

Exploring the Experiences of Cyberbullying in a Sample of Saskatchewan Adolescents

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Abstract

As technology advances, it appears that the adolescent age group is becoming more aligned with the various forms of communication that are available such as cell phones with texting, instant messaging on the Internet, as well as social networking websites like Facebook, Instagram, and Twitter. Bullying with these forms of communication technology has become known as Cyberbullying (Li, 2006). Communication technology use across Canada has been steadily increasing over the past few decades (Statistics Canada, 2010). With this increase, it is not surprising that adolescents are increasing the amount of time that they spend with communication technology (i.e. cell phones and Internet) whether it is school related use or socializing. Communication technology makes it more difficult for victims of cyberbullying to avoid the bullying and potentially increases the side effects that a victim may feel.

This study explored how adolescents experience cyberbullying. More specifically, in order to set the context for the study, it was explored how adolescents use communication technology (i.e. internet, cell phone, etc.) and whether there are differences between genders. Then, with specific focus on cyberbullying, how adolescents respond to the cyberbullying experience (as victim or perpetrator) and what views or attitudes adolescents had regarding cyberbullying were explored.

Anonymous questionnaires regarding cyberbullying and student life satisfaction were completed by 334 students in Grade 11 and 12 in a southern Saskatchewan high school. Approximately 33 percent of participants indicated being a victim of cyberbullying, 20 percent reported cyberbullying others, and almost 60 percent witnessed cyberbullying. Females reported experiencing stronger feelings in response to being cyberbullied than males and also felt more guilt than males when cyberbullying others. Those females who had experienced cyberbullying

victimization tended to hold more negative attitudes towards cyberbullying (i.e., thinking cyberbullying is harmful) than males. Males who tended to bully others more frequently tended to have more positive attitudes toward cyberbullying (i.e., thinking cyberbullying was a normal part of adolescence) than females. Participants also offered potential solutions on how to stop cyberbullying that included increasing education and awareness as well as using blocking and privacy features of Internet devices. Other findings indicate that participants who were not involved in cyberbullying, either as a victim or cyberbully, were more likely to report higher levels of life satisfaction than those involved in cyberbullying.

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Chapter One: Introduction

The following section begins with a description of the purpose and importance of the current study. A description of bullying and cyberbullying is provided. An overview of the chapters of this thesis is then provided followed by the main definitions utilized within this study.

Purpose and Importance of Study

Recently, the media has been giving a great amount of attention to adolescent suicides that are being attributed to peer aggression (Andressen, 2011), which is commonly known as bullying. The Promoting Relationships and Eliminating Violence (PREVnet) website, which is a Canadian network of researchers, non-governmental organizations, and governments committed to ending bullying, indicates that victims of bullying are at a greater risk for many problems including “low self-concept, school absenteeism, depression, stress-related health problems (e.g. headaches, stomach aches), social anxiety and loneliness, social withdrawal and isolation, aggressive behaviors and bullying, and in the most extreme cases, suicidal thoughts and suicide” (PREVnet, 2010). All of these risks are very serious and have the potential for drastically altering the live of adolescents who may be victim to bullying.

One of the most widely used definitions of bullying comes from Olweus (1978). This definition states that bullying is “peer aggression that incorporates three components: (1) repetition over time, (2) intentionally designed to harm the victim, and (3) involving an imbalance of power between the person doing the bullying and the person being bullied” (Grief & Furlong, 2006, p. 36). It is no secret that bullying exists at the adolescent age group as numerous studies have indicated high percentages of victimization between grades three and

twelve (e.g. Beran & Li, 2005; Hinduja & Patchin, 2008; Li, 2007; Pepler et al, 2004). This age group is also very reliant on communication technology (Subrahmanyam & Smahel, 2011).

As technology advances, it appears that the adolescent age group is becoming more aligned with the various forms of communication that are available such as cell phones with texting, instant messaging on the Internet, as well as social networking websites like Facebook and Twitter. Bullying with these forms of communication technology has become known as cyberbullying (Li, 2006). Cyberbullying also contains the aforementioned three components of peer aggression; however, it is conducted primarily through the various forms of technological communication available rather than in face-to-face confrontations (Beran & Li, 2005; Li, 2006).

Technology use across Canada has been steadily increasing over the past few decades (Statistics Canada, 2010). For example, there was a seven percent increase in Internet use across Canada between 2007 and 2009 from 73 percent to 80 percent (Statistics Canada, 2010). With this increase, it is not surprising that adolescents are increasing the amount of time that they spend with communication technology (i.e. cell phones & Internet) whether it is school related use or socializing. ERIN Research for the Media Awareness Network (2005) indicated that 94 percent of adolescents go online from home. This is an increase from 79 percent in 2001 (Media Awareness Network, 2005). In addition, eight out of ten homes in Canada have been reported to have access to the Internet (Statistic Canada, 2011).

ERIN Research for the Media Awareness Network (2005) reports that due to the perceived anonymity that the Internet provides, 59 percent of students said they took on a different identity and “of those students, 17 percent [said] they pretended to be someone else so ‘I can act mean to people and not get into trouble.’” The anonymity associated with Internet access provides a space for online bullying, or cyberbullying. Approximately 74 percent of

Canadian students between grades four and eleven indicated that they were bullied at school and 27 percent of students were bullied over the Internet (Media Awareness Network, 2005) indicating a new, evolving platform for victimization. The perpetrator of cyberbullying potentially has the advantage of perceived anonymity as well. Pisch (2010) indicates that the anonymity associated with cyberbullying allows the perpetrator to feel apathy towards the victim. These apathetic feelings typically result in the perpetrator not taking responsibility for their actions (Beran & Li, 2005).

Throughout the past decade technological use by adolescents has increased (ERIN Research for the Media Awareness Network, 2005; Kowalski, Limber, & Agatson, 2008). For this reason, cyberbullying is becoming an increasing problem. Cyberbullying is defined as the “any behavior performed through electronic or digital media by individuals or groups that repeatedly communicates hostile or aggressive messages intended to inflict harm or discomfort on other” (Tokunaga, 2010, p. 278). Cyberbullying can be conducted quicker than traditional bullying because of the speed with which technology functions. Due to the capability of communication technology to reach individuals outside of the traditional schoolyard, anyone is a potential victim (Lines, 2007). The fact that communication technology allows cyberbullying to leave school grounds makes it more difficult for victims of cyberbullying to avoid the bullying and potentially increases the side effects that a victim may feel. For example, some of the psychosocial effects of being bullied include anxiety, low self-esteem, and loneliness (Beran & Li, 2005).

Cyberbullying is more difficult for teachers and parents to control than more traditional forms of bullying due to the ways that it takes place (Li, 2006). As cyberbullying becomes a construct more widely present within the research community, it can be seen that much of the

literature focuses on prevalence rates, gender, age, parental involvement, and mode of cyberbullying. However, there is a limited amount of research available, which focuses primarily on the emotional responses experienced by victims of cyberbullying. Furthermore, in order to be able to compare to other research studies, the extent and method of cyberbullying experiences need to be considered. It is also important to obtain information regarding specific opinions that adolescents hold regarding the importance of cyberbullying in today's society. The current study is a replication of previous studies conducted in Saskatchewan and contributes similar data to previous research regarding cyberbullying prevalence (Cochrane, 2008; Pisch, 2010) but extends the generalizability of these Saskatchewan findings to yet another locale. The current study also extends previous research by including the Brief Multidimensional Student's Life Satisfaction Scale (Heubner, 1997), extracurricular involvement, perpetrator emotional response to cyberbullying, an opinion scale score, and gender comparisons of each variable.

As previous studies have suggested that cyberbullying regularly occurs within the adolescent age group (Beran & Li, 2005; Li, 2006, 2007), the focus of this study was the adolescent age group. For the purposes of this study, adolescence is defined as between the grades of nine and twelve, typically ranging from 14 to 18. Given that the majority of studies available on cyberbullying focus on prevalence in particular age groups, how and where it is conducted, and possible prevention strategies, the primary purpose of this study was to extend the research to include some correlates of cyberbullying such as extracurricular involvement, opinions as a scale score, and life satisfaction (as measured by the Brief Multidimensional Students' Life Satisfaction Scale, Huebner, 1997) in a sample of Saskatchewan adolescents. Gender comparisons are also taken into consideration for analyses.

This study explored how adolescents experience cyberbullying. More specifically, in order to set the context for the study, it was explored how adolescents use communication technology (i.e. internet, cell phone, etc.) and whether there are differences between genders. Then, with specific focus on cyberbullying, how adolescents respond to the cyberbullying experience (as victim or perpetrator) and what views or attitudes adolescents had regarding cyberbullying were explored.

It is also important to note that much of the research conducted on cyberbullying has been done so without a theoretical basis (Tokunaga, 2010). This is likely due to the newness of the research area. However, some attempts have been made to incorporate theory. For example, general strain theory was utilized within Hinduja and Patchin's (2007) study and dynamic systems theory was the motivator for research within Li's (2007) study. However, aside from these two studies, it appears that theory has not been addressed in relation to cyberbullying.

For the purposes of this study Bronfenbrenner's theory of ecological systems (1977, 1979) was taken into consideration. This theory suggests a combination of systems (micro, meso, exo, and macro) influence human development. The microsystem is the immediate setting that an individual is in, the mesosystem is any interaction between two microsystems, the exosystem is an external environment that an individual is not be directly involved in, and the macrosystem consists of larger sociocultural ideologies and attitudes (Bronfenbrenner, 1977). This theory of ecological systems was used to consider the impact of cyberbullying on the victims' surroundings and how the victim is impacted by his or her surroundings.

Overview of Chapters

This thesis is organized into five chapters. Chapter one consists of an introduction to and the purpose of the research study. Chapter two provides a review of the literature concerning

traditional bullying, cyberbullying, and the need for additional research in this area. Following this, chapter three outlines the research methodology and chapter four presents the results of this study. Finally, chapter five consists of a discussion of the findings of this study.

Definitions

Bullying: “peer aggression that incorporates three components: (1) repetition over time, (2) intentionally designed to harm the victim, and (3) involving an imbalance of power between the person doing the bullying and the person being bullied (Grief & Furlong, 2006, p. 36).

Cyberbullying: “any behavior performed through electronic or digital media by individuals or groups that repeatedly communicates hostile or aggressive messages intended to inflict harm or discomfort on other” (Tokunaga, 2010, p. 278).

Internet Cyberbullying: refers to any “hostile or aggressive messages intended to inflict harm or discomfort on others” (Tokunaga, 2010, p. 278) that takes place via email, chat rooms, voting/rating websites, blogs, online gaming, or instant messaging (Hinduja & Patchin, 2009).

Cell Phone Cyberbullying: refers to any “hostile or aggressive messages intended to inflict harm or discomfort on others” (Tokunaga, 2010, p. 278) via cellular telephone either with phone calls or text messaging.

Chapter Two: Review of the Literature

The following section contains a review of the literature concerning traditional bullying and cyberbullying. First, traditional bullying is defined, followed by a brief description of the characteristics, and impact and prevalence of traditional bullying. Second, an overview of the use of communication technology within the adolescent age group is provided. Subsequently, cyberbullying is defined and the characteristics, impact and prevalence are discussed. This is followed by a discussion of risk factors relating to cyberbullying and a brief explanation of why adolescents may participate in such behavior. Thereafter, an overview of recent literature is provided, followed by a summary and description of the need for additional research with a theoretical basis.

Traditional Bullying

Defined

The most commonly used definition of bullying comes from Olweus (1978). As previously stated, this definition states that bullying is “peer aggression that incorporates three components: (1) repetition over time, (2) intentionally designed to harm the victim, and (3) involving an imbalance of power between the person doing the bullying and the person being bullied (Grief & Furlong, 2006, p. 36). The aggression and repetition associated with this definition is a common characteristic within several other definitions of traditional bullying (Beran & Li, 2005; Grief & Furlong, 2006; Hinduja & Patchin, 2008; Hinduja & Patchin, 2007). Olweus (1978) refers to a power imbalance within his definition of bullying. This imbalance can be portrayed through a physical size difference between the victim and offender or through a perceived difference such as popularity (Beran & Li, 2005; Grief & Furlong, 2006; Hinduja &

Patchin, 2008).

Characteristics and Impact

Coy (2001) indicates that:

Bullying can take the form of name calling, put-downs, saying or writing inappropriate things about a person, deliberately excluding individuals from activities, not talking to a person, threatening a person with bodily harm, taking or damaging a person's things, hitting or kicking a person, making a person do things he/she does not want to do, taunting, teasing and coercion (p. 1).

Each of these forms of bullying is prominent within school-aged children (Coy, 2001) likely because the school grounds provide an opportune setting for bullying. In studies asking students to indicate where bullying commonly happens, it was found that it is "more common at school (in the school building or on schools grounds) than on the way to and from school, such as on the school bus, at the bus stop, or elsewhere in the community" (Kowalski, et al., 2008, p. 34). School grounds may be an opportune setting because bullying tends to occur where there is a lack of continual adult supervision (Kowalski et al., 2008).

The power imbalance between the victim of bullying and the offender plays a large role within the repetitive nature of traditional bullying. There are a wide range of characteristics that research has indicated may be the reason one person feels 'greater' than another. These characteristics include "popularity, physical strength or statue, social competence, confidence, extroversion, intelligence, age, gender, race, ethnicity, and socioeconomic status" (Mason, 2008, p. 324). Any of these characteristics may contribute to the power imbalance that exists between victim and offender of bullying.

It is possible for traditional bullying to occur between one victim and one offender, one

victim and multiple offenders, or multiple victims and one offender. Research by Beran and Li (2005) determined two categories of aggression that are associated with bullying: overt and relational. Overt aggression “includes verbal insults and physical assaults” (Beran & Li, 2005, p. 266) while relational aggression “refers to behaviors such as excluding someone from an activity and spreading rumors” (Beran & Li, 2005, p. 266). Studies have also indicated that overt aggression is more prominently displayed in males while relational aggression is more likely to be seen within females (Crick, Casas, & Ku, 1999; Li, 2006; Mason, 2008).

Bullying affects all individuals involved. There are various side effects of bullying for a victim including depression, headaches, stomach aches, low self-esteem, school absenteeism, loneliness, anxiety, suicidal thoughts and suicide (Hawker & Boulton, 2000; Mason, 2008; PREVnet, 2010). Victims of bullying also commonly feel vengeful, anger, and show signs of self-pity (Borg, 1998). Although each victim of traditional bullying may not experience all of these side effects, the likelihood of experiencing at least one side effect increases with the amount of bullying experienced. Those who are the bullies in bullying situations have been said to be psychologically defensive, “have positive attitudes toward violence, poor relationships with parents, and use drugs or alcohol” (Mason, 2008, p. 324).

Prevalence

Traditional bullying is often classified into three types: physical, verbal, and social. In Canada, prevalence rates of students (aged 11 to 15) involvement in physical bullying range from 10 – 15 percent and increases when the time frame is expanded (for example, from one week to one month) (Public Safety Canada, 2008). Similar prevalence rates were found with the same age group for verbal bullying as well. However, the prevalence rate greatly increases (up to 41 percent) when social bullying was considered (Public Safety Canada, 2008). Similarly, a

large study conducted within the United States determined that approximately 11 percent of students had been victims of bullying, 13 percent had bullied others, and six percent were both bullies and victims (Hinduja & Patchin, 2009). Overall, these general statistics indicate that bullying has continued to occur and is prevalent within the adolescent age group. With the increase in technology and continued ease in which people are able to obtain access to the Internet and communication tools, it is not surprising that the bullying phenomenon has migrated to cyberbullying.

Prevalence of Communication Technology Use

Technology use across Canada has been steadily increasing over the past few decades (Statistics Canada, 2010). For example, there was an eight percent increase in Internet use across Canada between 2007 and 2009 from 73 percent to 80 percent (Statistics Canada, 2010). With this increase, it is not surprising that adolescents are increasing the amount of time that they spend with communication technology (i.e. cell phones and Internet) whether it is school related use or socializing. A study conducted by ERIN Research for the Media Awareness Network (2005) included 5272 adolescent students across Canada indicated that 94 percent of adolescents go online from home. This is an increase from 79 percent in 2001 (ERIN Research for the Media Awareness Network, 2005) and demonstrates a great increase in Internet use. According to another study with 365 students from grade six to nine, approximately 64 percent of adolescents access the Internet at least once a day and just over 40 percent reported having three or more computers within their home (Cassidy, Jackson, & Brown, 2009). In addition, 23 percent of students, grade four to eleven, have their own cell phone and over half of these phones are used for text messaging (Media Awareness Network, 2005). Comparatively, Cassidy, Jackson, and Brown (2009) found that approximately 58 percent of adolescents have their own

cell phone. The difference in reported statistics can be attributed to the four-year difference between research studies and demonstrates at least some increase in the use of communication technology among adolescents.

Throughout the past decade technological use by adolescents has increased (Subrahmanyam & Smahel, 2011). Many teenagers in today's society carry cell phone with them regularly (Hinduja & Patchin, 2009). They also use the Internet for entertainment purposes, along with specific tasks, whereas many adults typically only use the Internet for a specific purpose (i.e. answering email; reading news; planning a vacation) (Hinduja & Patchin, 2009). The increase in adolescent reliance on and proficiency with technology has created a new medium for communication and thereby bullying. For this reason, it is possible that cyberbullying may be becoming an increasing problem.

Cyberbullying

Defined

Determining a widely acceptable definition for the construct of cyberbullying has yet to occur within this research area. Tokunaga (2010) illustrates the vast array of differing definitions of cyberbullying and stresses the need for an operational definition of the construct in order for research in this area to proceed constructively. He suggests the following as a uniting definition obtained from numerous differing definitions in the literature: "Cyberbullying is any behavior performed through electronic or digital media by individuals or groups that repeatedly communicates hostile or aggressive messages intended to inflict harm or discomfort on others" (Tokunaga, 2010, p. 278). The definition by Tokunaga (2010) was utilized for the current study.

Characteristics

Cyberbullying is a relatively new construct within the research community. Unlike traditional bullying, cyberbullying involves the use of communication technology such as cell phones and the Internet as means for harassment or bullying (Beran & Li, 2005; Hinduja & Patchin, 2008; Li, 2005). There are three major distinguishing factors between cyberbullying and more traditional forms of bullying (Tokunaga, 2010), to include perceived anonymity, lack of supervision, and accessibility to the targeted victim.

