Examining Adolescent Cyberbullying in Saskatchewan

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ABSTRACT

In a society where adolescent technology use is a dominant presence, the potential for adolescent cyberbullying has increased. It has become a phenomenon that warrants research attention. In North America, adolescent cyberbullying research is still in the exploratory stages. Current North American research has focused on younger populations (Beran & Li, 2005; Cochrane, 2008; Li, 2005; 2006; 2007; Patchin & Hinduja, 2006). However, adolescence is a period of dramatic change that encompasses all areas of development (Arnett, 2004; Berk, 2004; Hinduja & Patchin, 2008). These factors form the basis and motivations for this research. This study explored adolescent cyberbullying in Canada with the hope of providing preliminary research attention on a serious issue. Specifically, this study explored the following questions:

1. What was the extent of cyberbullying among grade ten, eleven and twelve students in urban Saskatchewan?

2. What was the relationship between traditional bullying and cyberbullying?

3. What did the experiences of cyberbullying look like (both as a perpetrator and as a victim)? How were the victims impacted?

4. How did individuals respond to cyberbullying (as a bystander)?

5. What were the students' opinions on adult responses to cyberbullying?

Answering these questions were 476 students from one large Catholic and two large public high schools in urban Saskatchewan. Students from grade 10 and, primarily, grades 11 and 12 anonymously completed a paper-pencil questionnaire. Of these students, 44.0% disclosed they had been a victim of cyberbullying and 31.3% reported they had been a cyberbully. Two-thirds (64.5%) also admitted knowing at least one individual who had been a victim of cyberbullying. Students shared a range of negative emotions and effects that they experienced as a result of

being a victim of cyberbullying. The most commonly reported were anger and sadness or hurt. Overall, significant differences in students' experiences with cyberbullying were found between gender, grade levels, and among levels of achievement.

Two-thirds (66.2%) of students also admitted telling at least one person that they had been a victim of cyberbullying. Students most often told a friend (53.8%) over telling anyone else. This was reflected in students' overwhelming perception that adults (e.g., parents or teachers) could not prevent cyberbullying or successfully intervene when it was occurring. Students did offer ideas on possible ways of intervening or preventing cyberbullying that ranged from increased education to effective consequences.

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CHAPTER ONE: INTRODUCTION

In a technologically driven society, cyberbullying warrants attention (Cochrane, 2008; Media Awareness Network, 2005). In a society where technology use is a given, the potential negative consequences of the use of technology need to be further explored, particularly with the adolescent population. Adolescents not only use but thrive and often times survive socially, via technology use (Media Awareness Network, 2005; Statistics Canada, 2006; Yu, 2002). Technology is quickly becoming a permanent part of every individual's life in one form or another. This impact is felt perhaps most greatly with those who use technology as part of their daily life. As technology availability increases so does its use in social interaction (e.g., 66% of respondents spend the majority of their free time on the Internet engaged in talking to friends via instant messaging devices) (Media Awareness Network, 2005).

According to Statistics Canada (2008), three-quarters of Saskatchewan residents have at least one cell phone in their household spending an average of $500.00 per year for services (Statistics Canada, 2009a). This places Saskatchewan as the second highest province for cell phone use second only to Alberta (Statistics Canada, 2008). As of January, 2009, 23.7% of Canadian adolescents use cell phones for communication with peers (Statistics Canada, 2008-2009). More current statistics may demonstrate an increase in this percentage that reflects the growing technological use trends. Adolescents use technology for study, recreation, and as communication with peers (Media Awareness Network, 2005; Yu, 2002). As with face-to-face interactions, not all technologically based interactions are positive. Nor should it be surprising that adolescents face a new reality—that of cyberbullying.

Cyberbullying is a form of willful and repeated harassment or bullying through electronic communication tools (e.g., email, message boards, text messages, or instant message

communication) (Beran & Li, 2005; Li, 2005, 2006, 2007; Chibarro, 2007; Stomfay-Stitz & Wheeler, 2007; Strom & Strom, 2005). It is further characterized by the speed at which information travels via technology that exceeds the pace at which information will travel from person to person (Li, 2006). This negative form of social interaction affects not only adolescents, but can potentially affect any individual who uses or has access to electronic forms of communication (Beran & Li, 2005; Franek, 2006; Li, 2005, 2006, 2007; McGuinness, 2007; Stomfay-Stitz & Wheeler, 2007; Strom & Strom, 2005; Willard, 2007). Like traditional bullying, which is briefly defined as some type of repeated aggressive act in which there is a difference of power (Craig & Pepler, 2007; Mason, 2008; Smith & Brian, 2000), any individual can become a victim or perpetrator of cyberbullying (Lines, 2007).

Traditionally, victims have used their home as a place to get away from their tormentors. However, bullying is no longer confined to harassing one's victim only when both are present in the same vicinity (i.e., physical contact). The pace and wide spread availability of technological communication allows for victims to be continually tormented any time or place without somewhere to escape (Li, 2006; Lines, 2007; Stover, 2006; Wolfsberg, 2006). The combination of these factors ensures that cyberbullying can be extremely damaging to the victim and even to the perpetrator. Cyberbullying has had a negative impact on the social development of many children and adolescents (Li, 2006; Lines, 2007; Strom & Strom, 2005). For example, a video of a physical altercation between adolescent females was found online by the victim of the attack (CBC News, 2005). The victim was not only victimized during the attack, but again upon the viewing of the video. Another more common example is the case of David Knight who was an unknowing victim of a Website page developed exclusively to victimize Knight through defamation of his character (Leishman, 2005; Ottenweller, 2007). More recently the media has

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inundated readers and viewers with the tragic case of Phoebe Prince which has received international attention. Phoebe Prince committed suicide after a year of torment (Eckholm & Zezima, 2010; O'Neill, 2010; Reitz, 2010; Smolowe et al., 2010). Sadly, some of those who were in positions of authority (e.g., teachers, administration) were aware of the incidents and thus able do something to prevent further torment failed to act (Eckholm & Zezima, 2010; O'Neill, 2010; Reitz, 2010; Smolowe et al., 2010).

Furthermore, unique to cyberbullying is anonymity, which allows for it to occur in a manner unlike any other form of harassment or bullying (Beran & Li, 2005; Li, 2005; 2006; 2007; Lines, 2007; Stomfay-Stitz & Wheeler, 2007; Stover, 2005). Anonymity creates a further removal of the cyberbully from his or her victim. The cyberbully can remain physically separated from his or her victim, and remain hidden. Victims often have little to no idea whom their cyberbully is (Li, 2006). Additionally, this anonymity fosters an atmosphere of apathetic feelings towards the victim by the perpetrator. The cyberbully is less likely to feel remorse or take responsibility for his or her actions (Beran & Li, 2005; Li, 2006; Strom & Strom, 2005). This lack of accountability and the potential for anonymity create a barrier to identification of those who are committing the act of cyberbullying. It is crucial that researchers and professionals learn to identify those who are likely to become cyberbullies or those who are engaging in the act of cyberbullying (Fitzpatrick, 2008; Merrell, Gueldner, Ross, & Isava, 2008). Current practices are not effective in dealing with cyberbullying (Beran & Shapiro, 2005; Couture & Hall, 2010; Fitzpatrick, 2008; Merrell et al., 2008). Legislating and working towards criminalizing cyberbullying are only one small piece in intervention and prevention of cyberbullying. When evaluated, the program ideas or policies currently in practice receive a "D" or are falling considerably short of intended goals (Beran & Shapiro, 2005; Fitzpatrick, 2008). Moreover, it is

critical that identification of cyberbully victims and cyberbullies becomes an easy process that does not require considerable investigative efforts or technological understanding. These can help lead to ways to ameliorate instances of and increase accountability for cyberbullying. Through this, those in positions of authority with children and adolescents can become better advocates for the victims of cyberbullying.

Cyberbullying affects a victim's social interactions, emotional development, social growth, and academic achievement among numerous other potential areas (Li, 2006; Patchin & Hinduja, 2006). Not only is cyberbullying an impediment to the healthy development of an individual, it is a societal issue. Ultimately every individual could potentially be affected by cyberbullying through victimization, becoming a cyberbully, being a witness or bystander to the event, or as an adult who is informed of such incidences.

Purpose and Importance of Study

Unfortunately, the pace and growth of technology has far exceeded the research in cyberbullying, in North America. European researchers have focused more research attention on adolescent cyberbullying. However, it cannot be stated with certainty what said research has found as they could not be translated from their native languages to English. The current lack of research attention beyond several important studies in North America (Beran & Li, 2005; Cochrane, 2008; Li, 2005; 2006; 2007; Patchin & Hinduja, 2006) contributes to the growing confusion that surrounds cyberbullying. There are a growing number of individuals who are affected by cyberbullying; be it directly or indirectly (Beran & Li, 2005; Cochrane, 2008; Li, 2005, 2006, 2007). Specifically, this study explored the following questions:

1. What was the extent of cyberbullying among grade ten, eleven and twelve students in urban Saskatchewan?

2. What was the relationship between traditional bullying and cyberbullying?

3. What did the experiences of cyberbullying look like (both as a perpetrator and as a victim)? How were the victims impacted?

4. How did individuals respond to cyberbullying (as a bystander)?

5. What were the students' opinions on adult responses to cyberbullying?

It is the wish of the researcher that the information collected in this study will provide new understanding into adolescent cyberbullying in Saskatchewan and provide evidence of the need for additional research.

Overview of Chapters

This thesis is organized into five chapters. Chapter one provides a brief introduction to the research study, the purpose of the study and definitions. Chapter two provides a review of the current literature on traditional bullying, adolescent bullying, and cyberbullying. Chapter three outlines the methodology of the study. Chapter four summarizes the results of the study and chapter five discusses significant findings and suggests directions for future research.

Definitions

The following are definitions of various concepts that will be used throughout this study. They are operationalized in terms of the current research study.

Adolescent/ Adolescence: For this study, the term adolescent will refer to individuals who are over the age of 13 and under the age of 19 (Willard, 2007). Adolescence is a marked by rapid, qualitative changes in social affiliations. These changes occur in peer group composition and structure, and are precipitated by processes associated with puberty as well as corresponding changes in social institutions. These changes come at a time when the peer group is taking on increased importance (Pellegrini & Bartini, 2000, p. 719).

Bullying/Traditional Bullying: behavior that is intended to harm or disturb…[and] occurs repeatedly over time…[with] an imbalance of power with a more powerful person or group attacking a less powerful one (Coy, 2001, p. 2).

Bystander/ Witness: someone who observes cyberbullying events that are occurring (e.g., is there when the cyberbully sends a message or when a victim receives a message), or are made aware of an act of cyberbullying shortly after it has occurred (e.g., receive a message that an individual has been the target of cyberbullying or they view it on a message board or social networking site) (Beran & Li, 2005; Cochrane, 2008; Li, 2005; 2006; 2006).

Cyberbullying: willful and repeated harassment or bullying through electronic communication

tools (e.g., via email, message boards, text messages, or instant message communication)

(Beran & Li, 2005; Cochrane, 2008; Franek, 2006; Li, 2005; 2006; 2007; McGuinness,

2007; Stomfay-Stitz & Wheeler, 2007; Strom & Strom, 2005).

Email: electronic mail that is used similar to mail sent through the post office. It is delivered

electronically to the recipient.

Forums or Community Message Boards: electronic places where individuals can go to write

about a particular topic of interest. Generally there are many different people who

participate and respond. Furthermore, some community message boards are considered

social-networks where individuals can interact with one another (e.g., Facebook, Twitter,

and MySpace)

Instant Message Communication: transmission of an electronic message over a computer

network using software that immediately displays the message in a window on the screen

of the recipient in real time (Webster's New Millennium Dictionary, 2008) (e.g., MSN,

Yahoo, and AIM).

Texting (Text Message): consists of words that are typed or entered on a keypad and sent

electronically to a cell phone from another cell phone (American Heritage Dictionary,

2004).

Webpage or Website: a connected group of pages on the World Wide Web regarded as a single

entity, usually maintained by one person or organization and devoted to a single topic or

several closely related topics (Dictionary.com, 2008).

Chapter Two: Literature Review

Chapter two is divided into six parts. The first three parts of the chapter provides overviews of traditional bullying, adolescent traditional bullying, and bullying in Canada. The fourth part provides information on technology use among Canadian adolescents. Section five provides an overview of cyberbullying as it relates to adolescents. The last section addresses the current studies on cyberbullying, the limitations or gaps in the literature, and the need for additional research.

Introduction

As bullying is a prevalent occurrence it is an issue that many individuals are very familiar with, either through personal or some type of secondary experience (Craig & Pepler, 2007; Pepler & Craig, 2000). What is less commonly understood is the relatively new issue of cyberbullying. Cyberbullying is a relatively new phenomenon that has affected the youth generation (Li, 2006). However, since little research attention has been given to this relatively new phenomenon in Canada, understanding the nature and consequences of traditional bullying provides a place to begin in examining cyberbullying.

Traditional bullying has many negative effects on the individuals involved in any bullying situation (Carney & Merrell, 2001; Craig & Pepler, 1996; Pepler, Craig, Zeigler, & Charach, 1994; Mason, 2008; Perry & Kusel, 1998). Bullying is also differentiated from occasional jokes or playful teasing because bullying "is both clearly malicious and unwarranted" (McGuinness, 2007, p. 20). Furthermore, bullying affects the adolescent population differently as compared to younger children (Pellegrini & Bartini, 2000). Bullying tends to be more aggressive among adolescents than children (Pellegrini & Bartini, 2000). For example, physical altercations tend to have greater impact on adolescents than on young children. The effect of bullying on

adolescents will be of considerable interest as it helps create preliminary understanding

cyberbullying of among an adolescent population. Adolescence is a period of time during which

many developmental changes occur. For the purpose of this research, adolescents are those

between the ages of 13 and 19 (Willard, 2007). While some consider those between the ages of

10-12 to be adolescents (Li, 2005; 2007), the focus here is on high school adolescents. Finally as

the focus is on Canadian youth, attention will be given to the differences found in bullying with

Canadian youth as compared to other youth.

Given the increase in the availability of technology which is hypothesized to lead to

increases in cyberbullying, understanding of the use of technology by the adolescent population

is required. One unique feature of cyberbullying is that the harassment occurs via electronic

means (Beran & Li, 2005; Li, 2005; 2006; 2007; Stomfay-Stitz & Wheeler, 2007; Strom &

Strom, 2005). It is important to understand how gender, differences between adolescent bullying

and cyberbullying, and anonymity of using technology affect cyberbullying.

Traditional Bullying

As children develop, there is an increased emphasis on social interactions with peers.

Peer interaction is seen as a positive and necessary developmental tool that all individuals

require. However, there are times when this social interaction turns negative in the form of

bullying.

Bullying Defined

Bullying is loosely defined as some type of repeated aggressive act (physical or verbal),

inflicted towards a person (or group) by another person (or group) in which there is a power

differential (Craig & Pepler, 2007; Juvonen & Graham, 2001; Mason, 2008; Merrell et al., 2008;

Pepler & Craig, 2000; Shariff & Gouin, in press; Smith & Brain, 2000; Smith et al., 2008). This

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power differential may be tangible (e.g., someone who is physically larger than another) or perceived (e.g., an individual who is more popular than another) (Hinduja & Patchin, 2008; Merrell et al., 2008; Patchin & Hinduja, 2006). More specifically, bullying can be defined as "behavior that is intended to harm or disturbs…[and] occurs repeatedly over time…[with] an imbalance of power with a more powerful person or group attacking a less powerful one" (Coy, 2001, p. 2).

Characteristics of Bullying

In essence, bullying can be based upon any difference between two people. Bullying has been the subject of great interest and there is a plethora of research that addresses the areas and issues of bullying, particularly incidences of and interventions for bullying (Arora, 1996). As school settings are where children and adolescents primarily spend their time, this is where bullying tends to most often occur (Coy, 2001; Meyer, 2006). Additionally, bullying can occur in a private situation between only the bully and victim or between a bully and a victim in front of other individuals (Beran & Li, 2005; Smith & Brain, 2000). There may also be multiple bullies per one victim or multiple victims per single bully. There are numerous reasons that bullying occurs which can range from a perceived dislike of an individual to some form of revenge seeking (Patchin & Hinduja, 2006). However, often there is no solid reason for why a bully attacks his or her victim; victims are targets simply because they are seen as somehow lesser than the bully (Carney & Merrell, 2001; Craig & Pepler, 1996; Pepler, et al., 1994; Perry & Kusel, 1998). These perceived 'lesser' characteristics may be physical appearance, social competence, intelligence, age, race, gender, socioeconomic status, or any other trait that a bully focuses on (Mason, 2008). Essentially, any characteristic of an individual can be used as means for bullying whether that detail is a real or perceived difference between the bully and victim (Mason, 2008).

Traditional bullying can also be divided into two types—direct or indirect bullying. Direct bullying is considered to be behaviour that is immediately damaging to the victim (Chibbaro, 2007; Mason, 2008; Smith et al., 2008). One such example is a bully who punches or beats on his or her victim. A traditional bully whom engages in victimization through rumours or threats is bullying indirectly (Chibbaro, 2007; Mason, 2008; Smith et al., 2008).

Impact on Victim and Perpetrator

Bullying affects a large number of children and adolescents who are subjected to occasional instances of bullying (Craig & Pepler, 2007; Mason, 2008; Pepler & Craig, 2000). While this may sound innocuous, even occasional instances are damaging. Even a single instance of bullying can emotionally, mentally, and physically harm a child or adolescent (Mason, 2008; Meyer, 2006). In addition, there are a smaller, but still significant proportion of children and adolescents that face recurrent bullying (Craig & Pepler, 2007; Mason, 2008; Pepler & Craig, 2000). For these individuals, the effects of recurrent bullying on overall development are much more severe (Pepler & Craig, 2000). The same level of effect is true for those who occasionally or frequently perpetrate the bullying (Craig & Pepler, 2007; Pepler & Craig, 2000).

It has been repeatedly demonstrated that bullying is a detrimental aspect of social development that commonly occurs in the school setting (Carney & Merrell, 2001; Craig & Pepler, 1996; Pepler, et al., 1994; Perry & Kusel, 1998). Moreover, victims of bullying suffer from various emotional, mental, cognitive, physical and psychological difficulties as a result of being bullied (Mason, 2008; Merrell et al., 2008; Rigby, 1998; 2003; Raskauskas & Stoltz, 2007; Slee, 1994). Particularly, bullying often leads the victim to feel helpless and scared which causes the victim to actively avoid situations where their bullies may be and to withdraw from social

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situations (Rigby, 1998; 2003 Slee, 1994). Further, adding to the feelings of helplessness are an actual loss of power and inability to defend one's self (Craig & Pepler, 2007).

Bullying creates long-term negative effects for victims. These range from general anxiety, to depression, and suicide attempts (Craig & Heral, 2004; Craig & Pepler, 2007; Espelage & Swearer, 2003; Mason, 2008; Merrell et al., 2008; Rigby, 2003; Smith & Brain, 2000). Not only do victims suffer long-term consequences, those that bully or victimize also tend to suffer from poor social adjustment that results in greater negative outcomes (e.g., antisocial behaviour) (Craig & Pepler, 2007; Craig, Peters, & Konarski, 1998; Espelage & Swearer, 2003; Farrington, 1993; Hinduja & Patchin, 2008; Mason, 2008; Merrell et al., 2008; Smith & Brain, 2000). Traditional bullies often carry their behaviour from childhood through to adulthood which can be easily identified by their new adult peer group (Hinduja & Patchin, 2008). Current research has begun to examine a possible genetic component in bullying—those who are more prone to aggressive behaviour may also be more likely to be regarded as a bully (Ball et al., 2008). Bullying not only affects the students directly involved in the situation it also affects the entire student body and school community. Furthermore, parents, teachers, and even society as a whole have the potential to be affected by bullying.

Adolescent Bullying

Adolescent Social Development

Adolescence is a period of dramatic changes that encompasses all developmental realms (Arnett, 2004; Berk, 2004; Hinduja & Patchin, 2008). Adolescents first start changing physically; they are growing into mature bodies (Arnett, 2004; Berk, 2004). However, adolescents are also changing the ways in which they cognitively process information and in how they "think" about any one particular thing (Arnett, 2004; Berk, 2004; Hinduja & Patchin, 2008). Developmentally,

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the types of relationships that adolescents have or engage in are also changing dramatically from the peer relationships held during childhood (Arnett, 2004; Berk, 2004; Chisholm, 2006; Shariff & Gouin, in press; Raskauskas & Stoltz, 2007). This is particularly true for adolescent females who tend to have greater investment in friendship-dyads (Besag, 2006). While males also place importance of their friendships, young females may tend to place greater importance on having secure friendships as part of their newly forming identities as adolescents (Besag, 2006). For both males and females, relationships are constantly evolving from basic forms of association to friendship to romantic interest to having no relationship with an individual (Arnett, 2004; Berk, 2004; Raskauskas & Stoltz, 2007). All of these developmental changes have an impact on the adolescent's emotional development (Arnett, 2004; Berk, 2004; Raskauskas & Stoltz, 2007).

No specific area of development is left untouched as a child matures into an adolescent. In the course of a child's life to adolescence, this period can be an abrupt change from what was previously known, which leaves the burgeoning adolescent unsure of him or her self (Arnett, 2004; Berk, 2004). Specifically, Pellegrini and Bartini (2000) view the change to adolescence as:

marked by rapid and qualitative changes in social affiliations. These changes in

peer group composition and structure are precipitated by processes associated

with puberty as well as corresponding changes in social institutions. These

changes come at a time when the peer group is taking on increased

importance in the adolescent's life (719).

These qualities leave individuals particularly vulnerable to negative forms of social interaction—often in the form of bullying (Arnett, 2004; Raskauskas & Stoltz, 2007). The external changes that occur in the transition from elementary to high school can also serve to increase some incidents of bullying (Pellegrini & Bartini, 2000). There are usually natural changes in peer

group formation, peer group availability and peer group status when one transitions (Pellegrini & Bartini, 2000). Taken alone, these changes are not inherently detrimental, but they have the potential to be when adolescents no longer "fit in". Essentially, Chisholm (2006) summarizes adolescents as going through the process of:

> learning who they are, what is important to them, what they value, how to relate to others, making friends and maintaining friendships, what their goals for the future are, and developing skills and competencies to become productive citizens to name a few of their concerns. In short, they are focused on identity, intimacy, self-esteem, wanting to belong, becoming more autonomous and separating from family, establishing and maintaining a more mature way of managing and regulating emotions, and preparing for a career/occupation (78).

While adolescents are undergoing developmental changes, bullying also undergoes some changes.

Changes in Bullying for Adolescents

Bullying remains a prevalent form of school violence that affects adolescents (Li, 2007). The physical forms of bullying tend to subside from the previous period of pre-adolescent development (Carney & Merrell, 2001; Craig & Pepler, 1996; Pepler, et al., 1994; Perry & Kusel, 1998). However, the verbal and non-physical forms of bullying remain consistent with previous levels and do not drop in the adolescent period of development (Carney & Merrell, 2001; Craig & Pepler, 1996; Pepler, et al., 1994; Perry & Kusel, 1998; Shariff & Gouin, in press).

It is imperative to recognize the carry-over effect bullying has in both the victim and, especially, the perpetrator. The long-term effects do not diminish in the victim simply because

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the victim is no longer a child. It has also been shown that the poor social interaction patterns perpetrators learn as young children are carried over and magnified in adolescence; the maladaptive behaviour patterns are usually not outgrown (Craig et al., 1998; McMaster, Connolly, Pepler, & Craig, 2002; Pepler, Craig, Blais, & Rahey 2005; Mason, 2008; Raskauskas & Stoltz, 2007). Often, these incidents are seen as far more detrimental as they can involve more dire consequences (e.g., sexual harassment, relationship abuse, or serious injury) (McMaster, et al., 2002; Pepler, et al., 2005; Raskauskas & Stoltz, 2007).

Perhaps one of the greatest consequences of bullying is the effect it has on the formation of relationships. Relationships are vital to healthy overall development and of distinct importance to adolescents (Arnett, 2004; Berk, 2004; Craig & Pepler, 2007; Hinduja & Patchin, 2008) because relationships are tied to continued positive emotional, social, and psychological development (Arnett, 2004). When repeatedly bullied, an individual's trust in relationships becomes compromised and the individual engages in fewer meaningful relationships especially during the time in which he or she is a victim of bullying (Arnett, 2004; Craig & Pepler, 2007; Pepler & Craig, 2000; Strom & Strom, 2005). Quite clearly, the relationships of those who repeatedly bully are also negatively affected. Often individuals who bully do not form very many, if any, healthy relationships or establish healthy relationship patterns (Craig & Pepler, 2007; Pepler & Craig, 2000; Raskauskas & Stoltz, 2007; Strom & Strom, 2005).

