in decision-making groups and business settings, but also in online social settings (Walther, 1996), such as Facebook, instant messenger, or chat systems.

Hyperpersonal communication provides a theoretical lens to investigate the complex nature of negative emotional outcomes of bullying among adolescents.

Muzafer and Sherif (1964) made the argument that both the functioning of teenage groups and their impact on individuals is related to the context and medium through which they are communicating and which they are embedded. When that context involves an online medium, the culture will be uniquely influenced (Walther, 1996). Walther constructed the idea of hyperpersonal communication from Muzafer and Sherif (1964). The hyperpersonal communication model introduces factors that explain how the CMC environment can allow the individual to experience a level of closeness above the norm in F2F condition (Walther, 1996). Walther (1996) argues that this model presents a reasoned approach, and a related process, that may provide a more accurate and comprehensive perspective to explain CMC effects.

Walther (1996) describes three necessary conditions for hyperpersonal communication to occur. First, the receiver has an idealization of the sender due to over-attributions, where the receiver assigns magnified positive values to his or her peers. This is true in instances of bullying, where a bullied victim may attribute more power to the bully than they actually have. Second, the sender can be selective in his or her self-presentation, and have the advantage of being able to optimally edit the message before transmitting. Bullies can choose to send messages through text message or Facebook, to avoid immediate feedback. They can even choose to mask their identity while sending the message anonymously. Third, the feedback loop, or reciprocity of interactions where the interplay of idealization and self-presentation form, create a self-reinforcing cycle. Again, a bully can send messages through multiple mediated channels, and also F2F. This continual bombardment of

bullying messages received by a victim would give them minimal time to defend themselves, or develop a response.

Walther (1996) specifically proposed four components of the communication process that may each uniquely influence hyperpersonal levels of communication, including: receiver, sender, channel, and feedback. Under certain circumstances, CMC message receivers dramatize the perceptions they form about their partners. For example, a verbal bullying text message may say 'you're stupid'. This comment could be said in many ways (e.g., insulting, joking, sarcastic, disgusted), but the F2F medium allows receivers to be clued in by vocal tones or facial and body expressions. The same message sent though text allows the receiver to interpret the message, leaving room for many possibilities. The message could have been intended as a joke, but if the receiver interpreted it as an insult, it may have negative emotional outcomes.

A useful and theoretical approach to this process is echoed with social identity deindividuation (SIDE) theory. Lea and Spear (1992; Spears & Lea, 1992) predict that, in the absence of F2F cues and prior personal knowledge, the subtle social context cues or personality cues that do appear in CMC are paid particular attention. CMC partners engage in an *overattribution* process; they build stereotypical impressions in light of limited information.

The early view of CMC was that it was both expansive and restricting. Computer-mediated communication limits the kinds of communication cues used, but it also allows the sender to strategically choose whether to minimize or maximize interpersonal effects. Walther (1996) acknowledges that the medium of

communication does not cause the impersonal or hyperpersonal level of communication. However, CMC does provide opportunities to communicate as desired. Interactions such as verbal bullying may be one instance where the sender would prefer to send a message to a peer in a less rich medium to avoid instant feedback and emotional responses.

Hyperpersonal communication, as an extension of MRT, illustrates possible theoretical explanations for verbal bullying emotional outcomes and bullying communication types, in respect to medium choice. Both MRT and hyperpersonal communication agree the unique aspects of F2F and cyberbullying media will result in different emotional outcomes, yet both theories suggest differences in those outcomes. Media richness theory suggests F2F is a rich media involving highly personal interactions, which will create increased emotional outcomes. Yet, if hyperpersonal communication occurs through alternative mediums, this may change the emotional outcomes. Media richness theory suggests undesirable relational messages may be transmitted strategically through a leaner medium to avoid immediate feedback and separate individuals from the message. The assumptions of hyperpersonal communication suggest cyberbullying mediums that involve a larger audience (i.e., Facebook newsfeed) may result in increased emotional outcomes, even though they are considered leaner media. Through this review of literature, four research questions emerged, which are discussed in the following section.

Research Questions

The research questions for this study emerged from previous literature. The rationale for each research question is reviewed below, along with its corresponding question. These questions were designed to guide a deductive approach to analyzing emotional outcomes and the use of verbal bullying communication types, unique to F2F and cyber media. These questions also investigate differences in the frequency of media choices between biological sex and grade level.

Emotional outcomes of bullying have been studied in various ways (Crick & Bigbee, 1998; Crick & Werner, 1998; Gini, 2007; Pearce, Boergers, & Pristein, 2002; Putallaz et al., 2007; Shariff, 2008), but emotional outcomes are not clearly understood in respect to different media used to verbally bully. The theoretical perspective of MRT differentiates the effectiveness of rich media and lean media (Daft & Lengel, 1984; 1986), and hyperpersonal communication discusses the concept of overdramatization when mediated channels are used to communicate (Walther, 1996). Thus, the following research question was posed to offer theoretical implications of emotional outcomes between exposures to verbal bullying through different media:

RQ$_1$: How do the emotional outcomes of verbal bullying differ as a function of bullying media (i.e., F2F, cyber, both)?

RQ$_{1a}$: How do victims perceptions of their happiness differ as a function of bullying media (i.e., F2F, cyber, both)?

RQ$_{1b}$: How do victims perceptions of their self-esteem differ as a function of bullying media (i.e., F2F, cyber, both)?

RQ$_{1c}$: How do victims levels of satisfaction with peer relationships differ as a function of bullying media (i.e., F2F, cyber, both)?

RQ$_{1d}$: How do victims levels of relational victimization differ as a function of bullying media (i.e., F2F, cyber, both)?

Research argues that bullying communication type differs between F2F and cyber-communication (Ramirez & Zhang, 2007; Slonje & Smith, 2008). Theoretically, MRT would suggest that if a bully wished to be more effective, he or she would choose F2F communication because it involves a richer media. However, because bullying messages are negative, the sender could strategically choose a leaner media to distance him or herself from the bullying, and still use the same bullying communication type. This study poses the following question, comparing bullying communication types to their frequency of use among F2F and cyber mediums:

RQ$_2$: How does the frequency of bullying communication type differ between bullying media (i.e., F2F, cyber, both)?

RQ$_{2a}$: How does the frequency of rumors differ between bullying media (i.e., F2F, cyber, both)?

RQ$_{2b}$: How does the frequency of exclusion differ between bullying media (i.e., F2F, cyber, both)?

RQ$_{2c}$: How does the frequency of being ignored differ between bullying media (i.e., F2F, cyber, both)?

RQ$_{2d}$: How does the frequency of secret sharing differ between

bullying media (i.e., F2F, cyber, both)?

RQ$_{2e}$: How does the frequency of name-calling differ between

bullying media (i.e., F2F, cyber, both)?

Past research has looked at biological sex and the role it plays in bullied

victims' emotional outcomes. Some findings suggest females are verbally bullied

more than males (Crick & Bigbee, 1998; Crick, Casas, & Nelson, 2002; Crick &

Werner, 1998). Yet other studies found no difference between verbal bullying and

biological sex (Cillessen & Mayeux, 2004; Crick & Grotpeter, 1996; Gini, 2007;

Paquette & Underwood, 1999; Roecker-Phelps, 2001). However, differences in

primary medium used to verbally bully based on biological sex have not been

investigated. Thus, the following research question was posed:

RQ$_3$: How does the frequency of verbal bullying through a specific

medium (i.e., F2F, cyber) differ as a function of biological sex (i.e.,

male, female)?