There appears to be a sense of security associated with bullying behaviors that occur from behind a computer screen or via other forms of communication technology (Hinduja & Patchin, 2008). The sense of security and perceived anonymity associated with cyberbullying provides adolescents an environment in which they can say hurtful things with extreme ease. There is a lack of social cues commonly obtained from the reactions of witnesses of bullying behaviors with cyberbullying, thereby providing an environment that allows individuals to act in ways that are not necessarily publicly acceptable (Mishna, Khoury-Kassabri, Gadalla, & Daciuk, 2012). This has been referred to as disinhibition within the literature (Hinduja & Patchin, 2009). Disinhibition is “to be freed from restraints on your behavior” (Hinduja & Patchin, 2009, p. 21) or to lack the social cues that may restrain or inhibit an individual’s behavior. Although adolescents appear to utilize this perceived anonymity to cyberbully others, it does not seem to be the case that victims of cyberbullying are always unaware of who is harassing them (Juvonen & Gross, 2008). According to research conducted by Juvonen and Gross (2008), 73 percent of respondents to an online survey “were ‘pretty sure’ or ‘totally sure’ of the identity of the perpetrator” (p. 501). From this, it appears likely that the cyber-environment provides a false sense of anonymity for those looking to treat other individuals in harmful ways.

Traditional bullying is commonly believed to occur on school grounds where the possibility for supervision and thereby intervention and prevention techniques can be utilized. However, with cyberbullying there appears to be a lack of supervision. Parents frequently underestimate their children's capability and knowledge with communication technology and thereby appear to be unaware of what positive and negative experiences their children are having through communication technology (Mishna, Cook, Gadalla, Daciuk, & Solomon, 2010). Also, with the increase of Internet availability on cell phones, it is not surprising that parental supervision of their children's activities and conversations on these cell phones is limited. There also appears to be an issue associated with children and teenagers not telling their parents about their experiences with cyberbullying (Mishna, Saini, & Solomon, 2009), thus creating a knowledge gap where parents are unaware of their need to provide supervision.

Along with the perceived anonymity and the lack of supervision associated with cyberbullying, there is also an increased ease in gaining access to various victims. Mishna et al. (2010) determined that almost all participants (99%) in their study had computers within their home and over half (53%) owned cell phones. The high rates of communication technology use allow for bullying to follow individuals home from school via social networking sites on the Internet and cell phone text messages among various other contexts.

Impact

The impact that cyberbullying potentially has on its victims has been mentioned in various research studies (Beran & Li, 2005; Beran & Li, 2007; Hinduja & Patchin, 2009; Juvonen & Gross, 2008; Yberra et al., 2007). Generally speaking, the consequences are very similar to those of traditional bullying. Emotional consequences include anger, frustration, sadness, embarrassment, and being scared (Hinduja & Patchin, 2009). One behavioral

consequence includes the potential for victims to bring weapons to school for protection (Ybarra, Diener-West, & Leaf, 2007). This was determined through the use of the Growing up with Media survey in which youth and an adult in their household were asked to complete the online survey, which contained questions concerning school-based behaviors and performance (Ybarra, et al., 2007). Problem behaviors have also been determined “such as recent school difficulties, assaultive conduct, substance use, and traditional bullying” (Hinduja & Patchin, 2009, p. 65). Evidence for these problem behaviors was found through the use of an online survey, which asked adolescents about their offline problem behaviors in relation to their cyberbullying victimization and various demographics.

Alternatively, the individuals who were inflicting the cyberbullying have been found to display problematic behavior such as low school commitment, alcohol use, and police contact (Ybarra & Mitchell, 2004). This was determined through the use of the Youth Internet Safety Survey in which 1501 youth were interviewed over the telephone about characteristics of Internet harassment, unwanted exposure of sexual material, and sexual solicitation. One parent or guardian of each youth was also interviewed in order to report on the youths Internet behavior.

Suicide, a potentially devastating consequence, has also been linked to cyberbullying. Several recent cases of adolescent suicide have implicated bullying and cyberbullying as factors in the victims’ lives. For example, Jenna Bowers-Bryanton, from Nova Scotia, committed suicide at the age of 15 after enduring months of traditional bullying at school as well as cyberbullying online and via text messages on her cell phone (Anderssen, 2011). Her mother, Pam Murchison, said that Jenna “received hateful text messages on her cell phone in the middle of the night [and] online, the insults bruised like punches: You are ugly, you are fat, you should kill yourself” (Anderssen, 2011). Two other teenagers, Emily McNamara and Courtney Brown,

also committed suicide in Nova Scotia as a result of traditional and cyberbullying (Boesveld, 2012). As it turns out, a 19-year-old man has admitted to encouraging others to bully and bullying these three girls himself. The Nova Scotia RCMP are currently conducting an investigation on the matter. Although bullying and cyberbullying are not always implicated in adolescent suicide and likely not the only reasons behind a decision to commit suicide, among young adults aged 10 to 24 in Canada, suicide is the second leading cause of death (Canadian Psychiatric Association, 2002). This is important to note primarily because the majority of suicides can be prevented.

Prevalence

As previously mentioned, the increase in communication technology use by adolescents has resulted in an increase in cyberbullying. Although prevalence rates vary slightly, primarily due to the definition of cyberbullying utilized within the specific studies (Tokunaga, 2010), generally speaking cyberbullying is experienced anywhere from 10 to 31 percent by adolescents (Hinduja & Patchin, 2009). It is important to note that many studies on cyberbullying have different definitions of the phenomenon, as well as have focused on different age groups and types of media, as well as have differing time periods (i.e. experiences within the last year vs. ever). It is interesting to note that although cyberbullying is prevalent within adolescents, studies have indicated that traditional bullying still has a higher incidence rate (Cassidy, Jackson, & Brown, 2009; Williams & Guerra, 2007). Specific details regarding particular factors associated with cyberbullying will be discussed further within the upcoming section entitled: *past research of cyberbullying*.

Risk Factors

Risk factors for cyberbullying include factors that may increase the probability of being a victim, bully or a bully-victim. Basically, any involvement in cyberbullying is included in the category of potential risk factors. A major risk factor for involvement in cyberbullying is the amount of time spent using the Internet (Juvonen & Gross, 2008; Mishna et al., 2012; Wolak, Mitchell, & Finkelhor, 2007). The higher the amount of time adolescents spend on the Internet, the higher the chance is of being involved in cyberbullying, whether it's as a victim, bully, or bully-victim (Mishna, et al. 2012). In contrast, it has been demonstrated that those who are not involved in cyberbullying have reported lower rates of time spent on the Internet and are less likely to share their online passwords to email and social networking site with other individuals (Mishna, et al. 2012).

Another risk factor for cyberbullying is attitude towards bullying behavior (Williams & Guerra, 2007). An individual who holds attitudes, or morals, that demonstrate approval of bullying behavior tend to have higher rates of involvement with cyberbullying, as well as verbal and physical forms of bullying (Williams & Guerra, 2007). It is important to note that the relationship between the moral acceptability of cyberbullying and involvement in the behavior is also seen with traditional bullying. This indicates an evolution of bullying towards a new platform and creates an impression that perhaps some cyberbullying and traditional bullying behaviors can be stopped through education of appropriate moral behavior.

Interestingly, when considering the placement of a computer within the home, one study found that adolescents who have private access to a computer away from their parents are more likely to be cyberbullied (Sengupta & Chaudhuri, 2011). Alternatively, another study that looked into parent supervision and computer placement within the home did not find a difference

in computer placement and adolescent involvement in cyberbullying (Mishna et al, 2012). It is possible that supervision may be more of a factor in cyberbullying behavior rather than computer placement in the home (Tokunaga, 2010).

Several studies have also been conducted on gender and age differences among adolescents and cyberbullying. Regarding differences between genders in recent cyberbullying research, there has been some inconsistency; However, the majority of studies have determined that there are no significant differences between genders when considering victimization (Tokunaga, 2010). Interestingly, there are a few studies in which gender differences regarding victimization were found (Kowalski et al., 2008; Sengupta & Chaudhuri, 2011; Smith, Mahadavi, Carvalho, & Tippet, 2006; Ybarra & Mitchell, 2008). These studies determined that females are more likely to be cyberbullied or to report an occurrence of being cyberbullied (Smith et al., 2006; Ybarra & Mitchell, 2008). This has been attributed to the fact that, within traditional bullying, females have been found to participate more within psychological, or verbal bullying instead of physical bullying (Tokunaga, 2010). However, considering the vast amount of studies demonstrating no significant differences between genders in cyberbullying (Beran & Li, 2007; Hinduja & Patchin, 2008; Juvonen & Gross, 2008; Mishna et al., 2012; Mishna et al., 2010; Williams & Guerra, 2007), the thought that females are more likely than males to be involved in cyberbullying should be interpreted with caution.

Much of the research on cyberbullying has been focused on adolescents typically between the ages of 10 and 18, depending on the focus of the study. Because of this, adolescent age groups are commonly viewed by grade level. There appears to be a curvilinear relationship between grade level and frequency of cyberbullying experiences (Williams and Guerra, 2007). More specifically, lower frequencies of cyberbullying experiences were seen within fifth and

eleventh graders while higher frequencies of cyberbullying experiences were seen within eighth graders. However, research on this particular curvilinear relationship is limited due to the many differing age groups or grades utilized within the research.

In contrast to the curvilinear relationship theory between grade and cyberbullying experiences, one study has determined that older students are more likely to perpetrate or be the victim of cyberbullying (Mishna et al., 2012). It has also been found that cyberbullying is relatively consistent between the eighth and eleventh grades (Williams & Guerra, 2007). Other studies have also shown no significant age differences (Beran & Li, 2007). It is important to note that each of these studies focused on different age groups (grades six, seven, ten and eleven, grades five, eight and eleven, and grades seven to nine, respectively). Due to the variable foci of the studies, it is not surprising that differences are seen in regards to age groups in relation to cyberbullying. However, it is clear that cyberbullying is prevalent across adolescence.

Reasons Adolescents Cyberbully

Determining the reasons that lie behind the motivations for cyberbullying is crucial for determining effective prevention and intervention efforts. Hinduja & Patchin (2009) determined, through the use of their own online survey, that revenge was the most common reason adolescents provided for their motivation to cyberbully others. Following revenge was that the individual deserved to be cyberbullied, and, that it was fun (Hinduja & Patchin, 2009). It also appears that some adolescents simply do not see the consequences of their actions and have, as previously mentioned, moral acceptability towards their actions (Williams & Guerra, 2007).

It is important to note that there appears to be limited research on why adolescents cyberbully. However, reasons appear to be similar to those of traditional bullying and therefore it seems as though researchers are assuming motives for cyberbullying are the same and are

simply taking place in a new setting. The lack of research on motives for cyberbullying also addresses a theoretical gap within this area of research. The topic of cyberbullying is relatively new and although there have been several studies concerning the prevalence of the experience, as mentioned, there is an absence of theory within these studies.

Research on Cyberbullying

Research of cyberbullying has increased greatly over the past few years. However much of the research appears to be conducted by a limited number of research teams. The following will review what has contributed to the topic of cyberbullying recently within the United States of America and Canada.

Research in the United States

In a study conducted by Hinduja and Patchin (2008), characteristics of cyberbullying victims and offenders were analyzed. Information was gathered through online surveys provided to 1378 adolescent Internet users. The survey contained items concerning both victimization and offending incidences of cyberbullying such as “have you been bullied online?” and “have you ever bullied online?” Hinduja and Patchin (2008) determined a link between traditional bullying and cyberbullying in that those bullied in the more traditional manner also appeared to be victims of cyberbullying as well as that “those who bully offline also appear to bully online” (p. 148). Hinduja and Patchin (2008) also found that “cyberbullying does not discriminate based on gender or race” (p. 147) but it is essential to note that a large part of the research available on gender and race impact on bullying are inconclusive. It is important to mention that the sample utilized within this study was gathered through convenience sampling with online recruitment and that there was no way of verifying the actual age of participants. It is possible that the data obtained from the survey is not an entirely honest representation of the target sample.

Prior to this study, Hinduja and Patchin (2007) attempted to link general strain theory (Agnew, 1985) to cyberbullying. General strain theory (GST) “recognizes how stressors may negatively affect one’s personal well-being” (Hinduja & Patchin, 2007, p. 93). Using this theory, 1388 internet-using adolescents were surveyed online. Cyberbullying behaviors and strain were viewed in relation to offline problem behaviors. Being a victim of cyberbullying was linked to offline problem behaviors, which Hinduja & Patchin (2007) attribute to strain. They effectively state that their study “has pointed to the emotional and psychological costs of cyberbullying victimization and empirically linked cyberbullying victimization with offline delinquent and deviant behavior” (Hinduja & Patchin, 2007, p. 103). It is important to note that there is a major concern with their population sampling technique. Certain websites popular with adolescents were linked to the survey and participants were asked to take part. Using this unsupervised method results in the inability to ensure that all participants were indeed adolescents and because of this results cannot be generalized. It is also interesting to note that Hinduja & Patching (2007) did not use GST within their later research, which may indicate limited success with GST in this study.

Another large contributor to cyberbullying research within the United States is Ybarra (2004, 2006, 2007, 2008). Utilizing a telephone survey, Ybarra and Mitchell (2004) interviewed 1501 adolescents between the ages of ten and seventeen along with one parent or guardian. Youth were placed into one of four categories based upon pre-screen questions. Group one: Targets of aggression; Group two: Online aggressors; Group three: Aggressor/target and; Group four: Non-harassment involved youth. The purpose of this study was to determine characteristics associated with each group of youth. Ybarra and Mitchell (2004) looked at psychological

characteristics, caregiver-child relationships, Internet use and controls (i.e. blocking software) and various demographics.

As seen in other research (Hinduja & Patchin, 2008), Ybarra and Mitchell (2004) found that approximately 56 percent of participants involved in online cyberbullying as aggressor/targets were also involved in traditional bullying. However, their findings also indicated that an unspecified amount of youth only take part in cyberbullying. Interestingly, similar characteristics were found between the aggressor/target and aggressor only groups when compared to the victim only group. When it came to the caregiver-child relationships, Ybarra and Mitchell (2004) indicated that additional measures were necessary to accurately measure these types of relationships.

Although this study is useful for determining various characteristics associated with cyberbullying, it is not without limitations. First, Ybarra and Mitchell (2004) stated that the severity and frequency of Internet harassment was not taken into account within their study. Without this information it is impossible to distinguish between regular cyberbullies and those who may have only bullied or been victims of cyberbullying on a single occasion. Secondly, the Youth Internet Safety Survey used within this study was created by experts in adolescent health and pilot tested for applicability and understandability. However, a reliability coefficient for the measure was never provided and as such the validity and reliability of the data received from the measure is questionable. Lastly, the data within this study was collected in 1999 and 2000 and therefore is not an adequate representation of cyberbullying characteristics within today's society since communication technology rates are much higher today.

Similar to the research conducted by Ybarra and Mitchell (2004), Ybarra, Mitchell, Wolak, and Finkelhor (2006) identified characteristics of cyberbullying victims through the use

of The Second Youth Internet Survey. Data for this survey was collected in 2005. Both youth and their caregivers were interviewed and Ybarra et al. (2006) was interested in characteristics such as age, gender, race, and socioeconomic status as well as online behaviors. Ybarra et al. (2006) determined that “harassing others online, interpersonal victimization and borderline/clinically significant social problems were all associated with elevated odds of being the target of Internet harassment among otherwise similar youth” (p. 1173). However, it should be noted that only nine percent of survey respondents indicated that they had been victims of Internet harassment. This percentage is lower than other studies that were not conducted via telephone survey, but has doubled from Ybarra and Mitchell’s (2004) study findings.

Ybarra et al. (2007) continued to look at characteristics of youth who cyberbullying but this time focused on the relationship between Internet harassment and school bullying. Through surveying 1588 youth between the ages of 10 and 15, several categories were considered including youth-reported Internet harassment, overlap between online and offline harassment, school-based behaviors and performance, caregiver-child relationship, substance use, Internet harassment of others online, and peer victimization offline. Ybarra et al. (2007) found that 35 percent of respondents had suffered Internet harassment in the past year, with eight percent falling within the frequent category. Similar to findings by Hinduja and Patchin (2007), this study found a significant relationship between school behavior problems and being harassed online. Students who reported online victimization were more likely to demonstrate school problems like skipping school, detention, and carrying weapons. Concerning is the finding that youth who are harassed online are more likely to carry weapons to schools although Ybarra et al. (2007) note that the reason behind bringing a weapon to school was not determined, therefore, a direct causal relationship cannot be assumed.

Another interesting finding within the study conducted by Ybarra et al. (2007) is that 64 percent of online harassed youth are not bullied at school. This is contrary to research findings that determined victims of cyberbullying are also victims of traditional bullying, which commonly takes place at school (Juvonen & Gross, 2008; Patchin & Hinduja, 2006). Ybarra et al. (2007) note that a major limitation within their study is the lack of an established definition of Internet harassment. As previously mentioned, this has been found to be a concern within the cyberbullying area of research (Tokunaga, 2010) and effort has been made by Tokunaga (2010) to establish a concrete definition of the construct.

Lastly, Ybarra and Mitchell (2008) considered the risk associated with social networking sites such as Facebook and Myspace in terms of sexual victimization and harassment. Approximately 1600 youth aged 10 to 15 were asked about their experience with online unwanted sexual solicitation and Internet harassment. Ybarra & Mitchell (2008) found that four percent of respondents were targeted by sexual solicitation on a social networking site and nine percent were being harassed on social networking sites. The presumption made by Ybarra and Mitchell (2008) was that social networking sites are risky due to the availability of personal information. However, their research findings do not agree with their presumption since the percent of respondents within their study that were targeted by sexual solicitation was minimal.

In a similar study, social networking site membership was compared to cyberbullying prevalence. Data was retrieved from 935 adolescents between the ages of 12 and 17 and it was determined that having a membership to a social networking site does not increase the likelihood of becoming a victim of cyberbullying. Rather, factors such as “being female, posting pictures online, chatting online, disclosing school information and instant messaging ID, doing part-time work, and flirting online are strongly associated with the likelihood of being cyberbullied”

(Sengupta & Chaudhuri, 2011, p. 288). It appears that it is more the behaviors of individuals online are associated to cyberbullying rather than particular memberships to social networking sites.