The effects of bullying on adolescent victims. Typically, adolescents who are victims of bullying will withdraw socially from any activities or peer interactions (Kaltiala-Heino, Rimpela, Rantanen, Rimpela, 2000). As adolescents become more independent, not attending school becomes a popular option for victims of bullying (Kaltiala-Heino, et al., 2000; Merrell et al., 2008), which not only affects their social interactions but their academic achievement (Beran,

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2009; Mason, 2008; Merrell et al., 2008). Victimized adolescents often have small social

networks with few friends and will rarely make new friends while being bullied (Kaltiala-Heino,

et al., 2000) as peers do not want to become targets themselves (Craig & Pepler, 2007). This

lack of opportunity to build a social network unfortunately compounds the issue of development

of healthy relationships.

Another aspect of adolescent development that suffers, as a result of being bullied, is an

individual's self-esteem (Patchin & Hinduja, 2006; Mason, 2008; Merrell et al., 2008;

Raskauskas & Stoltz, 2007). Individuals use peer groups as a means of maintaining a healthy

self-esteem (Patchin & Hinduja, 2006). When students become victims of bullying, their self-

esteem is negatively affected and that decrease in self-esteem subsequently affects their overall

development (Merrell et al., 2008; Patchin & Hinduja, 2006). Self-esteem becomes part of the

bullying cycle. Individuals who perceive they are not accepted will suffer from low self-esteem

and it is that low self-esteem that leads to an increased likelihood that individual will be

victimized (Merrell et al., 2008; Patchin & Hinduja, 2006).

Bullying in Canada

Bullying is a nation-wide concern that requires far more action than currently taking

place. Canadian students are at increasing risk of becoming a victim of bullying as the indication

is there is a high prevalence of both bullies and victims in Canada (Craig et al., 1998; Craig &

Harel, 2004; Craig & Pepler, 2007), more so than most other countries in the world (i.e., ranking

26th out of 35 countries in a Health-Behaviours in School-aged Children (by the World Health

Organization) survey on measures of bullying and victimization) (Craig & Harel, 2004).

Canadian students are not only likely to face these issues, but are more likely to repeatedly face

these issues more than students in many other countries (Craig & Harel, 2004). Part of the reason

for this may be that, as a whole, Canadian society has not provided enough attention to the campaign against bullying (Craig & Harel, 2004). Although programs intended to create awareness are in place, they are not addressing the necessary or pertinent issues for the ever changing Canadian youth (Beran & Shapiro, 2005; Fitzpatrick, 2008). Additionally, the avenues of opportunity to bully have changed. No longer does a perpetrator have to wait for a face to face encounter for bullying to occur. Given the gaps in what is currently available in terms of education and prevention and what is currently happening with victims who are bullied, there is little doubt that Canadians are facing this serious social issue. However, as this social issues grows, so too does the use of technology by Canadian students. One avenue of bullying that has received little attention is that of cyberbullying.

Technology Use

Adolescents in Canada are increasing their use of technology. Technology is important to adolescents because of the increasing need to keep connected to the latest information and to maintain their social connections. The study of victimization related to technology is extremely important because 90% of the over one million computers within Canadian schools have Internet access (Statistics Canada, 2004). Furthermore, approximately 94% of all young Canadians have access to the Internet from home (Media Awareness Network, 2005). In Saskatchewan specifically, 50% of all homes have Internet access. According to a Canadian study by Media Awareness Network (2005), 86% of students from grade 4 to grade 11 have email accounts, 37% have their own computer with internet access (with this number increasing to 57% by grade 11), 23% have their own cellular phone (with this number increasing to 47% in grade 11), 30% have their own Website (e.g., Facebook or MySpace), and 22% have their own webcam access. Moreover, the 37% of students who have their own computer spend up to twice as much time on

the Internet than those without (Media Awareness Network, 2005). For all Canadian students surveyed, the majority spent their time on the computer engaged in social facilitation activities (e.g., 77% play online games, 66% engage in instant message communication, and 64% check their email) (Media Awareness Network, 2005). For adolescents, the internet is a valuable means of communication and social interaction with their peers (Guan & Subrahmanyam, 2009). Though leisure activities are the primary reason students access computers, 72% indicated they also use their computer for school work (Media Awareness Network, 2005). Overall, high school students spend an average of two hours per day on the Internet for leisure activity and an hour per day on the Internet for academic activities (Media Awareness Network, 2005). Furthermore, 2006 census results suggest that secondary students are more likely to use online communication to socialize with peers than they are to communicate face-to-face (i.e., 36% vs. 32%) (Statistics Canada, 2006).

Over 60% of Canadian households own a cellular phone (Statistics Canada, 2005; 2007). When looking specifically at Saskatchewan, 78.0% of households own at least one cell phone (Statistics Canada, 2008). In addition, 23.7% of Canadians use cell phones for text messaging to communicate with peers (Statistics Canada, 2008-2009). Specifically, one in five (28.1%) Saskatchewan adolescents utilize cell phones for text messaging or social networking sites (e.g., Facebook) for communication with peers (Statistics Canada, 2008-2009).

Technology in Knowledge-Seeking

While technology use is of a primarily social variety (i.e., for communication or contact with peers); educators are embracing technology as a means of furthering their students' education and understanding (Diamanduros, Downs, & Jenkins, 2008; Finn, 2004; Guan & Subrahmanyam, 2009; Hinduja & Patchin, 2008; Yu 2002). This positive use of technology is

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primarily geared towards use inside school settings. This seems to be with the understanding that by the time students reach high school, the majority use the Internet as a primary resource for school work (i.e., 91%) (Media Awareness Network, 2005). Additionally, the information available via the Internet has the ability to expand adolescents' knowledge-base (Guan & Subrahmanyam, 2009) as well as of those who educate them (Diamanduros et al., 2008). The Internet also affords curious adolescents the ability to find answers to questions they may be too shy to ask of other people especially older adults (Guan & Subrahmanyam, 2009). However, this, too, is not without inherent risks as dissemination of information on the internet cannot be completely controlled. There is limited quality assurance on the internet when utilizing search engines for information on a given topic. Additionally, once information is released on the internet it is extremely difficult to remove it.

<div align="center">**Cyberbullying: New Venue, Same Issue**</div>

Cyberbullying Defined

Unlike its predecessor, traditional bullying, cyberbullying has not received a great deal of research attention. Increased use of technology has created new forms of social interaction among individuals (Hinduja & Patchin, 2008; Media Awareness Network, 2005). This growth has resulted in an increase in cyberbullying, which is a form of willful and repeated harassment or bullying through electronic communication tools (e.g., via email, message boards, text messages, or instant message communication) (Beran & Li, 2005; Chibbaro, 2007; Franek, 2006; Hinduja & Patchin, 2008; Li, 2005; 2006; 2007; McGuinness, 2007; Stomfay-Stitz & Wheeler, 2007; Strom & Strom, 2005; Willard, 2007).

<div align="center">19</div>

Reasons for Cyberbullying

Many of the reasons for cyberbullying are the same as the reasons for bullying (Beran, 2009; Diamanduros et al., 2008; Hinduja & Patchin, 2008; Merrell et al., 2008; Patchin & Hinduja, 2006; Ybarra & Mitchell, 2004b). The various characteristics that are used by bullies to pick a victim are also the ones used in cyber-victimization (Diamanduros et al., 2008). Often those who bully via traditional means may also be those who cyberbully (Katzer, Fetchenhauer, & Belschak, 2009; Smith et al., 2008). As well, cyberbullies can employ direct or indirect means of aggression via the technological tools available (Katzer et al., 2009; Smith et al., 2008). For example, cyberbullies may contact their victims directly through instant messages or text messages via a cellular phone. To engage in indirect cyberbullying, cyberbullies may post messages on websites about the intended victim without ever contacting him or her directly. Cyberbullies are believed to choose victims because they somehow perceive superiority over their victims regardless of how accurate that perception is (Mason, 2008; Patchin & Hinduja, 2006). Individuals will become cyberbullies because of some perceived power differential (Patchin & Hinduja, 2006). The difference is this power differential is often of less substantial value as the cyberbully and victim are physically removed from each other (Patchin & Hinduja, 2006; Willard, 2007). Unlike traditional bullies, cyberbullies require little to no perceived characteristics of superiority in order to victimize (Hinduja & Patchin, 2008). Moreover, victims can be chosen, like with traditional bullying, simply "because" with no real reason provided. Akin to traditional bullying, a cyberbully can also engage in direct or indirect forms of victimization (Chibbaro, 2007). Often there is little reason for the act of cyberbullying other than its availability and its ease of use (Hinduja & Patchin, 2008). One of the primary differences between victim targeting in traditional bullying and cyberbullying is that individuals will often

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use cyberbullying as a form of revenge against another individual where traditional bullying is more commonly utilized as a way to display power or control (Hinduja & Patchin, 2008; Lines, 2007).

Use of Technology in Cyberbullying

Though technology was created for positive gains in society, the inherent danger of cyberbullying should not be taken lightly. Cyberbullies benefit from the speed with which information sent via technology travels and the secretive nature technology is built upon (e.g., cell phones that only the owner can access or home computers in the adolescent's bedroom) (Li, 2006). Individuals are not often monitored when using the Internet, nor are their technological habits supervised (Chisholm, 2006). Even when there is supervision (e.g., 13% of individuals are supervised by parents during Internet use) (Media Awareness Network, 2005), individuals often find ways to circumvent such monitoring (Belsey, 2004; 2006; Sullivan, 2004). It is important to remember that cyberbullying does not occur in a vacuum. For students, especially adolescents, what occurs via technology affects what occurs in the school or social settings (Brown, Jackson, & Cassidy, 2006; Chibbaro, 2007; Katzer et al., 2009; Mason, 2008; Patchin & Hinduja, 2006; Raskauskas & Stoltz, 2007; Shariff & Gouin, in press; Smith et al., 2008). For example, discussing what happened over the weekend via instant message or social networking sites will influence what is discussed at school the next day. Another example of technology affecting social interactions is the spreading of a rumour (e.g., about an individual's sexual promiscuity). When a rumour is spread via technological means it can travel faster and farther than conventional word of mouth. The subject of the rumour will also greatly be affected in school and social situations (Katzer et al., 2009). This creates even greater negative feelings for the victim because the information spreads so quickly and effortlessly (Chisholm, 2006; Raskauskas

& Stoltz, 2007). In a study of 177 grade 5 to 8 students, approximately 25% of students reported being a victim of cyberbullying with the majority of students being victimized multiple times (e.g., 22.7% had been victimized over 10 times) (Li, 2007). The same students were also victims via multiple technological methods (41%) (Li, 2007). This multiple victimization differs slightly from traditional bullying. In traditional bullying fewer victims are continual victims. With cyberbullying, a larger population of victims are likely to be continually victimized (Li, 2006). This again speaks to the fast-paced delivery of technology.

Cyberbullying may not have the immediate threat of danger, but perhaps more dangerously, the increased access of technology allows for a cyberbully to continually harass his or her victim through many different forms (e.g., instant message, email, text message, social networking sites) (Gillespie, 2006; Hinduja & Patchin, 2008; Li, 2006; Swartz, 2005). For example, instead of one instance of verbal assault on a victim, a cyberbully can assault his or her victim via multiple forms in a matter of minutes. This assault will also last significantly longer than the verbal instance (Smith et al., 2008; Stover, 2005). No longer is victimization limited primarily to the school setting (Hinduja & Patchin, 2008; Gillespie, 2006; Wolfsberg, 2006). Essentially, cyberbullying can become an everyday, all day form of victimization where the victim cannot escape the cyberbully. While there may be the physical separation from the cyberbully, the victim could potentially never be free from the emotional and mental toll the act takes. With the ever expanding reach of technology, a victim is never safe from the torment of a cyberbully (Hinduja & Patchin, 2008). Even the mitigating effects of family support that can provide comfort for those who are victims of traditional bullying, do not offer the same comfort for victims of cyberbullying (Hinduja & Patchin, 2008).

Cyberbullying as Different From Traditional Bullying

There are characteristics of cyberbullying that differentiate it from traditional bullying. A cyberbully can "remain anonymous and can pretend to be someone else" (Lines, 2007, p. 3). Cyberbullying can "happen anywhere, anytime, take many different forms, be instantly and limitlessly disseminated" (Lines, 2007, p. 3). Where bullying usually involves actions or verbal intimidations addressed to a specific person, cyberbullying is generally about negatively changing the image of the victim (e.g., slander) (Strom & Strom, 2005). Often, cyberbullying is considered to be a form of relational aggression (Beran & Li, 2005; Beran & Stewart, 2008; Cochrane, 2008; Raskauskas & Stoltz, 2007). Relational aggression includes "behaviours such as excluding someone from an activity, spreading rumours, name-calling, swearing at someone, hitting, pushing, telling classmates not to talk to someone, and telling untrue stories about someone" (Beran & Li, 2005, p. 266). For females, who tend to more often use forms of relational aggression, cyberbullying offers a new way of victimizing peers (Björkqvist, 1994; Chibbaro, 2007; Espelage & Swearer, 2003). The novel nature of cyberbullying, in comparison to traditional bullying, offers an appeal and temptation for individuals who are prone to experiencing peer pressure (Patchin & Hinduja, 2006). There is the thought that if 'everyone else is doing it, it cannot be that bad', which is not only naïve, but false. Despite being aware of the harmful effects cyberbullying has, individuals still continue to partake (Patchin & Hinduja, 2006) because of the lack of "tangible feedback about the consequences" (Belsey, 2006, p. 8).

For these reasons, cyberbullying can cause significant harm to the victim. Overall, cyberbullying may affect individuals by making them feel excluded, exposed, powerless, betrayed, fearful, frustrated, lonely, and hurt (Lines, 2007).

Victim support. One of the small distinct advantages for the victims of cyberbullying, if the victim chooses to act on the crime, is the permanence of the information that the cyberbully sends. Unlike verbal words, written words can be permanently saved (Belsey, 2004; 2006; Franek, 2006). When or if a cyberbully is identified the information can be used as a means of showing exactly what the perpetrator has done to the victim, whereas, when a bully uses verbal words, this type of proof is hard to have or use. Additionally, this permanence provides support for victims to step up and provide accurate accounts of what has happened. As the Internet essentially is a warehouse of information, what is recorded on a message board or what is posted on an Internet website does not easily disappear (Belsey, 2004; 2006). Inherently, when a harassing or victimizing message is posted this permanence is seen as a detriment to the victim; moreover if the victim chooses to act against his or her cyberbully, this permanence provides evidence for the act (Franek, 2006). Regrettably, this small advantage is rarely used as most victims do not know and will never know who their cyberbully is.

Gender Differences

It has been found that females are proportionately more likely to be cyberbully victims than bully victims, but males are proportionately more likely to be victims of both forms of bullying (Hinduja & Patchin, 2008; Li, 2006; Smith et al., 2008; Ybarra & Mitchell, 2004b). The overall indication is that males are still more likely to cyberbully than females are (Li, 2006) which is similar to the pattern of males bullying more in traditional bullying. However, some forms of cyberbullying (e.g., using technological messaging to actively exclude other individuals from a group) are more often used by females (Chisholm, 2006; Shariff & Gouin, in press; Smith et al., 2008; Willard, 2007). Regardless of gender, cyberbullying appeals to those individuals who want an impersonal approach that requires more subtlety and less obvious means of

attacking their victim (Björkqvist, 1994; Shariff & Gouin, in press; Li, 2006). Females are also

more often reported as being the victims of cyberbullying (e.g., 60% of cyberbully victims in

Li's (2007) study were female) (Cochrane, 2008; Li, 2007; Smith et al., 2008). This finding

supports the notion that cyberbullying appeals to female cyberbullies as a less physical means of

exerting aggressive behaviours (Arnett, 2004; Björkqvist, 1994; Cochrane, 2008; Shariff &

Gouin, in press). This link is made as it is thought that most often females who cyberbully chose

female victims (Arnett, 2004; Björkqvist, 1994; Shariff & Gouin, in press). In terms of reporting

instances of cyberbullying, females are more likely to inform someone that they are a victim

(Cochrane, 2008; Li, 2006). This seems to speak to the ability for females to express personal

situations (Li, 2006). Females are seen as more able to open up about instances of bullying and

cyberbullying without having to feel ashamed or socially bound to stick it out and not report it

(Li, 2006). In contrast, there seems to be a less actively open approach for males where the norm

is to remain quiet and not openly discuss situations in which there are emotional aspects (Arnett,

2004; Berk, 2004). The indication is that research on cyberbullying and subsequent interventions

have to tailor to both genders as there are discernable differences from bullying.

Impact of Adolescent Cyberbullying

There is limited research that uses empirical measures with the adolescent population on

cyberbullying. As such, all posited ideas are speculations based on the understanding of

adolescent bullying and of cyberbullying as a whole.

Impact of cyberbullying on social development. Similar to the long-term effect on the

ability to form healthy relationships, it is hypothesized that adolescents who cyberbully or are

victimized will have negative relationship development (Beran, 2009; Brown et al., 2006;

Mason, 2008; Strom & Strom, 2005). As cyberbullying is more useful in employing indirect

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forms of aggression (i.e., through anonymity or not being face-to-face), it is hypothesized that acts of cyberbullying are more prevalent among adolescents than younger children (Smith et al., 2008). This differs from the decline seen in traditional bullying.

It is believed that those who are cyberbullied display the same personality and developmental characteristics as those who are bullied through traditional means (Beran, 2009; Katzer et al., 2009). It is also hypothesized that the maladaptive patterns of relating to individuals will carry through to adulthood (Strom & Strom, 2005). Like bullying, cyberbullying, can severely affect an individual's self-esteem and self-concept (Beran, 2009; Brown et al., 2006; Chibbaro, 2007; Mason, 2008; Patchin & Hinduja, 2006). Those who are cyberbullied are at risk for low self-esteem (Beran, 2009; Brown et al., 2006; Chibbaro, 2007; Merrell et al., 2008; Patchin & Hinduja, 2006; Willard, 2006). Self-esteem is an integral part of an individual's identity (Arnett, 2004). This risk for low self-esteem is increased when an individual who is cyberbullied has no outlet or means of dealing with the situation (Patchin & Hinduja, 2006). It can subsequently affect the same person's social interactions and ability to be a social member within a school or other social networks (Chibbaro, 2007; Mason, 2008; Patchin & Hinduja, 2006). Those who use technology primarily as a social connection are already socially isolated from their peers (Li, 2006). Without having peers to lean on in times of crisis, such as when one is being cyberbullied, individuals are set-up for permanent long-term maladjustment (Li, 2006; Mason, 2008). Adolescent peer groups may engage in victimization of individuals who do not 'fit in' for no reason other than it is something 'fun to do' (Smith et al., 2008). As social relationships are of higher importance in adolescents these seemingly innocent acts of teasing are far from innocent. They have the potential to cause irreparable social damage and severely disrupt development (Mason, 2008; Smith et al., 2008). Since both bullies and cyberbullies have

similar characteristics, it is hypothesized that those who victimize are seeking some type of power reinforcement from their victim (Beran & Li, 2005). Cyberbully victims are also thought to suffer from the same negative effects as their bully victim counterparts (e.g., withdrawal, helplessness, depression, anxiety, and even suicide) (Beran & Li, 2005; Chibbaro, 2007; Mason, 2008; Willard, 2006). Overall, the characteristics that deem an adolescent less popular among their peers are the very ones that increase the likelihood of cyberbullying (Katzer et al., 2009).

With adolescent cyberbullying, Stover (2005) has hypothesized that academic achievement and social development will be affected to a greater degree than through traditional bullying. Adolescents are the prime demographic for use of technology and that use carries over to the school setting. Thus, these individuals are at risk for "silent" torment throughout the day and even though they may be attending school, their education is suffering considerably. This will create a lack of focus and attention on the important aspects of the individual's day (Li, 2006). Additionally, lack of attendance is also a serious issue with victims of cyberbullying (Willard, 2006). This would seem to be especially true for individuals who know the identity of their cyberbully.

Lack of reporting by the victim. Adolescents face particularly tough choices regarding cyberbullying. It is suggested that the prevalence of cyberbullying is higher than other instances of traditional bullying and the rates are simply underreported (Hinduja & Patchin, 2008; Strom & Strom, 2005). This is because adolescents do not want to face their social world without the use of technology as it will limit their communication with their peers (Strom & Strom, 2005). Adolescents would rather deal with the cyberbullying than face the prospect of having their parents remove or limit the sources of technology available to them (Strom & Strom, 2005). Adolescents, as a whole, do not want to run the risk of being outside the social circle of their

respective groups. Unfortunately, the nature of cyberbullying also seems to create an open ground for other individuals to act in a harmful manner (Brown et al., 2006). For example, when a cyberbully posts a derogatory message on a public message board, other individuals can respond publicly to that message.

The victims themselves often stay silent (Chibbaro, 2007; Finn, 2004; Lines, 2007). It is a rare occasion that a victim will report an instance of cyberbullying to anyone, let alone a person with authority to act on the victimization (Finn, 2004). Moreover, the majority of research indicates that a large proportion of students know someone who has been cyberbullied but have remained silent (Cochrane, 2008; Hinduja & Patchin, 2008; Li, 2006; 2007; Smith et al., 2008; Willard, 2007). This silence speaks to the underdeveloped understanding of cyberbullying by those in positions of authority (Beran, 2009; Smith et al., 2008). Reporting cyberbullying may be seen as a fruitless endeavour. Additionally, reporting instances of cyberbullying may be seen as a form of "tattling" by other peers and places the victim at an increased risk for subsequent torment (Chibbaro, 2007). Unfortunately, this cyclically contributes to the lack of awareness of cyberbullying.

Anonymity

Cyberbullying is particularly dangerous because the perpetrators have the ability to act anonymously (Beran & Li, 2005; Li, 2005, 2006, 2007; Lines, 2007; Mason, 2008; Stomfay-Stitz & Wheeler, 2007; Stover, 2005; Swartz, 2005; Willard, 2007). The allure of anonymity is appealing for all students; 59% of Canadian students surveyed indicated that they have used an identity other than their own while on the Internet (Media Awareness Network, 2005). Individuals who may not engage in bullying face-to-face will do so via technology because of the appeal of anonymity (Beran & Li, 2005; Chisholm, 2006; Mason, 2008; Smith et al., 2008;

Ybarra & Mitchell, 2004b). Individuals can hide behind the technology used, which means that those who cyberbully do not require an observable power differential (e.g., a cyberbully can be physically weaker than his or her victim) (Beckerman & Nocero, 2002; Hinduja & Patchin, 2008; Strom & Strom, 2005; Willard, 2007). This affords a "unique method of asserting dominance online that conventional bullying disallows" (Ybarra & Mitchell, 2004a, p. 1313). It is hypothesized that this removed nature of the bullying makes it easier to victimize someone (Chisholm, 2006; Mason, 2008; Willard, 2007), which is particularly true for females who prefer verbal forms of bullying (Li, 2006). This has been termed the dishibition effect as the cyberbullies can be filled with the feeling of invulnerability and face reduced, or nonexistent, social cues and contexts (Mason, 2008). As with traditional bullying, perceived power differentials between cyberbullies and their victims can and often do exist but they do not have to exist for cyberbullying to occur (Chibbaro, 2007). A power differential is not necessarily a main reason or factor for committing the act (Beckerman & Nocero, 2002; Gillespie, 2006; Swartz, 2005)

Anonymity effect on the cyberbully. Cyberbullies also may not recognize the responsibility their actions carry because they are far removed from the person they are targeting. Cyberbullying allows individuals to indirectly victimize someone without danger of immediate, and often any type of, consequence (Beckerman & Nocero, 2002; Beran & Li, 2005; Hinduja & Patchin, 2008; Li, 2006; Mason, 2008; Willard, 2007). Often this can lead to more severe threats and greater victimization of individuals (Li, 2007; Media Awareness Network, 2005; Ybarra & Mitchell, 2004b). With cyberbullying there is less chance that the cyberbully will feel "regret, sympathy, or compassion for the victim" (Strom & Strom, 2005, p. 22). Even more dangerous is the lack of ability to trace information back to the cyberbully, which means that often the

cyberbully goes without any form of punishment or consequence (Beran & Li, 2005; Strom & Strom, 2005). This lack of accountability often leads to greater threats and more hostile acts of aggression than the typical bullying episode would (Li, 2006; Mason, 2008; Stomfay-Stitz & Wheeler, 2007; Ybarra & Mitchell, 2004b). It also has the potential to lead to greater frequencies of cyberbullying, elevated or more aggressive acts, and potentially could lead to face to face encounters. As there are few repercussions, particularly in the legal system, for cyberbullying, perpetrators often equate this freedom with an approval to torment their victims (Hinduja & Patchin, 2008). The lack of accountability and the negative effects it produces signifies why understanding the prevalence of cyberbullying is so vital. Understanding why cyberbullying occurs can help lead to ways to ameliorate instances of and increase accountability for cyberbullies.

North American Studies

There are few North American researchers that have addressed the issues of cyberbullying. Much of the research on cyberbullying has come from analysis of reported incidents where a victim of cyberbullying has come forward (Willard, 2007). Those that have addressed cyberbullying have not specifically addressed the adolescent population. The primary focus has been on the middle school years from Grade 5 to 9. With the exception of few, the majority of North American cyberbullying research has come from Canadian researchers. Much of the current research on cyberbullying addresses the issues without providing supporting data and as such the literature covers the theories behind cyberbullying without exploring through experimental research.