RQ$_{3a}$: How does the frequency of F2F bullying differ as a

function of biological sex (i.e., male, female)?

RQ$_{3b}$: How does the frequency of cyberbullying differ as a

function of biological sex (i.e., male, female)?

Although differences in verbal bullying have been studied across elementary

grades, adolescent grade level comparisons have received little attention (Crick et

al., 2006; Dempsey & Storch, 2008). Yet, adolescence is a critical stage in the social

development of individuals. It is not clear whether specific media are employed

differently across the grade levels of high school students. To understand the difference in bullying media choice across adolescent grade levels, the following question was posed:

RQ4: How does the frequency of verbal bullying through a specific medium (i.e., F2F, cyber) differ as a function of grade level (e.g., lower class students [9 & 10], upper class students [11 & 12])?

RQ4a: How does the frequency of F2F bullying differ as a function of grade level (i.e., lower class students [9 & 10], upper class students [11 & 12])?

RQ4b: How does the frequency of cyberbullying differ as a function of grade level (i.e., lower class students [9 & 10], upper class students [11 & 12])?

Literature addressed in this chapter offered a basis for current understandings of emotional outcomes, verbal bullying communication types, demographics of biological sex and grade level, and mediums used to verbally bully. First, verbal bullying was linked to destructive aggressive communication. Second, bullied victims' emotional outcomes were investigated according to past research on biological sex and grade level. Third, verbal bullying mediums were discussed. Fourth, CMC theories were introduced as a guiding theoretical lens, specifically highlighting MRT and hyperpersonal communication. The literature provided a framework, which led to the emergence of four research questions. The following section will address the four research questions and describe the method used for analysis.

CHAPTER 3. METHODOLOGY

Four elements—demographic information, bullied victims' emotional outcomes, verbal bullying communication types, and verbal bullying mediums—were combined in a survey to provide a more complete understanding of how communication is used to bully adolescents, as well as identify emotional outcomes of verbal bullying, based on the medium. The design, participants, procedures, and measures are addressed in this chapter.

Participants

In this study, one hundred twenty-two participants (n=122) were recruited from twelve classes within two Midwestern high schools. The researcher presented a five-minute description of the study to the classes, totaling two hundred ninety (n=290) students, and provided each student with an informational sheet and parent/guardian consent form. Students who were under eighteen and wished to participate were instructed to have a parent/guardian read and sign the consent form, as well as provide their primary email address on the form. Students who were eighteen or older were only required to fill out the primary email address section on the form. Students were instructed to return the completed forms to their school counseling office, and then to expect an email from the researcher with a link to the survey. This way, only students who obtained the necessary permission were sent the survey link. The researcher emphasized the importance of taking the survey on a computer located in a comfortable, private location for each participant. A total of one hundred forty-five students (n=145) returned the consent forms. The survey links were emailed to each student using the email address provided on the

consent forms. No identifiable information was collected during the survey and the consent forms remained confidential. A total of one hundred twenty-two students (n=122) completed the online survey. Of those students, a little less than half (n=54) were male and slightly more than half (n=68) were female. Also, sixty-three students (n=63) were enrolled in grades 9 or 10, and fifty-nine students (n=59) were enrolled in grades 11 or 12. An additional demographic question asked participants to select a sociometric status that reflected him/her. Of the total students (n=122) who completed the survey, several students (n=14) identified themselves as popular, the majority (n=101) as average, a few (n=7) as shy, and one (n=1) as troubled.

Procedures

The researcher and primary counselor from each school attended recruitment sessions in each of the twelve classes, targeting grades 9-12 equally. The sessions included a five-minute description of the study, and provided each student with a parent/guardian consent form. All students who turned in a complete consent form to the counseling office received the survey link through their email address, which they provided on the form. The survey took approximately 10 to 20 minutes to complete.

The first page of the survey included a youth assent/consent form with an electronic option of accept or decline. This was followed by two demographic questions, including biological sex (male, female) and grade level (9, 10, 11, 12). After that, four scales were used to measure participants' satifaction of peer relationships, participant's perceptions of their own self-esteem, perceptions of

their own happiness, and level of their relational victimization. Then, questions asked participants to specify how frequently they experienced five specific types of verbal bullying (rumors, exclusion, being ignored, secret sharing, name-calling), which did not have them specify if the bullying was F2F or cyber. The next questions asked participants to select which medium they primarily experienced verbal bullying through (F2F, cyber, both, neither). If participants chose F2F, cyber, or both, the following questions had them describe how frequently they experienced F2F and cyberbullying specifically (using a rating scale of 1-7, 7 being all the time). If they answered neither, they were redirected to two open-ended questions about what might motivate the bullies to bully. Finally, counseling service information was provided at the end of the survey (i.e., high school counseling information, a website for Crisis Hotline, website, Dealing with Bullying). See Appendix E for the complete survey.

Measures

This study used the online survey provider, www.surveymonkey.com, to address the four research questions. The following section provides an overview of how each research question was measured. First, measures of the four emotional outcome variables were obtained by using four established scales, which are described below.

Peer satisfaction. McCroskey and Richmond developed the Relational Satisfaction Scale (RSS) (1989). This bipolar adjective pair scale asked six questions, measuring an individual's level of satisfaction with their peers (i.e., classmates). Scale reliability was tested for this study using Cronbach's alpha ($\alpha = .90$). Example

items include 'bad'/'good', 'wrong'/'right', and 'foolish'/'wise'. Several items on this scale were reverse coded. To see the complete list of questions used to measure peer satisfaction, refer to *Appendix A*.

Self-Esteem. Gecas developed the Self-Esteem Scale (1971). This semantic differential scale asks eleven questions, which measures perceptions of an individual's self-esteem. Scale reliability was tested for this study using Cronbach's alpha (α= .89). Example items include 'powerful'/'powerless', 'dishonest'/'honest', and 'do few things well'/'do most things well'. Several questions on this scale were reverse coded. For a complete list of questions used to measure perceptions of self-esteem, refer to *Appendix B*.

Happiness. Hill and Argyle developed the Oxford Happiness Questionnaire (2001). This scale measures perceptions of an individual's happiness, using a 7-point Likert-type scale, with choices of 'strongly disagree' to 'strongly agree'. Scale reliability was tested for this study using a Cronbach's alpha (α = .89). This scale consisted of eight questions, including: 'I feel that life is rewarding', 'I don't feel particularly pleased with the way I am', and 'I am well satisfied about everything in my life.' For a complete list of questions used to measure perception of happiness, refer to *Appendix C*.

Relational Victimization. Crick and Grotpeter developed the Children's Social Experiences Scale (CSE) (1996), for elementary age children. Language was modified to fit an adolescent demographic. Question one was modified from 'How often do other kids leave you out on purpose when it is time to play or do an activity?' to 'How often do others leave you out of social activities or information

sharing'? Question two was modified from 'How often does a kid who is mad at you try to get back at you by not letting you be in their group anymore?' to 'How often does an individual who is mad try to get back at you by discluding you from the group?' Question three was modified from 'How often does a classmate tell lies about you to make other kids not like you anymore?' to 'How often does a peer tell lies or rumors about you to make others not like you or have false impressions?' Question four was modified from 'How often does another kid say they won't like you unless you do what they want you to do?' to 'How often does another peer say you're not cool unless you do what they want you to do?' Question five was modified from 'How often does a kid try to keep others from liking you by saying mean things about you?' to 'How often does a peer try to keep others from liking you by saying mean or false things about you?' Scale reliability was tested for this study using a Cronbach's Alpha ($\alpha = .75$). This scale measured relational victimization using a 7-point Likert-type scale, with choices of 'never' to 'all the time'. This scale consisted of five questions including: 'How often do others leave you out of social activities, or information sharing?' and 'How often does another peer say you're not cool unless you do what they want you to do?' For a complete list of questions used to measure relational victimization, refer to *Appendix D*.