Research in Canada

In Canada, most of the research available on cyberbullying has been conducted by Li (2006, 2007, 2010; Beran & Li, 2005) and more recently, Mishna (2009, 2010, 2012). Beran and Li (2005) conducted research on “the nature and extent of cyberbullying among adolescents” (p. 268). They were interested in the types of media used for cyberbullying, frequency, and adolescent reactions to cyberbullying. A sample of 432 students from Calgary schools in grades seven to nine responded to a questionnaire. From this questionnaire, Beran and Li (2005) determined that about 25 percent of respondents had been cyberbullied or have cyberbullied others and that the majority of respondents knew of someone who had been cyberbullied. Respondents reported feeling sad, angry, anxious, and scared as a result of cyberbullying experiences. Email, instant messaging and the Internet were the most commonly reported means for cyberbullying.

In a similar study, Li (2006) analyzed the nature and extent of adolescent cyberbullying with a focus on gender differences. Utilizing a survey provided to 264 students, Li (2006) determined that almost a quarter of cyberbullies were male and close to twelve percent were female. Alternatively, approximately 25 percent of both males and females reported being victims of cyberbullying. Overall, Li (2006) did not find many significant gender differences within the context of cyberbullying except that males were more likely to bully.

More recently, Li (2010) introduced the theoretical framework of dynamic systems theory in relation to four questions: “What happens after students are cyberbullied?; What do

students do when they witness cyberbullying?; Why do cyber-victims choose not to report the incidents?; and what are students' opinions about cyberbullying?" (Li, 2010, p. 376). Overall, 269 students from grades seven to twelve participated within this study. Li (2010) determined that students fell into four categories when considering how they reacted to cyberbullying. These categories were as follows, "one group thought it was no big deal and one group just lived with it, the third group felt upset or really upset, and the fourth group had no opinion" (Li, 2010, p. 378). In terms of what students did in response to cyberbullying, most did not tell anyone and only a few took revenge. Regarding why students do not tend to tell adults about cyberbullying instances, Li (2010) found that only 15 percent of students reported that the situation got better after telling someone while six percent said the situation got worse. Many, 64 percent, of students reported that they thought people were cyberbullied for fun. Consequently, students also reported that they thought it was bad but that there is nothing that can be done about it. Overall, this study contributes greatly to cyberbullying research because of its application of dynamic systems theory and its inclusion of obtaining student opinions of cyberbullying without the use of focus groups.

In a study conducted by Cochrane (2008), cyberbullying was examined within schools in urban and rural Saskatchewan. Experiences, characteristics, responses to, and parental and teacher involvement in cyberbullying was analyzed. A sample of 396 participants responded to a survey. Over a third of respondents stated that they had cyberbullied others and almost half of respondents stated that they had been victims of cyberbullying. Differences in gender were found as well as "significant correlations between cyberbullying involvement and student grade level, frequency of computer use, school size, and school type" (Cochrane, 2008, p. 80).

Cochrane (2008) determined that most victims of cyberbullying were victimized by students from the same school they attended. The majority of victims also knew who the cyberbully offender was. Online instant messaging, cell phone text messaging, email, and social networking sites were found to be the most common methods of cyberbullying. Cochrane (2008) also found that cyberbullying was more common among older adolescents within high school and females were more likely to be victims of cyberbullying. Finally, Cochrane (2008) found a significant correlation between frequency of computer use and being cyber bullied. Consistent with the literature, few respondents indicated that they told parents or teachers about their cyberbullying experiences. Rather, they did nothing about the cyberbullying, confronted the bully, or told a friend about it.

In a similar study conducted by Pisch (2010), the presence of adolescent cyberbullying was examined in urban schools across Saskatchewan in grades ten, eleven, and twelve. Pisch (2010) was specifically interested in the extent of cyberbullying at these grade levels, the relationship between traditional bullying and cyberbullying, victim impact and responses to cyberbullying, and opinions on adult responses to cyberbullying. A sample of 476 participants from three large schools responded to the survey. Similar to results seen in the Cochrane (2008) research, almost half of the respondents indicated they had been victims of cyberbullying and almost a third said they had cyberbullied others. Two-thirds of respondents also knew of someone who had been cyberbullied.

Pisch (2010) determined that “the extent of cyberbullying remains consistent from middle years to high school” (p. 78). It was also found that half of respondents had been victims of traditional bullying and over half had been bullies. Pisch (2010) also found that a significant amount of respondents indicated video game consoles to provide an environment for

cyberbullying and suggested future research explore the area of online gaming. In addition, because almost ninety percent of respondents reported using a social networking site, Pisch (2010) suggested further exploration on the relationship between cyberbullying and these sites. However, as previously stated, research has determined that social networking site use is not a predictor or risk factor of cyberbullying, rather, it is the online behaviors that adolescents participate in (Sengupta & Chaudhuri, 2011).

With respect to cyberbullying, Pisch (2010) found similar patterns to those of Cochrane (2008). The majority of respondents told a friend about their cyberbullying experiences, just under a third of respondents told their parents, and only ten percent told a teacher. While over half of the respondents indicated that they would confront the bully, a third of respondents unfortunately said they would do nothing about the cyberbullying. Pisch (2010) suggests that future research be conducted on similar age groups throughout Canada, as there is a lack of Canadian research available on this content area. Pisch (2010) also suggests that the relationships between cyberbullying and online gaming, social network sites, and responses to cyberbullying be specifically analyzed.

More recently, Mishna et al. (2009; 2010; 2012) contributed to the Canadian content available on cyberbullying through focus groups with emphasis on the perspectives of cyberbullying, virtual relationships and communication technology use that students in grades five through eight hold (Mishna et al. (2009). Utilizing a grounded theory approach (Glaser & Strauss, 1967), which is typically used with qualitative research, Mishna et al. (2009) conducted four focus groups with 38 students. Five themes emerged including “technology embraced as younger ages and becoming the dominant medium, participants’ definitions and views of cyberbullying, factors unique to cyberbullying, types of cyberbullying, and telling adults.

Mishna et al. (2009) found that the general consensus within this study was that communication technology use was becoming more prevalent at younger ages and interestingly, all students within this study reported spending at least three hours a day on a computer. Similar to other research, it was found that students felt that they were less able to get away from bullying because cyberbullying can occur at home. Also, a common and seemingly emerging type of cyberbullying was threats utilized to motivate an individual to share provocative or suggestive pictures, which then eventually spread over the Internet. Similar to other research as well was the commonality of students not telling their parents or other adults about their cyberbullying experiences. The main reason for this was said to be a fear of having computer access taken away and a lack of evidence to provide to adults.

Many students reported that anonymity was unique to cyberbullying in comparison to traditional bullying. However, much of the reported cyber bullying the students experienced was not anonymous. This is in alignment with much of the research that considers anonymity of cyberbullying (Beran & Li, 2005; Hinduja & Patchin, 2009; Juvonen & Gross, 2008). It is important to note that the conclusions reached by Mishna et al. (2009) cannot be generalized due to the use of focus groups and the limited number of participants. However, as many of her findings align with other quantitative research findings, the opinions obtained by the students within her study should be considered very relevant.

Just last year, Mishna et al. (2012) conducted research that distinguishes between four groups of individuals in order to determine more specific prevalence rates of cyberbullying in Canada. These four groups include victims, bullies, bully-victims, and students not involved in any of the previous three groups. Utilizing a survey that addressed socio-demographic characteristics, technology use, and experience of cyberbullying, Mishna et al. (2012) obtained

data from 2186 students in grades six, seven, ten, and eleven. Over 50 percent of students were involved in cyberbullying as victim, bully, or bully-victim. Of these, almost 24 percent were victims, eight percent were bullies, and almost 26 percent were bully-victims. It is important to note that Mishna et al. (2012) did not define cyberbullying on the survey and questions pertaining to cyberbullying were phrased to query about particular behaviors related to cyberbullying. This likely resulted in the high prevalence rates of involvement in cyberbullying. The high prevalence rate of involvement in cyberbullying as both bully and victim is unique to cyberbullying and this is the first time bully-victims have been considered within cyberbullying research.

Summary

As mentioned previously, much of the research thus far on cyberbullying has focused on prevalence rates, predictors, parental awareness, and its relation to traditional bullying. Although this research has contributed greatly to the emerging area of cyberbullying, there appear to be gaps that have yet to be adequately addressed. The first area is the emotional responses adolescents experience after being cyberbullied. Although some studies have considered this by looking at both emotional and behavioral consequences (Beran & Li, 2005; Beran & Li, 2007; Hinduja & Patchin, 2009; Juvonen & Gross, 2008; Ybarra et al., 2007), it has never been the primary purpose of a research study. Secondly, as most of the Canadian literature available originates from Alberta and Ontario, data should be gathered within Saskatchewan to determine if differences may lie across provinces. There has yet to be research on cyberbullying in Saskatchewan published although some thesis work has been conducted within the province (Cochrane, 2008; Pisch, 2010).

Third, an extension of the research conducted by Li (2010), which considers adolescent opinions of cyberbullying, would be beneficial to the research area as there is a limited amount of research available that takes into account adolescent perspectives. Lastly, with the increase in Internet availability on cell phones it becomes increasingly important to determine the prevalence of cyberbullying via this form of technology. As previous studies have indicated that cyberbullying is conducted primarily with computers (Cassidy et al., 2009; Mishna et al., 2010), it is necessary to consider that Internet on cell phones has the potential to make cyberbullying entirely portable.

Chapter Three: Methodology

The following chapter consists of three sections. First, a description of the research question is provided. This is followed by a discussion of the ethical considerations inherent in the study including required permissions, issues of consent and voluntary participation, confidentiality, and anonymity. A description of the research participants, the measurement instrument, and analysis of the results will be provided.

Research Question

This study explored how adolescents experience cyberbullying. More specifically, in order to set the context for the study, how adolescents use communication technology (i.e. internet, cell phone, etc.) and whether there are differences between genders was investigated. Then with specific focus on cyberbullying, how adolescents respond to the cyberbullying experience (as victim or perpetrator) and what views or attitudes adolescents had regarding cyberbullying was explored.

Measurement Instrument

Participants completed an anonymous self-report paper pencil questionnaire (see Appendix A) composed of a combination of questions from the questionnaires created by Mishna et al. (2010) and Li (2007). The major difference between the current measure and Mishna's et al. (2010) measure is length. Mishna's et al. (2010) measure originally consisted of approximately 140 items whereas the current measure contains approximately 46 items. The current measure is advantageous because of the shorter completion time in relation to the original 140-item measure. The questions that were not used from Mishna's et al. (2010) survey included family background history and responses to specific situations of cyberbullying experiences as both victim and perpetrator (i.e. rumors, private pictures, impersonation, and sexual harassment).

These questions were not included due to the specificity of their phrasing which was not necessary for inclusion in the current study.

The questionnaire for the current study consisted of six sections concerning demographics, computer and cell phone use, experiences with cyberbullying, experiences as a witness of cyberbullying, opinions or attitudes on cyberbullying, and the Brief Multidimensional Students' Life Satisfaction Scale (Huebner, 1997). Since a widely acceptable definition for the construct of cyberbullying has yet to be determined within this research area (Tokunaga, 2010), participants were provided with the broad overview of what cyberbullying actions include (see Appendix A) written in age appropriate language that was utilized within Mishna's et al. (2010) study.

Overall, there were 46 items across the six construct areas. The majority of the items were closed-ended with an opportunity to specify an "other" or unlisted option within a provided blank space. Answer stems for several questions relating to use of Internet and cell phones included a range from "never" to "more than once a day." The questions that relate to the experience of cyberbullying included several emotional response options (i.e. sad, angry, confused, etc.) followed by a 4-point rating ranging from "not at all" to "extremely." Contact information for local helping services was provided at the end of the measure for those who are interested.

Ethical Considerations

Prior to administration of the survey to students, the following areas were considered.

School Division Permission

Alongside obtaining ethical approval from the University of Saskatchewan Behavioral Research Ethics Board, permission from a school division in southern Saskatchewan was also

obtained. The Superintendent of Curriculum, Instruction and Assessment was contacted by the researcher and met with the researcher in order to obtain permission. A follow-up meeting was also held with the researcher, the Superintendent of Curriculum, Instruction and Assessment, and the principal of the school of interest for the research study. The principal was provided with a copy of the questionnaire package (see Appendix A) prior to the meeting. Following these meetings, written approval was provided by the school division to the researcher.

Consent

Passive consent of parents was utilized for this study. Passive consent forms (see Appendix B) were sent home with students 16 years and over three weeks prior to administration of the survey in order to provide enough time for parents to return the consent forms if they did not want their child to participate. Information forms (see Appendix C) were provided to each student who chose to participate and this form was read aloud by the researcher prior to completion of the survey. As part of this process, students were also informed that by completing the questionnaire they were consenting to participate. The broad overview of what cyberbullying looks like in practice was provided to students on the first page of the survey in simple to understand wording in order to help students understand the focus of this study.

Voluntary Participation, Confidentiality, and Anonymity

All participants who decide to take part in this study were made aware that their participation was completely voluntary and that they had the right to withdraw at any point prior to submission of the questionnaire without consequence or prejudice. Participants were told not to make any identifying marks on the questionnaire and that responses would be kept confidential and anonymous. Students were also informed that their completion of the questionnaire was considered consent to participate. No other consent forms were required.

Students who chose not to participate were directed toward the activity booklet included in the questionnaire package or permitted to do other homework.

Participants

Participants in this study were high school students 16 years of age and over from a comprehensive public high school within southern Saskatchewan. Recruitment consisted of a meeting with the English department and the researcher and receiving support from the teachers to come into their classrooms. Remuneration was not offered to students. In total, 334 students in grades eleven and twelve completed the questionnaire. Due to the University of Saskatchewan Behavioral Research Ethics Board's wishes, students in grades nine and ten and those who were under the age of 16 were not permitted to be a part of this study.

Survey Administration

Approximately three weeks prior to survey administration, a passive consent form was sent home with 410 students in 20-level and 30-level English classes. This form required parental or guardian signatures only if students were not permitted to complete the survey. Nine passive consent forms were returned prior to survey administration. These students were provided with the crossword and word search activity in order to pass the time and were provided with the option to complete other homework. Surveys were administered on two separate days in order to accommodate 14 English classes with supervision of the process conducted by a counsellor from the school. Questionnaire packages were handed out to students over the age of 16 with the instruction to wait until everyone had the questionnaire package in hand so that the researcher could go over the information form with the students as a group. Those students who were not over the age of 16 were permitted to complete the crossword and

word search activity or to complete other homework. In total, three students were ineligible to complete the survey due to their age.

Once participants had the questionnaire package at their desk, the researcher directed them to the information form and reviewed it with them. Specifically, the issues of consent, voluntary participation, and right to withdraw were emphasized. Students were then directed to read the general description of cyberbullying that was provided on the first page of the survey prior to completion of the survey. Once students completed the survey, they were asked to place the survey in the brown envelop provided in the questionnaire package and place the envelop in a box at the front or back of the classroom. Students were encouraged to raise their hand if they had any questions so that the researcher could then come over to answer the question(s). Upon completion, the researcher thanked the students for their participation and read the debriefing statement below:

“Thank-you for your participation. I appreciate you sharing your experiences with me. Your results will be used to determine whether cyberbullying is a concern in your school. Previous research in other SK high schools has shown that up to 44% of the students have been a victim of cyberbullying and 31% have shared that they have been a cyberbully in the past (Pisch, 2010). This is a concern because other research has shown that cyberbullying can cause school difficulties, and lead to assaultive conduct, substance use, and traditional bullying (Hinduja & Patchin, 2009). Before today, some of you may not even have understood what cyberbullying is or recognized cyberbullying when it happens. This is not uncommon. I hope to share the results of this survey with your school administrators and with the student body. If cyberbullying is happening here, we want to make sure that we do all that we can to prevent it and address it and I encourage

you to become involved in any prevention activities or initiatives that might follow. However, if completing this survey has in any way made you feel upset or anxious or if you want to speak with someone, please contact me or another counsellor at Student Services or the Kids Help Phone at 1-800-668-6868 or online at kidshelpphone.ca”

This process took approximately 15 to 20 minutes to complete and the researcher was able to visit two classrooms in one period, five times each day. After the two days of surveying were complete, the surveys were removed from the envelopes and randomly number 1 to 334.

Analysis

The data collected was entered into the 2011 edition of the Statistical Package for the Social Sciences (SPSS) program. All data was entered by the researcher and checked for accuracy thereafter. This included comparing each survey to the data entry on SPSS for errors.

Data analysis was separated into three groups by research question. The first area considered the frequencies of communication technology use and other demographic data. The second area focused on the emotional experience of cyberbullying and the third area concentrated on student opinions of cyberbullying. Since the survey was primarily categorical in nature, frequency distributions separated by gender, age, and grade were used for descriptive analyses. Thereafter, Chi-Square Tests for Independence and dependent t-tests were used to determine if any significant differences existed between groups (Field, 2009). For continuous data, Pearson’s Product Moment Correlations and One-Way Analysis of Variance were utilized to determine significant differences between groups. An alpha level of 0.05 was used for most analysis to determine statistical significance.

Responses to open-ended survey items were analyzed using qualitative thematic analysis in order to identify repeated patterns of meaning (Braun & Clarke, 2006). Following the

recommendations of Braun and Clarke (2006), the researcher first became familiarized with the data and then codes were generated for the open-ended responses by grouping responses to reflect the common features between them. At all times the researcher attempted to ensure the coding of the open-ended items and the interpretations made from the codes were constructed from the raw data contained in the responses to the survey questions (Boyatzis, 1998). Ultimately the codes were collated to create themes that are seen in chapter four.

Chapter Four: Results

This chapter begins with a description of the response rate and a summary of the descriptive data concerning participant characteristics. Thereafter, specific findings related to each of the research questions of this study are presented.

Response Rate

A total of 334 participants from southern Saskatchewan completed the cyberbullying questionnaire from a potential pool of 410 students over 16 years of age, in grade 11 and 12 who were invited to participate in the study. Thus the response rate for this survey was 81.5 percent. The remaining 76 potential participants did not complete the survey either because the passive consent form was returned indicating the student did not have permission to participate (nine forms were returned) or because the student was absent on the day of data collection (approximately 67 students were absent overall). Participant number 85 was also removed from the data set due to inappropriate completion of the cyberbullying questionnaire.

Participant Characteristics

Demographic details can be found in Table 4.1 for the 333 participants. There was almost an equal gender split: 48.6 percent of participants were male and 51.1 percent were female with one participant not identifying their gender. Approximately 34 percent of participants were 16 years of age, 60 percent were 17 years of age and the remaining 5 percent were 18 years of age. Thirty five percent of participants were in grade 11, 65 percent were in grade 12 and one participant reported being in grade 13 indicating they did not graduate on time and were taking an extra year to do so. Participant academic grade ranges and frequency of extracurricular activity can also be found in table 4.1.