American Study

Patchin and Hinduja (2006) are one of a few published American studies examining the issue of cyberbullying. The purpose of their study was to examine individuals' perceptions and experiences of cyberbullying. This was done through the creation of a questionnaire that was then placed on the internet. This type of sampling and data collection raises several issues of how accurate informed consent was, how reliable parental permission was, and how generalizeable the results would be. While these issues were noted by Patchin and Hinduja (2006), the justification was that the research was preliminary and exploratory in nature.

Of the 571 participants, 384 were under the age of 18 and became the sample of interest in the study (Patchin & Hinduja, 2006). While this particular study does include the adolescent population, the results are marred by the inclusion of individuals as young as those in Grade 2. Thus it is not a pure sample of adolescents. It was found that 29% of the respondents had been victims of cyberbullying and that 11% had been a cyberbully (Patchin & Hinduja, 2006). This most often occurred in Internet chat rooms, via text messages, and via email messages with the number of incidents per a 30 day period ranging from 10 to 107 (Patchin & Hinduja, 2006). These particular results seem to provide reason for engaging in additional research of this nature. What is most interesting is that while the victim prevalence is not overly large, the number of incidents suggests that those who are victimized are victimized repeatedly. The negative consequences of bullying were highlighted. This is of considerable interest particularly when over 60% of the victims were emotionally bothered (e.g., angry, hurt, frustrated) by the incidents or the incidents affected their day-to-day activity (Patchin & Hinduja, 2006).

While the results of the study indicate that there is considerable need for additional research in cyberbullying, the methods that were used to gather the data are a cause for some

concern. The methods used limit this study as honest representation of each person cannot be verified. There was also no mention of any differences among the various age ranges. That is to say, almost 30% of individuals had been victims of cyberbullying, but there is a lack of information regarding how that 30% breaks down for each age group (Patchin & Hinduja, 2006). Thus the current study will aim for an accurate representation of those who participate by using a pencil and paper survey. Furthermore the issue of a relationship between bullying and cyberbullying has not been explored. Although such a relationship has been suggested there is no data to support this theory. Also, the issue of gender has not been addressed. Research in traditional bullying has shown that there are gender differences and while it is suspected that there are differences with cyberbullying there is no mention of gender in this study. One future direction mentioned by Patchin and Hinduja (2006), is to look at how much emotional, mental, and physical harm the victim is exposed to and to examine the extent of and length of the harm.

Canadian Studies

Currently, the majority of published studies on cyberbullying from Canada are anchored by the same researcher. As such, much of the work and results have been found to be similar. That is to say the majority of the research has covered the same population for the purpose of replication of results among young children without expanding beyond this specific demographic. As well, it emphasizes a gap in understanding adolescent cyberbullying.

The primary researcher, especially in terms of Canadian content on cyberbullying, is Li (2005; 2006; 2007). In the original presentation of the research the participants were considered to be exclusively adolescents (Li, 2005). While this was not an erroneous statement, it did not shed light on just who made up the sample. The sample was 177 Grade 7 students (Li, 2005; 2007). These participants are just on the cusp of adolescence and do not accurately convey the

same perspectives of those who are considered to be adolescents. Further, the experiences of adolescents who are in Grade 7 or other middle year classes are different from adolescents who are in the high school phase of their life.

Specifically, in Li's (2005) first research study, there was an emphasis on its exploratory nature. Several straightforward questions were asked regarding the nature of cyberbullying, its characteristics and how it is conveyed (Li, 2005). The second research study that used the same data added an additional research question concerning the relationship between traditional bullying and cyberbullying (Li, 2007). A sampling of students from two schools of differing socio-economic status were used and the sample consisted of an almost even split between males and females (e.g., 80 males and 97 females) (Li, 2005; 2007). As with all of the studies conducted by Li, a survey was used to assess prevalence rates. Results suggested that of those students surveyed, 25% of participants had been victims of cyberbullying and 15% were cyberbullies (Li, 2005; 2007). This is similar to the number of victims in Patchin and Hinduja's (2006) study. However, it was found that 54% of participants indicated they had been victims of traditional bullying with 31% having bullied (Li, 2005; 2007), which is greater than numbers indicated in other studies. As this is a Canadian study, Li (2005; 2007) speaks to the potential for increased prevalence of traditional bullying that has been found within the Canadian population and the trend is expected to be comparable for cyberbullying. Li (2005; 2007) also addresses the issue of anonymity which is shown via the over 40% of participants who did not know their cyberbully. Supporting current literature was the identification of females being victims of cyberbullying more than males with the prevalence of cyberbullies being similar in terms of gender (Li, 2005; 2007). Finally, the pervasiveness and access of cyberbullying is also addressed. This is important to emphasize as with traditional bullying, victims are not just

harmed once, but are harmed repeatedly (e.g., 40% are cyberbullied over three times) (Li, 2005; 2007). Participants also indicated that they were most often victimized via multiple avenues (e.g., email, text message, Internet chat rooms) (Li, 2005; 2007).

Specific to Li's 2007 study, was the examination of the relationship between traditional bullying and cyberbullying. It was found via correlation coefficients that those who were traditional bullies were more likely to be cyberbullying ($r = 0.298$, $p < 0.001$); and that victims of traditional bullying were more likely to be victims of cyberbullying ($r = 0.305$, $p < 0.001$) (Li, 2007). These results are important because they provide support for the issue of cyberbullying. The relationship further suggests that understanding bullying is important, but understanding cyberbullying provides more direct knowledge.

Li's (2007) results appear to have been collected via rigorous means and the survey was developed for answering with pencil and paper. Furthermore, the results suggest that more research is needed in cyberbullying. Unfortunately, one of the weaknesses of both studies is the use of the same participant data. While the first study was expanded on, it did not bring in a new participant population that could have contributed an even stronger insight into cyberbullying. One of the suggestions made by Li (2007) is that "cyberbullying should not be examined as a separate issue [from traditional bullying]" (p. 1787). However, this does not take into consideration the differences in cyberbullying or the need for independent understanding first before any amalgamation.

A third study by Li (2006) focused specifically on the differences in gender and the effects of gender in cyberbullying. This study included a new sample of 264 Grade 7 to 9 students with gender balanced (e.g., 130 males and 134 females) (Li, 2006). The inclusion of several grades brings the study closer to sampling a true adolescent population and doubles in

examining another period of changing development (Berk, 2004). The indications were that 17%

of participants had been cyberbullied and over 37% were repeatedly cyberbullied (Li, 2006).

These were slightly lower than previous research findings, but are still significantly high and

merits further attention. Quite a bit lower were the number of participants who indicated that

they had been traditionally bullied (e.g., 34 %) (Li, 2006). This may be part of the trend that as

adolescents age traditional forms of bullying tend to decrease slightly (Pellegrini & Bartini,

2000). Regarding gender, the overall suggestion is that males still bully via traditional means

(40.8% vs. 27.8%) and cyberbully (22.3% vs. 11.6%) more often than females (Li, 2006).

Similar to Li's (2005; 2007) previous research was the indication that females are cyberbullied as

often as males are (Li, 2006). This is important to note because traditional bullying is often seen

in terms of males who bully and males who are victims. In spite of this, it is crucial that equal

attention is given to males and females in cyberbullying as the differences in cyberbullying

victims are null in terms of gender.

Another Canadian study addresses cyberbullying in the middle year's population (Beran

& Li, 2005). Unique to this study was the focus on the types of electronic tools used for

cyberbullying and the reactions participants had to instances of cyberbullying (Beran & Li,

2005). A fairly large sample of 432 participants was used for this study (Beran & Li, 2005).

Similar to previous studies, 23% of the participants had experienced cyberbullying and 26% of

participants were cyberbullies (Beran & Li, 2005). The indication was that those who had been

victims of cyberbullying were victimized via multiple means. The top three electronic tools were

email, instant messaging, and cell phones (e.g., text messaging) (Beran & Li, 2005). Of those

who were victimized by cyberbullies, the emotional reactions were queried and provide a greater

understanding of the negative effect cyberbullying has (See Appendix A). Overall, victims of

cyberbullying experience extremely negative feelings from anger to embarrassment which leads to alterations in the victims' emotional and mental states (Beran & Li, 2006). Though this study addressed a similar population the replication of similar prevalence rates provides a reliable base for the survey methods used in the studies. Furthermore, this study also addressed unique and critical issues of emotional and mental victim states.

Finally, a newer Canadian study addressed the middle year's population in Saskatchewan (Cochrane, 2008). This study focused on Li's (2005, 2006, 2007) work on cyberbullying while adapting it to fit with the current technological trends (Cochrane, 2008). A sample of 396 middle year's students was surveyed (Cochrane, 2008). Similar to previous results, the percentage of students who reported being bullied was higher than those who reported being cyberbullied (62.9% and 49.5% respectively) (Cochrane, 2008). However, the percentage of students who reported being a victim of cyberbullying was higher than previous studies (Cochrane, 2008). This suggests that the need for current research is well founded. In line with current research was the number of students who reported being a cyberbully (34.6%) (Cochrane, 2008). Furthermore, Cochrane (2008) found that multiple technological methods (e.g., instant messaging, cell phones or texting, and email) were utilized to victimize. Again similar to Li's (2005, 2006, 2007) research, females were more likely to identify themselves as victims of cyberbullying, to talk to someone about their victimization, and to divulge the negative impacts of being a cyberbully victim (Cochrane, 2008). Lastly, Cochrane (2008) explored student perception of adult involvement. Not surprisingly, students tended not to tell anyone they had been victim of cyberbullying (Cochrane, 2008).

Need for Additional Research

Overall Critique and Limitations of Current Studies

These studies provide impetus for further research in the area of cyberbullying particularly in areas that have yet to be studied (i.e., high school population). They also provide evidence for the occurrences of cyberbullying and the need for more research in this area (Beran & Shapiro, 2005; Beran & Stewart, 2008; Cochrane, 2008). Also, the limited current North American research does indicate the need for further exploration. There is an indication that bullying and cyberbullying are linked in terms of those who bully are also likely to cyberbully and those who are victims of bullying are also likely to be victims of cyberbullying (Li, 2007). Thus, the severity of cyberbullying is even greater as it lacks much needed attention. Students themselves view the "Internet is an extension of everyday social life and an integral part of these skill sets" (Media Awareness Network, 2005, p. 7). Inherently, even students understand the link between social interactions online and social interactions in person. This link grows stronger as children enter adolescence (Media Awareness Network, 2005).

Furthermore, the very few studies from Canada that address cyberbullying have been primarily carried out in Alberta with similar populations (Beran & Li, 2005; Li, 2005, 2006, 2007). As evidenced via the detailed understanding of the research, the majority of the current research addresses very similar issues and topics without providing additional information beyond prevalence rates in middle years school populations. Bringing an understanding of the prevalence rates in the high school population in terms of cyberbullying will create an entirely new avenue of research. There is currently no published research on cyberbullying in Saskatchewan. While individuals from differing socio-economic status homes may have the same Internet access at schools, the research has not examined whether schools with more

limited access to the Internet also indicate the same prevalence rates of cyberbullying. It is of interest to determine whether or not this holds true in a technologically advanced society as it has been noted that "cyberbullies are typically from upper class…nice families…top kids in the school" (Willard, 2007, p. 37). Worth additional attention are the issues of gender and how that continues to relate to cyberbullying in the adolescent population and the relationship between traditional bullying and cyberbullying.

The relatively new phenomenon of cyberbullying has not yet caught the attention of many professionals who deal with adolescents (Beran & Li, 2005; MacFarlane, 2007; Merrell et al., 2008; Chibbaro, 2007). Currently there are few effective programs for professionals to use when dealing with cyberbullying (Beran & Shapiro, 2005; Couture & Hall, 2010; Fitzpatrick, 2008; Merrell et al, 2008). Furthermore, there are instances where school personnel or those who have the authority to deal with cyberbullying fail to do so potentially resulting in grave consequences like that of Phoebe Prince's case (Eckholm & Zezima, 2010; O'Neill, 2010; Reitz, 2010; Smolowe et al., 2010). Professionals need to be aware of research that attests to the prevalence rates of cyberbullying as a potential threat to all students. Those who have attempted to address the issues of cyberbullying in schools have highlighted considerable shortcomings in the policies that have been created thus far (Beran & Shapiro, 2005; Couture & Hall, 2010; Fitzpatrick, 2008; Merrell et al., 2008). Current programs fall short of helping individuals who are victims of cyberbullying (Beran & Shapiro, 2005; Diamanduros et al., 2008; Merrell et al., 2008). Recognition of cyberbullying is vital; as research has shown that as technology use increases so may the prevalence of cyberbullying (Li, 2007). Once awareness and greater understanding of cyberbullying is achieved, parents, teachers, and psychologists who are involved with adolescents on a daily basis can develop effective programs that will stymie the

growth of cyberbullying (Beran & Shapiro, 2005; Diamanduros et al., 2008; Merrell et al., 2008). Cyberbullying is not harmless. It can harm those who come into contact with cyberbullying—be they victim, perpetrator, or even those around either individual. For example, those who witness cyberbullying may worry they will be targeted or feel guilty for not stopping the act. It is imperative to recognize the detrimental consequences of cyberbullying as evidence shows that bullying leads to negative consequences (Beran & Li, 2005) and thus cyberbullying has the potential to "inflict serious psychological, emotional, or social harm" (Patchin & Hinduja, 2006, p. 149).

Summary

Given the current understanding of traditional bullying and the emerging understanding of cyberbullying, it is crucial that additional research contribute to a stronger and clearer picture of the uniqueness of cyberbullying. Adolescents, as defined in for this research study, have yet to be studied. Adolescents are unique individuals who use available technology at an increasing rate. Moreover, current research in cyberbullying has highlighted many unique aspects that are not found in or are simply not a part of traditional bullying. In a rapidly growing technological world, cyberbullying is likely to become more pronounced. Additional research will provide awareness of cyberbullying and may offer effective forms of prevention and intervention. It is hoped the results of the current research may help bridge the gap of information on adolescent cyberbullying and contribute to the ongoing literature on cyberbullying.

Chapter Three: Methodology

The following is a description of the research methodology used in this study. First, the research questions are addressed. Next, ethical considerations are discussed. Lastly, a description of the research participants, measurement instrument, steps that were followed and methods of analysis in conducting this study are provided.

Research Questions

This study explored the following questions:

1. What was the extent of cyberbullying among grade ten, eleven and twelve students in urban Saskatchewan?

2. What was the relationship between traditional bullying and cyberbullying?

3. What did the experiences of cyberbullying look like (both as a perpetrator and as a victim)? How were the victims impacted?

4. How did individuals respond to cyberbullying (as a bystander)?

5. What were the students' opinions on adult responses to cyberbullying?

Ethical Considerations

Prior to conducting the research, the following issues were considered.

School Board Permission

After ethical approval was received by the researcher from the University of Saskatchewan Behavioural Research Ethics Board (See Appendix B), permission was sought from the public and Catholic school divisions in a large city in Saskatchewan. The Coordinator of Research and Measurement and the Assistant Superintendent of Education from the public and Catholic school divisions respectively, were contacted by the researcher. Following these discussions, the researcher sent application packages to the individual research coordinator

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contacts for the two school divisions. From this, written school board approval was granted. Three principals were then contacted by the researcher. Principals were provided with a copy of their division's school board approval, a copy of the ethical approval from the University of Saskatchewan, and a copy of the questionnaire package the students received (see Appendices B and C). Following these discussions, approval was granted by all the contacted principals.

Issues of Consent

Informed consent by the participants without parental consent was utilized for this study. All of the participants were 16 years of age or over and are considered mature enough to provide their own consent. The simple language used throughout the questionnaire was utilized as it was thought that this would help participants clearly understand what was asked of them. Definitions were provided for the core concepts of bullying and cyberbullying. Also, the information letter, provided to each student, was verbally delivered by the researcher and students had the opportunity to ask questions. See Appendix D for a copy of the Information Form that was provided to potential participants. Additionally, the study was brought to the attention of all school personnel involved with the students through email, verbal communication, and letters provided by the researcher. This allowed all students who wished to participate the ability to do so without the potential barriers that are caused by requiring parental consent for each participant 16 years of age and older.

Voluntary Participation, Confidentiality, and Anonymity

All participants were informed that their participation in this study was voluntary and that they had the right to withdraw up to the point of handing the questionnaire in without any consequence from their teachers or the school. They were informed that once the questionnaire was handed in, they would not be able to withdraw their questionnaire as it could not be

determined which was theirs. Participants were told to not write or provide any information that could identify them (e.g., their name, friends` names, phone numbers, their school, etc). Participants were not required to sign a consent form and were informed that handing in the questionnaire indicated their consent to participate in the study. Although information would be reported, the students were assured any information would be in summative form and would not identify specific responses that could identify a particular student. Finally, the design of the questionnaire package was such that students would not be able to determine who completed it and who did not. The survey was single-sided with two cover pages. There was also an activity booklet provided that students could work on if they had chosen not to participate.

Participants

Participants of this study were from large high schools belonging to large public and Catholic school divisions in Saskatchewan. Two of the participating high schools were from the large public school division and one participating high school was from the large Catholic school division in Saskatchewan. In total, all three participating schools were sampled. Participants were 500 grade ten, eleven, and twelve students. Those students who were 16 years of age or older were selected to address the gap in the literature and research on adolescent cyberbullying. These primarily grade eleven and twelve students were selected to explore cyberbullying with their unique perspectives.

Measurement Instrument

Participants completed an anonymous paper pencil questionnaire that was composed of survey questions from previous Canadian students (Beran & Li, 2005; Cochrane, 2008; Li, 2006, 2007; Lines, 2007). The primary model for the questionnaire was Cochrane's (2008) Student Survey as revisions were previously made to existing questionnaires used by other researchers.

Cochrane's (2008) revisions "accurately reflect current trends in computer use by Canadian students" (p. 54). These revisions were done to ensure the questions that explored various frequencies were more precise. The studies done previous to Cochrane (2008) had broader answer stems (i.e., rare, 1-3 times per month, or over 4 times per month) which were not appropriate to reflect current internet and technology use (Media Awareness Network, 2005; Statistics Canada, 2006). To reflect this use, additional answer stems "1-3 times a week", "4-7 times a week" and "daily" were included in this study. As per Cochrane's (2008) survey, numbers were used to describe academic achievement (i.e., above average was followed by (80% or higher), average was followed by (60% to 79%), and below average was followed by (below 60%) to create a more objective, standardized answer stem. In addition, questions that were deemed to be inappropriate for the age of the students sampled were omitted. An example of this type of question was "Most of the time I am supervised when I use a computer". Several answer stems were removed as well to allow the students sampled more freedom to express their opinions. An example of this was "What do you think teachers or other school personnel can do to stop cyberbullying" instead of simply providing a checklist of options. Finally, questions specific to the sample population were created. For example, the questions about the number of hours the students spend online, texting, or on social networking sites were added specifically for the adolescent population. As well, the additional questions about use of cell phones and social networking sites were added to reflect the importance of these tools for social interaction (Brown, et al., 2006; Chibbaro, 2007; Katzer et al., 2009; Mason, 2008; Patchin & Hinduja, 2006; Raskauskas & Stoltz, 2007; Shariff & Gouin, in press; Smith et al., 2008).

In all, the questionnaire was composed of 40 items divided into four main areas: students' demographic data, experiences with bullying (bullying other people and being bullied),

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experiences with cyberbullying (being cyberbullied, cyberbullying other people, witnessing cyberbullying, and preventing cyberbullying), and additional views on bullying or cyberbullying See Appendix D for a copy of the questionnaire that was used in the current study. A definition for bullying (Coy, 2001) and for cyberbullying (Li, 2007) were provided on the second page of the questionnaire to ensure that all students sampled would have a clear understanding of their meanings. Contact information for several helping agencies was provided (i.e., Kids Help Phone) at several times throughout the information form, questionnaire, and activity booklet for students to utilize if they needed further support. Activities were also provided for students to work on if they did not participate in the survey that they could keep (i.e., Sudoku puzzle, or crossword search). See Appendix D for the activity package provided to participants.

Primarily closed-ended and several open-ended questions were used throughout the questionnaire. Closed-ended questions were used to obtain information about student demographics. The closed-ended questions were predominantly utilized to explore experiences with cyberbullying and the relationship between the various experiences and important variables. The open-ended questions were used to learn additional information about students' perception on the ability of adults to prevent cyberbullying. Also, the open-ended questions allowed students to provide valuable information on their views of both bullying and cyberbullying. A Likert scale of "Never (0)" to "Almost Always (5)" was used to rate emotional and behavioural responses to cyberbullying.

Survey Administration

Prior to administration of the survey, the researcher contacted each of the three Principals via telephone or email to discuss the questionnaire and its purpose. After this, the researcher met with each principal to determine a time in which the administration of the survey would work

best. After this, permission to survey grade eleven and twelve students was provided by the Principals of the three high schools. The grade eleven and twelve students were not required to have their parents sign consent forms (i.e., passive consent) to allow all students to answer the questionnaire. The simple language used in the questionnaire and the verbal delivery of the information form prior to the completion of the questionnaire helped to ensure that participants fully understood the purpose of the cyberbullying questionnaire. Principals consulted with classroom teachers as to appropriate times to administer the questionnaire.

Immediately prior to the completion of the questionnaire, the students were provided a brief explanation of the questionnaire and the important points within the information form were covered. These included students being informed that they were not required to complete the questionnaire, that they may discontinue at any point while completing the questionnaire, that any personally identifying information should not be provided, and that their responses would remain anonymous. Students were also informed that completion of the questionnaire was their consent to participate in the study. See Appendix D for the complete package provided to participants.

The researcher administered the paper pencil questionnaire during a regularly scheduled special class period. Most students completed the questionnaire within 15 minutes and all students completed it within 20 minutes. During completion of the survey, students were reminded not to discuss their responses or to look at other students' questionnaires to help ensure participant confidentiality. Once finished, the questionnaires were collected by the researcher or the students handed their own survey in. Each booklet was then randomly number from 1 to 500 and placed in an envelope that had the same number. The questionnaires were not numbered

until the entire school had been surveyed. Additionally, none of the questionnaires were removed from their respective envelopes until all 500 surveys had been administered.

Analysis

Preliminary Analysis

The data collected from the questionnaire was analyzed using the 2009 edition of the Statistical Package for the Social Sciences (SPSS). Each possible answer stem was coded into the SPSS program. All data was entered exclusively by the researcher. The participants' responses were then entered. To ensure accuracy, once all responses were coded and entered, the data was checked by the researcher for errors in data entry, outliers, and for any missing data. This included comparing the original questionnaires to the SPSS data file to check for any researcher errors in entry. One-hundred percent verification was conducted through the methods checking plausible means and standard deviations, out-of-range values, in checking for outliers and by examining the descriptive statistics of this large data set (Tabachnick & Fidell, 2007).

Dealing with missing data. Examining the data for missing points as a result of missing a response, entering the data incorrectly, or from participant error is extremely important as missing data is one of the challenges faced in data analysis (Tabachnick & Fidell, 2007). Two ways researchers deal with missing data is by: running the analysis with estimates of the missing values then running the analysis without the estimates; or, by leaving the values as missing when they are randomly distributed and account for less than 5% of total values (Tabachnick & Fidell, 2007). Both of these methods were utilized in the current study.

Methods of Analysis

Participants' experiences with bullying and cyberbullying were examined using descriptive and inferential statistics. The questionnaire was primarily categorical in design. As

such frequency distributions were used in the descriptive analysis. Descriptive statistics provide a comprehensible picture of the questionnaire data (Tabachnick & Fidell, 2007). Additionally, conclusions can be gathered from inferential statistics (Tabachnick & Fidell, 2007). The non-parametric variables in the study were inferentially analyzed using Chi-Square Test for Independence to help determine if significant differences between groups of participants existed, and the Pearson Product Moment Correlation to help determine if the relationships between certain variables were significant (Tabachnick & Fidell, 2007). Finally, for the few data values that were continuous, Independent Samples t-Tests and One-Way ANOVAs were used to help determine if differences between variables were significant (Tabachnick & Fidell, 2007).

Level of statistical significance and power. An alpha level of 0.05 (5%) was utilized in determining statistical significance. The level of significance chosen was to ensure an appropriate assessment of the relationships among variables of interest based on the results. An alpha level of 0.05 (5%) is balance between a stringent statistical significance level of 0.01 (1%) and the more generous level of 0.10 (10%). Alpha levels of 0.01 are employed when predicting relationships among variables and utilizing treatments or interventions (Tabachnick & Fidell, 2007). Alpha levels of .10 may leave interpretation open to implying a non-important relationship is significant (Tabachnick & Fidell, 2007). The use of an alpha level of 0.05 was to even the chances for conducting Type I or Type II errors (Tabachnick & Fidell, 2007).

CHAPTER FOUR: RESULTS

In the first section of this chapter provides descriptions of the response rate and participant characteristics. The second part of the chapter reports the findings of the study as related to the research questions.