Data Analysis

In order to address RQ_1, participants identified the medium in which they experienced bullying (F2F, cyber, both). Out of the total participants who reported having been verbally bullied in some way (n=82), about one-forth (n=24) had only experienced verbal bullying F2F, about one-fifth (n=18) only cyber, and half (n=40)

experienced it in both ways. The neither category (n=40) was not included in these tests, because this study was only interested in emotional outcomes of individual's who have experienced some type of verbal bullying. The data of these three categories were compared across the four emotional outcome scales. Four one-way ANOVA's were run to identify the main effect between bullying medium and emotional outcome. The predictor variable was bullying medium (F2F, cyber, both) and the criterion variables consisted of emotional outcomes (peer satisfaction, self-esteem, happiness, and relational victimization).

In order to address RQ_2, participants identified the medium in which they have experienced bullying in (F2F, cyber, both). Again, out of the total participants who reported having been verbally bullied in some way (n=82), (n=24) had only experienced verbal bullying F2F, (n=18) only cyber, and (n=40) experienced it in both ways. As in RQ1, the neither category (n=40) was not included in these tests, because this study was only interested in emotional outcomes of individual's who have experienced some type of verbal bullying. Participants also responded to questions asking the frequency of bullying communication type. Five one-way ANOVA's were used to identify the main effect between bullying medium and bullying communication type. The predictor variable was bullying medium (F2F, cyber, both) and the criterion variables consisted of bullying communication type (rumors, being excluded, being ignored, information divulged, being ridiculed).

In order to address RQ_3, a demographic biological sex question was used, along with the F2F bullying frequency scale and cyberbullying frequency scale. Of the total (n=83) participants included in these tests, there were slightly more

females than males (male n=38 and female n=45). An independent sample t-test was used. The predictor variable was biological sex (male, female). The criterion variable was frequency of bullying (F2F, cyber).

In order to address RQ$_4$, a demographic grade level question was used, along with the F2F bullying frequency scale and cyberbullying frequency scale. Of the total (n=83) participants included in these tests, just over half (n=42) were lower class students (grades 9 & 10) and just under half (n=41) were upper class students (grades 11 & 12). Although individuals were able to report specifically what grade (9,10,11, 12) they were enrolled in, one of the categories was below 5, which required categories to be combined. After combining categories a sufficient number of participants was achieved. An independent sample t-test was used. The predictor variable was grade level, which was collapsed into lower class students (9, 10) and upper class students (11, 12). The criterion variable was frequency of bullying (F2F, cyber).

CHAPTER 4. RESULTS

The following statistical analysis provided insight into verbal bullying among adolescents. The four research questions (with sub-questions) are discussed in turn. Each research question provides the statistical test used and results of the test. Tables illustrate findings for the first two research questions.

RQ^{1a} investigated how a bullied victim's perception of their happiness differed as a function of bullying medium type (F2F, cyber, both). In response to RQ^{1a}, a one-way ANOVA revealed that a bullied victim's perception of their happiness did not significantly differ due to the different mediums in which verbal bullying was experienced, $F (2, 79) = 1.14$, p = .33.

RQ^{1b} investigated how a bullied victim's perception of their self-esteem differed as a function of bullying medium type (F2F, cyber, both). In response to RQ^{1b}, a one-way ANOVA revealed that a bullied victim's perception of their self-esteem did not significantly differ due to the different mediums in which verbal bullying was experienced, $F (2, 79) = 2.37$, p = .1.

RQ^{1c} investigated how a bullied victim's satisfaction with peer relationships differed as a function of bullying medium type (F2F, cyber, both). In response to RQ^{1c}, a one-way ANOVA revealed that a bullied victim's satisfaction with peer relationships did not significantly differ due to the different mediums in which verbal bullying was experienced, $F (2, 79) = .83$, p < .44.

RQ^{1d} investigated how a bullied victim's level of relational victimization differed as a function of bullying medium type (F2F, cyber, both). In response to RQ^{1d}, a one-way ANOVA revealed that a bullied victim's level of relational

victimization differed due to the different mediums verbal bullying was experienced through, F (2,79) = 5.92, p < .05, partial η^2 = .13. More specifically, Bonferroni's post hoc comparisons revealed that people report feeling more relationally victimized when they were verbally bullied through both (M = 3.63, SD = 1.32) than when they are only verbally bullied F2F (M = 2.57, SD = 1.28).

Results revealed the emotional outcome, relational victimization, was found to be significantly different between F2F and both mediums. The remaining three emotional outcomes [happiness, self-esteem, and peer satisfaction] did not show a significant difference across F2F, cyber, or both mediums. The results, mean (M), and standard deviation (SD), of each emotional outcome, in respect to medium, are illustrated below in Table 1.

Table 1. Level of Emotional Outcomes Among Mediums

	Happiness	Self Esteem	Peer Satisfaction	Relational Victimization
F2F				
M	4.9_a	5.33_a	5.37_a	2.57_a**
SD	.89	.91	1.13	1.28
Cyber				
M	4.94_a	5.81_a	5.68_a	2.92_{ab}
SD	.99	.52	.77	1.05
Both				
M	4.58_a	5.28_a	5.28_a	3.63_b**
SD	1.08	1.01	1.18	1.32

**Relational Victimization; F (2, 79) = 5.92, p < .05, partial η^2 = .13.

Note: Means with no subscript in common vertically differ at p < .05 using Bonferroni post hoc comparisons.

RQ[2a] investigated how the frequency of rumors differed as a function of bullying medium (F2F, cyber, both). In response to RQ[2a], a one-way ANOVA revealed that the frequency of rumors experienced by a victim differs as a function of bullying medium $F(2, 79) = 5.66$, $p < .05$, partial $\eta^2 = .125$. More specifically, Bonferroni's post hoc comparisons revealed that people report having rumors more frequently told about them through both ($M = 3.5$, $SD = 1.5$) than when only F2F ($M = 2.21$, $SD = 1.32$).

RQ[2b] investigated how the frequency of exclusion differed as a function of bullying medium (F2F, cyber, both). In response to RQ[2b], a one-way ANOVA revealed the frequency of exclusion did not significantly differ between victims who experienced F2F, cyber, or both, $F(2, 79) = .402$, $p = .67$.

RQ[2c] investigated how the frequency of being ignored differed as a function of bullying medium (F2F, cyber, both). In response to RQ[2c], a one-way ANOVA revealed there was not a significant difference in the frequency of being ignored through F2F, cyber, or both, $F(2, 79) = .32$, $p = .73$.

RQ[2d] investigated how the frequency of secret sharing differed as a function of primary bullying medium (F2F, cyber, both). In response to RQ[2d], a one-way ANOVA revealed a significant difference in the frequency of secret sharing between bullying medium, $F(2, 79) = 5.64$, $p < .05$, partial $\eta^2 = .125$. More specifically, Bonferroni's post hoc comparisons revealed that people report having secrets more frequently told about them through both ($M = 3.63$, $SD = 1.5$) than when only F2F ($M = 2.25$, $SD = 1.42$).