Table 4.1 Demographic Information (n=333)

Characteristic	Percentage of Respondents (n)
Gender	
Male	48.6 (162)
Female	51.1 (170)
Age	
Sixteen	33.9 (113)
Seventeen	60.4 (201)
Eighteen	5.4 (18)
Grade	
11	34.5 (115)
12	64.9 (216)
13	.3 (1)
Average Grades	
A's	14.7 (49)
B's	38.1 (127)
C's	37.2 (124)
D's	8.7 (29)
E's	0.9 (1)
Frequency of Extracurricular Involvement	
Never	26.4 (88)
About once/week	13.8 (46)
About 2 times/week	11.7 (39)
About 3 times/week	17.1 (57)
4+ times/week	30.9 (103)

*Note. Percentages do not add up to 100 due to missing values

A further breakdown on information related to cell phone use grouped by gender is found in Table 4.2. Approximately 94 percent of male and female participants reported using a cell phone. When asked how often a cell phone was used to talk verbally, approximately 31 percent of males and 27 percent of females said *a few times a week*. Twenty percent of males and 14 percent of females responded *more than once a day*, and comparably, 14 percent of male and female respondents and chose *never*. Of the male participants, 36 percent chose *once a day*, *once a week*, or *once a month* and 59 percent of females chose *once a week*, *once a month*, *more*

than once a day, or *once a day*. Overall, 17 percent of respondents indicated that they used a cell phone to talk verbally with friends *more than once a day*. The remaining percentage breakdown can be found in table 4.2.

Alternatively, when asked how often a cell phone was used to text message 85 percent of males and 87 percent of females responded with *more than once a day* and the remaining responses were all under six percent (see breakdown in Table 4.2). Overall, 86 percent of respondents use a cell phone to text message *more than once a day*, 3 percent text message *once a day*, 5 percent chose *a few times a week*, 1 percent chose *once a week* and *once a month*, and 5 percent of respondents chose *never*.

Upon analysis using the Chi-Square Test for Independence, no significant differences were found between gender and frequency of verbal use of a cell phone. Similarly, no significant differences were found between gender and frequency of text messaging use on a cell phone. As well, no significant differences were found between the cell phone use variables and age, or grade. However, ANOVA analysis determined a significant difference¹ between verbal use of cell phone and grade average, $F(3, 324) = 6.79, p = .000$, with the Bonferroni post hoc test indicating that those participants who reported having a grade average of A's also reporting less verbal use of cell phone ($M = 4.22$) than those with grade averages of B's ($M = 3.41$), C's ($M = 3.13$), and D's or E's ($M = 2.9$). The Bonferroni post hoc test is a type of conservative test conducted to compare the means of all combinations of pairs of groups (Field, 2009). Similarly, ANOVA analysis determined a significant difference between verbal cell phone use and extracurricular involvement, $F(2.33) = 7.32, p = .001$. The Bonferroni post hoc test indicated a

¹Although the assumption of homogeneity of variance was violated, the results of the Kruskal-Wallis nonparametric tests were also statistically significant and thus the parametric test was presented.

difference between those with extracurricular involvement of two to three times per week ($M = 3.86$) and both less than once a week ($M = 3.06$) and four or more times per week ($M = 3.29$) indicating that those who are involved in extracurricular activities two to three times per week have higher rates of verbal cell phone use than those who are rarely involved in extracurricular activities and those who are involved in extracurricular activities four or more times per week.

Table 4.2 Cell Phone Use by Gender (n = 333)

Characteristic	Male % Respondents (n)	Female % Respondents (n)	Total % Respondents (n)
Use of Cell Phone			
Yes	93.8 (152)	94.1 (159)	94 (311)
No	6.2 (10)	5.9 (10)	6 (20)
Verbal Use of Cell Phone			
More than once a day	19.8 (32)	13.7 (23)	16.7 (55)
Once a day	13.6 (22)	11.3 (19)	12.4 (41)
A few times a week	30.9 (50)	27.4 (46)	29.1 (96)
Once a week	13.0 (21)	18.5 (31)	15.8 (52)
Once a month	8.6 (14)	14.9 (25)	11.8 (39)
Never	14.2 (23)	14.3 (24)	14.2 (47)
Use of Cell Phone for Text Message			
More than once a day	84.5 (136)	87.0 (147)	85.8 (283)
Once a day	3.7 (6)	2.4 (4)	3.0 (10)
A few times a week	5.6 (9)	4.1 (7)	4.8 (16)
Once a week	0.6 (1)	0.6 (1)	0.6 (2)
Once a month	0.6 (1)	0.6 (1)	0.6 (2)
Never	5.0 (8)	5.3 (9)	5.2 (17)

*Note. Percentages do not add up to 100 due to missing values

Table 4.3 lists how many computers participants have in their homes, the amount of time spent using a computer in one day, and how often computers are used for homework, social networking and internet games. Each category is separated by gender. After running the Chi-Square Test for Independence, no significant differences were found between gender and hours

of computer use in a day or between gender and frequency of computer use for social networking.

Table 4.3 Computer Use

Characteristic	Male % Respondents (n)	Female % Respondents (n)	Total % Respondents (n)
Number of computers at home			
None	1.2 (2)	2.4 (4)	1.8 (6)
1	18.5 (30)	20.6 (35)	19.6 (65)
2	36.4 (59)	38.8 (66)	37.7 (125)
3 or more	43.8 (71)	38.2 (65)	41.0 (136)
Amount of hours spent on a computer in a day			
None	4.9 (8)	4.1 (7)	4.5 (15)
1 hour or less	46.3 (75)	43.5 (74)	44.9 (149)
2 hours	31.5 (51)	34.7 (59)	33.1 (110)
3 or more hours	17.3 (28)	17.6 (30)	17.5 (58)
Frequency of computer use for homework			
More than once a day	3.7 (6)	14.8 (25)	9.4 (31)
Once a day	17.9 (29)	19.5 (33)	18.7 (62)
A few times a week	36.4 (59)	43.8 (74)	40.2 (133)
Once a week	21.6 (35)	17.2 (29)	19.3 (64)
Once a month	13.6 (22)	4.7 (8)	9.1 (30)
Never	6.8 (11)	0.00 (0)	3.3 (11)
Frequency of computer use for social networking			
More than once a day	39.5 (64)	49.4 (84)	44.6 (148)
Once a day	28.4 (46)	25.3 (43)	26.8 (89)
A few times a week	9.9 (16)	11.8 (20)	10.8 (36)
Once a week	8.0 (13)	7.1 (12)	7.5 (25)
Once a month	3.7 (6)	1.8 (3)	2.7 (9)
Never	10.5 (17)	4.7 (8)	7.5 (25)
Frequency of computer use for Internet games			
More than once a day	7.5 (12)	2.9 (5)	5.1 (17)
Once a day	16.1 (26)	3.5 (6)	9.7 (32)
A few times a week	10.6 (17)	8.2 (14)	9.4 (31)
Once a week	8.1 (13)	4.7 (8)	6.3 (21)
Once a month	20.5 (33)	15.9 (27)	18.1 (60)
Never	37.3 (60)	64.7 (110)	51.4 (170)

*Note. Percentages do not add up to 100 due to missing values

However, a significant difference was found between gender and frequency of computer use to play Internet games, $\chi^2 (5, N = 331) = 31.948, p = 0.000$, indicating that a higher proportion of males spend more time playing Internet games than females. The Chi-Square Test for Independence also did not determine any differences between the computer use variables and age or grade.

When considering computer use, it is important to determine what types of websites Internet access is being used for. Table 4.4 provides a summary of websites commonly accessed by participants.

Table 4.4 Commonly Accessed Websites

Type of Website	Male (n) of Respondents	Female (n) Respondents	Total Respondents out of n = 333
Social Networking	132	152	284
Internet Game Sites	52	20	72
Chat Rooms	9	12	21
Sports Sites	75	21	96
Entertainment Sites	86	76	162
Sites for Homework	84	131	215

**Note.* Totals do not add up to (n) due to the option to select more than one response

Participants were also given the opportunity to provide examples of sites that they commonly accessed. Participant responses included: YouTube, music, tutorial video sets, Tumblr, blogging, Kijiji, online shopping, pornography, online books, news, Netflix, information encyclopedia (Wikipedia), email, Ebay, and applications on iPhone.

Cyberbullying Involvement

Participants were asked if they had ever been cyberbullied, if they had ever cyberbullied others, and if they had ever witnessed cyberbullying. Results can be found in Table 4.5. No significant differences were found between gender and cyberbullying victim, perpetrator, or witness frequencies. Also, when taking age and grade into consideration, no significant

differences were found in terms of cyberbullying involvement. However, the Pearson Product Moment Correlation did determine a significant correlation between frequency of cyberbullying victimization and reported grade average ($r = .148, p = .007$) suggesting that students who have experienced cyberbullying as a victim also tended to report having a lower grade average.

Table 4.5 Cyberbullying Involvement

Type of Involvement and Frequency in past 12 months	Male % of Respondents (n)	Female % Respondents (n)	Total % Respondents (n)
Cyberbullying Victim Frequency			
Never	70.2 (113)	63.3 (107)	66.7 (220)
Once/Twice	21.1 (34)	24.9 (42)	23.0 (76)
A few times	5.0 (8)	8.3 (14)	6.7 (22)
Many times	3.1 (5)	2.4 (4)	2.7 (9)
Almost everyday	0.6 (1)	1.2 (2)	0.9 (3)
Cyberbullying Perpetrator Frequency			
Never	77.5 (124)	81.7 (138)	79.6 (262)
Once/Twice	15.6 (25)	15.4 (26)	15.5 (51)
A few times	5.6 (9)	3.0 (5)	4.3 (14)
Many times	1.2 (2)	0.00 (0)	0.6 (2)
Almost everyday	0.00 (0)	0.00 (0)	0.00 (0)
Cyberbullying Witness Frequency			
Never	45.3 (72)	34.3 (57)	39.7 (129)
Once/Twice	26.4 (42)	25.9 (43)	26.2 (85)
A few times	17.0 (27)	27.7 (46)	22.5 (73)
Many times	8.2 (13)	10.8 (18)	9.5 (31)
Almost everyday	3.1 (5)	1.2 (2)	2.2 (7)

**Note.* Percentages do not add up to 100 due to missing values

The ANOVA analysis indicated a difference approaching significance between frequency of cyberbullying victimization and grade average, $F(3, 324) = 3.33, p = .020$, with those participants who reported a lower grade average of D's and E's ($M = 1.77$) also reporting a higher frequency of cyberbullying victimization than those with higher grade averages. No significant differences were found between extracurricular involvement and cyberbullying involvement. A significant correlation was found between being a victim of cyberbullying and

being a perpetrator of cyberbullying ($r = .378, p = .000$) indicating that those who are involved in cyberbullying as victims may also be involved as perpetrators.

Table 4.6 separates participants by gender in terms of experiences with cyberbullying. Generally speaking, 33 percent of participants have been cyberbullied, 20 percent have cyberbullied others, and 59 percent have witnessed cyberbullying. Each of these figures is based on frequency within the past 12 months. The Chi-Square Test for Independence indicated a significant difference between gender and frequency of witnessing cyberbullying, $\chi^2 (1, N = 325) = 4.065, p = 0.044$, but did not find any other significant differences between gender and victim or perpetrator frequencies. A higher proportion of females ($n = 109$) reported witnessing cyberbullying than males ($n = 87$). No significant differences were found between cyberbullying involvement either as victim, perpetrator, or witness, and age or grade.

Table 4.6 Experience of Cyberbullying

Type of Involvement	Male % Respondents (n)	Female % Respondents (n)	Total % Respondents (n)
Victim of Cyberbullying			
Never	70.2 (113)	63.3 (107)	66.4 (221)
Once to daily	29.8 (48)	36.7 (62)	33 (110)
Perpetrator of Cyberbullying			
Never	77.5 (124)	81.7 (138)	79 (263)
Once to daily	22.5 (36)	18.3 (31)	20.1 (67)
Witness of Cyberbullying			
Never	45.3 (72)	34.3 (57)	39 (130)
Once to daily	54.7 (87)	65.7 (109)	58.9 (196)

**Note.* Percentages do not add up to 100 due to missing values

Participants were also asked if they have friends who have bullied others, have been bullied by others, who have cyberbullied, and have been cyberbullied. Out of the 333 participants who responded, 198, or 59.5 percent, indicated that they have friends who have bullied others; 230, or 69.1 percent, indicated that they have friends who have been bullied by others; 125, or 37.5

percent, indicated they have friend who have cyberbullied others, and; 167, or 50.2 percent, indicated that they have friends who have been cyberbullied by others.

Further data from those participants who reported experiencing cyberbullying either as a victim, perpetrator, or witness can be found in table 4.7. A total of 40 participants, approximately 12 percent, reported being victims of cyberbullying, perpetrators of cyberbullying, and witnesses to cyberbullying. Of these 40 participants, 22 were male and 18 were female. Approximately 14 percent of participants indicated they had been both a victim and perpetrator of cyberbullying, while almost 27 percent were a victim and witness of cyberbullying, and almost 18 percent were both perpetrator and witness of cyberbullying.

Table 4.7 Frequency of Involvement in Cyberbullying

Frequency of Involvement	Male % Respondents (n)	Female % Respondents (n)	Total % Respondents (n)
Victim, Perpetrator & Witness	55.0 (22)	45.0 (18)	12.0 (40)
Victim & Perpetrator	54.3 (25)	45.7 (21)	13.8 (46)
Victim & Witness	44.9 (40)	55.1 (49)	26.7 (89)
Perpetrator & Witness	52.5 (31)	47.5 (28)	17.7 (59)

**Note.* Percentages do not add up to 100 due to missing values

Response to Cyberbullying

A total of 110 participants (33 percent) reported being a victim of cyberbullying at least once over the past 12 months. However, an approximate additional 30 participants responded to the questions concerning emotional responses to the cyberbullying experience. Appendix D provides a summary of the degree of feelings associated with these cyberbullying experiences that participants felt. Response options *very* and *extremely* were combined due to lower response rates between the categories. In order to protect against Type I error, the Bonferroni correction

was used (.05 divided by number of total comparisons) to determine an alpha of .0025 for the following t-tests. Significant differences were found between genders and all emotional responses except for feelings of anger, annoyance, embarrassment, and crankyness. Overall, female participants reported experiencing stronger feelings in response to being cyberbullied than males. Table 4.8 displays a summary of the independent t-test results of each emotional response option with significant differences indicated by a star. Independent samples t-tests were also used to determine if there were any differences between means by age and grade. However, no significant differences were found. Similarly, ANOVA analyses were used to determine if any differences in emotional responses and grade average or extracurricular involvement existed. However, no significant differences were found.

Table 4.8 Emotional Response t-Test

Emotional Response to Cyberbullying	N	Male M	SD	N	Female M	SD	<i>t</i>	<i>p</i>
Scared*	62	.03	.18	78	.62	.72	-6.85	.00
Sad*	62	.42	.59	79	1.47	.95	-8.08	.00
Alone*	62	.23	.56	80	1.15	1.11	-6.45	.00
Angry	62	1.18	.98	77	1.35	1.04	----	----
Vulnerable*	62	.31	.69	75	.93	.96	-4.42	.00
Frustrated*	63	.83	.87	80	1.38	.95	-3.57	.00
Nervous*	62	.34	.68	79	.84	.93	-3.68	.00
Pathetic*	62	.19	.51	79	.73	.97	-4.27	.00
Lonely*	62	.32	.72	78	1.05	1.10	-4.71	.00
Powerless*	62	.19	.51	79	.92	1.00	-.65	.00
Annoyed	63	1.25	1.00	78	1.47	1.12	----	----
Embarrassed	60	.48	.79	77	.96	1.03	----	----
Cranky	62	.44	.78	77	.81	.96	----	----
Anxious*	62	.26	.54	76	.78	.97	-3.95	.00
Depressed*	62	.34	.77	77	.16	.63	-3.78	.00
Run Away*	62	.16	.63	77	.75	1.19	-3.75	.00
Sick*	62	.21	.52	79	.84	1.08	-4.53	.00
Not Sleep*	62	.21	.52	77	.99	1.08	-5.57	.00
Not want to go to School*	62	.21	.68	76	.99	1.19	-4.80	.00
Could not concentrate*	62	.27	.66	78	.94	1.11	-4.39	.00

* Indicates significance at the $p=.0025$ level

Participants were also asked about how they immediately respond in the moment of being directly cyberbullied (Table 4.9) as well as what happened after they told someone they were being cyberbullied (Table 4.10). Please note that not all participants answered these questions due to not having experienced cyberbullying.

Table 4.9 Immediate Response to Cyberbullying

Immediate Response to Cyberbullying	Male (n) Respondents	Female (n) Respondents	Total (n) Respondents
Do nothing	72	39	111
Tell Cyberbully to stop	28	56	84
Get Away from Cyberbully	36	65	101
Cyberbully others	4	2	6
Tell an Adult	10	38	48
Tell a friend	21	78	99

**Note.* Percentages are not provided and totals do not add up to 100 due to the option to select more than one response

Table 4.10 Results of Telling Someone about Cyberbullying

What happened after you told someone?	Male % Respondents (n)	Female % Respondents (n)	Total % Respondents (n)
It got better	7.2 (10)	19.7 (27)	13.5 (37)
It got worse	1.4 (2)	5.8 (8)	3.6 (10)
Nothing changed	11.6 (16)	21.2 (29)	16.4 (45)
I never told anyone	23.2 (32)	13.9 (19)	18.5 (51)
I have never been cyberbullied	56.5 (78)	39.4 (54)	48.0 (132)

**Note.* Percentages do not add up to 100 due to missing values

When participants were asked who tried to help them when they were cyberbullied, 10 males and 30 females indicated their parents, 3 males and 13 females indicated a sibling, 1 male and 9 females indicated a teacher or other adult at school, 18 males and 55 females indicated their friends, and 31 males and 16 females indicated no one tried to help. Overall, 85 males and 61 females reported that they had never been cyberbullied.

A total of 67 participants reported being a perpetrator of cyberbullying at least once over the past 12 months. However, approximately 25 additional participants responded to the

questions concerning emotional responses to the cyberbullying experience. Appendix E provides a summary of the feelings associated with being a perpetrator of cyberbullying that participants felt.