Response Rate

Participants were from two large high schools in a large public division in Saskatchewan and from one large high school in a large Catholic division in Saskatchewan. A total of 500 participants in grades 10 through 12 were eligible to participate in the study. Eligibility included 1) being 16 years of age or older, 2) being in the classroom during administration of the questionnaire, and 3) being present at school on the day the questionnaire was administered. There were 320 participants from the two large public high schools and 180 participants from the one large Catholic high school. All data was checked for errors in entry using descriptive statistics, frequency tables, and examining for outliers. Of these 500 participants, 476 or 95.2% responded to the questionnaire. Twenty-four participants were not included in the analysis due to not responding to the questionnaire. Of the 476 that responded to the questionnaire, various participants did not respond to all questions posed in the questionnaire. The pairwise missed responses were not included in the respective analyses.

Participant Characteristics

The various descriptive characteristics of the questionnaire participants are displayed in Tables 4.1 and 4.2. Among the 476 participants analyzed, 53.4% were female and 46.6% were male. The ages of the participants ranged from 16 to 21. Additionally, 77.3% were White, 10.9% were Aboriginal, 8.6% were Asian, 3.4% were Black, 2.1% were Hispanic, and 3.4% identified

themselves as other. While a representative breakdown of ethnicities is provided, the ethnicities were not further analyzed in this study.

Almost all of the participants were in grade 11 (47.7%) or grade 12 (48.1%). Only 4.2% of participants were in grade 10. Half of the participants self-reported their grades as being average (50.8%). Of the remaining participants, 38.2% self-reported their grades as being above average and 10.7% self-reported their grades as being below average.

In terms of computer use, over three-quarters of the participants (75.5%) indicated they used computers four times a week or more with daily use of computers was most common with over half (57.6%) of the participants. Virtually all (98.5%) participants indicated that they had a computer in their homes. The majority of participants (95.2%) reported that they used some other form of technology to communicate with their peers. Of the 452 participants who reported which forms of technology they used, the most common devices were types of cellular phones or data devices (e.g., BlackBerry or iPhone) (437 participants or 96.7%), telephones within their homes (66 participants or 14.6%) and entertainment gaming consoles (e.g., Play Station 3 or Xbox) (31 participants or 6.9%). With respect to cell phones or data devices, 90.5% of participants reported that they used texting to communicate with their peers. Additionally, 87.6% of participants indicated that they communicated with their peers over social networks. The most common social network mentioned was Facebook.

Table 4.1: Demographic Profile

Characteristic	Percent of Respondents (n)
Gender	
Female	53.4 (254)
Male	46.6 (222)
Race	
White	77.3 (368)
Aboriginal	10.9 (52)
Asian	8.6 (41)
Black	3.4 (16)
Hispanic	2.1 (10)
Other	3.4 (16)
Grade	
Ten	4.2 (20)
Eleven	47.7 (227)
Twelve	48.1 (229)
Academic achievement	
Above average (80% or higher)	38.2 (182)
Average (60 to 79%)	50.8 (242)
Below average (Below 60%)	10.7 (51)

Note. Some percentages do not add up to 100 due to missing values.
$n= 476$

Table 4.2: Demographic Technology Profile

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Characteristic	Percent of Respondents (n)
Home Computer	
Yes	98.5 (469)
No	1.5 (7)
Frequency of computer use	
Rarely (Less than once a month)	1.7 (8)
Several times a month	6.5 (31)
1 to 3 times a month	16.2 (77)
4 to 7 times a month	17.9 (85)
Daily	57.6 (274)
Use of other technology to communicate	
Yes	95.2 (453)
No	4.8 (23)
Use of texting to communicate with peers	
Yes	90.5 (431)
No	9.5 (45)
Use of Social Networking to communicate with peers	
Yes	87.6 (417)
No	12.2 (58)

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Note. Some percentages do not add up to 100 due to missing values.
_n_= 476

Degree of Bullying and Cyberbullying

Prior to inferential analysis, descriptive statistics were obtained from the data by identifying the prevalence of bullying and cyberbullying (see Table 4.3). Both bullying and cyberbullying were examined as it is known that they share a significant relationship (Beran & Li, 2005; Cochrane, 2008; Li, 2005, 2007; Patchin & Hinduja, 2006). Half (50.0%) of all participants reported that they had been bullied and almost half (44.0%) indicated that they had been cyberbullied. Almost half (49.6%) of all participants also reported that they had bullied other individuals and 31.3% indicated that they had cyberbullied other individuals. Additionally,

the majority of participants (64.5%) reported that they knew of at least one individual who had

been cyberbullied.

Table 4.3: Percentages of Students Involved with Bullying and Cyberbullying

Type of Involvement	Percent of Respondents (n)
Bully	
Yes	50.0 (238)
No	49.6 (236)
Bully Victim	
Yes	53.4 (254)
No	46.4 (221)
Cyberbully	
Yes	31.3 (149)
No	63.4 (302)
Cyberbully Victim	
Yes	44.0 (210)
No	55.7 (265)
Cyberbully Bystander	
Yes	64.5 (307)
No	29.6 (141)

Note. Percentages do not add up to 100 due to missing values.
n= 476

Pearson Product Moment Correlations were run to test the relationships between bullying

and cyberbullying (see Table 4.4). Significant correlations were found between bullying and

cyberbullying which was expected based on previous studies (Beran & Li, 2005; Cochrane,

2008). Significant correlations were also found between bullies and cyberbullies ($r = .463$, p

$<.01$) and between cyberbullies and cyberbully victims ($r = .468$, $p <.01$). There were also

significant correlations between bully victims and cyberbully victims ($r = .383$, $p <.01$), between

bullies and cyberbully victims (r= .327, p<.01), and between bully victims and cyberbullies ($r =$

$.178$, $p <.01$). Finally there was also a significant correlation between bullies and bully victims (*r*

= .300, p <.01). These significant correlations suggest cyberbullying has a strong relationship with bullying. It also suggests that cyberbullying and bullying share a reciprocal relationship. For example, participants who were bullies were more likely to also be cyberbullies.

Table 4.4: The Relationships Between Bullying and Cyberbullying

	n	**Pearson's Correlation**	*p*
Bully and Cyberbully	448	.463*	<0.01
Bully and Cyberbully victim	473	.327*	<0.01
Bully and Bully victim	474	.300*	<0.01
Bully victim and cyberbully	449	.178*	<0.01
Bully victim and cyberbully victim	474	.383*	<0.01
Cyberbully and cyberbully victim	449	.468*	<0.01

* p<0.01.

It is not enough to know that cyberbullying and bullying occurred. It is also important to understand the frequency with which they occurred. The frequency of both bullying and cyberbullying that the participants experienced are reported in Table 4.5. Of those who reported being cyberbullied, over half (56.7%) reported being victimized one to three times. The rest of the cyberbully victims were split between being victimized four to ten times (20.5%) and being victimized over 10 times (22.9%). Those who reported being bullied were more evenly distributed among being victimized one to three times (40.5%), being victimized four to ten times (28.4%) and being victimized over ten times (31.1%).

Of those who reported being a cyberbully, slightly over half indicated they had victimized one to three times (54.7%). The rest of the cyberbullies were split between having victimized four to ten times (21.3%) and having victimized over ten times (24.0%). A similar

pattern was found with those who reported being a bully. The majority indicated they had

victimized one to three times (53.6%) while the rest were split between victimizing four to ten

times (25.9%) and over ten times (20.5).

Table 4.5: Frequency of Cyberbullying and Bullying

Frequency	Percent of Respondents (n)	
	Cyberbully[a]	Cyberbully Victim[b]
1 to 3 times	54.7 (82)	56.7 (119)
4 to 10 times	21.3 (32)	20.5 (43)
Over 10 times	24.0 (36)	22.9 (48)
	Bully[c]	Bully Victim[d]
1 to 3 times	53.6 (128)	40.5 (104)
4 to 10 times	25.9 (62)	28.4 (73)
Over 10 times	20.5 (49)	31.1 (80)

Note. Percentages do not add up to 100 due to missing values.
[a]*n*= 150. [b]*n*= 210. [c]*n*= 239. [d]*n*= 257.

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Characteristics of Cyberbullying

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The characteristics of cyberbullying are important in gaining a greater understanding of

cyberbullying. By whom and with what methods the victims were cyberbullied are investigated,

followed by the methods cyberbullies indicated they used.

Sources of and Methods Used

Sources. Out of the 208 participants that responded to the question inquiring about whom

the cyberbully was, the majority reported that they were victimized by a classmate (51.9%). The

participants almost equally reported that they were victimized by people outside the school

(19.8%), by their friends (17.8%) and by someone whom they did not know (17.6%). Additionally, 2% of the participants reported being victimized by "other". The most common responses indicated they were victimized by friends of their friends and by former or "ex" friends. Note that the percentages do not add up to 100 due to participants' ability to choose more than one response.

Methods victims were cyberbullied by. While it is important to understand who is cyberbullying, it is also important to understand how or via what methods they are committing the acts (see Table 4.6). The majority (61.1%) of the participants reported that they had been victimized via instant messaging (e.g., MSN). The other highest cyberbullying method (54.3%) used was a cell phone. These were followed closely by social networking sites (e.g., Facebook) (48.1%) and via email (40.4%). Three other methods through the use of computers were chat rooms (28.4%), message boards (19.2%) and video sites (e.g., YouTube) (9.1%). A portion (11.1%) of the participants indicated they had been victimized via "other means". Of the twenty-three participants who "chose" other, eighteen specified that they were victimized via online gaming and through the interactive components of video game consoles (e.g., PlayStations or Xbox).

Table 4.6: Frequency of Methods Used to Cyberbully Victims

	Percent of Respondents (n)
Email	40.4 (84)
Chat Room	28.4 (59)
Cell Phone	54.3 (113)
Message Board	19.2 (40)
Instant Messaging	61.1 (127)
Social Networking Sites (e.g., Facebook)	48.1 (100)
Video Sites (e.g., YouTube)	9.1 (19)
Other	11.1 (23)

Note. Percentages do not add up to 100 due to the ability to select more than one response. *n*= 208.

Further analysis using Chi-Square Test for Independence indicated that there were statistically significant differences between method of victimization and gender among victims (see Table 4.7). Males were less likely to report being victimized via email than females were, χ^2 (1, $N = 207$) = 6.739, $p = 0.009$. Females were more likely to report being victimized via cell phones, χ^2 (1, $N = 207$) = 4.703, $p = 0.03$. Males reported that they had been victimized via message boards more often than expected and females reported being victims less often than expected, χ^2 (1, $N = 207$) = 4.389, $p = 0.036$. Females were also more likely to report being victimized via instant messaging (e.g., MSN) than males were, χ^2 (1, $N = 207$) = 6.875, $p = 0.009$. Finally, males were more likely than expected to report being victimized via video sites and females were less likely than expected, χ^2 (1, $N = 207$) = 6.296, $p = 0.012$. Only one significant different between grade level and method of victimization among victims was found. It was with message board attacks, χ^2 (2, $N = 207$) = 8.813, $p = 0.012$. Older victims of

cyberbullying were significantly not likely to report that they had been victimized through

message boards. There were no significant differences between method of victimization and

academic achievement among victims. This indicates that academic achievement does not appear

to play a role in the methods utilized on cyberbully victims in this study.

Table 4.7: Differences of Methods Used to Cyberbully Victims by Gender

By Gender	Percent of Respondents (n)		
	df	Value	Significance
Email	1	6.739	0.009
Chat Room	1	2.282	0.131
Cell Phone	1	4.703	0.030
Message Board	1	4.389	0.036
Instant Messaging	1	6.875	0.009
Social Networking Sites (e.g., Facebook)	1	2.719	0.099
Video Sites (e.g., YouTube)	1	6.296	0.012
Other	19	29.414	0.060

n= 210.

Methods utilized by cyberbullies. Those who indicated they have cyberbullied other

individuals were asked to report which methods they utilized (see Table 4.8). Cyberbullies

indicated that they used cell phones most often (49.0%), followed closely by instant messaging

(46.9%) and social networking (42.9%). Participants also reported that they utilized various

methods over the computer. Computer cyberbullying included email (27.9%), chat room

(26.5%), message board (17.7%), and video sites (10.9%). Similar to the victim reports, 12.2%

of the cyberbullies reported using "other means" to victimize. Of the eighteen that chose other,

seventeen specified that they were victimized via online gaming and through the interactive components of video game consoles.

Further analysis using the Chi-Square Test for Independence indicated that there were no significant differences between method of victimization and grade level among perpetrators. As well, there were no significant differences between method of victimization and academic achievement among perpetrators. There was only one significant difference between method of victimization and gender of the perpetrator. Males reported utilizing message boards to cyberbully more than expected, while females reported utilizing message boards to cyberbully less often than expected, χ^2 (1, $N = 147$) = 5.615, $p = 0.018$.

Table 4.8: Frequency of Methods Used by Cyberbullies

	Percent of Respondents (n)
Email	27.9 (41)
Chat Room	26.5 (39)
Cell Phone	49.0 (72)
Message Board	17.7 (26)
Instant Messaging	46.9 (69)
Social Networking Sites (e.g., Facebook)	42.9 (63)
Video Sites (e.g., YouTube)	10.9 (16)
Other	12.2 (18)

Note. Percentages do not add up to 100 due to the ability to select more than one response. *n*= 147.

Personal Characteristics in Relation to Cyberbullying

Several individual factors were examined to determine their relationship with cyberbullying (see Table 4.9). Gender, grade, and academic achievement are three factors that

are personal to each participant. Frequency analysis of the reported responses indicated that the majority of self-reported cyberbullies and cyberbully victims were females (59.7% and 62.9% respectively). These frequencies were analyzed using Chi-Square Test of Independence and it was found that females are not statistically more likely to self-report being cyberbullies, χ^2 (1, N = 450) = 2.306, p = 0.129. They were, however, more likely to self-report being cyberbully victims, χ^2 (1, N = 475) = 13.322, p < 0.000.

In terms of grade levels, there were only twenty grade ten participants. However ten participants (50.0%) indicated they had cyberbullied and twelve (60.0%) indicated they had been a victim. The frequency analysis indicated that the grade twelve students reported being a cyberbully (50.3%) and in being a victim of cyberbullying (50.0%). Additional analyses were not run on grade levels as the distribution of grade levels among those who reported being cyberbullies or victims of cyberbullying was similar to the entire population sampled. From these descriptive comparisons no significant differences were suggested or suspected.

Academic achievement was the last personal characteristic examined. Almost half (49.7%) of all self-identified cyberbullies reported having average grades. Also, slightly over half (53.3%) of all victims of cyberbullying reported average grades. No additional analyses were run on academic achievement as the distribution of grades among those who reported being cyberbullies or victims of cyberbullying was similar to the entire population that was sampled. From this descriptive comparison, no significant differences were suggested or suspected.

Table 4.9: Personal Factors and Cyberbullying

Characteristic	Percent of Respondents (n)		
	Cyberbully[a]	Cyberbully Victim[b]	Total[c]
Gender			
Female	59.7 (89)	62.9 (132)	53.4 (254)
Male	40.3 (60)	37.1 (78)	46.6 (222)
Grade Level			
Ten	6.7 (10)	5.7 (12)	4.2 (20)
Eleven	43.0 (64)	44.8 (94)	47.7 (227)
Twelve	50.3 (75)	49.5(104)	48.1 (229)
Academic Achievement			
Above Average	36.2 (54)	36.7 (77)	38.2 (182)
Average	49.7 (74)	53.3(112)	50.8 (242)
Below Average	13.4 (20)	9.5 (20)	10.7 (51)

Note. Percentages do not add up to 100 due to missing values
[a]$n= 149$. [b]$n= 210$. [c]$n= 476$.

Technological Factors and Their Use

In line with previous research, the frequency of computer use and access to a computer at home were examined. In addition to existing research, use of other forms of technology, use of texting, and use of social networking was explored. Finally, the number of hours spent utilizing each form of technology were also explored. The descriptive statistics of the technological factors are displayed in Table 4.10.

Overall, the majority of cyberbullies and cyberbully victims reported that they used the computer daily (60.4% and 59.0% respectively). However, Pearson Product Moment Correlations revealed that there were no significant relationships between frequency of computer use and being either a cyberbully or a victim of cyberbullying *(r = .029, p =.267* and r = .027, *p =*

.280 respectively). This means that participants were no more likely to report being a cyberbully or a victim of cyberbullying than those who less frequently used the computer.

Further, the overwhelming majority (96.6% of cyberbullies and 96.7% of cyberbully victims) reported that they utilized other forms of technology to communicate with peers. The most common responses were cell phones or other data devices (e.g., BlackBerry or iPhone), telephones within their homes, and online gaming through consoles (e.g., PlayStation or Xbox) (92.6 %, 16.1%, 10.7% for cyberbullies and 91.9%, 14.8%, 10.5% for victims of cyberbullying, respectively). This was identical to the pattern of the entire population that was sampled which did not suggest any significant cyberbullying differences among those who utilized other forms of technology and those who did not. Also, nearly all of those self-reported as being a cyberbully or a victim of cyberbullying indicated they had computers in their home (99.3% and 97.1% respectively). Again, this pattern was identical to the pattern of the entire population that was sampled which did not suggest any significant differences in cyberbullying between those who had computers at home and those who did not.

Finally, almost all participants indicated that they used texting to communicate with their peers (94.0% for cyberbullies and 91.4% for cyberbully victims). They also reported that the majority also used social networking sites to communicate with their peers (88.6% for cyberbullies and 91.0% for cyberbully victims). Pearson Product Moment Correlation revealed no significant relationships between texting and being either a cyberbully or a victim of cyberbullying ($r = .070$, $p = .068$ and $r = .021$, $p = 322$ respectively). Participants who utilized texting to communicate with their peers were no more likely to report being a cyberbully or a cyberbully victim. There was also no significant relationship revealed between utilizing a social network and cyberbullying others ($r = .013$, $p = .389$) which meant that participants who utilized

a social network were no more like to report being a cyberbully. While a significant relationship was found between utilizing a social network and being a victim of cyberbullying ($r = .098$, $p < .016$) it was a very small relationship and the relationship may not have practical significance. Participants who utilized a social networking site, such as Facebook, were more likely to report being a victim of cyberbullying than those who did not use social networking sites.

Participants also self-reported the number of hours they spent on the computer, the time spent texting, and the time spent on social networking sites per week. On average, the participants spent 12 hours ($M = 11.79$) on the computer with a broad range from half an hour to 125 hours. On average, participants spent almost 30 hours ($M = 29.475$) texting per week. They ranged from half an hour to 170 hours. Finally, participants spent an average of 8 hours ($M = 8.093$) on social networking sites with a range from half an hour to 100 hours. The upper limits of the self-reported ranges are reported as they were written by the participants. It is unclear as to the feasibility of spending these considerable amounts of time engaged with technology. As such the upper ranges should be interpreted with caution.

The amount of time spent with various technologies was analyzed further using an Independent Samples T-test for gender and ANOVAs for grade level and academic performance. There were no significant differences found between length of technology use and gender among cyberbullies. Additionally, there were no significant differences found between amount of time spent online or on social networking sites and gender among victims. There was a significant difference found between amount of time spent texting and gender among victims of cyberbullying (t (155) = -2.101, $p = .037$). Female victims spent more time texting than male victims. There was also a significant difference found between amount of time spent texting and

gender among cyberbullies (t (353) = -3.649, p < .000). It can be determined that female cyberbullies spent more time texting than male cyberbullies.

There were no significant differences found between the amount of time spent on the computer, texting, or on social networking sites and grade level when analyzed using a one-way ANOVA. Nor were there any significant differences found between amount of technology use at each grade level and being either a cyberbully or a victim of cyberbullying. That means that the amount of time spent engaging in the use of various technologies does not differ significantly among the grades of the participants. There were no significant differences found between hours spent on the computer, hours spent texting, or hours spent on social networking sites and academic performance when using a one-way ANOVA. Finally, there were no significant differences found between amount of technology use at each academic level and being either a cyberbully or a victim of cyberbullying. The amount of time spent engaging in technological use does not differ significantly with the self-reported academic achievement of the participants.

Table 4.10: Technological Factors, Use and Cyberbullying

Characteristic	Percent of Respondents (n)		
	Cyberbully[a]	Cyberbully Victim[b]	Total[c]
Frequency of Computer Use			
Rarely	0.7 (1)	1.0 (2)	1.7 (8)
Several times a month	7.4 (11)	7.1 (15)	6.5 (31)
1 to 3 times a week	14.8 (22)	15.2 (32)	16.2 (77)
4 to 7 times a week	16.1 (24)	17.1 (36)	17.9 (85)
Daily	60.4 (90)	59.0 (124)	57.6 (274)
Computer at Home			
Yes	99.3 (148)	97.1 (204)	98.5 (469)
No	0.7 (1)	2.9 (6)	1.5 (7)
Use of Other Technology			
Yes	96.6 (144)	96.7 (203)	95.2 (453)
No	3.4 (5)	3.3 (7)	4.8 (23)
Use of Texting to Communicate			
Yes	94.0 (140)	91.4 (192)	90.5 (431)
No	6.0 (9)	8.6 (18)	7.4 (35)
Frequency of Texting			
Use of Social Networking			
Yes	88.6 (132)	91.0 (191)	87.6 (417)
No	11.4 (17)	8.6 (18)	12.2 (58)
Frequency of Social Networking Use			

Note. Percentages do not add up to 100 due to missing values
[a]$n= 149$. [b]$n= 210$. [c]$n= 476$.

Responses to Cyberbullying

How the participants responded to cyberbullying was examined by asking the students

what they had done about being a victim of cyberbullying, if and why they told anyone, and, if

they did not tell anyone, what their reasons were. Bystanders to cyberbullying were also asked

for their reactions. Lastly, cyberbullying victims were asked about how being a victim of cyberbullying has impacted them.

Reactions of the Victims

Participant reactions are presented in Table 4.11. Two-thirds (66.2%) of all victims of cyberbullying reported that they had told at least one person. The most common person/people told was/were the victim's friend(s) (53.8%) followed by their parents (32.9%). Only 11.0% of cyberbully victims informed teachers and just 9.0% of other adults within the school (e.g., counselors, school administrators) were informed by victims when cyberbullying occurred. The majority (54.8%) of victims took it upon themselves to confront the cyberbully when they were aware of whom the perpetrator was. Almost half (43.4%) of the "other" responses indicated that the victims sought revenge on the cyberbully (11.0% of the entire cyberbully victim sample). The participants did not expand on how they sought revenge. Only 38.6% of victims chose to do nothing about being victimized.

The Chi-Square Test for Independence showed that self-reported academic achievements did not make a significant difference in telling at least one person or in how the victims reacted. Furthermore, the participants' grade levels did not make a difference in telling at least one person; nor in what the victim chose to do after the incident. Statistically, females are more likely than males to tell at least one person about their victimization, χ^2 (1, $N = 210$) = 19.504, $p < 0.000$. Furthermore, females are more likely to tell a friend or a parent about being a victim of cyberbullying than their male counterparts (χ^2 (1, $N = 209$) = 9.359, $p = 0.002$ and χ^2 (1, $N = 209$) = 25.073, $p < 0.000$, respectively).

Reasons for telling or not telling. When asked why the participants chose to tell at least one person they had been victimized, half (50.4%) indicated that they thought it would help.

Almost half (46.8%) of the 139 participants were also confident in their ability to identify the cyberbully or had proof of who the cyberbully was (38.8%). Though not included in the answer stem, many participants specified in the "other" response (94.9%) that they simply wanted someone to talk to (e.g., just wanted someone to talk to). This accounted for 26.6% of all participant responses. However, not all participants chose to tell someone. One-third (33.8%) chose to not tell at least one person. Of these participants, the majority (70.4%) thought it would not help. Many (65.8%) of the participants chose "other" as their response. Though not provided in the answer stem, forty-one of the forty-six participants (89.1%) that chose "other" indicated that they were not bothered by it, did not care about being cyberbullied, and could handle it without telling someone. The other responses, namely, not knowing who the cyberbully was, not being able to handle telling someone, and not having any proof were reported equally (18.6%, 16.9%, 14.1% respectively).

However, the Chi-Square Test for Independence revealed the self-reported academic achievement did not make a difference in the reasons for telling at least one person or not telling anyone. Additionally, grade level did not make a different in the reasons for telling at least one person. Nor did it make a difference in all of the reasons for not telling at least one person. Finally, there were no gender differences in the reasons for telling or not telling at least one person.

Bystander Reactions

Out of the 307 participants, two-thirds (64.5%) indicated they had witnessed an act of cyberbullying. Almost half (43.3%) responded that they tried to get the cyberbully to stop their behaviours, 26.4% responded that they watched but did not participate, and 13.7% left the online environment. A small minority (12.1%) responded that they actually began to engage in

cyberbullying behaviours by participating in the victimization (e.g., they reported joining in by cyberbullying the victim). Additionally, nearly half (39.0% in total) indicated that they told someone about the cyberbullying they had witnessed. Specifically, 22.1% told a friend, 11.4% told a parent, and 5.5% told a teacher. Of those who chose "other" the primary responses were to help the victim (35.8%) or to do nothing (43.4%) (6.2% and 7.5% of total responses, respectively).