RQ[2e] investigated how the frequency of name-calling differed as function of primary bullying medium (F2F, cyber, both). In response to RQ[2e], a one-way ANOVA revealed there was not a significant difference in the frequency of name-calling between F2F, cyber, or both, F (2, 79) = 1.14, p = .33.

Results revealed frequencies of two of the bullying communication types [rumors and secret-sharing] are found to be significantly different between F2F and both mediums. The remaining three communication types [exclusion, being ignored, and name-calling] did not show a significant difference across F2F, cyber, or both mediums. The results, mean (M), and standard deviation (SD), of each communication type, in respect to medium, are illustrated below in Table 2.

Table 2. Frequency of Bullying Communication Types Among Mediums

	Rumors	Exclusion	Ignored	Secret Sharing	Name Calling
F2F					
M	2.21_a**	3.04_a	3.75_a	2.25_a**	2.92_a
SD	1.32	1.27	1.54	1.42	1.61
Cyber					
M	3.06_{ab}	3.06_a	3.5_a	3.06_{ab}	2.56_a
SD	1.66	.94	1.5	1.95	1.89
Both					
M	3.5_b**	3.3_a	3.45_a	3.63_b**	3.25_a
SD	1.5	1.4	1.45	1.5	1.57

**Rumors;* F (2, 79) = 5.66, p < .05, partial η^2 = .125

**Secret-Sharing;* F (2, 79) = 5.64, p < .05, partial η^2 = .125

Note: Means with no subscript in common vertically differ at p < .05 using Bonferroni post hoc comparisons.

RQ[3a] investigated whether frequency of F2F bullying differed as a function of biological sex. In response to RQ[3], an independent sample t-test revealed that there was not a significant difference in the frequency of F2F bullying between males (M = 2.53, SD = 1.66) and females (M = 2.09, SD = 1.49), t (81) = 1.26, p = .27.

RQ[3b] investigated whether frequency of cyberbullying differed as a function of biological sex. In response to RQ[3], an independent sample t-test revealed that there was not a significant difference in the frequency of cyberbullying between males (M = 2.21, SD = 1.6) and females (M = 3.11, SD = 1.77), t (81) = .41, p = .52.

RQ[4a] investigated whether frequency of F2F bullying differed as a function of grade level. In response to RQ[4], an independent sample t-test revealed that lower class students (M = 2.74, SD = 1.83) are significantly verbally bullied more frequently F2F than upper class students (M = 1.83, SD = 1.09), t (81) = 12.92, p < .05.

RQ[4b] investigated whether frequency of cyberbullying differed as a function of grade level. In response to RQ[4], an independent sample t-test revealed there is no significant difference in the frequency of cyberbullying between lower class students (M = 2.57, SD = 1.76) and upper class students (M = 2.83, SD = 1.75), t (81) = .1, p = .75.

The results indicated three of the four emotional outcomes [happiness, self-esteem, and peer satisfaction] were not significantly different across verbal bullying media, while the fourth emotional outcome (relational victimization) was found to be significantly different. Results also suggested significant differences between frequencies of two bullying communication types (rumors and secret-sharing)

between bullying media, while the three other bullying communication types (exclusion, ignoring, and name-calling), were not significantly different. There was not a significant difference in the frequency of a bullying medium based upon biological sex. There was significant difference in the frequency of F2F bullying between upper class students and lower class students; however there was no significant difference in the frequencies of cyberbullying between upper class students and lower class students.

The online survey instrument combined demographic information, bullied victims' emotional outcomes, verbal bullying communication types, and verbal bullying mediums to, provides a more complete understanding of how communication is used to bully adolescents, as well as to identify emotional outcomes of verbal bullying, based on the medium. Analysis of the data illustrated the CMC theories of MRT and Walther's (1996) hyperpersonal communication as theoretical underpinning for findings by suggesting that newer concepts of familiarity of a medium, strategy, and overdramatization need to be acknowledged when investigating message effectiveness. These results suggest interesting implications for how F2F verbal bullying might relate to cyberbullying, and provide multiple avenues for future research. Theoretical and practical implications are discussed in the following chapter. Although there are many areas for future research, several practical suggestions are offered, which acknowledge that cyberbullying is a largely unmonitored occurrence, in need of attention.

CHAPTER 5. DISCUSSION

This study sought to answer four research questions: (1) How do the emotional outcomes of a victim differ as a function of bullying medium type? (2) how does the frequency of bullying communication type differ as a function of bullying medium type? (3) how does the frequency of verbal bullying through a specific medium differ as a function of biological sex? and (4) how does the frequency of verbal bullying through a specific medium differ as a function of grade level? One hundred and twenty-two high school students responded to an online questionnaire, which provided insight for these questions.

The results provide new insight into current understandings of adolescent verbal bullying, and theoretically extend MRT and hyperpersonal communication. As mentioned in previous literature, adolescents are now socially communicating more frequently through F2F and cyber mediums than previous generations (Beran & Li, 2005). The current adolescent generation is sometimes referred to as a generation of digital natives. Digital natives are individuals who do not know what society, and communication, would be like without technology (Walther, 1996). Through the development of early childhood and adolescents, individuals have had access to a plethora of technology, which is always accessible. As adolescents communicate through multiple mediums, both positive and negative messages are sent. Concerns about behavioral outcomes linked to verbal bullying, such as depression, anxiety, decreased self-esteem, eating disorders, or even suicide (Kim & Leventhal, 2008), have acted as a needed catalyst to further investigate verbal bullying among different media. This study offers implications for how the current

adolescent generation of digital natives responds to communication through various media.

Results extend current understandings of the CMC theories MRT and hyperpersonal communication to adolescent verbal bullying, comparing F2F and cyber mediums. Interestingly, results showed 67 percent of students have experienced some type of verbal bullying. Further, 83 percent of those students who had reported having experienced verbal bullying considered themselves to be of an 'average' sociometric status. Alternatively they could have reported being 'popular', 'shy', or 'controversial'. Therefore bullied victims were not targeted during the recruitment of this study; it represented a normal population of students. It is possible that students who chose to participate in the study may have been motivated by past experiences with verbal bullying. A discussion of the results follows, first highlighting findings for each of the four research questions, then moving to a broader discussion of theoretical and practical implications, and finally, direction for future research and application.

Emotional Outcomes of Verbal Bullying Mediums

Results were mixed across emotional outcomes and bullying medium. While the emotional outcomes of (1) perception of happiness, (2) perception of self-esteem, and (3) satisfaction with peer relationships were not significantly different between verbal bullying through F2F, cyber, or both mediums, results of (4) relational victimization were significantly different between F2F and both mediums.

Previous research has acknowledged medium choices of verbal bullying (Beran & Li, 2005; Rigby, 2003; Slonje & Smith, 2008), yet links to emotional

outcome differences between these medium choices are not clearly defined. The Center for Safe and Responsible Internet Use suggested that emotional outcomes resulting from cyberbullying are different than F2F verbal bullying. Further, theoretical assumptions of MRT suggest that the unique characteristics of each medium involved in verbal bullying would create different emotional outcomes. According to the results, this is true for certain emotional outcomes, and not others. Possible reasons for differences across emotional outcomes include (1) familiarity of a medium, (2) selective hyperpersonal communication, and (3) the self-report survey instrument.