Response options *very* and *extremely* were combined due to lower response rates between the categories. In order to protect against Type I error, the Bonferroni correction was used to determine an alpha of .004 (i.e., .05 divided by the total number of comparisons). Significant differences were only found between genders and reported feeling of guilt ($t(86) = -3.624, p < .001$) indicating that females feel more guilt than males when cyberbullying others. Responses of (thinking cyberbullying is) funny ($t(88) = 2.138, p = .035$), terrible ($t(85) = -2.759, p = .007$), and nothing ($t(81) = 2.112, p = .039$) were approaching significance suggesting that males may be more likely than females to report emotional responses of funny or doing nothing in response to cyberbullying others, whereas females may be more likely than males to report feeling terrible in response to cyberbullying others. The emotional responses of cyberbullying others were also compared by age, grade, grade average, and extracurricular involvement but no significant differences were found.

Participants were also asked about their responses to witnessing cyberbullying. Results can be found in Table 4.11. Participants were also given the opportunity to provide further information about their normal response to cyberbullying in an open-ended question. Responses included doing nothing or ignoring the situation, helping the victim if asked to, and talking to the cyberbully.

Table 4.11 Witness Response (n = 333)

Response to Witnessing Cyberbullying	Male (n) Respondents	Female (n) Respondents	Total (n) Respondents
Join in	6	3	9
Cheer the bully on	3	1	4
Watch but not participant	41	55	96
Leave online environment	12	34	46
Object to others	12	17	29
Object to cyberbully	28	29	57
Try to help or befriend victim	29	49	78
Report the Cyberbully	14	18	32
Have not been a witness	42	35	77

**Note.* Percentages are not provided and totals do not add up to 100 due to the option to select more than one response

Cyberbullying Opinions

Participants were asked several questions concerning their opinions on cyberbullying.

Table 4.12 provides a summary of those questions in relation to how male and female participants responded.

Table 4.12 Cyberbullying Opinions (n = 333)

Question	Male % Respondents (n)	Female % Respondents (n)	Total % Respondents (n)
What is your reaction to cyberbullying?			
No big deal	16.8 (27)	6.7 (11)	11.7 (38)
Live with it	27.3 (44)	24.4 (40)	25.8 (84)
Upset	21.1 (34)	43.9 (72)	32.6 (106)
Very upset	5.6 (9)	14.6 (24)	10.2 (33)
No opinion	29.2 (47)	10.4 (17)	19.7 (64)
What is your feeling about people being cyberbullied?			
They deserve it	4.0 (6)	0.0 (0)	1.9 (6)
It's too bad, but there is nothing we can do about it	50.3 (75)	23.0 (38)	36.1 (114)
It is a very serious problem and we need to stop it	45.7 (69)	77.0 (127)	62.0 (196)
Cyberbullying is a normal part of the online world			
Agree/Strongly agree	46.2 (74)	38.5 (65)	42.3 (139)
Neutral	31.2 (50)	37.9 (64)	34.7 (114)
Disagree/Strongly disagree	22.5 (36)	23.7 (40)	23.1 (76)
Things that happen online should stay online			
Agree/Strongly agree	26.8 (43)	11.9 (20)	19.2 (63)
Neutral	34.8 (56)	22.0 (37)	28.3 (93)
Disagree/Strongly disagree	38.5 (62)	66.1 (111)	52.6 (173)
It is important to tell a responsible adult			
Agree/Strongly agree	50.0 (80)	71.0 (120)	60.8 (200)
Neutral	40.0 (64)	26.6 (45)	33.1 (109)
Disagree/Strongly disagree	10.0 (16)	2.4 (4)	6.1 (20)
I would report cyberbullying incidents if it were anonymous			
Agree/Strongly agree	30.0 (48)	61.6 (104)	46.2 (152)
Neutral	41.9 (67)	23.1 (39)	32.2 (106)
Disagree/Strongly disagree	28.1 (45)	15.4 (26)	21.6 (71)
I have the right to say anything I want online			
Agree/Strongly agree	10.1 (16)	5.3 (9)	7.6 (25)
Neutral	23.3 (37)	17.1 (29)	20.1 (66)
Disagree/Strongly disagree	66.6 (106)	77.6 (132)	72.4 (238)

Adults should stay out of this			
Agree/Strongly agree	15.0 (24)	11.1 (19)	13.0 (43)
Neutral	40.0 (64)	25.9 (44)	32.7 (108)
Disagree/Strongly disagree	45.0 (72)	62.9 (107)	54.3 (179)
I would like to create a more kind and respectful online world			
Agree/Strongly agree	56.5 (91)	78.1 (132)	67.7 (223)
Neutral	35.4 (57)	20.7 (35)	27.9 (92)
Disagree/Strongly disagree	8.1 (13)	1.2 (2)	4.5 (15)

*Note. Percentages do not add up to 100 due to missing values

In response to why participants thought people cyberbully others, 65.2 percent answered *they feel insecure*, 63.4 percent answered *they are jealous*, 55 percent answered *they think it is fun*, 48 percent answered *they are angry*, 42.9 percent answered *they have family problems*, 41.3 percent answered *they are bored*, 39.3 percent answered *they are mean*, 37.8 percent answered *they think it is a defense mechanism*, and 21.9 percent answered *it is cool*. Please note that responses do not total 100 percent because participants were permitted to choose more than one response. “Other – please specify” responses included alcohol and drug abuse, attention, scared to say what they want face-to-face, in response to bullying, to make themselves feel better, to gain power, gossip, anonymity, peer pressure, and revenge.

The eight questions from the opinion section of the questionnaire were recoded and reverse coded where required in order to develop an opinion scale score. A reliability analysis of this scale determined an acceptable alpha level (i.e., $r_{xx} > .70$; Field, 2009), Cronbach’s alpha = .733. A lower score on the opinion scale indicates agreement with the general opinion that cyberbullying is harmful whereas a higher score indicates an opinion that cyberbullying is normal or typical adolescent behavior. Midrange scores indicate neutrality to cyberbullying. The lowest possible score attainable on the opinion scale is zero whereas the highest score attainable is 32. Overall, 321 participants completed the opinion questions and scores ranged

from 0 to 27. The mean score was 12.41 indicating that most participants have neutral opinions of cyberbullying. When correlated with frequency of cyberbully involvement as a victim and perpetrator, Pearson's Product Moment Correlations revealed a significant correlation for males between the opinion scale score and frequency of cyberbullying others ($r = .259, p = .001$). However, this was not the case with female participants. For females, the Pearson Product Moment Correlation revealed a significant correlation between the opinion scale score and frequency of being a victim of cyberbullying ($r = -.158, p = .045$). For females, students who had experienced more frequent cyberbullying victimization tended to hold a more negative attitude toward cyberbullying (i.e., thinking cyberbullying is harmful) than males. Male students who tended to bully others more frequently tended to have more positive attitudes toward cyberbullying (i.e., thinking cyberbullying was a normal part of adolescence) than females. The Pearson Product Moment Correlation also revealed a significant correlation between the opinion scale score and participant reported grade average ($r = .137, p = .015$), indicating that those students with lower grade averages also tended to have more positive attitudes, or thinking that cyberbullying is normal, toward cyberbullying than students with higher grade averages.

Independent samples t-tests were conducted in order to determine if any significant differences existed between gender and responses to each of the opinion scale questions. Significant differences were found between gender and reported agreement with knowing someone that has been hurt by cyberbullying ($t(328) = 5.092, p < .000$), reported agreement with what happens online should stay online ($t(327) = 5.158, p < .000$), reported agreement with telling an adult ($t(327) = 4.875, p < .000$), reported agreement with reporting cyberbullying if it could be done anonymously ($t(327) = 5.974, p < .000$), reported agreement with having the right to say anything online even if it is unkind ($t(327) = 2.954, p = .003$), reported agreement with

adults should stay out of cyberbullying ($t(328) = 2.454, p = .015$), and reported agreement with wanting to create a kinder online world ($t(328) = 4.214, p < .000$). In all significant cases, males reported less agreement than females indicating that females believe cyberbullying to be more harmful than males. Means and standard deviations for the opinion scale responses can be found in table 4.13.

Table 4.13 Opinion Survey Response Means & Standard Deviations

Opinion Questions on Cyberbullying	Male Mean	SD	Female Mean	SD
Cyberbullying is a normal part of the online world	2.30	1.03	2.09	.96
I know of someone who has been really hurt by cyberbullying*	2.51	1.21	1.81	1.27
Things that stay online should stay online*	1.84	1.09	1.23	1.08
If someone is being hurt by cyberbullying, it is important to tell a responsible adult*	1.49	.86	1.04	.82
I would report cyberbullying incidents if I could do so without anyone knowing it was me*	2.03	1.03	1.33	1.08
I have the right to say anything I want online, even if what I say hurts someone or violates someone's privacy*	1.16	1.00	.85	.91
Adult should stay out of this*	1.59	1.01	1.32	.99
I would like to create a more kind and respectful online world*	1.34	.87	.96	.72

* Indicates significant differences

Independent samples t-tests were conducted in order to determine if any significant differences existed between responses to the opinion scale questions and age or grade. No significant

differences were found. Similarly, no significant differences were found between total opinion scale score and grade average or extracurricular involvement.

When participants were asked if they would report cyberbullying to a school counselor, teacher, or administrator, only 23 percent answered, *probably yes*. Of those who said they would report it, approximately 25 were male and 50 were female. Alongside closed-ended response options for why participants would choose not to report being cyberbullied to school staff, participants were also given the opportunity to provide an open-ended response. Seventy-two participants contributed open-ended responses and after reviewing the responses thematically (Braun & Clarke, 2006), the following categories represent the majority of responses received: I can stand up for myself, I would just ignore the cyberbullying/cyberbullying is not a big deal, lack of trust in school staff, telling school staff would not change anything. Closed ended answer response rates can be found in Table 4.14.

Table 4.14 Why Cyberbullying would not be reported to school staff (n = 333)

Question	Male (n) Respondents	Female (n) Respondents	Total % Respondents (n)
They would not understand or believe me	12	19	9.3 (31)
They would/could not do anything to stop it	45	73	35.4 (118)
I could get into trouble because I am also at fault	15	24	11.7 (39)
I could get into trouble even if I did nothing wrong	14	27	12.3 (41)
Cyberbully could get back at me and make things worse	14	44	17.7 (58)
Other students could make fun of me	15	27	12.9 (43)
Parents might restrict access to technology	4	27	9.6 (31)
I need to learn to deal with Cyberbullying myself	44	43	26.1 (87)
Cyberbullying is no big deal, people should just ignore it	46	21	20.1 (67)

**Note.* Percentages do not add up to 100 due to the option to choose more than one answer

Similarly, participants were asked whether they would report being cyberbullied to their parents or guardians. Overall, 41 percent indicated that they probably would tell their parents or guardians. Of this 41 percent, 44 were male and 89 were female. Together with the closed-ended response options for why participants would choose not to report being cyberbullied to their parents/guardians, participants were also given the opportunity to provide an open-ended response. Fifty-seven participants contributed open-ended responses and after analyzing the

responses thematically, the following categories represent the majority of responses received: I can stand up for myself, I would just ignore the cyberbullying, parents/guardians would not know how to stop it/would not be helpful, awkward or embarrassing interaction. Closed answer response rates can be found in Table 4.15.

Table 4.15 Why Cyberbullying would not be reported to Parent/Guardian (n = 333)

Question	Male (n) Respondents	Female (n) Respondents	Total % Respondents (n)
They would not understand or believe me	8	18	7.8 (26)
They would not know how to stop it	23	38	18.3 (61)
I could get into trouble because I am also at fault	4	19	6.9 (23)
I could get into trouble even if I did nothing wrong	5	14	5.7 (19)
Cyberbully could get back at me and make things worse	8	23	9.3 (31)
Other students could make fun of me	10	13	6.9 (23)
Parents might restrict access to technology	5	26	9.3 (31)
I need to learn to deal with Cyberbullying myself	31	32	18.9 (63)
Cyberbullying is no bid deal, People should just ignore it	42	14	16.8 (56)

**Note.* Total percentages do not add up to 100 due to the option to choose more than one answer

Participants were provided with an open-ended question asking, “What would be the most effective way to stop cyberbullying?” Overall, 286 participants responded to the question, resulting in an approximate 86 percent response rate. After thematic analysis, several general

categories of responses emerged. The most common response, as indicated by 15 percent of participants was that there is no way to stop cyberbullying. Following this, 12 percent of participants indicated that education and increasing awareness was the most effective way of stopping cyberbullying. One student responded that “the most effective way to stop cyberbullying would be to educate students (especially younger groups of children) and to have a more readily and accessible place for people to go to if they are being cyberbullied.” Comparably, 12 percent of participants indicated that ignoring the cyberbullying by using blocking features and choosing not to react to the cyberbullying would be a way to stop cyberbullying. Almost 10 percent of participants made reference to the need to limit online activity in order to stop cyberbullying. One student stated “people need to spend less time in the virtual world.” Other, less prevalent categories that emerged include participants not knowing if there was a way to stop cyberbullying, telling adults, confronting the cyberbullying or fighting back, monitoring online activity, and being more respectful online.

Relation to Life Satisfaction

Scores from the Brief Multidimensional Students’ Life Satisfaction Scale (Huebner, 1997) were totaled in order to determine the level of life satisfaction of participants. A reliability analysis of this scale determined a good alpha level (Field, 2009), Cronbach’s $\alpha = .839$. A higher score on the life satisfaction scale is indicative of a higher level of life satisfaction. The participant reported life satisfaction level ranged from seven to 42 (with zero being the lowest level of life satisfaction possible and 49 being the highest level of life satisfaction possible). The mean reported level of life satisfaction score was 31.66.

Independent samples t-tests were conducted in order to determine significant differences between gender and reported satisfaction with family, friendships, school experience, self, living

arrangement, and overall life. Significant differences were only found between genders and reported self satisfaction ($t(320) = 2.476, p = .014$) with males ($M = 5.4114, SD = 1.13502$) reporting higher levels of satisfaction than females ($M = 5.0427, SD = 1.51617$). Independent samples t-tests were also conducted to determine if any significant differences existed between total life satisfaction and age and grade. However, no significant differences were found. ANOVA analyses determined a significant difference between total life satisfaction and grade average, $F(3, 316) = 14.47, p = .000$, with the Bonferroni post hoc test indicating that those participants with reported grade averages of A's ($M = 34.33$), B's ($M = 32.70$), and C's ($M = 30.79$) all having higher life satisfaction scores than those participants with reported grade averages of D's or E's ($M = 26.21$). Similarly, significant differences were also found between total life satisfaction and extracurricular involvement, $F(2, 319) = 10.49, p = .000$. Bonferroni post hoc analyses indicated that those who were involved in extracurricular activities less than once a week had lower levels of life satisfaction ($M = 30.07$) than those who participated in extracurricular activities four or more times per week ($M = 33.67$).

Upon running the Pearson Product Moment Correlation, a significant negative correlation was found between the experience of cyberbullying as a victim and level of life satisfaction ($r = -0.224, p < 0.001$). Similarly, a significant negative correlation was found between experience of cyberbullying as a perpetrator and level of life satisfaction ($r = -0.115, p = 0.040$). Both of these findings indicate that those participants who were not involved in cyberbullying, either as a victim or cyberbully, were more likely to report higher levels of life satisfaction than those who were involved in cyberbullying, either as victim or perpetrator. The Pearson Product Moment Correlations revealed a significant correlation between male reported frequency of being cyberbullied and total life satisfaction score ($r = -.354, p < .000$). A similar correlation was also

found between male reported frequencies of cyberbullying others and total life satisfaction score ($r = -.216, p = .007$). Alternatively, a significant correlation was only found for females between reported frequency of being cyberbullied and total life satisfaction score ($r = -.441, p < 0.000$). These findings indicate that for females, total life satisfaction is only influenced by cyberbullying victimization but that for males both victimization and perpetration of cyberbullying influence life satisfaction. A significant negative correlation was found between participant reported grade average and life satisfaction ($r = -.330, p = .000$) indicating that those participants with higher grade averages also tended to report higher levels of life satisfaction than those with lower reported grade averages. Similarly, a significant correlation was found between frequency of extracurricular involvement and life satisfaction ($r = .248, p = .000$), indicating that those participants who tended to be more involved with extracurricular activities also tended to report higher levels of life satisfaction than those who reported less extracurricular involvement.

Chapter Five: Discussion

The following chapter provides a discussion of the research findings. First, the purpose and procedures of the research are reviewed. Thereafter, the findings of the current study are compared with those of previous research. Lastly, the importance of the research, limitations of the study, and suggestions for future research are provided.

Purpose and Procedures

The majority of studies available on cyberbullying focus on prevalence in particular age groups, how and where cyberbullying is conducted, and parental involvement, the primary purpose of this study was to extend the research to include some correlates of cyberbullying such as extracurricular involvement, opinions as a scale score, and life satisfaction (as measured by the Brief Multidimensional Students' Life Satisfaction Scale, Huebner, 1997) in a sample of Saskatchewan adolescents. Gender comparisons are also taken into consideration for analyses (as measured by the Brief Multidimensional Students' Life Satisfaction Scale; Huebner, 1997) in a sample of Saskatchewan adolescents.

This study explored how adolescents experience cyberbullying. More specifically, in order to set the context for the study, I explored how adolescents use communication technology (i.e. internet, cell phone, etc.) and whether there are differences between genders. Then with specific focus on cyberbullying I explored how adolescents respond to the cyberbullying experience (as victim or perpetrator) and what views or attitudes adolescents had regarding cyberbullying. For the purposes of this study Bronfenbrenner's theory of ecological systems (1977, 1979) was intended to be taken into consideration.

Summary of Main Findings

There were six main findings of this study. First, 94 percent of the participants reported using a cell phone. A much larger proportion of participants indicated they used their cell phone for text messaging than for verbal use (approximately 86 percent versus 17 percent for more than once a day response option). Almost one fifth of participants indicated they had two or more computers in their home and almost half of students reported spending two to three or more hours on the computer per day.

Second, roughly one third of the participants have experienced cyberbullying in the past 12 months and similar frequencies were reported by both genders. Approximately one fifth of the participants indicated that they have cyberbullied others in the past 12 months and similar levels were reported by both genders. Finally, over half of the participants indicated being a witness to cyberbullying, with slightly more females reporting being a witness than males.