When analyzed further, the Chi-Square Test for Independence revealed that only two reactions or behaviours significantly differed. There was a significant difference between the genders of the bystanders and telling a friend; as well as among grade levels and trying to stop the cyberbully from continuing (χ^2 (1, N = 301) = 9.781, p = 0.002 and χ^2 (2, N = 301) = 11.071, p = 0.004, respectively). Males were less likely than expected to tell a friend that they had witnessed cyberbullying than females. Younger students, those in grade eleven, were less likely than those in grade twelve to try and stop the cyberbullying from continuing.

Table 4.11: Reactions to Cyberbullying-Victims and Bystanders

Reactions	Percent of Respondents (n)
Cyberbully Victims[a]	
Did they tell someone	
Yes	66.2 (139)
No	33.8 (71)
What they did	
Confronted the person	54.8 (115)
Told a friend	53.8 (113)
Nothing	38.6 (81)
Told a parent	32.9 (69)
Told a teacher	11.0 (23)
Told an adult at school	9.0 (19)
Other	27.6 (58)
Bystanders[b]	
What they did	
Tried to get the bully to stop	43.3 (133)
Watched but didn't participate	26.4 (81)
Told a friend	22.1 (68)
Joined in	12.1 (37)
Told a parent	11.4 (35)
Left the online environment	13.7 (42)
Told a teacher	5.5 (17)
Other	17.3 (53)

Reasons for Telling or Not Telling

Cyberbully Victims[a]	
Telling[c]	
Thought it would help	50.4 (70)
Knew who the bully was	46.8 (65)
Had proof	38.8 (54)
Other	28.1 (39)
Not Telling[d]	
Didn't think it would help	70.4 (50)
Didn't know who the bully was	18.6 (13)
Couldn't handle telling anyone	16.9 (12)
Didn't have any proof	14.1 (10)
Other	65.8 (46)

Note. Percentages do not add up to 100 due to missing values or because the participants had the ability to select more than one response.
[a]$n= 210.$ [b]$n= 307.$ [c]$n= 139$ [d]$n=71.$

Impact of Cyberbullying

Participants were first asked to briefly assess whether telling at least one person helped (see Table 4.12). The 139 participants reported polarized views on talking to someone about being a victim of cyberbullying. Almost half (42.4%) of the participants reported telling someone to not have any result and less than one-quarter (20.1%) reported telling someone led to an end in victimization. However, of those who did tell someone, almost half (43.2%) reported that it made them feel better about the situation and only 7.2% reported it made them feel worse.

Emotional and beahviroual impact. Possible emotions and behaviours associated with cyberbullying were explored through the use of a ten-question Likert scale. With the exceptions of feeling angry or sad and hurt, most reported never feeling the specific emotions or engaging in the behaviours in question. However, for a greater understanding of the range, Table 4.11 presents all possible responses for each emotion and behaviour. Taking into account "never", the majority of participants responded that they felt anger "many times" (32.2%) and sad and hurt once or twice (28.8%). Not including "never", participants most often reported feeling afraid (22.4%), anxious (22.9%), embarrassed (24.4%), self-blame (18.5%) only once or twice in relation to being a victim of cyberbullying. Again, not including "never" participants reported missing school (10.7%), crying (16.1%), having difficulty concentrating (24.9%) and having marks drop (9.8%) only once or twice as a result of cyberbullying.

In order to determine whether any significant differences existed between gender, among grade levels or academic achievement an Independent Samples t-Test and One-Way ANOVAs were run. Several Independent Samples t-Tests were also run to determine if any significant differences existed between computer use, texting, or using a social network. A sum of the entire ten questions was used for the analyses. No significant differences were found among the grade a

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student was in or their levels of academic achievement. Nor were any significant differences found among using or not using a computer, texting, or using a social network in the amount of impact felt by cyberbullying. It was found that males were significantly less likely to report being affected by cyberbullying than females (t (203) = -2.537, p < .05). Stated in a different way, females are more likely to report being affected by cyberbullying.

The impact of cyberbullying was further examined by grouping the impact variables into two groups—emotional impact and behavioural impact. Again, Independent Samples T-tests and One-Way ANOVAs were run to look at impact with gender, grade level, and academic achievement, and use of other technologies. To determine an emotional impact, feeling afraid, angry, anxious, embarrassed, sad and hurt, and self-blame were summed. To determine behavioural impact, absenteeism, having cried, marks dropping, and having difficulty concentrating were summed. Similar to the results of examining the overall impact, there were no significant differences found among the grade the student was in or their academic achievement. There were also no significant differences found among use of computer, testing or social networking use when examining the impact of cyberbullying. Following the significant overall impact difference for females, females also were more likely to report emotional impact and a behavioural impact on their lives than males were (t (201) = -2.478, p = .014 and t (201) = -2.344, p = .02, respectively). Simply put, females are more likely to report some type of impact on their lives as a result of being a victim of cyberbullying.

Table 4.12: Impact of Cyberbullying

	Percent of Respondents (n)[a]
Cyberbully Victims[a]	
Did telling someone help	
Yes, made me feel better	43.2 (60)
Yes, it stopped the person	20.1 (28)
No, it didn't do anything	42.4 (59)
No, it made me feel worse	7.2 (10)

	Percent of Cyberbully Victims (n)[b]				
	Never	Once/ Twice	Few Times	Many Times	Almost Everyday
Emotions					
Afraid	56.1 (115)	22.4 (46)	10.2 (21)	3.9 (8)	6.3 (13)
Angry	9.3 (19)	22.0 (45)	25.9 (53)	32.2 (66)	10.7 (22)
Anxious	43.9 (90)	22.9 (47)	20.0 (41)	7.3 (15)	4.9 (10)
Embarrassed	42.4 (87)	24.4 (50)	19.0 (39)	7.3 (15)	5.9 (12)
Sad and Hurt	26.3 (54)	28.8 (59)	26.8 (55)	9.8 (20)	7.3 (15)
Self-blame	58.5 (120)	18.5 (38)	8.3 (17)	7.3 (15)	6.3 (13)
Behaviours					
Absenteeism	75.1 (154)	10.7 (22)	7.8 (16)	2.4 (5)	2.9 (6)
Cried	54.6 (112)	16.1 (33)	10.2 (21)	8.7 (18)	9.3 (19)
Difficulty Concentrating	39.5 (81)	24.9 (51)	17.1 (35)	10.7 (22)	6.8 (14)
Marks dropped	73.2 (150)	9.8 (20)	7.8 (16)	4.9 (10)	3.4 (7)

Note. Percentages may not add up to 100 due to missing data or the ability to select more than one response.
[a]$n=139$. [b]$n=205$.

Adult Connection

The final research question helped access participants' perceptions on adult awareness of and ability to provide help for victims of cyberbullying. Additionally, participants were asked for their opinions on what adults could potentially do to stop cyberbullying from occurring.

Adult Awareness

There were fewer participants who responded to the questions that asked about their perceptions of adult awareness. Only 416 participants completed this question; of this sample 66.3% believed that adults were aware of cyberbullying and tried to stop it from occurring again or at all. Fortunately, of the 66.3% (276 participants), slightly over half (54.7% or 151 participants) believe that the attempts adults take to try to stop cyberbullying are helpful.

Participants' Prevention Suggestions

What school personnel can do. Overwhelmingly, the participants felt that there was nothing that could be done. They felt that teachers and other school personnel could not stop cyberbullying. Additionally, the participants strongly emphasized that school involvement would only serve to make the situation worse. However, several themes emerged based on the suggestions given. The participants felt that more awareness was needed on cyberbullying which could be attained through education on cyberbullying. Moreover, participants believed that there needed to be proper action taken and appropriate consequences when the schools did become aware of incidents of cyberbullying. A popular suggestion was for schools to limit the amount of time students are able to use computers and to block sites that could potentially lead to cyberbullying (e.g., Facebook, MSN, and other sites primarily used for socialization). Finally, a powerfully simple suggestion was to actually speak with the victims, the cyberbullies, and their parents.

What parents can do. Similar to the perception of what school personnel can do, the overwhelming majority indicated that there is nothing that parents can do to prevent cyberbullying. Additionally, it was reported that, any parent involvement, real or perceived, would only make situations worse. The same suggestions of monitoring computer use, providing

education on cyberbullying, and having actual consequences for the cyberbullying behaviours were mentioned. As well, the suggestion of engaging in conversation with the people involved was emphasized. However, an even stronger suggestion was for parents to engage in conversation with their child(ren). This was repeatedly suggested as a simple way to begin navigating the potentially difficult topic of cyberbullying or bullying in general.

CHAPTER FIVE: DISCUSSION

This chapter provides a discussion of the research results. The purpose and procedures of the research are summarized. A comparison of the findings of the study with prior research is provided. Finally, the importance of the research, limitations of this study, and suggestions for future research are offered.

Purposes and Procedures

The primary aim of this research was to explore cyberbullying amongst adolescents in a large urban centre in Saskatchewan. There is a need for research to better understand adolescent cyberbullying. This insight can be obtained through research that leads to increased awareness on cyberbullying, victimization, creation of effective intervention programs, and implementation of successful deterrent programs. Specifically, this study investigated the following questions:

1. What was the extent of cyberbullying among grade ten, eleven and twelve students in urban Saskatchewan?

2. What was the relationship between traditional bullying and cyberbullying?

3. What did the experiences of cyberbullying look like (both as a perpetrator and as a victim)? How were the victims impacted?

4. How did individuals respond to cyberbullying (as a bystander)?

5. What were the students' opinions on adult responses to cyberbullying?

An anonymous paper and pencil questionnaire was utilized to answer the preceding questions. Students from grades 10 through 12 (primarily 11 and 12) responded to a questionnaire that was adapted from the surveys utilized by previous Canadian researchers (Beran & Li, 2005, Cochrane, 2008; Li, 2006, 2007; Lines, 2007). In total, 500 potential participants from one large Catholic and one large public school divisions in Saskatchewan were

invited to participate. Of those 500 eligible participants, 476 or 95.2% completed the questionnaire. Participants were limited to those who were in grade 11 or 12 classes (i.e., those who were 16 years of age or older) and were present on the day the questionnaire was given to the students.

After collecting the questionnaire data, it was entered into the SPSS (2009) statistical package and checked by the researcher for accuracy. To answer the research questions, descriptive and inferential analyses were utilized. The questionnaire variables were primarily of a categorical nature which involved frequency distributions to explore prevalence rates, Chi-Square Test for Independence to determine if significant differences existed among groups of participants, and the Pearson Product Moment Correlation to explore if significant relationships existed among certain variables. Finally, for significant differences between variables with continuous data, Independent Samples t-Tests and One-Way ANOVAs were utilized. The alpha level was set at 0.05 for all analyses.

Findings

The key findings from this study include:

1. Almost half of all participants reported that they had been a victim of cyberbullying and almost one-third of all participants indicated they had been a cyberbully. Two-thirds of the participants admitted to knowing at least one other individual who had been a victim of cyberbullying. The majority of cyberbully victims and cyberbullies indicated they had been involved with cyberbullying one to three times. Both cyberbully victims and cyberbullies were then split on being involved four to ten times and being involved over ten times.

2. Half of all cyberbully victims indicated they had been victimized by a classmate. Cyberbully victims were then split on being victimized by someone outside of the school, a friend, and by someone they did not know. The most commonly utilized method of cyberbullying was instant messaging, which was closely followed by victimization through a cell phone (i.e., text messaging). The other two most common methods were through social networking sites (i.e., Facebook) and email.

3. Significant differences in victims' experiences with cyberbullying were found between gender, grade levels, and among levels of academic achievement. No significant correlations were found between cyberbullying involvement and gender, grade level, academic achievement, frequency of computer use, use of texting, and use of social networking sites. However, when examining the number of hours spent texting there was a significant difference in the amount of time spent texting and female participants' experiences with both being a cyberbully and a cyberbully victim.

4. Two-thirds of all cyberbully victims reported telling at least one person. The majority of the individuals told were friends. One-third of victims indicated that they had told a parent. However, the majority of victims indicated they would not report their incident to an adult. Of those who had witnessed an act of cyberbullying (i.e., bystanders), almost half reported trying to stop the incident or informing another individual about the cyberbullying that occurred.

5. Of those who told at least one person, the majority believed that telling someone, who was most often a friend, was not helpful and caused no change in the cyberbullying. Two-thirds of participants indicated they believed that adults were aware of

cyberbullying and almost half of those believed that efforts to prevent cyberbullying were helpful.

6. A variety of emotional responses were reported by the participants (i.e., anger, sadness, embarrassment, etc). Females were more likely to report being negatively impacted by cyberbullying victimization. Also, females were more likely to report being a victim of cyberbullying.

7. Unfortunately, the overwhelming majority of participants reported that they felt adults could do very little to stop cyberbullying from occurring. Participants felt that the adult prevention of and effectively dealing with cyberbullying was very minimal. The general consensus was greater education and discussion about cyberbullying is needed and there needs to be stronger consequences for cyberbullies.

Extent of and Relationship Between Bullying and Cyberbullying

    Extent of cyberbullying. The first research question explored the extent of cyberbullying with an adolescent population. The percentage of participants who indicated being involved with cyberbullying as victim or perpetrator was explored. The prevalence of cyberbullying was also examined. Previous research on cyberbullying indicates that one-quarter of grades 7 to 9 students self-reported being a victim of cyberbullying and one in five self-reported being a cyberbully (Beran & Li, 2005; Li, 2005, 2006, 2007; Patchin & Hinduja, 2006). A current study found that half of grades 7 to 9 students self-reported being a victim of cyberbullying and one-third reported being a cyberbully (Cochrane, 2008). This indicates a rising trend in cyberbullying incidents. All research indicates that over half of middle years students have known at least one person who was a victim of cyberbullying (Beran & Li, 2005; Cochrane, 2008; Li, 2006, 2007).

Though these studies examined younger populations, these results are important to demonstrate the trend of cyberbullying as traditional bullying research has shown that the verbal and non-physical forms of bullying remain consistent into the adolescent period of development (Carney & Merrell, 2001; Craig & Pepler, 1996; Mason, 2008; Pepler, et al., 2005; Perry & Kusel, 1998; Raskauskas & Stoltz, 2007). Cyberbullying provides a possible avenue to transition from physical bullying to other forms of bullying. Specifically, this study found that the extent of involvement with cyberbullying remained similar to those found in the previous research. Almost half (44.0%) of the grades 10 to 12 students self-reported being a cyberbully victim and one-third (31.3%) reported being a cyberbully. Furthermore, two-thirds (64.5%) reported that they knew at least one person who was a victim of cyberbullying. Though less than the highest rates found, these results are consistent with the range of involvement in cyberbullying found in other research. This study supports the concern about the high prevalence of traditional bullying and cyberbullying in Canada (Craig, et al., 1998; Craig & Pepler, 2007). It also supports the research that indicates victimization is a pervasive problem not only in elementary schools but also in some high schools in an urban Saskatchewan centre in Canada (Diamanduros, et al., 2008; Fitzpatrick, 2008; MacFarlane, 2007; Stover, 2005). Finally, this study suggests that the extent of cyberbullying remains consistent from middle years to high school.

Prevalence of cyberbullying. Research conducted prior to this study have reported that victims of cyberbullying were directly involved only a few times (Beran & Li, 2005; Cochrane, 2008; Li, 2005, 2006, 2007). Similarly, this study found that the majority of cyberbullying involvement for victims (56.7%) and bullies (54.7%) occurred one to three times. Of some concern is that for the rest of the participants there was a split of involvement between four to ten times and over ten times. This suggests that for one-quarter of the students there was substantial

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involvement with cyberbullying. The prevalence of being a bully was similar to being a cyberbully with half (53.6%) of the students reporting being a bully one to three times. However, there were fewer participants that self-reported being a victim of bullying (40.5%) one to three times. This may indicate that there are more bullies who target fewer people.

Relationship between bullying and cyberbullying. The second research question explored the extent of bullying and the relationship between traditional bullying and cyberbullying. The percentage of students involved with bullying as victim or perpetrator was investigated as there is an indication in the literature that bullying and cyberbullying are related (Beran & Li, 2005, Cochrane, 2008; Li, 2005, 2006, 2007; Patchin & Hinduja, 2006). Previous research has shown that one-half to two-thirds of grades 7 to 9 students self-reported being a victim of bullying and one-third to half self-reported being a bully (Cochrane, 2008; Li, 2005, 2006, 2007). With respect to this study, the trend of bullying was again consistent with the previous research. Half (50.0%) of the adolescent participants indicated that they had been a victim of bullying and just over half (53.4%) indicated they had bullied.

When examining the relationship between bullying and cyberbullying, the findings of the current study remains consistent with the research found with middle years students (Cochrane, 2008; Li, 2007). Furthermore, this study indicates that the relationships between bullying and cyberbullying are very similar with the recent middle years research conducted in Saskatchewan (Cochrane, 2008). This again substantiates the research that cyberbullying continues into adolescents as a new means of victimizing (Björkqvist, 1994; Chibbaro, 2007; Espelage & Swearer, 2003). Specifically, significant correlations were found between bullies and cyberbullies ($r = .463$, $p < .01$), cyberbullies and cyberbully victims ($r = .468$, $p < .01$), bully victims and cyberbully victims ($r = .383$, $p < .01$), bullies and cyberbully victims ($r = .327$, p

<.01), and bully victims and cyberbullies ($r = .178$, $p < .01$). Finally there was also a significant correlation between bullies and bully victims ($r = .300$, $p < .01$). These correlations provide support for the relationships between bullying and cyberbullying. There appears to be a relationship that may suggest that those who are victimized are more likely to become a perpetrator. As these findings are similar to the existing research, it suggests that the relationship is not weakened in adolescence. Additionally, the findings emphasize the importance of understanding both bullying and cyberbullying in adolescence.

Overall. This study, with the support of previous research (Beran & Li, 2005, Cochrane, 2008; Li, 2005, 2006, 2007; Patchin & Hinduja, 2006), indicates that a large majority of students have been involved in cyberbullying as a victim, perpetrator, or a bystander, or in some combination of all three. There is also the indication that the extent and rates of cyberbullying in adolescence does not drop significantly. In fact, it remains fairly constant through to grade 12. This suggests that the students are utilizing the newest technologies to remove themselves from the physical aspects of bullying while maintaining the non-physical aspects which are just as detrimental, if not more so, than the physical bullying (Björkqvist, 1994; Chibbaro, 2007; Espelage & Swearer, 2003). This is one of few North American studies that have explored adolescent cyberbullying. In addition, as technological use increases, the amount of exposure to cyberbullying at all ages is expected to increase. This is especially important in adolescence where cyberbullying is deceptively not appearing as dangerous as it has the potential to become. As such, additional research is encouraged to examine this growing issue further.

Characteristics (Experiences) of Cyberbullying

The characteristics of cyberbullying were examined to answer the research question that involved exploring the experiences of cyberbullying. The sources and methods, personal characteristics, and technological factors were explored for both the victim and perpetrator.

Sources. Prior research has found that the majority of cyberbullying victimization occurs by school peers (Cochrane, 2008; Li, 2005, 2007). This study found that half (51.9%) of all participants indicated they had been cyberbullied by a classmate or school peer. This is lower than the recent research in Saskatchewan where two-thirds (66.8%) of students indicated they were victimized by a classmate (Cochrane, 2008). This difference could be explained by the equal split between victimization from people outside of school (19.8%), by their friends (17.8%), and by someone they did not know (17.6%). In adolescence, individuals are expanding their interpersonal networks and acquainting themselves with a greater number of individuals than in childhood (Arnett, 2004; Berk, 2004; Besag, 2006; Chisholm, 2006; Hinduja & Patchin, 2008; Raskauskas & Stoltz, 2007). Thus, it is understandable that there are increased cyberbullying incidents by those other than classmates which can result in fewer incidents perpetrated by classmates. Adolescents' social networks do not rely solely on school-peer contact as it can in childhood (Pellegrini & Bartini, 2000). In comparison to Cochrane's (2008) research, there are fewer individuals who did not know their cyberbully (28.6% vs. 17.6% in the current study). This could be the by-product of the spread of information that occurs at a rapid pace in adolescence (Chisholm, 2006; Katzer et al., 2009; Raskauskas & Stoltz, 2007). Rarely does a high school incident occur between two individuals that does not become instant rumour mill gossip. As a result, the victim of cyberbullying could easily learn who their tormenter was.

Methods. Equally important was to understand how individuals were cyberbullied. Previous research found that the majority of students utilized multiple technologies to commit cyberbullying with the most popular mediums being instant messaging (e.g., MSN), email, and social networking sites (e.g., Facebook) (Beran & Li, 2005; Li, 2005, 2007). Recent research in Saskatchewan also found that cell phone use through text messaging as a means of cyberbullying was increasing with over one-third of victims and perpetrators indicating its involvement (Cochrane, 2008). Utilization of multiple methods was also indicated in the current study for both cyberbullies and victims of cyberbullying with the most popular self-reported methods being instant messaging for the victims (61.1% for cyberbully victim and 46.9% for cyberbullies) and cell phones for the cyberbullies (49.0% for cyberbullies and 54.3% for cyberbully victims). The most common methods included social networking sites (reported by 48.1% of cyberbully victims and 42.9% of cyberbullies), email (reported by 40.4% of cyberbully victims and 27.9% of cyberbullies), computer chat rooms (reported by 28.4% of cyberbully victims and 26.5% of cyberbullies), internet message boards (reported by 19.2% of cyberbully victims and 17.7% of cyberbullies), and video sites (e.g., YouTube) (reported by 9.1% of cyberbully victims and 10.9% of cyberbullies). The increased utilization of cell phones as a means of cyberbullying can be explained by the constant use of cell phones as the primary means of communication among adolescents, which, is unsurprising considering 78.0% of Saskatchewan households have at least one cell phone second only to Alberta (Statistics Canada, 2008).

New data emerged from the current study that has not previously been mentioned in the research. Participants were given the option of choosing "other" and specifying a method of cyberbullying. The majority that chose "other" (chosen by 78.5% of cyberbully victims and

94.4% of cyberbullies) self-reported online gaming and the interactive components of video game consoles (e.g., PlayStation or Xbox) as methods by which cyberbullying occurred. This method of cyberbullying may be gaining in popularity as the preference for online games is increasing (e.g., World of Warcraft). This is an area that warrants further research to explore the relationship between online gaming and cyberbullying.

Personal characteristics in relation to cyberbullying. Three sets of personal characteristics, gender, grade level, and academic achievement were examined by the researcher for their relationships to cyberbullying. Similar to previous studies (Cochrane, 2008; Kowlaski & Limber, as cited by Kowlaski et al., 2008; Li, 2005, 2007), the current study found that females were statistically more likely to self-report being a victim of cyberbullying than their male counterparts were. Specifically, 62.9% of females self-reported being a victim of cyberbullying. At the high school level, this increase in female reporting could be related to relational aggression aspect of cyberbullying which can be considered more appealing to females who do not engage in the physical aspects of traditional bullying (Beran & Li, 2005; Björkqvist, 1994; Chibbaro, 2007; Espelage & Swearer, 2003; Raskauskas & Stoltz, 2007; Smith et al., 2008). Furthermore, the current study was also similar to previous research in finding no significant gender different in the self-reporting of being a cyberbully (Cochrane, 2008; Li, 2005, 2007). Taken together, this is further evidence to support that females are more likely to report being victims of cyberbullying and that males and females are equally likely to self-report being a cyberbully.

Grade level was also examined. Taken as a whole, high school students are reported to more frequently engage in cyberbullying (Cochrane, 2008; Media Awareness Network, 2005; Patchin & Hinduja, 2006; Smith et al., 2008). However, when examined separately, the

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difference between grades 10, 11 and 12 were not seen as deviating from the entire population sampled. This suggests that the difference is derived from comparing the high school population to middle years or elementary school populations and not from comparing individual grades within the high school system.

Lastly, academic standing was examined. The results of the current study are similar to the results found in previous research (Cochrane, 2008; Li, 2005, 2007). In the current study half of those involved in cyberbullying (53.3% of cyberbully victims and 49.7% of cyberbullies) reported average grades. This was similar to the entire population sampled and with those of previous research. Thus, this further supports the claim that academic standing is not associated with cyberbullying involvement (i.e., an increased or decreased involvement).

Technological factors. Technology use with an adolescent population in relation to cyberbullying was explored through frequency of computer use and access to a computer. To build on existing research, use of other forms of technology, namely, use of texting, and use of social networking were explored. Further, the number of hours utilizing each form of technology was also examined.

Over half (57.7%) of all participants indicated they used a computer daily for an average of 12 hours a week with a range from half an hour to 125 hours. Furthermore, 59.0% of cyberbully victims and 60.4% of cyberbullies indicated they used a computer daily. These are slightly higher than previous research in Saskatchewan (47.5% of all students, 52.6% of cyberbully victims and 51.8% of cyberbullies) (Cochrane, 2008). This can partially be accounted for the increased expectations of high school students to actively research information as well as to present assignments in a polished form utilizing all available technology. An additional consideration is the increased expectations of connecting with peers via social networking sites.