Familiarity of a medium offers the explanation that specific media can change how rich/lean it is, based on the users knowledge and frequency of the medium. Medium familiarity offers possible reasons why three of the four emotional outcomes (happiness, self-esteem, and peer satisfaction) did not significantly differ between bullying media. The basic understanding of MRT characterizes rich and lean media based on their level of effectiveness. The greater the difference across media in terms of effectiveness characteristics, the greater the differences hypothesized for emotional outcomes. Specifically, this study operationalized message effectiveness by measuring resulting emotional outcomes of a bullied victim. If one individual were verbally bullied through a rich media (i.e., F2F) the basic understandings of MRT would suggest this medium is the most effective, and should create the highest emotional outcomes. However, a newer component of MRT explains that mediums can become increasingly rich based on familiarity with a specific medium. As individuals develop experience communicating with others

using a specific medium (i.e., text message), they may develop a knowledge base for more effectively communicating (Sproull, 1991). For example, text-messaging users may become aware of how to craft messages to convey differing levels of formality or how to use channel-specific language to communicate emotions. Similarly, these individuals are also likely to interpret messages received on this channel more richly because they can interpret an increasing variety of cues. It is possible that although basic assumptions of MRT suggest F2F as the most effective channel, leaner mediums (i.e., cyber) become increasingly effective with increased familiarity. If this happens, it could be one reason why verbal bullying would create comparable emotional outcomes across media.

Hyperpersonal communication provides another explanation that may cause emotional outcomes to be comparable between mediums. Hyperpersonal communication suggests that messages through leaner media are more ambiguous and lack personal cues that rich media messages have. Therefore, the receiver of a bullying message sent through lean media like text message or Facebook may overdramatize the message, or assume it meant something that the sender did not intend. If this is true, then it is curious why cyber mediums did not produce emotional outcomes that were different than F2F verbal bullying. Walther (1996) explains that hyperpersonal communication does not take place all the time when a lean medium is used, but occurs only sometimes. He adds that it is hard to predict when it may take place. Walther's explanation of hyperpersonal communication happening only sometimes offers a second possible reason for why three of the four emotional outcomes do not differ significantly between media.

The emotional outcome, relational victimization, does differs from the other three emotional outcomes (happiness, self-esteem, and peer satisfaction) in that it was significantly different between F2F and both mediums. Individuals who experienced verbal bullying through both mediums were significantly more relationally victimized than those who experienced it only F2F. One reason for these results may have been associated with the self-report method used in the online survey instrument. Individuals reported their personal level of happiness, self-esteem, peer satisfaction, and relational victimization. The relational victimization scale was more focused on whether the verbal bullying action took place, whereas the happiness, self-esteem, and peer satisfaction scales were more focused on individuals' perceptions. Adolescents may have been able to answer questions dealing with whether they have 'experienced' verbal bullying more accurately because the verbal bullying either did or did not happen (i.e., the relational victimization scale). When self-reporting self-esteem, happiness, and peer relationships, issues like denial or skewed self-perception would alter the results. It is possible that adolescents may be modeling the same attitude adults have about verbal bullying, 'It is normal and part of growing up'. Denial, skewed self-perception, or the attitude that verbal bullying is normal, may be possible reasons for why three of the four emotional outcomes did not significantly differ between media.

Possible reasons for three of the four emotional outcomes not being significantly different between verbal bullying media include familiarity, hyperpersonal communication, and the self-report aspect of the survey instrument. Relational victimization is one example of how bullying through multiple mediums

creates significantly different emotional outcomes. However, for the other three emotional outcomes, results suggest that basic assumptions of MRT (rich media is more effective than lean media) may benefit from accounting for familiarity of a medium and hyperpersonal communication. By acknowledging these concepts, CMC theories may be able to offer a more thorough lens to enlighten complex factors involved in verbal bullying of F2F and cyber mediums, among the current adolescent generation. Additionally, issues of denial among adolescents who are verbally bullied, as well as the attitude that verbal bullying is 'normal', provide areas where further investigation is needed.

Communication Types of Verbal Bullying Mediums

Differences in the frequency of bullying communication types used through specific mediums emerged. While the frequency of communication types of (1) exclusion, (2) being ignored, and (3) name-calling were not significantly different between F2F, cyber, or verbal bullying through both mediums, results of (4) rumors and (5) secret sharing were significantly different. Possible reasons for these results include (1) natural increase in frequency with an increased number of mediums and (2) message complexity.

Results show bullied victims experience the bullying communication types of rumors and secret sharing more frequently through both mediums, than only F2F. These results are logical in that bullied victims have twice the chance of experiencing bullying from their peers. Therefore, the frequency of rumors and secret sharing would naturally increase when multiple mediums are involved.

Interestingly, only two of the five bullying communication types were significantly different when multiple mediums are being used to bully. A possible reason why rumors and secret-sharing were significantly different between F2F and both mediums, while exclusion, ignorance, and name-calling were not, may have to do with differences in complexity of the message. If the communication types of exclusion, ignorance, and name-calling are considered less complex messages, it may be less important for a sender to strategize which medium they should be sent through. For example, if an adolescent wants to ignore a certain individual, they will most likely be consistent in their communication (or lack of communication) across F2F and cyber mediums. It is possible that because the bullying communication types of rumors and secret-sharing are more complex messages, they are more frequently sent strategically through multiple mediums.

Verbal Bullying Medium Frequency between Biological Sexes

Results of this study showed no significant differences in frequency of F2F and cyber verbal bullying among either males or females. Previous research investigated verbal bullying between males and females, and uncovered contradicting results in the level of relational victimization experienced. Several studies (Crick & Bigbee, 1998; Crick, Casas, & Nelson, 2002; Crick & Werner, 1998) indicate that females tend to be more relationally victimized than males. However, contrasting studies found no sex differences in the case of relational victimization (Cillessen & Mayeux, 2004; Crick & Grotpeter, 1996), suggesting that biological sex does not play a role.

Due to the contradicting claims from previous literature, this study investigated the frequency of verbal bullying among specific mediums (i.e., F2F and cyber) between males and females. Interestingly, there was no significant difference in verbal bullying frequency between F2F and cyber media. These results may suggest that although some studies have identified females as experiencing higher levels of relational victimization, this is not due to medium choice. There are several possible reasons why the frequency of F2F and cyberbullying are not significantly different among males or females, including (1) similar strategies and (2) receiving verbal bullying messages from both sexes.

Theoretically, MRT suggests a medium should be selected based on level of the sender's desired effectiveness. This, however, is complicated by strategic factors weighed out by the sender. Males and females alike have the opportunity to choose the medium they desire a message to be sent through, based on a series of factors: immediacy, multiple cues, language variety, and personal source (Daft & Lengel, 1984). Additionally, senders also have to weigh newer components of MRT including: multiple addressability, external recordability, computer processable memory, and concurrency (Sproull, 1991; Valacich, Paranka, George, & Nunamaker, 1993). Although some adolescents, both male and female, choose to select the richer media because they may want to be more personal, or reduce whether the message can be recorded, others are choosing to avoid immediate feedback, reduce the personal nature of the message, or increase multiple addressability in their verbal bullying (i.e., cyberbullying).

Research suggests that although the frequency of verbal bullying may be comparable between the sexes, females tend to retain emotional memories for a longer period of time (Crick & Bigbee, 1998). This is an important factor to account for when looking at differences between biological sex and emotional outcomes of bullied victims. The contradicting evidence between biological sex and level of relational victimization, discussed earlier, may be due to the difference in memory retention of a negative social event.