Third, overall, approximately one quarter of respondents were categorized as being both a victim of and witness to cyberbullying. Just under one fifth of respondents were categorized as being both a perpetrator of and a witness to cyberbullying. Approximately 14 percent of respondents were both victims and perpetrators and a similar amount (12 percent) were victim of, perpetrator of, and witness to cyberbullying.

Fourth, significant differences were found between reported emotional responses to cyberbullying and gender with females reporting experiencing more intense levels of the following emotions than males: sad, alone, frustrated, nervous, lonely, vulnerable, and embarrassed. Significant differences were also found between genders and reported emotional response to cyberbullying others with females reporting stronger levels of feeling guilt than males. A third of the participants reported being upset as a reaction to cyberbullying whereas a

quarter of the participants reported that they “lived with it.” Over half of the participants indicated that cyberbullying is a serious problem that needs to be stopped, however, over a third of the participants indicated that cyberbullying is a problem but that there is nothing that can be done about it.

Fifth, a significant correlation was found between the opinion scale score and male frequency of cyberbullying others indicating that male students who tended to cyberbully others more frequently tended to have less negative attitudes toward cyberbullying than females and leaned towards the opinion that cyberbullying is a normal part of life. A significant correlation was found between the opinion scale score and female frequency of cyberbully victimization indicating that females who had experienced more cyberbullying as a victim tended to hold a more negative attitude toward cyberbullying (i.e., cyberbullying is bad) than males.

Lastly, a significant negative correlation was found between the frequency of experiencing cyberbullying as a victim and level of life satisfaction as well as frequency of cyberbullying others and level of life satisfaction. Both of these findings indicated that participants who were not involved in cyberbullying, as victim or perpetrator, were more likely to indicate higher levels of life satisfaction than those involved in cyberbullying. Similarly, a significant correlation was found between level of life satisfaction and reported grade average as well as frequency of extracurricular involvement indicating that those participants with higher grade averages or those who tended to be more involved in extracurricular activities also tended to report higher levels of life satisfaction than those with lower reported grade averages or less extracurricular involvement.

Extent of Cyberbullying

The extent of cyberbullying was investigated because cyberbullying is still a relatively new research phenomenon and it is important to continue to contribute Canadian data from different regions to this area of research. Overall, 33 percent of participants have been cyberbullied, 20 percent have cyberbullied others, and 59 percent have been a witness to cyberbullying. Similar rates were found between genders. These victimization rates are slightly higher than the general research rate, which has been reported to be between 10 and 31 percent (Hinduja & Patchin, 2009), as well as similar rates reported in Canadian studies (Beran & Li, 2005; Li, 2006; Mishna et al, 2012). However, this may be due to the use of different definitions of cyberbullying between studies. Since a widely acceptable definition for the construct of cyberbullying has yet to be determined within this research area (Tokunaga, 2010), participants in the current study were provided with Mishna's et al. (2012) broad overview of what cyberbullying actions include and this may have allowed for greater interpretation by the participants as to what can be included in cyberbullying behavior. Notably, the victimization rates for the current study are considerably lower to those of two other Saskatchewan-based studies (Cochrane, 2008; Pisch, 2010), which reported that nearly half of their participants experienced cyberbullying victimization. It is possible that rates of cyberbullying victimization may be higher in Saskatchewan when compared with studies in Alberta and Ontario. It is also possible that the difference in cyberbullying definitions utilized between studies could account for some variability. Regardless of differences between reported rates of cyberbullying victimization, it is important to note that as research continues over the years in this area, adolescents are continuing to be cyberbullied and that rates appear to be somewhat higher in Saskatchewan than other places in Canada.

The one fifth of participants reporting cyberbullying others is somewhat lower than the third of participants found by Cochrane (2008) and Pisch (2010) but similar to the rates reported by Beran and Li (2005) and Li (2006) and higher than the eight percent reported by Mishna et al. (2012). The differences in reported rates of cyberbullying others could be attributed to the format of the question and the setting in which the surveying took place. A broad definition of cyberbullying was used in this study which could have led to under or over-reporting of behavior, especially as compared to studies that used narrow definitions of cyberbullying. Furthermore, it is possible that not all students read the provided summary of what cyberbullying includes which could have contributed to a lack of understanding or misinterpretation of what cyberbullying others would consist of. The classroom setting for survey administration also may have had an impact on how honest individuals were in admitting that they had cyberbullied others since it was possible (but strongly discouraged) for students to see how other students completed their surveys. However, it is important to note that adolescents are continuing to cyberbully their peers and it is possible that the rates reported here are underestimations since there is likely a sense of shame and/or embarrassment associated with being unkind to others. It is interesting to note that Li (2006) determined a slight gender difference with almost a quarter of males and only 12 percent of females reporting having cyberbullied others, while the current study had more similar rates between genders (male = 22.5%, female = 18.3%). Perhaps, since 2006 females have become more involved in cyberbullying others or female participants within the current study were more honest in responding to questions than those in Li's (2006) study. Since research has demonstrated that females are more involved with psychological instead of physical bullying (Tokunaga, 2010), it is possible that previous research has underestimated female involvement in cyberbullying as a perpetrator.

Research has shown that the majority of adolescents know someone who has been cyberbullied (Beran & Li, 2005; Cochrane, 2008; Li, 2006; Pisch, 2010). Similarly, recent research in Saskatchewan has demonstrated high rates of witnesses to cyberbullying incidents (Pisch, 2010). In alignment with these studies, the current study found that approximately 59 percent of participants had witnessed cyberbullying at least once in the past 12 months. A significant difference was also found between frequency of witnessing cyberbullying and gender with a higher proportion of females than males reporting witnessing cyberbullying incidences. Although no significant gender differences were found in regards to cyberbullying involvement as victim or perpetrator, a significant correlation was found between grade average and cyberbullying victimization. This suggests that students who have experienced cyberbullying as a victim also tended to report having a lower grade average than those who were not involved in cyberbullying.

Use of Communication Technology

Ninety-four percent of participants within the current study indicated that they used a cell phone, which is consistent with research indicating that the majority of teenagers carry a cell phone with them regularly (Hinduja & Patchin, 2009). A study by Cassidy, Jackson, and Brown (2009) indicated that 58 percent of adolescent participants within their study had their own cell phone whereas the current study presents a much higher statistic of 94 percent. This is likely due to the increase in communication technology use from 2009 since other studies have demonstrated increasing rates of cell phone use among this age group (Kowalski, Limber, & Agatson, 2008; Statistics Canada, 2010; Subrahmanyam & Smahel, 2011).

When comparing verbal communication by cell phone to text message communication by cell phone, a proportionately higher number of participants indicated more frequent of cell phone

communication via text messages. For example, almost 86 percent of participants indicated they communicated via text messages *more than once a day* while approximately 17 percent indicated they communicated verbally with a cell phone *more than once a day*. Similar proportions were reported by both genders. The rates for communication via text messages are similar but slightly lower than those found by Pisch (2010) at 90.5 percent. This difference can be attributed to the difference in question format utilized between the current study and Pisch (2010). Pisch (2010) indicated that 90.5 percent of participants utilized text messaging as a way of communicating with peers whereas the current study was interested in frequency on a daily basis. Both similar findings indicate that adolescents are communicating regularly via text message.

Similar proportions were reported by both male and female participants in regards to how many hours per day were spent on the computer, with one hour or less being the most prevalent response. However, these rates are likely an underestimation since the majority of participants indicated that they have a cell phone and likely the question regarding computer use was not thought of in terms of Internet on the cell phone. Similar to results found by Cassidy, Jackson, and Brown (2009), 41 percent of participants reported having three or more computers within their home. Research has demonstrated that adolescents use the Internet primarily for entertainment purposes as well as specific tasks (Hinduja & Patchin, 2009). This is consistent with the current study findings as the majority of participants indicated they used the computer for social networking more than once a day and for homework only a few times a week. The most notable difference between genders was found in regards to frequency of computer use to play Internet games, where a higher proportion of males spent more time playing Internet games than females.

Response to Cyberbullying

Victim Response

Past research has found that victims of cyberbullying often report feeling sad, angry, anxious, fearful, powerless, and frustration with females typically being more negatively affected (Beran & Li, 2005; Lines, 2007). Similarly, the current study found participants reported most frequently feeling angry, annoyed, frustrated, and sad. Significant differences were found between genders on all emotional responses except for feelings of anger, annoyance, embarrassment, and crankiness with female participants reporting stronger feelings of each emotional reaction in response to being cyberbullied than males. Since females appear to consistently be more negatively impacted by cyberbullying (Cochrane, 2008; Li, 2006) it may be beneficial to specifically target females in regards to potential intervention. As suggested in prior research (Cochrane, 2008), the types of emotions that victims feel in response to cyberbullying victimization could help in developing potential programs for intervention that focus on ways to cope with the impact of cyberbullying, for example, anger management.

Participants were also asked about how they responded in the moment of being cyberbullied and what happened if they told someone they were being cyberbullied. Unfortunately, and not unlike other research studies (Cochrane, 2008; Li, 2010), the majority of participants indicated that they would do nothing in response to being cyberbullied. Almost a third of participants indicated that they would tell a friend, which was also the most common response in Pisch's (2010) study. Sadly, in response to what happened after participants told someone they were being cyberbullied, the most common answer was that nothing changed. It is possible that because many adolescents believe nothing will change if they tell someone that this is the reason more people are not being made aware of cyberbullying incidents. If effective

interventions or consequences are not put into place to assist adolescents with dealing with cyberbullying, adolescents will likely continue to avoid reporting cyberbullies.

Participants were also asked about whether they would report cyberbullying to a school counselor, teacher, administrator or parents/guardians. This question was difficult to compare to other Saskatchewan research studies because it was phrased as a hypothetical question in the current study whereas other studies looked at who adolescents reported cyberbullying to after the fact. However, since the survey utilized within the study was adapted from Li (2010), findings can be compared to her work. Li (2010) reported that less than 18 percent of participants would tell school staff if they were being cyberbullied, whereas almost 25 percent of participants within the current study indicated they would tell school staff. Notably, over 40 percent indicated they would tell their parents or guardians indicating a potential lack of trust in school staff. In both cases, females were much more likely to report cyberbullying than males. If participants indicated that they probably would not tell school staff or parents/guardians, they were asked why. In both situations, the top three responses included 1) that adults would or could not do anything to stop it; 2) that the adolescent needs to learn to deal with cyberbullying themselves; and 3) that cyberbullying is no big deal, people should just ignore it. These responses indicate that there is a lack of faith in adult capability to intervene and assist with cyberbullying incidences and that cyberbullying is not as much of a concern as people make it out to be.

Perpetrator Response

Exploration of perpetrator characteristics within traditional bullying has indicated that those who bully others typically “have positive attitudes towards violence, poor relationships with parents, and use drugs or alcohol” (Mason, 2008, p. 324). In terms of cyberbullying, those who cyberbully others have demonstrated low school commitment, alcohol use, and police

contact (Ybarra & Mitchell, 2004) as well as more positive attitudes towards bullying behavior (Williams & Guerra, 2007) than those who do not cyberbully others. It appears that studies have yet to look into the emotional responses of those who cyberbully others. The current study determined that the highest rated emotional responses to cyberbullying others were feelings of guilt, feeling terrible, and thinking cyberbullying others was funny. The only significant difference found between genders was for the response of guilt, with females feeling more guilt than males in response to cyberbullying others. It is important to note that a similar proportion of males and females reported cyberbullying others. The response of thinking cyberbullying others was funny approached a statistical significant difference between genders with males reporting a higher rate of thinking cyberbullying others was funny than females. This is consistent with research indicating that females have a more negative psychological response to cyberbullying than males (Cochrane, 2008; Li, 2006) and suggests that males may not realize the impact cyberbullying has on its victims since a proportion believe it is amusing to cyberbully.

Witness Response

Since the current study is adapted from Li's (2010) study, it is possible to compare Canadian adolescent responses to witnessing cyberbullying. In regard to those who have witnessed cyberbullying, the majority of participants in both studies have watched but not participated, which Li (2010) has indicated may encourage the individual cyberbullying others to continue their behavior. This was also seen in Saskatchewan based studies by Cochrane (2008) and Pisch (2010). The second highest response in the current study, as well as the other three studies (Cochrane, 2008; Li, 2010; Pisch, 2010), was to try to help or befriend the victim which indicates that a proportion of adolescent witnesses of cyberbullying do realize the effect that cyberbullying may have on the victim and want to try to improve the situation for the victim.

The similarities of witness responses to cyberbullying between Canadian research studies demonstrates a need for education surrounding the possible effects of being a bystander (i.e. passive encouragement of the cyberbully (Li, 2010)), as well as support for those who want to help cyberbullying victims.

Opinions

Several closed-ended questions were asked about their opinions and eight questions were combined in order to create a scale score. Participants were also permitted to disclose their own opinions through open-ended questions. When participants were asked what their reaction to cyberbullying was, almost a third responded that it made them upset, whereas just over a quarter responded that they live with it. Even though the most common response was feeling upset, many adolescents do not report cyberbullying to adults. It is for this reason that adolescents should be provided with coping mechanisms for dealing with these situations, as well as being directed to appropriate support when needed. On a positive note, when participants were asked what their feeling about people being cyberbullied was, over 60 percent responded that it is a very serious problem and we need to stop it. A greater proportion of females chose this response in comparison to males whereas conversely just over a third of participants responded to the same question with *cyberbullying is too bad, but there is nothing we can do about it*, with a greater proportion of males choosing this response than females. This demonstrates that males have a more neutral stance to the prevention of cyberbullying whereas females believe something should be done to prevent or stop it. These rates are somewhat different from Li's (2010) findings. Li (2010) reported just under half of participants choosing that cyberbullying should be stopped, as well as that there is nothing that can be done about it. It is possible that

this difference reflects diversity between provinces since Li's (2010) research took place in Alberta, Canada.

This study contributes gender comparisons in regards to specific opinion questions on cyberbullying conducted as part of this research study as a new area of research in cyberbullying. In each case where a significant difference was found between males and females, it was males who reported less agreement than females indicating that females believe cyberbullying to be more harmful than males. Differences between genders were found for the following opinion questions: "I know someone who had been really hurt by cyberbullying," "things that happen online should stay online," "if someone is being hurt by cyberbullying, it is important to tell a responsible adult," "I would report cyberbullying incidents if I could do so without anyone knowing it was me," "I have the right to say anything I was online, even if what I say hurt someone or violates someone's privacy," "adults should stay out of this," and "I would like to create a kind and respectful online world." Overall, the opinion scale score mean was within the range that suggests neutrality towards the issue of cyberbullying. However, a significant correlation was found between the opinion scale score and frequency of cyberbullying others for males indicating that male students who tended to cyberbully others more frequently tended to have more positive attitudes towards cyberbullying (i.e. thinking cyberbullying was a normal part of adolescence) than females. This is consistent with traditional bullying and cyberbullying research indicating that an individual who holds attitudes that demonstrate approval of bullying behavior tend to have higher rates of involvement with cyberbullying than those with attitudes that demonstrate less approval of bullying behavior (Williams & Guerra, 2007). A significant correlation was also found between the opinion scale score and frequency of cyberbullying victimization for females indicating that those females who experienced more frequent

cyberbullying victimization tended to hold more negative attitudes toward cyberbullying (i.e. thinking cyberbullying is harmful) than males. This is logical, as it has been demonstrated that females are more likely to be psychologically impacted by cyberbullying experiences than males (Cochrane, 2008; Li, 2006), and supports the need for increasing supports to be made available for these individuals.

Participants were provided with an opportunity to answer the question of what the most effective way to stop cyberbullying would be. Four main categories emerged through thematic analysis as a result of an approximate 86 percent response rate. The most prevalent answer was that there was no way to stop cyberbullying. This is consistent with other research findings in Canada that have taken into account adolescent opinions of cyberbullying (Li, 2010). The second most prevalent answer was that education and increasing awareness was the most effective way of stopping cyberbullying. Specifically, one participant stated, “the most effective way to stop cyberbullying would be to educate students (especially younger groups of children) and to have more readily and accessible places for people to go if they are being cyberbullied.” The third emerging response was that ignoring the cyberbullying by using blocking features and choosing not to react to the cyberbullying would be the best solution. This response could be tied into the education and awareness category, as some adolescents are not aware of how to use blocking and privacy settings. Lastly, many participants referenced limiting online activity as a solution, for example one participant suggested that, “people need to spend less time in the virtual world.”

Relation to Life Satisfaction

New to this area of research is the relation of cyberbullying to student life satisfaction. Life satisfaction was correlated with cyberbullying victimization and perpetration. Significant

differences were found between both cyberbullying victimization and perpetration when compared to levels of life satisfaction indicating that those who are not involved in cyberbullying, either as victim or cyberbully, are more likely to report higher levels of life satisfaction than those who are involved in cyberbullying. When gender was taken into account, it appears that for females, life satisfaction is only influenced by cyberbullying victimization but that for males both victimization and perpetration of cyberbullying influence life satisfaction. This is interesting and should be examined more specifically in future research because similar rates of cyberbullying involvement as perpetrator were reported for both males and females. The Brief Student's Life Satisfaction Scale (Heubner, 1997) does not take into consideration individual emotions and it is for this reason that it was not correlated with victim and perpetrator emotional responses.

Levels of life satisfaction were also correlated with self-reported grade average and amount of extracurricular involvement. In both cases, higher levels of life satisfaction were reported when adolescents had higher grade averages or were more involved in extracurricular activity. It is possible that students with higher grade averages spend more time studying and less time on the Internet or using cell phones which then reduces the amount of exposure to cyberbullying in any capacity. The same could be concluded in regards to extracurricular involvement as those adolescents who are more involved may have less time to spend on the Internet or on their cell phone and thereby reduce their exposure to cyberbullying. Further research is required in this area.

Findings in Relation to Theory

Since research on cyberbullying has primarily been conducted without a theoretical focus (Tokunaga, 2010), Bronfenbrenner's (1977, 1979) the theory of ecological systems was intended

to be incorporated into this study. However, due to limitations within the measurement instrument it was not possible to specifically consider the impact of cyberbullying on the victim's surroundings and how the victim may be impacted by his or her surroundings. It is important to note that, since the current study utilized a combination of two measurement instruments that have been used for several research studies across Canada, there is a need for more specific and applicable theoretical frameworks to be incorporated into this area of research. The theory of ecological systems (Bronfenbrenner, 1977, 1979) suggests a combination of systems influences human development and does not take into account the intricacies involved in cyberbullying incidences. For this reason, it is recommended that alternative theories be taken into consideration for future cyberbullying research or that measurement instruments for cyberbullying incorporate the specificities necessary for the incorporation of the theory of ecological systems (Bronfenbrenner, 1977, 1979).