Perhaps as a result of the increased overall use, there were no significant relationships found between cyberbullying involvement and computer use. The results in the current study follow the results found in Cochrane's (2008) research. Again, the upper limits of the ranges should be interpreted with caution as the feasibility of these self-reported ranges could not be verified any further.

In building on the suggestion from Cochrane's (2008) research to explore specific forms of technology and their relationships to cyberbullying involvement, the current study specifically examined cell phone and social networking use. Nearly all participants (95.4%) self-reported using other forms of technology to communicate with peers. Almost all (96.6% of cyberbullies and 96.7% of cyberbully victims) also self-reported using other forms of technology. The majority of participants indicated the other form of technology to be a cell phone or data device (e.g., BlackBerry or IPhone). This was identical to the entire population sampled and was not indicative of any significant difference among those who utilized another form of technology and those who did not in terms of cyberbullying involvement.

More specifically, 90.5% of all participants use texting to communicate with peers. Participants engaged in texting an average of 30 hours per week with a range from half an hour to 170 hours. Slightly higher rates were found for cyberbullies (94.0%) and cyberbully victims (91.4%). However, no significant relationship was found. This indicates that engaging in texting does not increase or decrease the likelihood of cyberbullying involvement. In the current study, 87.8% of participants utilized social networking sites spending an average of 8 hours a week with a range from half an hour to 100 hours. Again, slightly higher rates were found for cyberbullies (88.6%) and for cyberbully victims (91.0%). While no significant relationship was found between social networking use and cyberbullying others, a significant relationship was

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found between social networking use and being a victim of cyberbullying ($r = .098$, $p < .016$). However, the relationship was very small and may not be indicative of a practical relationship existing between who are on social networking sites being at a greater risk of cyberbullying involvement than those who are not. Given the recent media and subsequent tragic incidents (e.g., Phoebe Prince) surrounding social networking sites and cyberbullying, further exploration is needed in this area as it has potential to generate promising research.

When exploring the number of hours spent engaged with various technological mediums, only one result was significant in the current study. There was a significant relationship found in the amount of time spent texting and gender for both cyberbullies ($t (353) = -3.649$, $p < .000$) and victims of cyberbullying ($t (155) = -2.101$, $p = .037$). This suggests that those who spend greater amounts of time texting are more likely to report being a cyberbully and a victim of cyberbullying. No other significant relationships were found between the amount of time spent engaged with various technological mediums and grade level or academic achievement.

Finally, it was found that nearly all the participants (98.5%) had access to a computer at home. This was similar to those involved with cyberbullying (99.3% for cyberbullies and 97.1% for cyberbully victims). As this was similar, it was not suggestive of any significant differences in cyberbullying between those who had a computer at home and those who did not. Additionally, this finding was similar to the previous Saskatchewan study (Cochrane, 2008). Furthermore, 75.8% of Saskatchewan homes have a computer (Statistics Canada, 2009) and of those who may not have access at home, 90% of Canada's school based computers have internet access (Statistics Canada, 2004). Thus, the likelihood of having access at one point everyday is high and is not a strong measure for a relationship with cyberbullying involvement.

Responses to Cyberbullying

The reactions of the victims and bystanders were explored in answering the fourth research question. These responses along with the emotional and behavioural impacts of the victimization were examined.

Victim reactions to cyberbullying. Previous research found that the majority of participants chose not to tell an adult about their cyberbullying victimization (Cochrane, 2008; Li, 2006, 2007). Furthermore, the majority of participants chose to tell a friend, do nothing, or confront the cyberbully (Cochrane, 2008). Females were also found to be more likely than their male counterparts to tell at least one person about being victimized and that person was more likely to be an adult or friend (Cochrane, 2008; Li, 2006). Of those who chose not to tell at least one person, the majority indicated they did not feel anyone could help make the situation better and would even make the situation worse (Cochrane, 2008; Lines, 2007).

In the current study, two-thirds (66.2%) of all cyberbullying victims told at least one individual. The primary person victims confided in were friends (53.8%); followed by parents (32.9%). Friends may be the most common confidant as one-quarter (26.6%) of victims simply wanted someone to talk to. Unfortunately, only 11.0% confided in a teacher and even fewer (9.0%) informed another adult at school (e.g., Counsellor or Administrator). This happened when the victim knew who the cyberbully was (46.8%) or had proof (38.8%). A larger group of participants indicated they would talk to someone other than a friend than what has been found in previous research. This could be explained by the difference in ages of the participants in the current study as they may be more open to talking an adult. However, additional research is needed to explore this finding. The majority (54.8%) of victims took it upon themselves to confront the cyberbully. This is substantially larger than those in the previous Saskatchewan

study where 35.7% chose to confront the cyberbully (Cochrane, 2008). Also a large number of participants chose "other" and almost half (43.4%) specified that they would seek revenge on the cyberbully. For both of these findings, the age of the participants may have played a role in the increase in the current study. In addition, adolescent peer groups often discourage 'tattling' and encourage individuals taking charge of their own issues (Arnett, 2004; Berk, 2004; Brown et al., 2006; Chibbaro, 2007; Strom & Strom, 2005). The current research supports this hypothesis. Similar to previous research, one-third (38.6%) of the participants stated that they would do nothing about being a cyberbully victim. The current study also showed that females are significantly more likely than males to tell at least one person they had been victimized, (χ^2 (1, N = 210) = 19.504, $p < 0.000$). Furthermore, females are more likely to tell a friend or a parent about being a victim of cyberbullying than their male counterparts (χ^2 (1, N = 209) = 9.359, p = 0.002 and χ^2 (1, N = 209) = 25.073, $p < 0.000$, respectively).

Of the one-third (33.8%) of cyberbullying victims who did not tell at least one person, the majority (70.4%) thought it would not help which is similar to previous research. Differing from previous research, over half (58.6%) of those who did not tell someone indicated they were not bothered by the incident, did not care, and if wanted to, could handle it alone. A number of participants that indicated they were cyberbullied via online gaming or through the online components of gaming systems (e.g., XBox Live) also reported they did not care or were not bothered by the incidents. It may be that those who are cyberbullied see the incidents as part of the gaming culture. However, this idea requires additional research attention beyond the scope of this study.

Taken together, the current study supports the previous findings (Cochrane, 2008; Li, 2006, 2007; Lines, 2007) that silence is still the most common response to cyberbullying.

Though a large majority in the current study would confront the cyberbully, individuals connected to the victim are still often unaware an incident has occurred. As friends are the most common people told, it is important that education is provided to peers so they are effectively able to support their friends who are victims of cyberbullying (Guan & Subrahmanyam, 2009; Lines, 2007).

Bystander reactions to cyberbullying. The majority of participants in previous studies have known at least one person who has been a victim of cyberbullying (Beran & Li, 2005; Cochrane, 2008; Li, 2005, 2006, 2007). Furthermore, the majority did not tell anyone they had witnessed an act of cyberbullying (Cochrane, 2008; Li, 2006; 2007). In the current study, two-thirds (64.5%) of the participants indicated they had been a bystander to cyberbullying. Encouragingly, almost half (43.3%) reported attempting to stop the cyberbully from continuing with the hurtful behaviours. This is similar to the previous Saskatchewan study where 40.0% of participants indicated trying to stop the cyberbully (Cochrane, 2008). One-quarter (26.4%) of participants reported being true bystanders (e.g., watching it occur without doing anything). While they did not engage in cyberbullying, they also failed to prevent it from continuing. Finally, of those who chose to tell someone what they had witnessed, the majority told a friend (22.1%). As with victims, the proclivity is towards remaining silent on what bystanders have witnessed. Peer education is imperative for this group, as they would be the individuals who are in a position to help the victim by stopping the victimization (e.g., telling the cyberbully to stop, helping the victim leave the online environment, or standing up for the victim) (Chibbaro, 2007; Finn, 2004; Lines, 2007).

Impact of cyberbullying. Research has shown that the emotional impact of cyberbullying can vary greatly from anger, frustration, powerlessness, sadness, fear to loneliness (Beran & Li,

2005; Lines, 2007; Patchin & Hinduja, 2006). Specifically, previous research has found that anger is the most common emotion followed by sadness and hurt when victimized electronically (Beran & Li, 2005; Cochrane, 2008). The current study also found that anger was the most common (32.2%) emotion followed by sadness and hurt (28.8%) when victimized electronically. Taking "never" feeling an emotion or behaviour out of the equation, participants reported being impacted only "once or twice"; otherwise "never" being impacted was reported most often.

Findings suggest that cyberbullying has a stronger impact on females which relates to the understanding that cyberbullying is a form of relational aggression (Beran & Li, 2005; Cochrane, 2008; Patchin & Hinduja, 2006; Raskauskas & Stoltz, 2007; Smith et al., 2008; Ybarra & Mitchell, 2004b). The relationship of cyberbullying with relational aggression could increase the likelihood that females may be negatively impacted by cyberbullying more so than their male counterparts (Björkqvist, 1994; Chibbaro, 2007; Espelage & Swearer, 2003; Mason, 2008; Smith et al., 2008). Overall, in the current study females were more likely to report being negatively affected by cyberbullying victimization than males were (t (203) = -2.537, p <.05). As expected, females were also more likely to report being negatively affected emotionally (t (201) = -2.478, p = .014) and behaviourally (t (201 = -2.344, p = .02) than males were by electronic victimization. With previous findings supported, it is imperative that supports are put in place particularly for females who are more likely to obtain supports and are more strongly affected by each incident.

Adult connection

Finally, the adult connections to adolescent cyberbullying were explored in the last research question.

Adult awareness of cyberbullying. Research has reported mixed results in adult attempts at preventing cyberbullying from occurring or stopping it when informed of an incident with a

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range from under half (Cochrane, 2008) to two-thirds (Li, 2006). The current study is similar to Li's (2006) results as two-thirds (66.3%) of the participants believed that adults were aware of and attempted to stop cyberbullying from occurring again or at all. Just over half (54.7%) of the participants in the current study believed that said efforts were helpful. In the current study participants were also asked if they felt that telling at least one person helped. The responses were split between those who felt it did not help (42.2%) and those who felt better after telling someone (43.2%). This suggests that adolescents may have very divisive viewpoints with respect to their perceptions of cyberbullying prevention and intervention. It is unknown why the current study is not similar to the previous Saskatchewan study. One explanation may be the age of the participants lends to a different perception of adult involvement. However, more research is required in this area.

Participants' prevention and intervention strategies. Overwhelmingly and perhaps unsurprisingly, the majority of participants indicated that they felt there was nothing that school personnel or parents could do to prevent or intervene when cyberbullying occurred. Even more disheartening was the message that any form of adult involvement, actual or perceived, would make the victimization worse. This finding was not surprising as adolescents tend to remain silent rather than risk the possibility of being socially blacklisted (Arnett, 2004; Berk, 2004; Strom & Strom, 2005).

Fortunately, there were preventative and intervening suggestions put forth by participants. This was expected as participants in previous research generated positive examples of change for the current methods utilized in dealing with cyberbullying (Cochrane, 2008). Increased cyberbullying education was suggested as a means of generating awareness on the issue and increasing the likelihood of effective prevention programs. Several participants

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suggested creating a group that focuses on the issues around cyberbullying and provides means of effectively dealing with interpersonal conflicts. Increased education tied to limited free-time access to school computers was seen as one way schools could control the spread of cyberbullying. Beyond academic purposes, school computers do not need to be available to students unsupervised. Surprisingly, participants indicated that there are insufficient consequences for cyberbullying both at school and home. There is a need for greater consequences that are carried out with immediacy. Furthermore, the consequences need to fit the act of victimization for it to be effective. Additionally, participants suggested greater genuine communication between adults and those involved in cyberbullying is a necessity. This simple, yet powerful suggestion is perhaps one that could easily be implemented with minimal support from professionals who regularly deal with personal and interpersonal issues.

Implications for All Involved

The majority of the students surveyed are affected, in some way, by cyberbullying. Cyberbullying remains a significant part of high school culture and adolescents need to be given the tools to effectively deal with the issues that arise. There are numerous prevention and intervention strategies that have been developed for dealing with traditional bullying. However, few truly effective strategies have been developed for dealing with cyberbullying. The results of the current study indicate several prevention and intervention strategies that would be transferable to dealing with adolescent cyberbullying. The strong relationship between traditional bullying and cyberbullying lends to the understanding that the strategies that have been effective for dealing with bullying are likely to be effective in dealing with cyberbullying.

Education and Awareness

Education on cyberbullying is especially important for high school students as often this education does not occur (Media Awareness Network, 2005). Given the extent of high school students' involvement in cyberbullying, all students would benefit from more education and increased awareness of cyberbullying. Numerous students have the incorrect belief that cyberbullying is not as harmful as traditional bullying. This is suggested by the self-reports of those who did not try to stop cyberbullying or from those who did not care that they were cyberbullied. Students and adults need to become aware that cyberbullying has considerable and severe negative effects on the victims and the perpetrators (e.g., mental health concerns, legal matters, and academic issues). The majority of students who did feel that something could be done to prevent cyberbullying indicated that education and awareness would be the best method.

Consequences

The overwhelming majority of students sampled believe that the current consequences for cyberbullying are insufficient to deter perpetrators from committing another act. More effective means of dealing with the issues of cyberbullying need to be developed at a school-system level. Currently those practices are not preventing nor effectively dealing with the issues (Beran & Shapiro, 2005; Couture & Hall, 2010; Diamanduros et al., 2008; Fitzpatrick, 2008; Merrell et al., 2008). Furthermore, some of the current practices impose more limitations on the victim than they do the perpetrator (Couture & Hall, 2010). These well intentioned, but ultimately unsuccessful intervention techniques need to be modified before students will feel comfortable sharing their cyberbullying experiences. Students sampled felt that immediate action needs to be taken and followed through with appropriate consequences both at school and at home.

Access to Technology

Though technology plays a significant role in education (Diamanduros, et al., 2008, Finn, 2004; Guan & Subrahmanyam, 2009; Yu, 2002), there are still ways that educational settings can limit the amount of exposure. Personal communication devices are not a necessity in education and as such can be required to be left in students' lockers or backpacks. Additionally, the amount of social networking access students are allowed may be limited to outside of school. Students sampled also felt that parents or guardians could do more to limit the amount of computer (or other technology) use at home. A small reduction in the amount of non-educational technology use could lead to a reduction in acts of cyberbullying. Professionals working with adolescents can also utilize technology in a positive way. By creating websites, communication boards, or blogs that address the issues of cyberbullying in a manner that adolescents are familiar with it could create a greater understanding of the potentially harmful effects of cyberbullying. It may also help provide a connection for adolescents who could feel that adults do not understand the importance of technology as the method of information delivery would be through the very technology adolescents currently utilize. The aim is not to remove technology but to encourage positive use of technology for education and social connections.

Communication

Perhaps most powerfully, students sampled felt that if parents or other adults were more open to dialogue, then students would feel more comfortable in disclosing cases of cyberbullying. Open communication that involves listening to the student is important. Beyond that, students also feel that talking to the victim, the perpetrator, and the parents of both parties is especially important. Effective communication does not prevent the first incident of cyberbullying, but it may prevent future occurrences. Offering students the opportunity to speak

to someone privately or confidentially about the impact of the cyberbullying provides another avenue of support for the students—both victims and perpetrators. Finally, there is the understanding that during the adolescent period, adolescents can find it difficult to communicate with adults, especially parents. As such, creating a student mentorship programs would allow individual access to peers with whom they may be more inclined to speak. As a team the victim may feel more prepared and comfortable with talking to an adult.

Adult Involvement

Interestingly, the students sampled indicated that more adult involvement, particularly parental involvement, when dealing with issues of cyberbullying would make the situation worse. However, they suggested that parents become more involved in their child(ren)'s daily life. By effectively engaging daily, adolescents may feel more comfortable in confiding with their parents. School personnel can also support students daily and create a safe atmosphere that students can learn in. This is done through education on cyberbullying and effective means of preventing and eliminating it from schools and households where the adolescents reside.

Limitations of the Study

As other research in this area had limitations so too did the current study. First, the nature of this study created a self-imposed limitation. It was an exploratory study that was developed from research with the middle year's population. Thus, there was no current research with the adolescent population that could be utilized as guidelines. However, there were theoretical ideas that were utilized as well as the depth of research in traditional bullying. The significant relationship between traditional bullying and cyberbullying mitigates the limited research on adolescent cyberbullying.

Second, self-report questionnaires were utilized for data collection. The accuracy of the information can be limited by the honesty of the participants and their willingness to disclose. It may also be limited by their peer group and the perceived perceptions they may have. Males may be less likely to self-report specific feelings (e.g., crying, sadness) as part of their concern over how they are perceived. Finally, the participants may have a fear of potential repercussions for disclosing sensitive information. To mitigate this and increase the validity the self-report questionnaire was anonymous and participants were asked to not talk to or look at anyone else during the completion of the questionnaire. Participants were also informed that the researcher would be the only person to view the raw responses.

Third, the design of the questionnaire limited participants to answering only the questions included in the study. Students were not able to self-report all of their perceptions about cyberbullying. To allow for students to include important additional information about cyberbullying, several open-ended questions were included. These were included to reduce the restrictions placed on the participant by the design of the questionnaire.

Fourth, the understanding, knowledge and perceptions that each participant held created potential limitations. Participants may have had different definitions for "bullying" and "cyberbullying". As well, participants may have misunderstood the intention of a question and answered it differently than others. To reduce the possibility of this limitation, the researcher clearly defined the terms used in the questionnaire. Specifically, bullying and cyberbullying definitions were provided in written form and they were read verbally to the participants. Finally, participants were encouraged to clarify the meaning of questions if they were unsure.

Fifth, the participants themselves created another limitation. The outcomes of this study are limited to adolescent students from large Catholic and public high schools in a large centre in

Saskatchewan. As a result, the findings in this study can only be applicable to this population. Furthermore, the sample was limited to those who were in attendance on the days that the survey was administered and with those who consented to participate. However, this did not have as strong of an impact as 476 out of 500 (95.2%) participants completed the questionnaire. Finally, participants were not chosen randomly. They were limited to the schools that had consented to participate in the study. Subsequently, potential data is missing from schools that did not participate.

<div align="center">

Directions for Future Research

</div>

Exploratory studies serve an important purpose in demonstrating need for additional research. The current study has demonstrated considerable need for additional research in replication and in addressing questions that arose as a result of this study. First and foremost, additional research is needed with similar populations in Saskatchewan and throughout Canada. Additional studies will only serve to strengthen the understanding of adolescent cyberbullying. European research appears to be burgeoning in the area of adolescent cyberbullying and unfortunately, Canadian research has been limited in growth. This needs to change to create a more complete picture of cyberbullying which is obtainable through replication of the current research with various populations. Furthermore, numerous points were brought up for future research (e.g., the relationship between gaming culture and cyberbullying, importance of social networking, or responses to cyberbullying). Some specific questions that could be addressed in future research are: creating an understanding of the social, emotional, and cognitive factors characteristics of a cyberbully; further exploring the characteristics of cyberbullying within a specific time frame (e.g., within the past year); and to examine who the victim and who the

cyberbully are (e.g., Do females cyberbully females or males ? Do males cyberbully males or females? Is it a combination of both?). All of these are worthy of being investigated.

To date, the majority of research had been quantitative in nature. Qualitative research on cyberbullying could help provide depth with multifaceted understandings of cyberbullying. The dynamic responses that could be uncovered from personal experiences of cyberbullying would be invaluable. They would be especially meaningful in creation of effective prevention and intervention strategies. As the rate of technological growth is far exceeding strategies which can leave school personnel and parents feeling ineffective. Anything that can eliminate these feelings and serve to provide a more complete understanding of cyberbullying can only bring about positive changes in cyberbullying research and more importantly, provide support for the victims, cyberbullies, and all those affected by cyberbullying.

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Appendix A: Emotional Reactions to Cyberbullying

Table 2. Impact of Experiencing Cyber-Harassment ($n = 100$)

	Frequency of each response				
	Never	Once/ twice	Few times	Many times	Almost every day
Emotions					
Angry	17	26	32	18	7
Sad/hurt	30	34	21	12	3
Anxious	60	22	13	4	1
Embarrassed	56	25	11	7	1
Cried	61	20	9	8	2
Afraid	64	21	13	1	1
Blames myself	57	25	11	4	3
Behaviors					
Poor concentration	44	34	16	6	0
Low school achievement	79	11	5	4	1
Absenteeism	87	9	2	0	2

Taken from Beran and Li (2005)

Appendix B: Ethics Certificate

UNIVERSITY OF SASKATCHEWAN

Behavioural Research Ethics Board (Beh-REB)

Certificate of Approval

PRINCIPAL INVESTIGATOR	DEPARTMENT	BEH#
Laurie-ann Hellsten-Bzovey	Educational Psychology and Special Education	09-203

INSTITUTION(S) WHERE RESEARCH WILL BE CONDUCTED
University of Saskatchewan

STUDENT RESEARCHERS
Diane Pisch

SPONSOR
SOCIAL SCIENCES AND HUMANITIES RESEARCH COUNCIL OF CANADA (SSHRC)

TITLE
Examining Adolescent Cyberbullying in Saskatchewan

ORIGINAL REVIEW DATE	APPROVAL ON	APPROVAL OF:	EXPIRY DATE
25-Sep-2009	19-Oct-2009	Ethics Application Consent Protocol	18-Oct-2010

Full Board Meeting ☐   Date of Full Board Meeting:

Delegated Review ☒

CERTIFICATION

The University of Saskatchewan Behavioural Research Ethics Board has reviewed the above-named research project. The proposal was found to be acceptable on ethical grounds. The principal investigator has the responsibility for any other administrative or regulatory approvals that may pertain to this research project, and for ensuring that the authorized research is carried out according to the conditions outlined in the original protocol submitted for ethics review. This Certificate of Approval is valid for the above time period provided there is no change in experimental protocol or consent process or documents.

Any significant changes to your proposed method, or your consent and recruitment procedures should be reported to the Chair for Research Ethics Board consideration in advance of its implementation.

ONGOING REVIEW REQUIREMENTS

In order to receive annual renewal, a status report must be submitted to the REB Chair for Board consideration within one month of the current expiry date each year the study remains open, and upon study completion. Please refer to the following website for further instructions: http://www.usask.ca/research/ethics_review/

John Rigby, Chair
University of Saskatchewan
Behavioural Research Ethics Board

Please send all correspondence to

Research Ethics Office
University of Saskatchewan
Box 5000 RPO University 1602-110 Gymnasium Place
Saskatoon SK S7N 4J8

Behavioural Research Ethics Application

1.   **Name of researcher(s)** and/or supervisor (s) and related department(s).
Dr. Laurie-ann M. Hellsten
Department of Educational Psychology and Special Education

1a.   **Name of student(s)**, if a student study, and type of study (e.g., B.A., Hon., M.A., Ph.D.)
Diane M. Pisch
M. Ed. Candidate
Department of Educational Psychology and Special Education
School and Counselling Psychology

1b.   **Anticipated start date of the research study (phase) and the expected completion date of the study (phase).**
Anticipated Start Date: September 28, 2009
Anticipated Completion Date: June 30, 2010

2.   **Title of Study**
Examining Adolescent Cyberbullying in Saskatchewan

3.   **Abstract (100-250 words)**
        Cyberbullying is a relatively new phenomenon that affects adolescents who are under going many developmental changes (Li, 2006). Cyberbullying is a form of harassment or bullying through electronic communication tools (e.g., via email, message boards, text messages, or instant message communication) (Beran & Li, 2005; Li, 2006; 2007). The study of cyberbullying in the school system is extremely important because 90% of the over one million computers within Canadian schools have Internet access (Statistics Canada, 2004). In Saskatchewan, 50% of all homes have Internet access and over 60% of Canadian households own a cellular phone (Statistics Canada, 2005; 2007). Understanding the pervasiveness of cyberbullying among adolescents is the first step towards understanding how to deal with issues that may arise for the victims and perpetrators and ultimately how to prevent cyberbullying from occurring.

        Data collection will consist of an initial questionnaire about cyberbullying (based on Cochrane, 2008; Li, 2007) to gain an understanding of the prevalence of cyberbullying, with approximately 500 high school students (grades 11 and 12; to allow for an adequate sample size to conduct data analysis). This is sample represents an understudied population in the area of cyberbullying. The proposed study will address

three questions, (1) What is the extent of cyberbullying among a sample of high school students (e.g., of at minimum 300 participants)? (2) Does cyberbullying differ among males and females? and (3) What is the relationship between traditional bullying and cyberbullying?

4.   <u>**Funding**</u>
Funding has been granted by the Joseph-Armand Bombardier CGS-Master's Scholarship from the Social Sciences and Humanities Research Council of Canada.

5.   <u>**Expertise**</u>
The graduate student has experience working within school systems as an Instructional Assistant. She also has experience in participating as a researcher for her Bachelor of Arts Honours degree working with young children to examine their math aptitudes. She is currently in the School and Counselling Psychology Master's of Education program and has developed the skills needed for working with adolescents in the proposed study.