Whatever the strategy may be when selecting a verbal bullying medium, results suggest males and females are not significantly different in the frequency of their use between mediums. Although further investigation should be done to understand the differences in outcomes between males and females based on medium choice (e.g., emotional outcome differences between males and females), it is interesting to know that frequency of exposure is not significantly different. Being aware that verbal bullying occurs just as frequently among both males and females, through F2F and cyber mediums, is helpful in developing monitoring and prevention strategies.

Verbal Bullying Medium Frequency between Grade Levels

Differences emerged in the results between grade levels and the frequency of verbal bullying mediums. While the frequency of cyberbullying between upper and lower class students was not significantly different, the frequency of F2F verbal bullying was significantly different between the grade levels. These results suggest an interesting difference in medium choice between grade levels. Cyberbullying is used just as frequently between upper and lower class students; F2F bullying is

significantly less frequent among upperclassmen. Reasons for these results are discussed in turn, first highlighting reasons why cyberbullying is comparable in frequency among both upper and lower class students.

Reasons for the consistent frequency among adolescents in the case of cyberbullying may have to do with the current generation of adolescents having access to a wider variety of communication technologies than previous generations. Communication technologies range from cell phones (i.e., phone conversation, text message), Facebook (i.e., wall posts, messages, chat), e-mail, and instant messaging. The increased access to technology has caused channels of communication between teenage peers to shift from predominantly F2F to cyber-communication (Beran & Li, 2005).

This shift in communication media makes verbal bullying present among adolescents in both F2F and cyber-communication, with cyberbullying becoming increasingly convenient. With the increase in technology access, the option to bully through mediated communication is growing in popularity among teenagers (Geach & Haralambous, 2009). Efforts of the National School Safety website and understanding of consequences may enlighten differences in frequency of F2F bullying between upper and lower class students.

Media Richness Theory suggests communication mediums are chosen based on level of desired effectiveness, but the strategy of a sender's association with a message also plays a role in medium choice. Efforts of the national safety organizations such as N.S.S.S.S. seem to have paid off. As students get older, the consequences are more evident. The F2F verbal bullying is occurring less, possibly

because students are fully aware of the consequences of getting caught. The lower class students may not realize the consequences of verbal bullying yet, which may lead to more F2F verbal bullying occurrences. The seniority of the upper class students may leave the lower class students more susceptible to being a victim of verbal bullying as well.

The methodological decision to collapse the categories of grades 9 and 10 into lower class students, and grades 11 and 12 into upper class students, may have caused the results to be different than if the comparison was done between all four grades. However, there were not enough participants in grades 10 and 11 to make an accurate comparison. Future research should consider investigating differences among all four grades to see if trends in behavior appear as adolescents' progress through high school.

Verbal Bullying Trends in Findings

Among results that were found to be significantly different, the significance was always between the F2F medium and both mediums. Dual-coding, often mentioned in positive communication/presentation tactics, describes the importance of offering multiple ways for receivers to process a message. The multiple ways the receiver is exposed to the message produces a larger chance that the message will be remembered accurately as well as increase the effectiveness of the message. This concept explains one possible reason why the significant difference does not lie between F2F and cyber mediums, but between F2F and both mediums.

For example, if an adolescent experiences F2F verbal bullying, he or she is experiencing one level where he/she is receiving a negative message. If another adolescent is being cyber bullied, he/she is also experiencing one level of a negative message. If a third adolescent experiences F2F verbal bullying, and also receives text messages and Facebook comments involving cyberbullying, he or she would be experiencing two levels of verbal bullying simultaneously. This trend in results suggests that it is not really the difference in medium itself that causes the greater effect, but more the level, or number, of mediums which an individual is experiencing verbal bullying through (i.e., none, F2F or cyber, both).

If this concept of levels of medium exposure is modeled with negative messages, it is interesting what the connection might be for positive social messages. Also, extending this concept from social messages to task messages would be interesting when considering an organization or group setting. The idea of multiple levels of communication being used to increase the effectiveness of a message is commonly used in meetings. For example, an importance notice may be mentioned at a meeting, and then a reminder email is sent as a follow up message. The multi-level strategy offers many avenues for future research, but specifically provides insight into understanding the complex nature of adolescent verbal bullying.

The results of this study provide evidence that current monitoring and prevention strategies for F2F verbal bullying among adolescents needs to be updated to account for cyberbullying as well. Although there may not be large differences in the effects of each medium separately, the multiple layers of verbal

bullying together can create severe problems, which must be acknowledged. This adolescent generation has grown up with technology always at their fingertips. Although safety and prevention strategies developed by the N.S.S.S.S. and other safety organizations seem to be effective when monitoring F2F verbal bullying, they have not faced the issue as a whole. Holding individuals accountable for cyber communication is a difficult task, which even society has struggled with. With laws like slander, defamation, and liable placing constraints on citizen's freedom of speech, people are held accountable for their online communication, when it negatively affects another. Although the laws are different for adolescent because they are adults, schools can and should take these concepts seriously when considering consequences for instances of verbal bullying. Encouraging students to report cyberbullying, and the consistency and severity of consequences, are tools which school administration and staff can use to develop a tangible plan for monitoring cyber communication.

Schools must abandon the idea that verbal bullying is normal, and that it is considered a 'rite of passage' experienced throughout high school. When students start realizing these rights apply to them, they may more confidently identify that this is happening. The illusive nature of cyberbullying would then become more common to talk about, because as this study has shown, it is happening frequently, and through a variety of media. The concluding chapter offers several practical steps towards creating a school environment where students know their freedom of speech rights, and may be able to identify when peers are crossing the line of verbal bullying.

CHAPTER 6. CONCLUSION

This study has provided insight into understanding the complexity of verbal bullying among adolescents. Bullying is becoming increasingly common among adolescents (Crick et al., 2001; 'Enough is Enough', 2006; Galen & Underwood, 1997; Marr & Field, 2001; Shariff, 2008), and now there is the growing issue of cyberbullying (Beran & Li, 2005). Developing a better understanding of how and why verbal bullying happens is necessary, when issues such as depression, anxiety, decreased self-esteem, eating disorders, and suicide (Kim, 2008) result.

Implications for Application

The quantitative analysis in this study provided a valuable look at emotional outcomes and communication types used during adolescent verbal bullying. This study extends earlier research by incorporating verbal bullying medium choices with emotional outcomes, communication types, and comparisons between biological sex and grade level.

Past research has emphasized F2F verbal bullying (Genta et al., 1996; Kumpulainen et al., 1998; Whitney & Smith, 1993). Even the National School Safety Program, a primary school safety website (N.S.S.S.C., 2009), encourages schools to focus primarily on traditional bullying inside the school grounds, ignoring the multi-media nature of bullying. Results of this study suggest that cyberbullying occurs just as frequently among males and females and among all high school grades (i.e., 9, 10, 11, 12). Although monitoring both cyber and F2F occurrences may seem like an impossible task, steps should be taken to develop a plan for more thorough

monitoring. Sharriff (2008) explains the method of identifying 'hotspots' where verbal bullying commonly happens in and around schools. Whether the solution is higher accountability among adolescents with technology use, or specifically targeting proper social communication through technology through education, steps need to be taken to taper cyberbullying so that it does not remain an illusive and uncontrollable occurrence.

Results of this study suggest emotional outcomes of bullied victims who are bullied though F2F, cyber, or both mediums do not significantly differ among three of the emotional outcomes (e.g., happiness, self-esteem, peer satisfaction) and only significantly differ in the emotional outcome of relational victimization between F2F and both mediums. Since F2F, cyber, and the combination of both verbal bullying mediums produce similar emotional outcomes, it is important for parents and schools to confront the issue of verbal bullying while acknowledging that it takes place through many mediums. It is not enough to predominantly target F2F verbal bullying because it is more noticeable and easier to control. New methods need to be developed to acknowledge the different mediums verbal bullying occurs through.