Implications of Research

It is apparent from this study that cyberbullying is an ongoing issue within the lives of the adolescent population studied in this sample. Even though some attitudes indicate neutrality or negativity towards finding solutions to cyberbullying, it is important to keep in mind that this is still a relatively new phenomenon for school divisions and as such, methods and processes of dealing with cyberbullying may not yet have been put in place. Several implications can be derived from the findings of the current study.

Education and increasing awareness was one of the main suggestions brought forth by adolescents within this study. Mishna, Saini, and Solomon (2009) indicate "to ensure that researchers do not fall into the technological gap across generations, it is important to elicit the experiences of the children and youth who are at the forefront of these technological advances"

(p. 1226). Since it is students that are suggesting more preventative education on the topic of cyberbullying especially at younger ages, the recommendation should be taken seriously that perhaps these students are currently not receiving a sufficient amount of education.

Appropriately, it is the adolescent age group that is most frequently studied and commonly involved in cyberbullying (Tokunaga, 2010) and therefore increasing awareness of the risk factors, impact cyberbullying has on victims and perpetrators, and ways to protect yourself online, can only be beneficial. Another significant piece to increasing education and awareness is providing resources to students for where and from whom they can receive appropriate and necessary supports. Similarly, since many students reported telling a friend about being cyberbullied, increasing student education around ways to support their peers would also be beneficial.

A second implication derived from the current study would be appropriate intervention specifically focused on the emotional responses adolescent experience as a result of cyberbullying. Since females tended to be more psychologically impacted by cyberbullying victimization it would be appropriate to create interventions specific to feeling sad, frustrated, and angry. For example, it would be beneficial to teach coping strategies or implement anger management interventions. Also, because more males than females reported cyberbullying others to be funny, appropriate education surrounding the impact cyberbullying can have on its' victim would be valuable as it appears males do not recognize the potential severity of their actions.

Another implication that comes from the current study findings, as well as past research (Cochrane, 2008; Li, 2010; Mishna et al., 2009; Pisch, 2010), has found adolescents are not seeking support from adults due to the belief that they cannot help or are not trustworthy. It is

crucial that the relationships between adolescents and adults become more positive. By increasing the positive communication, trust will be more easily established and thereby adult involvement and awareness of cyberbullying will also expand. This could be done through increasing education available for adults on cyberbullying.

Limitations

It should be kept in mind that this study was primarily exploratory in nature and was not without limitations. The first limitation to the current study is generalizability. Since the data collection took place within one high school with only grade 11 and 12 English students, the results can only be representative of that specific population. Additionally, data is limited to those students who were present on the day of data collection and whom received consent and themselves consented to participate. These factors contributed to the 81.5 percent response rate.

Another limitation was the phrasing of the questions regarding computer use. Participants were asked about their frequency of computer use in general, for homework, social networking, and Internet games. Since the prevalence of smart phones is so high within today's society, the questions would have been better phrased as Internet use rather than computer use. It is possible that participants responded to these questions with their home computer in mind and therefore the rates reported may be an underestimation.

Lastly, the self-report survey's used for data collection influence the accuracy of the data obtained by understanding that participants may not have fully disclosed their experiences or been entirely honest. Since the data collection took place within classrooms, it is not entirely unlikely that some students may have been uncomfortable in taking the time they needed to disclose as much as they may have wanted to in a peer setting. Also, since some questions concerned emotional responses, it is possible that some participants may not have been honest in

disclosing how the experiences of cyberbullying affect them. Participants were made aware of the fact that the surveys were anonymous and confidential and that they would not be used if any personal identifying information was written on them. Participants were also asked not to talk to their peers while completing the survey to ensure privacy.

Future Directions

Although cyberbullying is becoming an increasingly well-known phenomenon within today's society, it is still essential that research continues to be conducted within Canada. The first suggestion is for a widely acceptable and operational definition for the construct of cyberbullying to be developed. Until definitions between research studies, government legislation, and societal understanding of the construct of cyberbullying align, there will continue to be discrepancies in statistical data as well as between potential intervention and preventative strategies.

The second suggestion for future direction is for similar research questions to be utilized with a younger age group in Saskatchewan, specifically those adolescents under the age of 16, which the current study was unable to target. Similarly, open-ended opinion questions should be utilized more with quantitative research studies on cyberbullying in order to develop a more widespread and thorough database of adolescent opinions that could potentially be generalized. Mishna et al. (2009, 2010) appears to be one of the few researchers conducting qualitative research on cyberbullying and thus there is a need for qualitative cyberbullying research to be conducted across Canada.

To date, this appears to be the only study to associate cyberbullying with life satisfaction. Therefore, further research should be conducted looking at regression analysis between these variables and the long form of the Multidimensional Student Life Satisfaction Scale (Heubner,

2001), which is an updated, reliable measure of student life satisfaction for children and adolescents. Furthermore, the correlations found between cyberbullying involvement and involvement in extracurricular activity should be explored further. Additional detailed information available on cyberbullying will allow for more specific prevention and intervention programs to be developed and may assist in the reduction of cyberbullying incidences in Canada.

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Appendix A: Student Survey

Student Survey: Exploring the Experiences of Cyberbullying in a Sample of Saskatchewan Adolescents

This survey seeks information from students about cyberbullying.

Cyberbullying includes, but is not limited to sending angry, rude, vulgar messages about a person to an online group or to that person electronically; or sending harmful, untrue, or cruel statements about a person to other people or posting such material online; or pretending to be someone else and sending or posting material that makes that person look bad; or sending or posting material about a person that contains sensitive, private, or embarrassing information, including forwarding private messages or images, or cruelly excluding someone from an online group. Cyberbullying might occur at home or at school, through the Internet network or a cell phone used. Your responses to this survey are confidential. You may also choose not to respond to this survey (If this is the case, please feel free to complete the alternative activity or other homework).

By completing this survey, you are granting the researcher permission to use this information.

Part I: About You

1. Your grade: ____ Your Age: ____
Gender: ____M ____F
Ethnic Background (e.g., Caucasian): _____
2. Do you use the Internet? _____Yes _____No
3. Do you use a cell phone? _____Yes _____No
4. On the following scale, consider A to be the best and C to be the average, your school grades are usually (circle one):
A.....B.....C.....D.....E.....
5. How often do you engage in extracurricular activities, such as band or sports teams?
____Never ____About once/week ____ About 2 times/week
____ About 3 times/week ____4+ times/week

Part II: Computer & Cell Phone Use

6. How many computers are in your home?
____ none ____ 1 ____ 2 ____ 3 or more

7. How many hours do you use a computer in a day?
 ___ none ___ 1 hour or less ___ 2 hours ___ 3 or more hours
8. How often do you use a computer to do homework?
 ___ never ___ once a day ___ more than once a day
 ___ once a week ___ a few times a week ___ Once a month
9. How often do you use a computer for social networking? (i.e. Facebook, Twitter, msn messenger, etc.)
 ___ never ___ once a day ___ more than once a day
 ___ once a week ___ a few times a week ___ Once a month
10. How often do you use a computer to play Internet games?
 ___ never ___ once a day ___ more than once a day
 ___ once a week ___ a few times a week ___ Once a month
11. What types of websites do you usually visit? (check all that apply)
 ___ Social networking ___ Internet game sites ___ Chatrooms
 ___ Sports sites ___ Entertainment sites
 ___ Sites for homework ___ Other Please specify _____
12. Do you use a cell phone at school? ___ Yes ___ No
13. How often do you use a cell phone to talk **verbally** to your friends?
 ___ more than once a day ___ once a day ___ a few times a week
 ___ once a week ___ once a month ___ never
14. How often do you use a cell phone to **text message**?
 ___ More than once a day ___ once a day ___ a few times a week
 ___ once a week ___ once a month ___ never

Part III: Cyberbullying (Your Experience)

15. How often have you been cyberbullied in the past 12 months?
 Check **one** that applies.
 ___ Never ___ Once/Twice ___ A few times ___ Many times
 ___ Almost every day

15a. Did being cyberbullied make you feel:

	Not at all	Slightly	Very	Extremely
Scared				
Sad				
Alone				
Angry				
Vulnerable				
Frustrated				
Nervous				
Pathetic				
Ashamed				
Lonely				
Powerless				
Annoyed				
Embarrassed				
Cranky				
Anxious				
Depressed				
Like you should run away				
Sick (stomach or head)				
Like you could not sleep				
Like you did not want to go to school				
Like you couldn't concentrate at school				

16. How often have you cyberbullied others in the past 12 months?

Check one that applies.

___Never ___Once/Twice ___A few times ___Many times

___Almost every day

16a. Did cyberbullying others make you feel:

	Not at all	Slightly	Very	Extremely
Like you were funny				
Like you were better than other students				
Guilty				
Pleased				
Popular				
Brave				
Powerful				
Important				
Confident				
Terrible				
Satisfied				
Nothing				

17. On the following scale, check your reaction to cyberbullying
- ☐ No big deal ☐ Live with it ☐ Upset ☐ Very upset
 - ☐ No opinion
18. When you are cyberbullied, you (check all that apply)
- ☐ Do nothing
 - ☐ Tell the cyberbully to stop
 - ☐ Get away (e.g., log off) from the cyberbully
 - ☐ Cyberbully other people
 - ☐ Bully other kids
 - ☐ Tell an adult
 - ☐ Tell a friend
19. If you have been cyberbullied, what happened after you told someone?
- ☐ It got better
 - ☐ It got worse
 - ☐ Nothing changed
 - ☐ I never told anyone.
 - ☐ I've never been cyberbullied.
20. If you have been cyberbullied, who has tried to help you?
(Check all that apply)
- ☐ My parents
 - ☐ My sister(s) or brother(s)
 - ☐ A teacher or another adult at school
 - ☐ My friend(s)
 - ☐ Nobody
 - ☐ I've never been cyberbullied.
21. Why do you think people cyberbully others? (Check all that apply)
- ☐ It is cool
 - ☐ They feel insecure
 - ☐ They are angry
 - ☐ They are jealous
 - ☐ They think it's fun
 - ☐ They are mean
 - ☐ They are bored
 - ☐ They think it is a defense mechanism
 - ☐ They have family problems
 - ☐ Other, specify_____

22. What is your feeling about people being cyberbullied?
- ☐ They deserve it
 - ☐ It's too bad, but there is nothing we can do about it.
 - ☐ It is a very serious problem and we need to stop it.

23. I have friends who: (check all that apply)
- ☐ have bullied others
 - ☐ have been bullied by others
 - ☐ have cyberbullied others
 - ☐ have been cyberbullied by others
 - ☐ I have no friends.

Part III: Witness

24. How frequently have you been a witness to cyberbullying incidents in the past 12 months?
- ☐ Never ☐ Once/Twice ☐ A few times ☐ Many times
 - ☐ Almost every day
25. If you have been a witness to cyberbullying incidents, what is your normal response? (check all that apply)
- ☐ Join in
 - ☐ Cheer the cyberbully on
 - ☐ Watch or look, but do not participate
 - ☐ Leave the online environment
 - ☐ Object to others, but not directly to the cyberbully
 - ☐ Object to the cyberbully
 - ☐ Try to help or befriend the victim
 - ☐ Report the cyberbullying to someone who can help the victim
 - ☐ Have not been a witness
 - ☐ Other, specify_____

26. If you were cyberbullied at school or at home, would you report the cyberbullying to a school counselor, teacher, or administrator?
- ☐ Probably yes ☐ Probably no

• If you answered “**probably no**,” what are the most important reasons why you would probably not report: (check all that apply)

- ☐ I don’t think school staff would understand or believe me
- ☐ I don’t think the school would or could do anything to stop it
- ☐ I could get myself into trouble, because I could also be at fault
- ☐ I could get myself into trouble, even if I had done nothing wrong
- ☐ The cyberbully could get back at me and make things even worse
- ☐ Other students could make fun of me
- ☐ My parents could find out and might restrict my access to the Internet or other technologies
- ☐ I need to learn to deal with cyberbullying by myself
- ☐ Cyberbullying is no big deal. People should just ignore it
- ☐ Other, specify_____

27. If someone was cyberbullying you at home or at school, would you tell your parent/guardian?

☐ Probably yes ☐ Probably no

• If you answered “probably no,” what are the most important reasons why you would probably not report (check all that apply):

- ☐ I don’t think my parent/guardian would understand or believe me
- ☐ I don’t think my parent/guardian would know how to stop it
- ☐ I could get myself into trouble, because I could also be at fault
- ☐ I could get myself into trouble, even if I had done nothing wrong
- ☐ They cyberbully could get back at me and make things even worse
- ☐ Other students could make fun of me
- ☐ My parents could find out and might restrict my access to the Internet or other technologies
- ☐ I need to learn to deal with cyberbullying by myself
- ☐ Cyberbullying is no big deal. People should just ignore it
- ☐ Other, specify_____

Part IV: Your opinion

28. Please indicate your opinion to the following statements:

- Cyberbullying is a normal part of the online world..
___ Strongly agree ___ Agree ___ Neutral ___ Disagree
___ Strongly disagree
 - I know of someone who has been really hurt by cyberbullying.
___ Strongly agree ___ Agree ___ Neutral ___ Disagree
___ Strongly disagree
 - Things that happen online should stay online.
___ Strongly agree ___ Agree ___ Neutral ___ Disagree
___ Strongly disagree
 - If someone is being hurt by cyberbullying, it is important to tell a responsible adult.
___ Strongly agree ___ Agree ___ Neutral ___ Disagree
___ Strongly disagree
 - I would report cyberbullying incidents, if I could do so without anyone knowing it was me.
___ Strongly agree ___ Agree ___ Neutral ___ Disagree
___ Strongly disagree
 - I have the right to say anything I want online, even if what I say hurts someone or violates someone's privacy.
___ Strongly agree ___ Agree ___ Neutral ___ Disagree
___ Strongly disagree
 - Adults should stay out of this.
___ Strongly agree ___ Agree ___ Neutral ___ Disagree
___ Strongly disagree
 - I would like to create a more kind and respectful online world.
___ Strongly agree ___ Agree ___ Neutral ___ Disagree
___ Strongly disagree
29. In school, I am very popular
___ Strongly agree ___ Agree ___ Neutral ___ Disagree
___ Strongly disagree

30. In school, I have many friends

___ Strongly agree ___ Agree ___ Neutral ___ Disagree

___ Strongly disagree

31. In your opinion, what would be the most effective way to stop cyberbullying? Specify below.

++++Continued on next page++++

Brief Multidimensional Students' Life Satisfaction Scale
(Huebner, 1997)

These six questions ask about your satisfaction with different areas of your life. Circle the best answer for each.

1. I would describe my satisfaction with my family life as:
a) Terrible
b) Unhappy
c) Mostly dissatisfied
d) Mixed (about equally satisfied and dissatisfied)
e) Mostly satisfied
f) Pleased
g) Delighted
2. I would describe my satisfaction with my friendships as:
a) Terrible
b) Unhappy
c) Mostly dissatisfied
d) Mixed (about equally satisfied and dissatisfied)
e) Mostly satisfied
f) Pleased
g) Delighted
3. I would describe my satisfaction with my school experience as
a) Terrible
b) Unhappy
c) Mostly dissatisfied
d) Mixed (about equally satisfied and dissatisfied)
e) Mostly satisfied
f) Pleased
g) Delighted
4. I would describe my satisfaction with myself as:
a) Terrible
b) Unhappy
c) Mostly dissatisfied
d) Mixed (about equally satisfied and dissatisfied)
e) Mostly satisfied
f) Pleased
g) Delighted
5. I would describe my satisfaction with where I live as:
a) Terrible
b) Unhappy
c) Mostly dissatisfied
d) Mixed (about equally satisfied and dissatisfied)
e) Mostly satisfied
f) Pleased
g) Delighted
6. I would describe my satisfaction with my overall life as:
a) Terrible
b) Unhappy
c) Mostly dissatisfied
d) Mixed (about equally satisfied and dissatisfied)
e) Mostly satisfied
f) Pleased
g) Delighted

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...