6.   <u>**Conflict of Interest**</u>
The graduate student will be working at one of the potential schools for her Practicum. She will be doing her student practicum placement as a High School Counsellor that coincides with the duration of the study. However, there is no anticipated conflict that would arise between the proposed research study and the placement. Also, the graduate student's experience within a school system is not in the same system where the potential research participants will come from.

7.   <u>**Participants**</u>
As the proposed research study will address adolescents' perspective on Cyberbullying, the graduate student must first obtain permission from the Administrators of the school divisions. After this, permission will be obtained from the Principals of the high schools that could potentially be involved. From there, individual participants will be approached through cluster sampling of the English classes in the high schools with approval from the participating schools. Approximately 500 grade 11 and 12 students who are 16 years of age or older and who attend the participating high schools will be approached. Participants will not receive financial compensation for their participation. Grade 11 and 12 students were chosen as they are able to provide their own informed consent that allows for participation from all students.

Once the high schools agree to allow their students to participate in the study, the graduate student will provide a small notice detailing the proposed study that can be placed in each school's newsletters or bulletins. As well, the notices can be placed on school bulletin boards. The graduate student will use English classes as a means of finding potential participants. The English course will be used as it is a mandatory course for all students attending high school. There will be one session for the study. In this session, the graduate student will address the potential participants by providing information and the purpose of the study as well as the importance of how completion of the questionnaire will imply consent. Potential participants may also ask questions and voice any concerns. Prior to administrating the questionnaire, the graduate student will go

over the information form once more to ensure that all participants understand the proposed study and understand the opportunity to withdraw. The graduate student will also discuss that once the questionnaires have been completed and handed in, withdrawal will no longer be possible. The graduate student will also review confidentiality. It is only then that the students will be given envelops with numbers on the front that contain the questionnaire. The questionnaire will contain several demographic questions, but there will be none that could identify an adolescent who is participating in the study.

7a. The committee will require a sample of all **recruitment material** used.
Here is an example of the small notice that would be placed in the high school bulletins, newsletters, and on school bulletins boards.

Cyberbullying

Are you in Grade 11 or 12?

Does it happen to you?

Are you affected by it?

I am a graduate student who is looking for adolescent perspectives on Cyberbullying. I will be asking students to complete a questionnaire that covers many aspects of Cyberbullying. This research will help to provide a better understanding of Cyberbullying.

If you are interested in learning more, I will be coming to your English classes to explain in more detail what this study is about.

My name is Diane Pisch. I am Graduate Student at the University of Saskatchewan, in the Educational Psychology and Special Education Department.

Diane Pisch   Dr. Laurie Hellsten
M. Ed Candidate   Supervisor
University of Saskatchewan   University of Saskatchewan
Contact: 535- 2719   Contact: 966-7723

8. **Consent**
   Information Forms are included at the end of the Ethics Application
   Once approval has been provided from the School Boards and Principals of the high schools, the adolescents will be provided with information forms that will explain how completion of the questionnaire will imply consent to participate in this study. They will be provided with a copy of the form to keep. The graduate student will also review the information form to ensure that the adolescents understand their rights as participants by explaining the study and what the completion of the questionnaire means. The students who do not wish to participate will be given an alternative activity to complete that is attached to the questionnaire. This way the peers will not know who is and is not participating. The graduate student will also remind potential participants of their rights to withdraw. The graduate student will also explain to the potential participants that once they have completed the questionnaire they will no longer be able to withdraw from the study. Finally, the participants will be provided with the questionnaire. The participants in this study will be 16 years of age and older. Students who are 16 years of age and older are considered mature enough to provide their own consent; therefore parental consent will not be required. Research has shown that students who are bullied or cyberbullied are less likely to discuss the incidents with their parents and may be less inclined to participate if they need to have their parents' permission to do so. These potential participants' thoughts and opinions are incredibly valuable and having them provide their own consent allows greater freedom for them to be able to participate. The right to withdraw or to not answer all questions without consequence will be emphasized.

   In addition, researchers should consider whether any of the following concerns apply, and address them accordingly:

   a) *Recruitment from organizations*
       Permission is required from the School Boards as well as permission from the Principals of the high schools that could potentially participate in the study.

       A copy of the correspondence is included at the end of the Ethics Application

   b) *Children under 18 years of age*
       Informed consent for participation of those 16 years of age and older without parental consent is being utilized. This is a minimal risk study that addresses Cyberbullying in a clear, straightforward manner with simple language that can be understood by the adolescents who may participate. Also, with the added verbal delivery of the consent form, any questions will be answered. Also, the study will be brought to the attention of the parents through the school newspapers and bulletins. However, if the School Boards or Principals require Parental Consent Forms, then they will be provided.

9. **Methods/Procedures**
   Participants will be asked to complete a paper and pencil questionnaire in one session. The session will take place during a scheduled English class. The session will commence with a short explanation of the purpose of the study and an explanation of the importance

of the information form. There will also be an opportunity for the potential participants to ask questions or voice concerns they may have. Upon delivery of the information forms the participants will be asked to complete a questionnaire that will take approximately 30 minutes to complete. To maximize participation, the questionnaire will be completed on paper by the participants. The questionnaire will be administered by the graduate researcher. Completion of the questionnaire by the participants will imply their consent. As well, participants will be informed that withdrawal will no longer be possible once the questionnaire is completed and handed in. Additionally, the Administrators of the school divisions will be contacted prior to the administrations of the questionnaire after approval from the University of Saskatchewan Behavioural Research Ethics Board has been granted. Prior to participating in the questionnaire, the students will provide their consent. Those who do not wish to participate will have the opportunity to complete an alternative activity.

Included at the end of the Ethics Application is a copy of the Cyberbullying Questionnaire.

10. **Storage of Data**

Throughout the study period, the researcher will keep all questionnaires, information forms, and assent forms, in a locked cabinet. As the completion of the questionnaire will imply consent to participate, there will be no signed consent forms that the graduate student will have to store. Following completion of the study, research materials, including all information forms, assent forms, and questionnaires, will be safeguarded for a period of five years at the University of Saskatchewan under the care of my thesis supervisor, Dr. Laurie-ann M. Hellsten. After five years the consent forms, assent forms, and questionnaires will be destroyed.

11. **Dissemination of Results**

Data collected for this study will be used for completion of the thesis, as well as for relevant scholarly journals, conference presentations, and summative informational reports.

12. **Risk, Benefits, and Deception**

There are numerous potential benefits of the proposed research. As this is an understudied area of research, this study will bring new knowledge in understanding adolescent cyberbullying. There are many theories that surround adolescent cyberbullying, but there are few empirical studies that have been carried out to measure the veracity of the theories. Additionally, there are very few studies that have been conducted in the area of cyberbullying in general. There are currently no studies that examine adolescent cyberbullying in Canada. This research could potentially be used to as a template for future studies and as the impetus to generate additional research. There may not be any immediate benefits to the participants involved in this study that directly relate to the subject matter. However, there is the potential benefit of the students feeling like they are being heard and that their opinion matters which is important for an adolescent to feel.

There are very few foreseeable risks that the participants may encounter. One potential risk is that the participants may feel discomfort with the questions. This potential for discomfort will be closely watched for. If it arises, it will be dealt with through assurance of the ability for the participants to not answer certain questions or to withdraw from the study. Also, included in the questionnaire and in the Information form, will be ways to receive help for any issues that may arise. The other potential risk is that a participant may disclose that she/he is a victim of cyberbullying or bullying. If this occurs, than the graduate student will provide the appropriate resources. These resources may include, but are not limited to, the school counsellor, a trusted teacher, an online cyberbullying website, or any other form of support. Additionally potential risk is being minimized by having the participants answer the questionnaires anonymously and on paper. There is also no deception involved in this study. These steps serve to emphasize the benefits and minimize the risks or potential for discomfort while working with the vulnerable population of adolescent participants.

13. **Confidentiality**

Confidentiality and anonymity will be used to protect the participants in the study. The participants' names will not be recorded on any documents as completion of the questionnaire will imply consent. The questionnaires will not have the participants' names on them. Instead they will have a number on the envelope and on the questionnaire itself. This is only to ensure that each participant has handed in their questionnaire. The answers to the questions will be kept confidential and there will be no way of finding out how each participant answered a question. The data will be reported as aggregated quantitative results. If there is an instance where a specific answer is used, any possible means of identifying the individual will be removed. As the very nature of the questionnaire is anonymous, there is little chance of identification.

15. **Debriefing and feedback**

Participants will be debriefed after they have completed the questionnaire. The purpose of the study will once again be explained and the participants will be asked if they have any new questions or concerns. The contact information and a list of available resources or supports on the information forms will again be emphasized. Participants will also be told that the results of the research study will be available online at the University of Saskatchewan. Additionally, the participants will be told that they may also contact the graduate student or her supervisor if they wish to view a copy of the finished study.

16. <u>Required Signatures</u>

_____

Diane M. Pisch, Master's Student
Department of Educational Psychology and Special Education
College of Education, University of Saskatchewan

_____

Dr. Laurie-ann M. Hellsten, Supervisor
Department of Educational Psychology and Special Education
College of Education, University of Saskatchewan

_____

Dr. David Mykota
Department of Educational Psychology and Special Education
College of Education, University of Saskatchewan

17. <u>Required Contact Information</u>

Diane M. Pisch
140 Westfield Dr.
Regina, SK
S4S 2S7
Phone: (306) 535-2719
Email: dmp775@mail.usask.ca

Dr. Laurie Hellsten
28 Campus Drive
University of Saskatchewan
Dep't of Ed. Psych and Special Education
Saskatoon, SK
S7N 0X1
Phone: (306) 966-7723
Email: laurie.hellsten@usask.ca
Fax: (306) 966-7719

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EXAMINING ADOLESCENT CYBERBULLYING IN SASKATCHEWAN

You are invited to participate in a research project entitled Examining Adolescent Cyberbullying in Saskatchewan. Please read this form carefully, and feel free to contact myself or my supervisor with any questions you might have.

Researcher(s):

Diane Pisch
M. Ed. Candidate
Department of Educational Psychology
    and Special Education
Phone: (306) 535-2719
Email: dmp775@mail.usask.ca

Dr. Laurie Hellsten
Department of Educational Psychology and
    Special Education
Supervisor
Phone: (306) 966-7723
Email: laurie.hellsten@usask.ca

Purpose and Procedure: Your participation in this study is voluntary. This study will be used to examine the occurrence of cyberbullying among high school students. It will also look at if, or how, cyberbullying differs among the grades. The information gathered will be used to create a broader understanding of the how often cyberbullying occurs among your peers.

I have given you a general description of what the study is about and what will be asked of you. If you choose to participate in this study, you will be asked to complete a questionnaire that will take no more than 30 minutes to complete. Completion of the questionnaire will mean that you have provided your consent to participate in this study. Once you complete the questionnaire, your answers will be placed in a sealed envelope that will only be identified with a number. Your name will not be placed on the questionnaire. Once handed in, the questionnaires will be anonymous.

The answers to the questionnaires will be used as part of my research study and in potential publishable papers or conferences. Individual answers will be combined for a broad picture of cyberbullying. There may be individual answers that are highlighted, but there will be no way to identify who answered it. The questionnaires will be kept in a locked filing cabinet that will only be available to myself and my supervisor.

Potential Benefits and Risks: Adolescent Cyberbullying is not currently well understood. With this study, there will be evidence to support the knowledge that cyberbullying does occur. There are no foreseeable risks involved with your participation in this study. You may refuse to answer any of the questions. If you happen to become upset or begin to feel uncomfortable, please discuss this with myself and I would provide available resources that will help remove the discomfort.

Confidentiality: Your confidentiality will be kept; no one will be able to identify your questionnaire or participation in this study. There will be no form that you have to sign so your signature and/or name will not be on any of forms or the questionnaire. Although the data from this research project will be published, the data will be reported so that it will not be possible to identify individuals. Moreover, you will not be asked to provide any identifying information so it will not be possible to associate a name with any given set of responses. I will also remind you not to put your name or other identifying information on the questionnaire. If you happen to, I will remove it before leaving the classroom. As well, the questionnaires will only be identifiable with a number that will be separate from anything you sign.

Right to Withdraw: Your participation is voluntary, and you may answer only those questions that you are comfortable with. Your withdrawal from the research project for any reason, at any time during the completion of the questionnaire, will be without penalty of any sort and this will not affect your school standing or grade in English. The information that is shared will be held in strict confidence and discussed only with myself, my supervisor, and my research committee. If you withdraw from the research project at any time during the completion of the questionnaire, any data that you may have contributed will be destroyed at your request. Once you have completed the questionnaire and handed it in to myself, it will no longer be possible to withdrawal from the study.

Questions: If you have any questions concerning the research project, please feel free to ask at any point; you are also free to contact the researchers at the numbers provided if you have other questions. This research project has been approved on ethical grounds by the University of Saskatchewan Behavioural Research Ethics Board on **(insert date).** Any questions regarding your rights as a participant may be addressed to that committee through the Ethics Office (966-2084). Out of town participants may call collect.

Follow-Up or Debriefing:
If you are interested in the finished research study, you may contact myself or my supervisor. If you have any questions or concerns after you have participated you are free to contact any of the numbers provided.

Consent to Participate:
I have read and understood the description provided; I have had an opportunity to ask questions and my questions have been answered. I understand that completion of the questionnaire will imply my consent to participate in this research project, understanding that I may withdraw from the research project at any time during the completion of the questionnaire. I understand that once my questionnaire has been submitted, withdrawal from the research project will no longer be possible. This Information Form has been given to me for my records.

Available Resources:
If completing this questionnaire brings up any feelings that you need to talk about, there are many places you can go for help.
    You can…
- Talk to an adult you can trust (e.g., your teacher, principal, parents, or school

counsellor).

- Contact the Kids Help Phone for FREE at 1-800-668-6868 or http://kidshelpphone.ca/en

- Saskatoon Community Mediation Services at 244-0440

- Contact myself for additional resources or for guidance in where to go for help.

Thank you,

Diane Pisch
M.Ed Candidate

_____
(Signature of Researcher)

Diane Pisch, M. Ed. Candidate
(ADDRESS)
(DATE)

(SCHOOL DIVISION ADDRESS)

Attention: (Name of Director of Education)
Subject: School Board Permission to Administer Student Cyberbullying Questionnaire

My name is Diane Pisch. I am a Master's of Education student, currently in my second year of studies. It is a two year program that includes a thesis requirement. I have experience working within a school system as an Instructional Assistant. As well, I have experience working as a researcher in a school setting. I obtained my B.A. Honours in Psychology through my research in understanding children's math aptitude. **I am writing this letter to request your permission to collect my thesis data from students within Saskatchewan Rivers School Division.** If you grant me permission to do so, I will contact individual Principals within this school division and request their written permission as well.

I am interested in researching the phenomenon of adolescent cyberbullying. It is an important area of study with the increasing use and availability of technology inside and outside of the school system. I am interested in examining the prevalence and occurrence of cyberbullying among the adolescent population in Saskatchewan which has not yet been studied. I would appreciate the opportunity to work with your high schools to create understanding of cycberbullying as your high school students view it. The title of my research study is: Creating Examining Adolescent Cyberbullying in Saskatchewan. As I am sure you are well aware, cyberbullying is an increasing problem high school professionals are having to deal with. It is my hopes that with this research, the preliminary ground work will be laid for how to deal with issues that may arise for the victims and perpetrators and ultimately how to prevent cyberbullying from occurring. Currently, the studies that examine cyberbullying are from Alberta and there are none that examine adolescent cyberbullying.

Following is a brief overview of my methodology.
Procedure/Survey Administration: The cyberbullying questionnaire will take no more than 30 minutes to complete which includes the explanation of the information form. This will, hopefully, take place within the English classes. Completion of the questionnaire by the potential participants will imply their consent to participate in this study and those who do not wish to participate will be provided with an alternative activity. If there are any questions that the students do not wish to answer, they will be able to leave them blank or if they wish to

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discontinue their participation. There will be no penalty for withdrawal during the completion of the questionnaire. Once the questionnaires have been handed in, withdrawal will no longer be possible.

Potential Benefits: Information that is gained from this research will be available to the School Board and Principles. The results may provide invaluable information that may help parents and school professional gain a greater understanding of cyberbullying experiences as it pertains to adolescents.

Potential Risks: Some students may feel some discomfort with the questions that are included in the questionnaire. However, all students will have the opportunity to not answer the questions that may discomfort them or to discontinue completion of the questionnaire. If a more intense reaction occurs, there will be contact information for various services that may provide help for the students in need.

Questions: You will be informed of any new information that may arise during the course of the research that may affect your decision to allow your school division to participate in this study. My supervisor is Dr. Laurie Hellsten at the University of Saskatchewan. Also, this research project has been approved on ethical grounds by the University of Saskatchewan Behavioural Research Ethics Board on **(insert date).**

Please, feel free to contact myself or my supervisor with questions that you may have. The contact information is on the first page of the Ethics Application that I have included to provide you with more information on the research I propose to carry out.

If you are interested in having your school division participate in this study, please sign the attached permission slip.

Thank you for your time and consideration.

Sincerely,

_____
Diane Pisch, M. Ed. Candidate
Student Researcher
Department of Educational Psychology and Special Education
(306) 535-2719
dmp775@mail.usask.ca

_____
Laurie Hellsten, Ph. D.
Research Supervisor
University of Saskatchewan
(306) 966-7723
laurie.hellsten@usask.ca

Examining Adolescent Cyberbullying In Saskatchewan

I, (Name of Director of Education), grant student researcher, Diane Pisch, permission to recruit students from (Name of School Division) to participate in her study entitled *Examining Adolescent Cyberbullying in Saskatchewan*

_____   _____

(Signature)   (Date)

Diane Pisch, M. Ed Candidate
(ADDRESS)
(DATE)

(NAME OF SCHOOL) is invited to participate in a study entitled *Examining Adolescent Cyberbullying in Saskatchewan*.

To (Principal of the High School)

I am a Master's of Education student, currently in my second year of studies. I have experience working within a school system as an Instructional Assistant. As well, I have experience working as a researcher in a school setting. I obtained my B.A. Honours in Psychology through my research in understanding children's math aptitude. I am interested in researching adolescent cyberbullying. It is an important area of study with the increasing use and availability of technology inside and outside of the school system. I am interested in examining the prevalence and occurrence of cyberbullying among the adolescent population in Saskatchewan. I would appreciate the opportunity to work with your students to create understanding of cycberbullying as your students view it.

Written permission to involve (Name of School Division) in this study has been obtained from your Director of Education, (Name of Director of Education). My supervisor is Dr. Laurie Hellsten at the University of Saskatchewan. This research project has been approved on ethical grounds by the University of Saskatchewan Behavioural Research Ethics Board on **(insert date).** Please read this form carefully and feel free to ask any questions that you may have.

Purpose and Procedure: The title of my research study is: Creating an Understanding and Awareness of Adolescent Cyberbullying. As I am sure you are well aware, cyberbullying is an increasingly problematic issue that you may be dealing with. It is my hopes that with this research, the preliminary ground work will be laid for how to deal with issues that may arise for the victims and perpetrators and ultimately how to prevent cyberbullying from occurring. The cyberbullying questionnaire will take no more than 30 minutes to complete which includes the explanation of the information form. This will, hopefully, take place within the English classes. Completion of the questionnaire by the potential participants will imply their consent to participate in this study and those who do not wish to participate will be provided with an alternative activity. If there are any questions that the students do not wish to answer, they will

be able to leave them blank or if they wish to discontinue their participation. There will be no penalty for withdrawal during the completion of the questionnaire. Once the questionnaires have been handed in, withdrawal will no longer be possible.

Potential Benefits: Information that is gained from this research will be available to the School Board and Principles. The results may provide invaluable information that may help parents and school professional gain a greater understanding of cyberbullying experiences as it pertains to adolescents.

Potential Risks: Some students may feel some discomfort with the questions that are included in the questionnaire. However, all students will have the opportunity to not answer the questions that may discomfort them or to discontinue completion of the questionnaire. If a more intense reaction occurs, there will be contact information for various services that may provide help for the students in need.

Please, feel free to contact myself or my supervisor with questions that you may have. The contact information is on the first page of the Ethics Application that I have included to provide you with more information on the research I propose to carry out.

If you are interested in having your school participate in this study please sign the permission slip below. The researcher will contact you to arrange administration of the survey and to collect the permission slip.

Thank you for your time and consideration.

Sincerely,

_____

Diane Pisch, M. Ed. Candidate
Student Researcher
Department of Educational Psychology and Special Education
(306) 535-2719
dmp775@mail.usask.ca

_____

Laurie Hellsten, Ph. D.
Supervisor
University of Saskatchewan
(306) 966-7723
laurie.hellsten@usask.ca

Saskatchewan

Examining Adolescent Cyberbullying In

I, (Name of Principal), grant student researcher, Diane Pisch, permission to recruit students from (Name of School) to participate in her study entitled *Examining Adolescent Cyberbullying in Saskatchewan*

_____   _____

(Name)   (Date)

_____

(Signature)

Examining Adolescent Cyberbullying In Saskatchewan

Research Supervisor: Dr. Laurie Hellsten, Ph.D.
Student Researcher: Diane Pisch, M.Ed. Candidate
28 Campus Drive, University of Saskatchewan
Saskatoon, SK, S7N 0X1
Phone: (306) 966-7723

CYBERBULLYING QUESTIONNAIRE

THANK YOU for PARTICIPATING in this QUESTIONNAIRE

Bullying occurs when a person intends to harm another person and can occur repeatedly over time. The harm can be physical (e.g., hitting, kicking). The bullying can also be verbal which are comments, threats, or any words that are meant to hurt another person. Bullying can also be actions made without contact with another person (e.g., gestures, faces) (Coy, 2001).

Cyberbullying is a type of bullying that occurs through electronic information and communication tools such as email, instant messaging, text messages, message boards, or social networking sites (e.g., Facebook, Twitter). Cyberbullying occurs when an individual means to hurt another person with repeated unfriendly behaviour (Li, 2007).

~Cyberbullying is not okay~

Instructions:
1. Do not write your name or anything else on this questionnaire except to answer the questions.
2. Your participation is voluntary. If you do not wish to participate please enjoy the activities at the back.
3. Please fill in completely each question you choose to answer.
4. Completion of this questionnaire means that you consent to participate in this study.

CYBERBULLYING QUESTIONNAIRE

SECTION ONE: ABOUT YOU

Please Check One:

1. I am:

    ☐ Male

    ☐ Female

2. I am in Grade:

    ☐ 10

    ☐ 11

    ☐ 12

3. I was born in the year: _____

4. I describe myself as:

☐ Aboriginal

☐ Asian

☐ Black

☐ Hispanic

☐ White

☐ Other, specify:_____

5. My school grades are usually:

☐ Above average (80% and above)

☐ Average   (60 – 79%)

☐ Below average (Below 60%)

6. I use computers:

☐ Rarely (less than once a month)

☐ Several times a month

☐ 1-3 times a week

☐ 4-7 times a week

☐ Daily

7. I have a computer at home:

☐ Yes

☐ No

8. The number of hour(s) a week I spend online is _____ (please round up to the nearest hour or half hour)

9. I use other forms of technology to communicate with peers:

☐ Yes

☐ No

10. If yes, specify (e.g., cell phones, blackberries, etc):
_____
_____
_____

11. I use texting to communicate with peers (friends):

☐ Yes

☐ No

12. If yes, the number of hour(s) a week I spend texting is _____ (please round up to the nearest hour or half hour).

13. I use social networking sites (e.g., Facebook, Twitter) to communicate with peers:

☐ Yes

☐ No

14. If yes, the number of hour(s) a week I spend on social networking sites is
_____ (please round up to the nearest hour or half hour).

SECTION TWO: BULLYING

Please Check One

1. I have *been bullied* during school:

☐ Yes

☐ No

2. If yes, I have been *bullied:*

☐ Less than 4 times

☐ 4 – 10 times

☐ Over 10 times

3. I have *bullied* others:

☐ Yes

☐ No

4. If yes, I have *bullied others:*

☐ Less than 4 times

☐ 4 – 10 times

☐ Over 10 times

SECTION THREE: EXPERIENCES BEING CYBERBULLIED

1. I have been *cyberbullied* (e.g. via email, chat room, cell phone) (check one):

☐ Yes

☐ No

2. If yes, I was *cyberbullied* via (check *all* that apply):

☐ Email

☐ Chat Room

☐ Cell Phone

☐ Message Board

☐ Instant Messaging

☐ Social Networking Site (e.g., Facebook, Twitter)

☐ Video Sites (e.g., Youtube)

☐ Other, please specify:_____

3. If yes, I was *cyberbullied* by (check *all* that apply):

☐ Classmates

☐ People outside school

☐ Friends

☐ I don't know who

☐ Other, please specify:_____

4. If yes, I have been *cyberbullied* (check one):

☐ Less than 4 times

☐ 4 – 10 times

☐ Over 10 times

5. If yes, what did you do about it (check *all* that apply):

☐ Nothing

☐ Confronted the person who did it

☐ Told a parent

☐ Told a teacher

☐ Told a friend

☐ Told an adult at school (e.g., Counsellor)

☐ Other, please specify:_____

6. If you were cyberbullied, did you tell someone (check one):

☐ Yes

☐ No

7. If yes, who did you tell (check *all* that apply):

☐ Told a parent

☐ Told a teacher

☐ Told a friend

☐ Told an adult at school (e.g., Counsellor)

☐ Other, please specify:_____

8. If you told someone, did it help (check *all* that apply):

☐ Yes, it made me feel better.