Changing the idea that verbal bullying should not be a 'normal' occurrence all adolescents face at some point should be a starting point to new prevention strategies. Efforts to educate students about appropriate and inappropriate communication through new media may allow students to recognize they have the right to tell adults about verbal bullying that is happening. Although some schools monitor access to certain websites, it is important to know that students are still finding alternative ways to verbally bully through accessible media (i.e., text

message). The most effective way to address verbal bullying is by educating adolescents about how detrimental their words can be, and teaching them that they have the right to share verbal bullying with anyone. Connecting these rights with the rights all citizens share, such as freedom of speech, with respect to defamation, liable, slander, and other detrimental forms of communication, will give adolescents the power to cope with verbal bullying effectively.

This study uses the CMC theories of MRT and hyperpersonal communication in ways they were not originally developed. Although MRT suggests that F2F verbal bullying will be the most effective, creating the highest emotional outcome, results of this study indicate other factors such as strategy, familiarity, and Walther's (1996) hyperpersonal communication also play a role in emotional outcomes resulting from a verbal bullying message. The basic assumptions of MRT should be extended to include strategy, familiarity, and overdramatization to alter the effectiveness of the message.

Limitations

Although there are several strengths to using the online survey approach, there are limitations of this study that provide avenues for future research. This study included 122 participants from two high schools in the Midwest. Future research should investigate a larger pool of participants, a more diverse population, and other geographic locations to gain a more comprehensive understanding of verbal bullying that could be generalized to a larger sample. Also, the issue of adolescent verbal bullying may benefit from qualitative analysis where themes from stories of verbally bullying occurrences could guide further analysis.

Additional limitations of this study include elements of the survey design. In a future study the survey could be redesigned so participants can report not only verbal bullying through the mediums of F2F, cyber or both, but be able to provide additional categories identifying frequency of specific mediums: high F2F, low F2F, high cyber, low cyber. This would provide a more specific understanding of the effects of high and low frequency of bullying, and the different combinations individuals can have in being exposed to both mediums. This would require a larger number of participants. Participants in this study were able to report whether they were primarily verbally bullied F2F, cyber, both, or neither, and then given the option to select a number of a frequency scale of how much they had experienced that type of bullying. For RQ1 & 2 participants were separated into categories of F2F, cyber, and both, but frequency levels could range from 1 to 7 within each of these categories. Although this provided a comparison between mediums, it did not accurately portray individual's different levels of exposure to verbal bullying through these mediums. Further changes to the survey design may include the addition of questions targeting the sending of verbal bullying messages, rather than focusing exclusively on verbally bullied victims.

Future Research

This study has preliminary results, which provide direction for future verbal bullying research, as well as extend the communication theories of MRT and hyperpersonal communication. Examining factors such as emotional outcomes and frequency of communication type used during adolescent verbal bullying provides specific knowledge about differences between mediums (i.e., F2F and cyber).

Bullying is a social problem, particularly among adolescents. Further investigation of relational aggression is needed within adolescents who identify as bullies and bullied victims. Further, differences in emotional outcomes based on the frequency of medium exposure are another avenue of research to be explored. This study provides foundational knowledge about verbal bullying between cyber and F2F mediums, which offers a guide for further academic analysis. Finally, this study provides practical findings to develop resources, which can aid in prevention, monitoring, and coping strategies with verbal bulling among adolescents through both F2F and cyber mediums.

Three individuals took their lives because they were victims of bullying. Jaheem Herera (age 11) hung himself April 16, 2010, because he as called "gay" and "snitch". Jon Carmichael (age 13) took his life during March of 2010, because he was called names and picked on for being short. Phoebe Prince (age 15) hung herself in January of 2010, because of the continual taunting and threats from upper class students. Tragic stories of these three individuals are evidence that verbal bullying and cyberbullying cannot be overlooked, or treated as a 'rite-of-passage' any longer.

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APPENDIX A

McCroskey and Richmond, (1989) The Relational Satisfaction Scale (RSS)

Please answer these questions while thinking about your peer relationships. Please

indicate the number on the semantic differential scale that best represents your

peer relationships.

1. Bad-good

2. Wrong-right

3. Beneficial-harmful—

4. Fairly-unfairly—

5. Foolish-wise

6. Positive-negative—

Notes. Items marked (--) should be scored in reverse.

APPENDIX B

Gecas, (1971) Self-Esteem Scale

Please answer these questions in terms of how you view yourself. Please indicate the number on the semantic differential scale that best represents how you view yourself.

1. Powerful-powerless—

2. Good-bad—

3. Cruel-kind

4. Strong-weak—

5. Dishonest-honest

7. Undependable-dependable

8. Wise-foolish—

9. Cowardly-brave

10. Selfish-generous

11. Worthy-worthless—

12. Do few things well-do most things well

Notes. Items marked (--) should be scored in reverse.

APPENDIX C

Hill and Argyle, (2001) The Oxford Happiness Questionnaire

Below are a number of statements about happiness. Please indicate how much you agree or disagree with each statement by selecting *strongly agree* (5), agree (4), *neither disagree nor agree* (3), *disagree* (2), *strongly disagree* (1). If you find some of the questions difficult, please give the answer that is true for you in general or for most of the time.

1. I don't feel particularly pleased with the way I am—

2. I feel that life is very rewarding

3. I am well satisfied about everything in my life

4. I don't think I look attractive—

5. I find beauty in some things

6. I can fit in everything I want to

7. I feel fully mentally alert

8. I do not have particularly happy memories of the past—

Notes. Items marked (--) should be scored in reverse.

APPENDIX D

Crick and Grotpeter, (1996) Children's Social Experiences

Below are a number of questions about relational social experiences. Please indicate

how much you experience or don't experience with each statement by selecting *all*

the time (5), *almost all the time* (3), *sometimes* (3), *almost never* (4), *never* (5).

1. How often do others leave you out of social activities, information sharing?

2. How often does an individual who is mad at you try to get back at you by
   discluding you from the group?

3. How often does a peer tell lies or rumors about you to make others not like
   you or have false impressions?

4. How often does another peer say you're not cool unless you do what they
   want you to do?

5. How often does a peer try to keep others from liking you by saying mean or
   false things about you?

Notes. The original scale was developed for elementary children to measure

relational victimization. The scale was slightly modified in order to appropriately

phrase the questions for high school individuals.

APPENDIX E

Participant Survey

Invitation: You are invited to take part in a research study to better understand the outcomes associated with bullying, looking at the differences between cyber and face-to-face communication. The aim of this study is to learn what the relational outcome differences are, and provide solutions to stop bullying from occurring. The study focuses on how often individuals experience bullying through a face-to-face setting as well as frequency individuals experience bullying through a cyber-setting. This study is being organized by Laura Farrell, a graduate student in the Department of Communication at NDSU, under the supervision of Dr. Stephenson Beck, assistant professor in the Department of Communication at NDSU.

What will the research involve? If you agree to take part in the survey by clicking accept, you will be asked questions about how often you or your peers have experienced forms of cyberbullying and face-to-face bullying, as well as questions about your self-esteem, happiness, and peer relationships. No survey questions will ask you to identify yourself in any way.