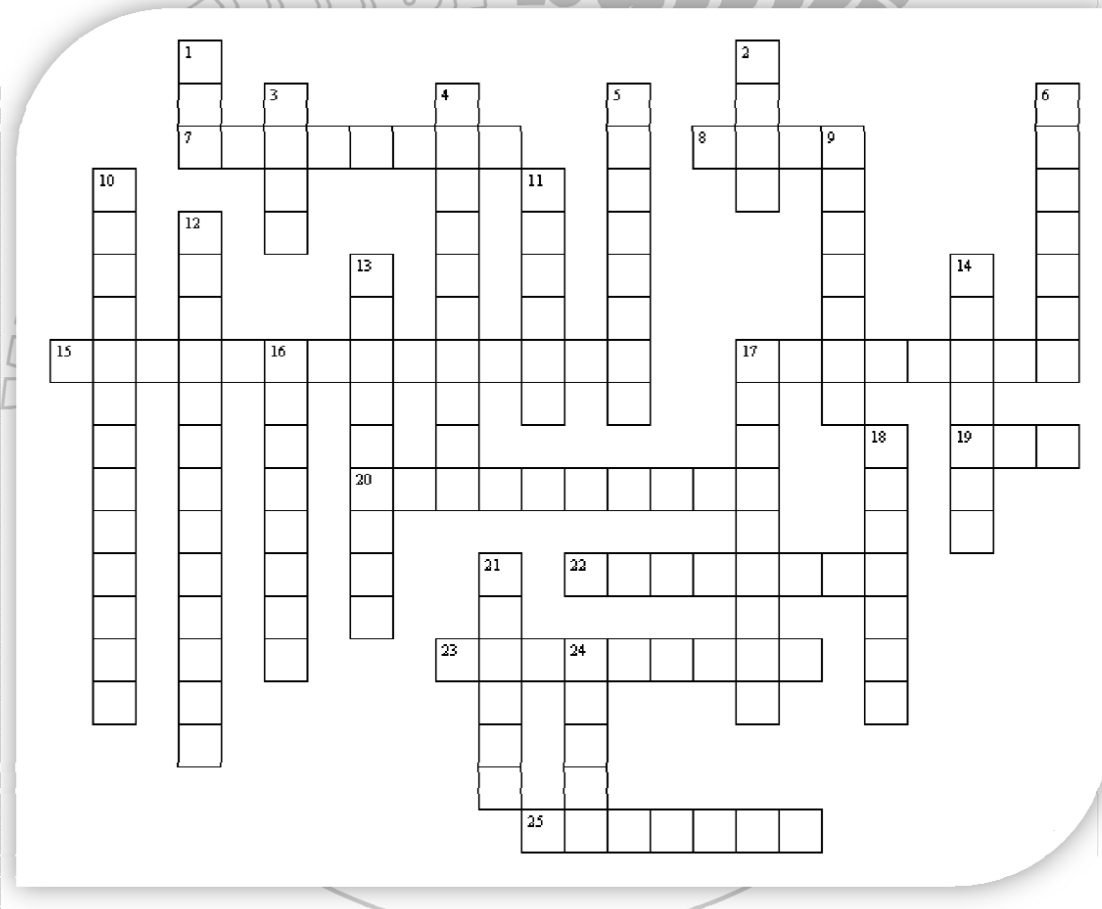
- Talk to an adult you can trust (e.g., your teacher, principal, parents, or school counsellor).
- Contact the Kids Help Phone for FREE at 1-800-668-6868 or <http://kidshelpphone.ca/en>
- Southwest Crisis Services
 - Safe Shelter: (306) 778-3692
 - Crisis Line: (306) 778-3833 or 1-800-567-3334

Cyberbullying Crossword Puzzle

Talking to youth about Internet harassment



Sameer Hinduja, Ph.D. and Justin W. Patchin, Ph.D.
Cyberbullying Research Center



Cyberbullying Research Center
www.cyberbullying.us

DOWN

1. Short for "World Wide Web" or pages linked together via the Internet.
2. Unsolicited electronic mail sent from someone you do not know.
3. Interactive web journal or diary, the contents of which are posted online and then viewable by some or all individuals.
4. An intermediary web site which hides or disguises the IP address associated with the Internet user.
5. An electronic device that stores and processes information and also facilitates electronic communication when connected to a network.
6. Two or more computers connected so that they can communicate with each other.
9. The most popular social networking web site.
10. An extreme form of bullying where physical assaults are recorded on mobile phones or digital cameras and distributed to others.
11. A file on a computer that records user information when visiting a web site.
12. Intentional and repeated harm inflicted through the use of computers, cell phones, and other electronic devices.
13. A wireless handheld device which allows for telephone communications.
14. A user-created web page on a social networking web site.
16. The denial of access to particular parts of the Internet.
17. The act of restricting access to certain web sites (usually using software programs).
18. Sending short messages via cell phone.
21. Making a statement or taking an action that indicates harm to another.
24. Allows Internet users to send and receive electronic text to and from other Internet users.

ACROSS

7. Repeated and deliberate harassment directed by one in a position of power toward one or more.
8. Physical or emotional injury to someone.
15. Suicide stemming directly or indirectly from cyberbullying victimization.
17. The second most popular social networking web site.
19. Acronym for the company that provides an Internet connection to individuals or companies.
20. Unsolicited words or actions intended to annoy, alarm, or abuse another individual.
22. A worldwide network of computers communicating with each other via phone lines, satellite links, wireless networks, and cable systems.
23. The act of requesting another person to enter your social network
25. Sending angry, rude, or obscene messages directed at a person or persons privately or an online group.

OPTIONAL WORD BANK:

ANONYMIZER
BLOCKING
BLOG
BULLYING
CELLPHONE
COMPUTER
COOKIE
CYBERBULLICIDE
CYBERBULLYING

EMAIL
FACEBOOK
FILTERING
FLAMING
FRIENDING
HAPPYSLAPPING
HARASSMENT
HARM
INTERNET

ISP
MYSPACE
NETWORK
PROFILE
SPAM
TEXTING
THREAT
WEB

ANSWERS:**DOWN**

1. WEB
2. SPAM
3. BLOG
4. ANONYMIZER
5. COMPUTER
6. NETWORK
9. MYSPACE
10. HAPPYSLAPPING
11. COOKIE
12. CYBERBULLYING
13. CELLPHONE
14. PROFILE
16. BLOCKING
17. FILTERING
18. TEXTING
21. THREAT
24. EMAIL

ACROSS

7. BULLYING
8. HARM
15. CYBERBULLICIDE
17. FACEBOOK
19. ISP
20. HARASSMENT
22. INTERNET
23. FRIENDING
25. FLAMING

Sameer Hinduja, Ph.D. is an Associate Professor at Florida Atlantic University and Justin W. Patchin, Ph.D. is an Associate Professor at the University of Wisconsin-Eau Claire. Together, they lecture across the United States on the causes and consequences of cyberbullying and offer comprehensive workshops for parents, teachers, counselors, mental health professionals, law enforcement, youth and others concerned with addressing and preventing online aggression.

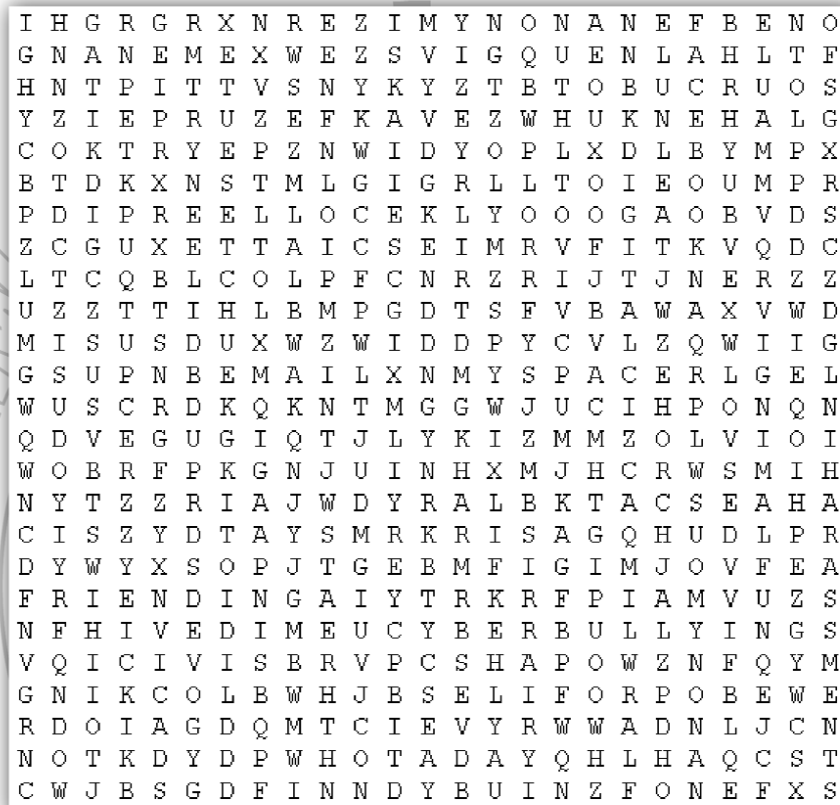
The Cyberbullying Research Center is dedicated to providing up-to-date information about the nature, extent, causes, and consequences of cyberbullying among adolescents. For more information, visit <http://www.cyberbullying.us>. © 2009 Cyberbullying Research Center - Sameer Hinduja and Justin W. Patchin

Cyberbullying Word Find

Talking to youth about Internet harassment



Sameer Hinduja, Ph.D. and Justin W. Patchin, Ph.D.
Cyberbullying Research Center



AGGRESSION
ANONYMIZER
ANONYMOUS
BLOCKING
BLOG
BULLYING
CELLPHONE
COMPUTER
COOKIE
CYBERBULLICIDE

CYBERBULLYING
DIGITAL
EMAIL
FACEBOOK
FILTERING
FLAMING
FRIENDING
HAPPYSLAPPING
HARASSMENT
HARM

INSTANT
INTERNET
ISP
MYSPACE
NETWORK
PROFILE
REVENGE
TEXTING
THREAT
WEB

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Appendix B: Passive Consent Form

Dear Parent(s),

Sarah Andrie (M. Ed. Candidate) will be conducting a survey called *Exploring the Experiences of Cyberbullying in a Sample of Saskatchewan Adolescents* at SCCHS this semester. The survey will ask about the cyberbullying experiences of student's over 16 years of age. Students will be asked to fill out a survey between December 6 and December 14, 2012. The survey takes about 15 minutes for the students to complete.

Doing this paper and pencil survey will cause little or no risk to your child. The only potential risk is that some students might find certain questions to be sensitive. The survey has been designed to protect your child's privacy. Students will not put their names on the survey. Also, no school or student will ever be mentioned by name in a report of the results. Your child will get no benefit right away from taking part in the survey. The results of this survey will help your child and other children in the future. We would like all selected students to take part in the survey, but the survey is voluntary. No action will be taken against the school, you, or your child if your child does not take the survey. Students can skip any questions they do not wish to answer. In addition, students may stop taking the survey at any point without penalty. If you would like to see the survey, a copy is available by contacting Sarah Andrie at sck196@mail.usask.ca.

Please read the section below and check the box only if you **do not** want your child to take part in the survey. If you check the box "no" below, then sign this form and return it to the school by November 26, 2012. If you have any questions about the survey, please contact Sarah Andrie at sck196@mail.usask.ca. Thank you.

Student's name: _____

Grade: _____

I have read this form and know what the survey is about.

☐ NO, my child may not take part in this survey.

Parent's signature: _____

Date: _____

Appendix C: Information Form

Exploring the Experiences of Cyberbullying in a Sample of Saskatchewan Adolescents

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

Researcher(s):

Sarah Andrie
M. Ed. Candidate
Department of Educational Psychology
and Special Education
Phone: (306) 773-2801 (until Dec 20)
Phone: (306) 966-7723 (after Dec 20)
Email: sck196@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 and how it relates to life satisfaction. 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 20 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 may be the risk of some psychological and/or emotional discomfort while thinking about your own experience with cyberbullying. 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 withdraw 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 Behavioral Research Ethics Board on October 19, 2012. 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://www.kidshelpphone.ca/Teens/Home.aspx>
- Southwest Crisis Services

Safe Shelter: (306) 778-3692

Crisis Line: (306) 778-3833 or 1-800-567-3334

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

Thank you,
Sarah Andrie
M.Ed Candidate

Appendix D: Cyberbullying Victim Feelings

Cyberbullying Victim Feelings (n = 140)

Feeling	Male % of Respondents (n)	Female % Respondents (n)	Total % Respondents (n)
Scared			
Not at all	96.8 (60)	50.0 (39)	70.7 (99)
Slightly	3.2 (2)	41.0 (32)	24.3 (34)
Very/Extremely	0.00 (0)	9.0 (7)	5.0 (7)
Sad			
Not at all	62.9 (39)	12.7 (10)	34.8 (49)
Slightly	32.3 (20)	46.8 (37)	40.7 (57)
Very/Extremely	4.8 (3)	40.5 (32)	24.8 (35)
Alone			
Not at all	83.9 (52)	38.8 (31)	58.5 (83)
Slightly	9.7 (6)	23.8 (19)	17.6 (25)
Very/Extremely	6.5 (4)	37.4 (30)	24.0 (34)
Angry			
Not at all	27.4 (17)	24.7 (19)	25.9 (36)
Slightly	40.3 (25)	32.5 (25)	36.0 (50)
Very/Extremely	32.3 (20)	42.9 (33)	38.1 (53)
Vulnerable			
Not at all	79.0 (49)	38.7 (29)	56.9 (78)
Slightly	14.5 (9)	40.0 (30)	28.5 (39)
Very/Extremely	6.4 (4)	21.4 (16)	14.6 (20)
Frustrated			
Not at all	41.3 (26)	17.5 (14)	28.0 (40)
Slightly	41.3 (26)	42.5 (34)	42.0 (60)
Very/Extremely	17.4 (11)	40.0 (32)	30.1 (43)
Nervous			
Not at all	75.8 (47)	44.3 (82)	58.2 (82)
Slightly	16.1 (10)	35.4 (28)	27.0 (38)
Very/Extremely	8.1 (5)	20.3 (16)	14.9 (21)
Pathetic			
Not at all	85.5 (53)	55.7 (44)	68.8 (97)
Slightly	9.7 (6)	22.8 (18)	17.0 (24)
Very/Extremely	4.8 (3)	21.5 (17)	14.2 (20)
Ashamed			
Not at all	82.3 (51)	58.4 (45)	69.1 (96)
Slightly	12.9 (8)	15.6 (12)	14.4 (20)
Very/Extremely	4.8 (3)	26.0 (20)	16.6 (23)
Lonely			
Not at all	80.6 (50)	42.3 (33)	59.3 (83)
Slightly	8.1 (5)	25.6 (20)	17.9 (25)
Very/Extremely	11.3 (7)	45.1 (25)	22.9 (32)

Powerless				
Not at all	83.9 (52)	43.0 (34)	61.0 (86)	
Slightly	14.5 (9)	31.6 (25)	24.1 (34)	
Very/Extremely	1.6 (1)	25.3 (20)	14.9 (21)	
Annoyed				
Not at all	25.4 (16)	25.6 (20)	25.5 (36)	
Slightly	38.1 (24)	25.6 (20)	31.2 (44)	
Very/Extremely	36.5 (23)	48.8 (38)	43.4 (61)	
Embarrassed				
Not at all	66.7 (40)	42.9 (33)	53.3 (73)	
Slightly	21.7 (13)	29.9 (23)	26.3 (36)	
Very/Extremely	11.6 (7)	27.3 (21)	20.4 (28)	
Cranky				
Not at all	71.0 (44)	49.4 (38)	59.0 (82)	
Slightly	17.7 (11)	28.6 (22)	23.7 (33)	
Very/Extremely	11.3 (7)	22.1 (17)	17.3 (24)	
Anxious				
Not at all	79.0 (49)	52.6 (40)	64.5 (89)	
Slightly	16.1 (10)	25.0 (19)	21.0 (29)	
Very/Extremely	4.8 (3)	22.4 (17)	14.4 (20)	
Depressed				
Not at all	79.0 (49)	53.2 (41)	64.7 (90)	
Slightly	12.9 (8)	15.6 (12)	14.4 (20)	
Very/Extremely	8.0 (5)	31.2 (24)	20.8 (29)	
Run Away				
Not at all	93.5 (58)	66.2 (51)	78.4 (109)	
Slightly	0.00 (0)	11.7 (9)	6.5 (9)	
Very/Extremely	6.4 (4)	22.1 (17)	15.1 (21)	
Sick				
Not at all	83.9 (52)	54.4 (43)	67.4 (95)	
Slightly	11.3 (7)	20.3 (16)	16.3 (23)	
Very/Extremely	4.8 (3)	25.4 (20)	16.3 (23)	
Could not Sleep				
Not at all	83.9 (52)	42.3 (33)	60.7 (85)	
Slightly	11.3 (7)	30.8 (24)	22.1 (31)	
Very/Extremely	4.8 (3)	25.7 (20)	16.5 (23)	
Not want to go to School				
Not at all	90.3 (56)	51.3 (39)	68.8 (95)	
Slightly	1.6 (1)	18.4 (14)	10.9 (15)	
Very/Extremely	8.0 (5)	30.2 (23)	20.3 (28)	
Could not Concentrate				
Not at all	82.3 (51)	48.7 (38)	63.6 (89)	
Slightly	9.7 (6)	24.4 (19)	17.9 (25)	
Very/Extremely	8.1 (5)	26.9 (21)	18.6 (26)	

**Note.* Percentages do not add up to 100 due to missing values

Appendix E: Cyberbullying Perpetrator Feelings

Cyberbullying Perpetrator Feelings (n = 92)

Feeling	Male % of Respondents (n)	Female % Respondents (n)	Total % Respondents (n)
Funny			
Not at all	36.4 (16)	63.0 (29)	50.0 (45)
Slightly	50.0 (22)	28.3 (13)	38.9 (35)
Very/Extremely	13.6 (6)	8.7 (4)	11.1 (10)
Better than Others			
Not at all	81.8 (36)	80.0 (36)	80.9 (72)
Slightly	11.4 (5)	15.6 (7)	13.5 (12)
Very/Extremely	6.8 (3)	4.4 (2)	5.6 (5)
Guilty			
Not at all	50.0 (22)	25.0 (11)	37.5 (33)
Slightly	31.8 (14)	20.5 (9)	26.1 (23)
Very/Extremely	18.2 (8)	54.5 (24)	36.4 (32)
Pleased			
Not at all	70.5 (31)	72.7 (32)	71.6 (63)
Slightly	20.5 (9)	20.5 (9)	20.5 (18)
Very/Extremely	9.1 (4)	6.8 (3)	8.0 (7)
Popular			
Not at all	81.8 (36)	93.2 (41)	87.5 (77)
Slightly	15.9 (7)	6.8 (3)	11.4 (10)
Very/Extremely	2.3 (1)	0.00 (0)	1.1 (1)
Brave			
Not at all	86.4 (38)	70.5 (31)	78.4 (69)
Slightly	9.1 (4)	18.2 (8)	13.6 (12)
Very/Extremely	4.5 (2)	11.3 (5)	8.0 (7)
Powerful			
Not at all	75.0 (33)	65.9 (29)	70.5 (62)
Slightly	20.5 (9)	20.5 (9)	20.5 (18)
Very/Extremely	4.6 (2)	13.6 (6)	9.1 (8)
Important			
Not at all	79.5 (35)	84.1 (37)	81.8 (72)
Slightly	15.9 (7)	11.4 (5)	13.6 (12)
Very/Extremely	4.5 (2)	4.6 (2)	4.5 (4)
Confident			
Not at all	68.2 (30)	63.6 (28)	65.9 (58)
Slightly	27.3 (12)	25.0 (11)	26.1 (23)
Very/Extremely	4.5 (2)	11.4 (5)	7.9 (7)
Terrible			
Not at all	65.9 (29)	39.5 (17)	52.9 (46)
Slightly	13.6 (6)	14.0 (6)	13.8 (12)
Very/Extremely	20.5 (9)	46.6 (20)	33.3 (29)
Satisfied			

	Not at all	74.4 (32)	71.1 (32)	72.7 (64)
	Slightly	18.6 (8)	20.0 (9)	19.3 (17)
	Very/Extremely	7.0 (3)	8.9 (4)	8.0 (7)
Nothing				
	Not at all	61.0 (25)	81.0 (34)	71.1 (59)
	Slightly	17.1 (7)	14.3 (6)	15.7 (13)
	Very/Extremely	21.9 (9)	4.8 (2)	13.2 (11)

**Note.* Percentages do not add up to 100 due to missing values