☐ Yes, it stopped the person from doing it.

☐ No, it didn't do anything.

☐ No, it made me feel worse.

9. If you told someone, what was the reason(s) (check *all* that apply):

☐ I thought it would help.

☐ I had proof.

☐ I knew who the bully was.

☐ Other, please specify:_____
_____
_____

10. If you didn't tell someone, why not (check all that apply):

☐ I didn't think it would help.

☐ I didn't have any proof.

☐ I didn't know who the bully was.

☐ I don't think I could handle telling anyone.

☐ Other, please specify: _____
_____
_____

11. If you have been cyberbullied, how have you been impacted? (circle one)

I felt sad and hurt

1	2	3	4	5
Never	Once/Twice	A Few Times	Many Times	Almost Every Day

I felt angry

1	2	3	4	5
Never	Once/Twice	A Few Times	Many Times	Almost Every Day

I felt embarrassed

1	2	3	4	5
Never	Once/Twice	A Few Times	Many Times	Almost Every Day

I felt afraid

1	2	3	4	5
Never	Once/Twice	A Few Times	Many Times	Almost Every Day

I felt anxious

1	2	3	4	5
Never	Once/Twice	A Few Times	Many Times	Almost Every Day

I missed school because of it

1	2	3	4	5
Never	Once/Twice	A Few Times	Many Times	Almost Every Day

I cried

1	2	3	4	5
Never	Once/Twice	A Few Times	Many Times	Almost Every Day

I had difficulty concentrating

1	2	3	4	5
Never	Once/Twice	A Few Times	Many Times	Almost Every Day

My marks have dropped because of it

1	2	3	4	5
Never	Once/Twice	A Few Times	Many Times	Almost Every Day

I blamed myself

1	2	3	4	5
Never	Once/Twice	A Few Times	Many Times	Almost Every Day

12. If you have been cyberbullied, do the people who cyberbully you also harass you in other ways (not using technology)?

0	1	2	3	4	5
I don't know	Never	Once/Twice	A Few Times	Many Times	Almost Every Day

---

SECTION FOUR: EXPERIENCES AS A CYBERBULLY

1. I have *cyberbullied* others (check one):

☐ Yes

☐ No

2. If yes, I *cyberbullied* others via (check *all* that apply):

☐ Email

☐ Chat Room

☐ Cell Phone

☐ Message Board

☐ Instant Messaging

☐ Social Networking Site (e.g., Facebook, Twitter)

☐ Video Sites (e.g., Youtube)

☐ Other, please specify:_____

3. If yes, I have *cyberbullied* others (check one):

☐ Less than 4 times

☐ 4 – 10 times

☐ Over 10 times

SECTION FIVE: SEEING AND PREVENTING CYBERBULLYING

1. I know someone who has *been cyberbullied* (check one):

☐ Yes

☐ No

2. If yes, what did you do about it (check *all that apply*):

☐ I watched but didn't participate

☐ I joined in

☐ I left the online environment

☐ I tried to get the bully to stop

☐ I told a parent

☐ I told a teacher

☐ I told a friend

☐ Other, please specify: _____

_____

3. If adults know about cyberbullying, do they try to stop it (check one):

☐ Yes

☐ No

4. If yes, are their efforts helpful (check one):

☐ Yes

☐ No

5. What do you think teachers or other school personnel can do to stop cyberbullying?

_____
_____
_____
_____
_____
_____
_____

6. What do you think other adults (e.g., parents, community) can do to stop cyberbullying?

_____
_____
_____
_____
_____
_____
_____

ADDITIONAL COMMENTS

1. Are there any other comments you would like to make regarding bullying or cyberbullying?

_____
_____
_____
_____
_____
_____
_____

****IMPORTANT****

If completing this questionnaire brings up any feelings that you need to talk about, there are many places you can go for help.

You can…

- Talk to an adult you can trust (e.g., your teacher, principal, parents, or school

counsellor)

- Contact the Kids Help Phone for FREE at 1-800-668-6868 or http://kidshelpphone.ca/en

- Saskatoon Community Mediation Services at 244-0440

If you **do not** wish to participate, please enjoy these activities. You may keep this portion

You may **also keep this portion of the questionnaire if you do participate.**

CYBERBULLYING WORD SEARCH

```
K C R U M O U R S X G R G K G K C Z W I N B Y S L
M T T B A L I M K O R N P H C C Y T F S L H T H C
P E E I P Z U W S G K H I S O P H X L A R B C E O
W H R Y Z K V K S J O M R G I D T N C Q V C O B H
U J Y J L Z V M L P S G J J A R Z K X N T T M C K
I U J S S L O U I N J P I I E S B J I A P S P K V
X Q G M I M U S G L T A O L R E S F Q U M T U Z O
Q D X D G C S B A Q R S A R R K T E P C Q T T O O
L L Y F Z O A P R E N T E R T A I N M E N T E T H
C I L W G E T L A E I R Y A E S N Y U X P Q R M O
L L I N W O P R X O B J E S X I Y F D V U A J Q M
A H M L P U W C N K W Y B T T K O O B E C A F I E
S Y A O E K Y S E T L Z C K T C N F Y Y G U F Y Z
S M F O U N H R O Z E G H F Z I L Y E X C K G E T
R L G H H I O V J A D O C W R C W I F G R A O D H
O Z I C P H N H B B D N U P L I V T Q O A C V S F
O G R S Y O B O P D T B S I T R E L W U S J A Y A
M W L U U D Y O C K E O O K N Y A N W Q E T X J K
W W F J S F P U E M A I L A F T M O D C U S C T L
T T R X R Y O E L V L Q F R R X E N P S Z I R F B
B U I I Z Y E M L W B A A A Q T J R R P B X X B E
F F E O R A L U C I R U C A R T X E N D D V D A Z
R N N J E M H N L I F O L J P X E N S E I O N Y X
D H D X N P H K A H Z D O L Z T P N W I T D H M H
M P R G E B J V E R B A L O Y D U E O G Q H P Y L
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CYBERBULLY

TEXT

MESSAGING

COMPUTER

SCHOOL

ENTERTAINMENT

VERBAL

MSN

CLIQUES

BOYFRIEND

GIRLFRIEND

RUMOURS

BULLY

LAPTOP

FAMILY

SPORTS

PHONE

HOME

GOSSIP

FRIENDS

BLACKBERRY

CLASSROOM

WORK

RELATIONSHIPS

PHYSICAL

EMAIL

INTERNET

EXTRACURICULAR

TWITTER

FACEBOOK

CELL

SUDUKO PUZZLE

	1		6	9		8		
4			8			7	5	
2	6				3			1
1	9	2		4	5			
	7						3	
			2	8		9	1	4
6			7				4	9
	4	5			2			8
		3		5	6		7	

****IMPORTANT****

If completing this questionnaire brings up any feelings that you need to talk about, there are many places you can go for help.

You can…

- Talk to an adult you can trust (e.g., your teacher, principal, parents, or school

counsellor)

- Contact the Kids Help Phone for FREE at 1-800-668-6868 or

http://kidshelpphone.ca/en

- Saskatoon Community Mediation Services at 244-0440

Cyber**Bullying**[*]

Cyberbullying is defined as the use of technology to support deliberate, hostile and hurtful behaviour towards an individual or group of individuals.

Just like other forms of bullying, cyberbullying is about power and control. Those who bully others are trying to establish dominance over people they perceive to be weaker than them. While technology can be used as a positive communication tool it can also be used to hurt others.

The convenience of modern technology enables people who are bullying to hide behind anonymity.

There are several ways that people bully others online.

They do it by:

- Sending e-mails or instant messages containing insults or threats directly to a person.
- Spreading hateful comments about a person through e-mail, instant messaging or postings on websites and blogs.
- Stealing passwords and sending out threatening e-mails or instant messages using an assumed identity.
- Building websites, often with password protection, to target specific people.

The law

Some forms of online bullying are considered criminal acts. Under the Criminal Code of Canada it is a crime to:

- Communicate repeatedly with someone if the communication causes them to fear for their own safety or the safety of others.
- Write something that is designed to insult a person or likely to injure a person's reputation by exposing them to hatred, contempt or ridicule.

A person may also be violating the *Canadian Human Rights Act*, if he or she spreads hate or discrimination based on race, national or ethnic origin, colour, religion, age, sex, sexual orientation, marital status, family status or disability.

Cases of bullying are now going before the courts. It's likely that cases involving cyberbullying will soon follow.

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The role of Internet service providers and cell phone service providers

Internet service providers (ISPs) are the companies that provide Internet access to consumers. Most ISPs have Acceptable Use Policies that clearly define privileges and guidelines for those using their services, and the actions that can be taken if those guidelines are violated.

ISPs and cell phone service providers can respond to reports of cyberbullying over their networks, or help clients identify the appropriate service provider to contact.

Parents should tell their children not to delete messages so that they can be saved and referred to the appropriate people for resolution.

Most cyberbullying occurs when adults aren't around.

Below are some tips to pass along to the young person in your life:

- Guard your contact information. Don't give people you don't know your cell phone number, instant messaging name or e-mail address.

- If you're being harassed online, take the following actions immediately:

  - Tell an adult you trust.

  - Leave the area or stop the activity (e.g., chat room, instant messaging).

- Block the sender's messages. Never reply to harassing messages!

- Save any harassing messages and forward them to your Internet Service Provider.

- If the bullying involves threats, tell the police.

- Take a stand. Speak up when you see someone harassing another person online. Most youth respond better to their peers and will listen to them more than they would an adult.

For more information on cyberbullying visit:

www.b-free.ca

- Website developed for youth, by youth, that provides practical advice on how to Stand Up and Stop Bullying.

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www.cyberbullying.org

- Includes information and support for victims of cyberbullying.

*Adapted from www.bullyfreealberta.ca Cyberbullying Fact Sheet

UNIVERSITY OF
SASKATCHEWAN

INFORMATION FORM

EXAMINING ADOLESCENT CYBERBULLYING IN SASKATCHEWAN

You are invited to participate in a research project entitled Examining Adolescent Cyberbullying in Saskatchewan. Please read this form carefully, and feel free to contact myself or my supervisor with any questions you might have.

Researcher(s):

Diane Pisch
M. Ed. Candidate
Department of Educational Psychology
    and Special Education
Phone: (306) 535-2719
Email: dmp775@mail.usask.ca

Dr. Laurie Hellsten
Department of Educational Psychology and
    Special Education
Supervisor
Phone: (306) 966-7723
Email: laurie.hellsten@usask.ca

Purpose and Procedure: Your participation in this study is voluntary. This study will be used to examine the occurrence of cyberbullying among high school students. It will also look at if, or how, cyberbullying differs among the grades. The information gathered will be used to create a broader understanding of the how often cyberbullying occurs among your peers.

I have given you a general description of what the study is about and what will be asked of you. If you choose to participate in this study, you will be asked to complete a questionnaire that will take no more than 30 minutes to complete. Completion of the questionnaire will mean that you have provided your consent to participate in this study. Once you complete the questionnaire, your answers will be placed in a sealed envelope that will only be identified with a number. Your name will not be placed on the questionnaire. Once handed in, the questionnaires will be anonymous.

The answers to the questionnaires will be used as part of my research study and in potential publishable papers or conferences. Individual answers will be combined for a broad picture of cyberbullying. There may be individual answers that are highlighted, but there will be no way to identify who answered it. The questionnaires will be kept in a locked filing cabinet that will only be available to myself and my supervisor.

Potential Benefits and Risks: Adolescent Cyberbullying is not currently well understood. With this study, there will be evidence to support the knowledge that cyberbullying does occur. There are no foreseeable risks involved with your participation in this study. You may refuse to answer any of the questions. If you happen to become upset or begin to feel uncomfortable, please

discuss this with myself and I would provide available resources that will help remove the discomfort.

Confidentiality: Your confidentiality will be kept; no one will be able to identify your questionnaire or participation in this study. There will be no form that you have to sign so your signature and/or name will not be on any of forms or the questionnaire. Although the data from this research project will be published, the data will be reported so that it will not be possible to identify individuals. Moreover, you will not be asked to provide any identifying information so it will not be possible to associate a name with any given set of responses. I will also remind you not to put your name or other identifying information on the questionnaire. If you happen to, I will remove it before leaving the classroom. As well, the questionnaires will only be identifiable with a number that will be separate from anything you sign.

Right to Withdraw: Your participation is voluntary, and you may answer only those questions that you are comfortable with. Your withdrawal from the research project for any reason, at any time during the completion of the questionnaire, will be without penalty of any sort and this will not affect your school standing or grade in English. The information that is shared will be held in strict confidence and discussed only with myself, my supervisor, and my research committee. If you withdraw from the research project at any time during the completion of the questionnaire, any data that you may have contributed will be destroyed at your request. Once you have completed the questionnaire and handed it in to myself, it will no longer be possible to withdrawal from the study.

Questions: If you have any questions concerning the research project, please feel free to ask at any point; you are also free to contact the researchers at the numbers provided if you have other questions. This research project has been approved on ethical grounds by the University of Saskatchewan Behavioural Research Ethics Board on **(insert date).** Any questions regarding your rights as a participant may be addressed to that committee through the Ethics Office (966-2084). Out of town participants may call collect.

Follow-Up or Debriefing:
If you are interested in the finished research study, you may contact myself or my supervisor. If you have any questions or concerns after you have participated you are free to contact any of the numbers provided.

Consent to Participate:
I have read and understood the description provided; I have had an opportunity to ask questions and my questions have been answered. I understand that completion of the questionnaire will imply my consent to participate in this research project, understanding that I may withdraw from the research project at any time during the completion of the questionnaire. I understand that once my questionnaire has been submitted, withdrawal from the research project will no longer be possible. This Information Form has been given to me for my records.

Available Resources:
If completing this questionnaire brings up any feelings that you need to talk about, there are many places you can go for help.

You can…

- Talk to an adult you can trust (e.g., your teacher, principal, parents, or school counsellor).

- Contact the Kids Help Phone for FREE at 1-800-668-6868 or http://kidshelpphone.ca/en

- Saskatoon Community Mediation Services at 244-0440

- Contact myself for additional resources or for guidance in where to go for help.

Thank you,

Diane Pisch
M.Ed Candidate

_____
(Signature of Researcher)

Examining Adolescent Cyberbullying In Saskatchewan

Research Supervisor: Dr. Laurie Hellsten, Ph.D.
Student Researcher: Diane Pisch, M.Ed. Candidate
28 Campus Drive, University of Saskatchewan
Saskatoon, SK, S7N 0X1
Phone: (306) 966-7723

CYBERBULLYING QUESTIONNAIRE

THANK YOU for PARTICIPATING in this QUESTIONNAIRE

Bullying occurs when a person intends to harm another person and can occur repeatedly over time. The harm can be physical (e.g., hitting, kicking). The bullying can also be verbal which are comments, threats, or any words that are meant to hurt another person. Bullying can also be actions made without contact with another person (e.g., gestures, faces) (Coy, 2001).

Cyberbullying is a type of bullying that occurs through electronic information and communication tools such as email, instant messaging, text messages, message boards, or social networking sites (e.g., Facebook, Twitter). Cyberbullying occurs when an individual means to hurt another person with repeated unfriendly behaviour (Li, 2007).

~Cyberbullying is not okay~

Instructions:
1. Do not write your name or anything else on this questionnaire except to answer the questions.
2. Your participation is voluntary. If you do not wish to participate please enjoy the activities at the back.
3. Please fill in completely each question you choose to answer.
4. Completion of this questionnaire means that you consent to participate in this study.

CYBERBULLYING QUESTIONNAIRE

SECTION ONE: ABOUT YOU

Please Check One:

1. I am:

☐ Male

☐ Female

2. I am in Grade:

☐ 10

☐ 11

☐ 12

3. I was born in the year: _____

4. I describe myself as:

☐ Aboriginal

☐ Asian

☐ Black

☐ Hispanic

☐ White

☐ Other, specify:_____

5. My school grades are usually:

☐ Above average (80% and above)

☐ Average   (60 – 79%)

☐ Below average (Below 60%)

6. I use computers:

☐ Rarely (less than once a month)

☐ Several times a month

☐ 1-3 times a week

☐ 4-7 times a week

☐ Daily

7. I have a computer at home:

☐ Yes

☐ No

8. The number of hour(s) a week I spend online is _____ (please round up to the nearest hour or half hour)

9. I use other forms of technology to communicate with peers:

☐ Yes

☐ No

10. If yes, specify (e.g., cell phones, blackberries, etc):
_____
_____
_____

11. I use texting to communicate with peers (friends):

☐ Yes

☐ No

12. If yes, the number of hour(s) a week I spend texting is _____ (please round up to the nearest hour or half hour).

13. I use social networking sites (e.g., Facebook, Twitter) to communicate with peers:

☐ Yes

☐ No

14. If yes, the number of hour(s) a week I spend on social networking sites is
_____ (please round up to the nearest hour or half hour).

SECTION TWO: BULLYING

Please Check One

1. I have *been bullied* during school:

☐ Yes

☐ No

2. If yes, I have been *bullied:*

☐ Less than 4 times

☐ 4 – 10 times

☐ Over 10 times

3. I have *bullied* others:

☐ Yes

☐ No

4. If yes, I have *bullied others:*

☐ Less than 4 times

☐ 4 – 10 times

☐ Over 10 times

SECTION THREE: EXPERIENCES BEING CYBERBULLIED

1. I have been *cyberbullied* (e.g. via email, chat room, cell phone) (check one):

☐ Yes

☐ No

2. If yes, I was *cyberbullied* via (check *all* that apply):

☐ Email

☐ Chat Room

☐ Cell Phone

☐ Message Board

☐ Instant Messaging

☐ Social Networking Site (e.g., Facebook, Twitter)

☐ Video Sites (e.g., Youtube)

☐ Other, please specify:_____

3. If yes, I was *cyberbullied* by (check *all* that apply):

☐ Classmates

☐ People outside school

☐ Friends

☐ I don't know who

☐ Other, please specify:_____

4. If yes, I have been *cyberbullied* (check one):

☐ Less than 4 times

☐ 4 – 10 times

☐ Over 10 times

5. If yes, what did you do about it (check *all* that apply):

☐ Nothing

☐ Confronted the person who did it

☐ Told a parent

☐ Told a teacher

☐ Told a friend

☐ Told an adult at school (e.g., Counsellor)

☐ Other, please specify:_____

6. If you were cyberbullied, did you tell someone (check one):

☐ Yes

☐ No

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7. If yes, who did you tell (check *all* that apply):

☐ Told a parent

☐ Told a teacher

☐ Told a friend

☐ Told an adult at school (e.g., Counsellor)

☐ Other, please specify:_____

8. If you told someone, did it help (check *all* that apply):

☐ Yes, it made me feel better.

☐ Yes, it stopped the person from doing it.

☐ No, it didn't do anything.

☐ No, it made me feel worse.

9. If you told someone, what was the reason(s) (check *all* that apply):

☐ I thought it would help.

☐ I had proof.

☐ I knew who the bully was.

☐ Other, please specify:_____

_____

_____

10. If you didn't tell someone, why not (check all that apply):

☐ I didn't think it would help.

☐ I didn't have any proof.

☐ I didn't know who the bully was.

☐ I don't think I could handle telling anyone.

☐ Other, please specify: _____

_____

_____

11. If you have been cyberbullied, how have you been impacted? (circle one)

I felt sad and hurt

1	2	3	4	5
Never	Once/Twice	A Few Times	Many Times	Almost Every Day

I felt angry

1	2	3	4	5
Never	Once/Twice	A Few Times	Many Times	Almost Every Day

I felt embarrassed

1	2	3	4	5
Never	Once/Twice	A Few Times	Many Times	Almost Every Day

I felt afraid

1	2	3	4	5
Never	Once/Twice	A Few Times	Many Times	Almost Every Day

I felt anxious

1	2	3	4	5
Never	Once/Twice	A Few Times	Many Times	Almost Every Day

I missed school because of it

1	2	3	4	5
Never	Once/Twice	A Few Times	Many Times	Almost Every Day

I cried

1	2	3	4	5
Never	Once/Twice	A Few Times	Many Times	Almost Every Day

I had difficulty concentrating

1	2	3	4	5
Never	Once/Twice	A Few Times	Many Times	Almost Every Day

My marks have dropped because of it

1	2	3	4	5
Never	Once/Twice	A Few Times	Many Times	Almost Every Day

I blamed myself

1	2	3	4	5
Never	Once/Twice	A Few Times	Many Times	Almost Every Day

12. If you have been cyberbullied, do the people who cyberbully you also harass you in other ways (not using technology)?

0	1	2	3	4	5
I don't know	Never	Once/Twice	A Few Times	Many Times	Almost Every Day

---

SECTION FOUR: EXPERIENCES AS A CYBERBULLY

1. I have *cyberbullied* others (check one):

☐ Yes

☐ No

2. If yes, I *cyberbullied* others via (check *all* that apply):

☐ Email

☐ Chat Room

☐ Cell Phone

☐ Message Board

☐ Instant Messaging

☐ Social Networking Site (e.g., Facebook, Twitter)

☐ Video Sites (e.g., Youtube)

☐ Other, please specify:_____

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3. If yes, I have *cyberbullied* others (check one):

☐ Less than 4 times

☐ 4 – 10 times

☐ Over 10 times

SECTION FIVE: SEEING AND PREVENTING CYBERBULLYING

1. I know someone who has *been cyberbullied* (check one):

☐ Yes

☐ No

2. If yes, what did you do about it (check *all that apply*):

☐ I watched but didn't participate

☐ I joined in

☐ I left the online environment

☐ I tried to get the bully to stop

☐ I told a parent

☐ I told a teacher

☐ I told a friend

☐ Other, please specify: _____

_____

3. If adults know about cyberbullying, do they try to stop it (check one):

☐ Yes

☐ No

4. If yes, are their efforts helpful (check one):

☐ Yes

☐ No

5. What do you think teachers or other school personnel can do to stop cyberbullying?

_____
_____
_____
_____
_____
_____
_____

6. What do you think other adults (e.g., parents, community) can do to stop cyberbullying?

_____
_____
_____
_____
_____
_____
_____

ADDITIONAL COMMENTS

1. Are there any other comments you would like to make regarding bullying or cyberbullying?

_____
_____
_____
_____
_____
_____
_____

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You can…

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If you **do not** wish to participate, please enjoy these activities. You may keep this portion

You may **also keep this portion of the questionnaire if you do participate.**

CYBERBULLYING WORD SEARCH

```
K C R U M O U R S X G R G K G K C Z W I N B Y S L
M T T B A L I M K O R N P H C C Y T F S L H T H C
P E E I P Z U W S G K H I S O P H X L A R B C E O
W H R Y Z K V K S J O M R G I D T N C Q V C O B H
U J Y J L Z V M L P S G J J A R Z K X N T T M C K
I U J S S L O U I N J P I I E S B J I A P S P K V
X Q G M I M U S G L T A O L R E S F Q U M T U Z O
Q D X D G C S B A Q R S A R R K T E P C Q T T O O
L L Y F Z O A P R E N T E R T A I N M E N T E T H
C I L W G E T L A E I R Y A E S N Y U X P Q R M O
L L I N W O P R X O B J E S X I Y F D V U A J Q M
A H M L P U W C N K W Y B T T K O O B E C A F I E
S Y A O E K Y S E T L Z C K T C N F Y Y G U F Y Z
S M F O U N H R O Z E G H F Z I L Y E X C K G E T
R L G H H I O V J A D O C W R C W I F G R A O D H
O Z I C P H N B B D N U P L I V T Q O A C V S F
O G R S Y O B O P D T B S I T R E L W U S J A Y A
M W L U U D Y O C K E O O K N Y A N W Q E T X J K
W W F J S F P U E M A I L A F T M O D C U S C T L
T T R X R Y O E L V L Q F R R X E N P S Z I R F B
B U I I Z Y E M L W B A A A Q T J R R P B X X B E
F F E O R A L U C I R U C A R T X E N D D V D A Z
R N N J E M H N L I F O L J P X E N S E I O N Y X
D H D X N P H K A H Z D O L Z T P N W I T D H M H
M P R G E B J V E R B A L O Y D U E O G Q H P Y L
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WORD LIST

CYBERBULLY

TEXT

MESSAGING

COMPUTER

SCHOOL

ENTERTAINMENT

VERBAL

MSN

CLIQUES

BOYFRIEND

GIRLFRIEND

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	1		6	9		8		
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