What are any risks or benefits for me? There are no more than minimal risks associated with this study. There is a possibility you may recall distress or psychological harm due to reflecting on an unpleasant experience involving bullying. Counseling service contact information will be provided at the end of the survey. You can feel good about helping to develop application-based solutions to prevent or reduce the occurrences of bullying. We also hope the research from this study may help enhance the understanding of the role of communication in bullying.

Do I have to take part in the research? Your parent(s) or legal guardian(s) have given their permission for you to be in the research, but it is still your choice whether or not to take part. Even if you click accept now, you have the option to stop the survey at any time. If you choose to leave the survey without completing all the questions, we may or may not use the information you provided. If you decide not to join the research, you can click the decline button, which will take you to the end of the survey automatically.

Who will see my answers and information? We will make every effort to keep your information private; only the people helping us with the research, including Laura Farrell and Dr. Beck will be able to see the answers provided, and no identifiable information will be linked to your answers. Your information will be combined with information from other people in the study. When we write about the study, we will write only about this combined information, and no one will be able to know what your information is. NDSU and the researcher own all information collected for this project. If you want to look at the information we collect from you, just let us know, and we will provide it to you. But, you cannot look at information from others in the research.

What if I have questions? You should contact Laura Farrell at laura.farrell@ndsu.edu or 701-429-4792.

What are my rights? You have rights as a research participant. For questions about your rights, or to tell someone else about a problem with this research, you can contact the NDSU Human Research Protection Program (HRPP) at (701) 231-8908 or ndsu.irb@ndsu.edu. The HRPP is responsible to make sure that your rights

and safety are protected in this research. More information is available at: www.ndsu.edu/research/irb.

Click 'accept' under this electronic form, signifying assent/consent only if you: have understood what the research is about and why it's being done, have had all your questions answered, have talked to your parent(s)/legal guardian about this project, and agree to take part in this research. (Agree or Disagree) [Logic will take those that agree to the demographic question and those that disagree to the thank you page of the survey].

Please select the appropriate response for the following demographic questions.

1. What is your sex? (Male or Female)

2. What grade are you in? (9, 10, 11, 12)

3. How would your peers describe you in relation to popularity? (Popular, average, stir up trouble, shy)

Please select a place between each word listed below that represents how you feel about your relationship with your classmates. (7-point bipolar adjective scale).

4. Bad-good

5. Wrong-right

6. Beneficial-harmful

7. Fairly-unfairly

8. Foolish-wise

9. Positive-negative

Please select a place on the scale that represents what you think about yourself. (7-point semantic differential scale).

10. Powerless-powerful

11. Good-bad

12. Cruel-kind

13. Strong-weak

14. Dishonest-honest

15. Undependable-dependable

16. Wise-foolish

17. Cowardly-brave

18. Selfish-generous

19. Worthy-worthless

20. Do few things well-do most things well

Please indicate how much you agree or disagree with each statement by selecting a choice ranging from 'strongly agree' to 'strongly disagree'. If you find some of the questions difficult, please give the answer that is true for you in general or for most of the time. (7 pt. Likert-type scale with 'strongly agree' on one end, 'neither disagree nor agree' in the middle and 'strongly agree' on the opposite end).

21. I don't feel particularly pleased with the way I am

22. I feel that life is very rewarding

23. I am well satisfied about everything in my life

24. I don't think I look attractive

25. I find beauty in some things

26. I can fit in every social situation I want to

27. I feel fully mentally alert

28. I do not have particularly happy memories of the past

Below are a number of questions about relational social experiences. Please indicate how much you experience or don't experience with each statement by selecting a choice ranging from 'all the time' to 'never'. (7 pt. Likert-type scale with 'all the time' on one end, 'sometimes' in the middle, and 'never' on the opposite end).

29. How often do others leave you out of social activities, information sharing?

30. How often does an individual who is mad at you try to get back at you by discluding you from the group?

31. How often does a peer tell lies or rumors about you to make others not like you or have false impressions?

32. How often does another peer say you're not cool unless you do what they want you to do?

33. How often does a peer try to keep others from liking you by saying mean or false things about you?

Verbal bullying occurs in several ways. Some examples include when an individual, or several individuals, communicate mean or hurtful things or make fun of another individual, when an individual calls another individual mean or hurtful names, when an individual completely ignores or excludes another individual from their group of friends or leaves them out of things on purpose, when an individual tells lies or spreads false rumors about another individual, and other hurtful things like that. When we talk about bullying, these things happen repeatedly, and it is

difficult for the individual being bullied to defend himself/herself. We also call it bullying when a student is teased repeatedly in a mean or hurtful way. But we don't call it bullying when the teasing is done in a friendly and playful way. Also, it is not bullying when two students of about equal strength or power argue or fight.

Face-to-face bullying is having rumors spread about them, being excluded, being ignored, having information divulged about them, or being ridiculed, in a personal or face-to-face setting.

Cyberbullying is having rumors spread about them, being excluded, being ignored, having information divulged about them, or being ridiculed, in a cyber-setting. Cyber settings include the seven categories identified earlier, which are e-mail/instant messaging, Internet, chat rooms, web pages, cell phone/text message, video clips, and photographs.

34. How often are rumors told about you? (7 pt. Likert-type scale ranging from 'never', to 'sometimes', to 'a lot of the time').

35. How often are you excluded from something? (7 pt. Likert-type scale ranging from 'never', to 'sometimes', to 'a lot of the time').

36. How often do you feel ignored? (7 pt. Likert-type scale ranging from 'never', to 'sometimes', to 'a lot of the time').

37. How often is a secret of yours shared with others? (7 pt. Likert-type scale ranging from 'never', to 'sometimes', to 'a lot of the time').

38. How often do you get made fun of or called names? (7 pt. Likert-type scale ranging from 'never', to 'sometimes', to 'a lot of the time').

39. How have you been primarily bullied before? (In person, through text message, Facebook, phone, email, etc.), both ways in person and through text message, Facebook, etc., neither). [Logic will send the 'neither' option to question 42].

40. How frequently do you experience bullying in person (face-to-face)? (7 pt. Likert-type scale ranging from 'rarely', to 'sometimes', to 'a lot of the time').

41. How frequently do you experience bullying through mediated communication (like text message, Facebook, email, etc.)? (7 pt. Likert-type scale ranging from 'rarely', to 'sometimes', to 'a lot of the time').

42. Please check all of the ways you have been cyber-bullied before: email or instant message, Internet, chat room, Facebook or myspace, cell phone or text message, video clips, photographs.

43. What do you think motivates teenagers to bully? (open-ended text box).

44. What makes teenagers more susceptible to being bullied? (open-ended text box).

Thank you for participating in this survey. If you would like to talk about any of the issues in the survey, please stop by your school counselor's office. For counseling services outside the High School, please contact:

The Village Family Service Center

Source: www.thevillagefamily.org

The Village Family Service Center provides a full range of counseling services, adoption, financial counseling and mentoring programs.

Crisis Hotline

Source: www.boystown.org

The Boys and Girls Town Hotline is a crisis hotline available 24/7 to help you with just about any problem. Call 1-800-448-3000

Dealing With Bullying

Source: kidshealth.org

Bullying has everyone worried, not just the people on its receiving end. Read this article to learn about dealing with bullies, including tips on how to stand up for yourself or a friend.

Cyberbullying

Source: kidshealth.org

Using technology to bully is a problem that's on the rise. The good news is awareness of how to prevent "cyberbullying" is growing even faster. See our tips on what to do.

Cyberbullying: A Guide for Teen Girls

Source: www.youngwomenshealth.org