

**LIFE SATISFACTION AND SCHOOL BULLYING IN ELEMENTARY SCHOOL
STUDENTS**

by

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ABSTRACT

This descriptive study examined domain-specific and global life satisfaction, traditional and cyber bullying, and the relationship between perpetrator involvement in school bullying and life satisfaction among 299 elementary school students in Newfoundland and Labrador, Canada. A self-report bully/victim survey assessed students' involvement in physical, verbal, social and cyber (internet/computer and cell phone) bullying and victimization and a life satisfaction survey assessed students' levels of satisfaction with family, school, friendship, self, living environment (neighborhood) and overall life. Results show that for the time period assessed, students report moderately high to high levels of domain-specific and global life satisfaction. Results also show that students' life satisfaction does not predict their involvement as traditional and cyber bullies and that students' involvement in traditional bullying is more prevalent than in cyber bullying. Elementary school females report significantly higher satisfaction with their living environment (neighborhood), greater social victimization involving exclusion and isolation, and greater cyber (cell phone) victimization with mean pictures than males. Younger elementary students report significantly higher levels of cyber victimization with mean telephone calls over the Internet using a computer and verbal victimization with mean names, comments or gestures with a sexual meaning than older students.

DEDICATION

This thesis is dedicated to our stunning grandsons, Samuel Douglas, aged 4 years and Bryson Hunter, aged 1.5 years whose innocence, curiosity, and laughter illuminate our hearts with constant joy and bewilderment. May their years of schooling be bully-free and their lives satiated with satisfaction.

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CHAPTER I

INTRODUCTION

The past three decades underscore ever-increasing global concern for school bullying and other forms of aggression and violence among youth. The literature on school bullying clearly acknowledges traditional bullying and victimization as a common, world-wide phenomenon (Craig & Pepler, 2007; Kowalski & Limber, 2013; Porter & Smith-Adcock, 2011; Solberg, Olweus, & Endresen, 2007; Topcu & Erdur-Baker, 2012) and electronic or cyber bullying as an international, novel, and emerging spectacle in primary, elementary and secondary schools (Barlinska, Szuster, & Winiewski, 2013; Beckham, Hagquist, & Hellstrom, 2013; Dehue, 2013; Gofin & Avitzour, 2012; Kowalski, Morgan, & Limber, 2012). Moreover, the literature also acknowledges school bullying as widespread, lacking research, harmful, and affecting life satisfaction (Moore, Huebner, & Hills, 2012).

Prevalence of School Bullying

Despite widespread variability on student involvement rates as bullies and/or victims in school bullying, most large-scale research studies suggest that 20% to 30% of students are frequently involved in school bullying as perpetrators and/or victims (Juvonen, Graham, & Schuster, 2003). Recent research involving 7-11 year-olds in England found that 49.1% self-reported being traditional victims, 20.5% self-reported being cyber victims, 18.2% self-reported being traditional bullies and 5.0% self-reported being cyber bullies (Monks, Robinson, & Worlidge, 2012). A comparable study by Wang, Iannotti and Nansel (2009) of USA adolescent bullying behaviours finds that the prevalence of bullying others or being victimized (at least once

in the last 2 months) is 20.8% for physical bullying, 53.6% for verbal bullying, 51.4% for social bullying, and 13.6% for electronic bullying. Another related study by Moore et al. (2012) highlights that more than 13 million children in the United States aged 6-17 are victims of electronic bullying and that “approximately one-sixth of primary school age children and one-third of teens report being threatened, called names, or embarrassed by information shared about them on the Internet” (p. 431). A study of 16000 USA students in grades 6-10 showed that 30% of the students reported frequent involvement in some form of bullying with approximately 13% identifying themselves as bullies, 10.6% as victims and 6% as bully/victims (Nansel et al., 2001).

Craig and Pepler (2007) and Larochette, Murphy and Craig (2010) also observe high proportions of Canadian students who report bullying or being bullied and confirm that this represents an important social problem. Craig, Pepler and Blais (2007) found that incidence of school bullying with school-aged children in Canada is greater than in the majority of World Health Organization (WHO) countries. As remarked by Rigby and Smith (2011), “In Canada...the phenomenon of bullying has only very recently reached such proportions as to become a subject of widespread social alarm” (p. 2).

Recent statistics affirm this cheerless outlook (Canadian Nurse, 2012). For example, it is estimated that (a) greater than 1.1 million Canadian children are chronically bullied each week (b) 49% of Canadian parents report their children being bullied at school (c) 26% of Canadian parents say they do not know if their child is being bullied online (d) 50% of children involved in bullying are both victims and perpetrators and (e) compared with non-bullies, children who are

bullies in grades 6 to 9 are 6 times more likely to have a criminal record by the age of 24 (Canadian Nurse, 2012).

Studies by Durdle (2008), Nesbit (1999), Power-Elliott and Harris (2010) and White (2014) indicate that school bullying is an issue in the province of Newfoundland and Labrador. In 1999, Nesbit behaviorally categorized the nature of bullying in elementary, junior and senior high students into six different forms: physical assault, verbal abuse, seizing possessions, threatening, teasing, and controlling. Durdle (2008), Power-Elliott and Harris (2010) and White (2014) assert that school bullying is a problematic social dynamic among elementary and secondary students in Newfoundland and Labrador and advocate ongoing research in conjunction with early prevention and intervention as crucial for successful anti-bullying programs.

Impact of School Bullying

While the varied incidence and prevalence rates of students engaged in or targeted by traditional and/or cyber bullying behaviours is problematic in and of itself, the eventual impact on outcomes such as social, emotional, behavioral and academic development, mental health, and psychological well-being for the perpetrators, victims and bystanders raises even more significant concerns (Barlinska et al., 2013; Campbell, Spears, Slee, Butler, & Kift, 2012; Schneider, O'Donnell, Stueve, & Coulter, 2012; Vollink, Bolman, Dehue, & Jacobs, 2013). Aluedse (2006), Beckham et al. (2013) and Willard (2007) mention that cyber, digital or electronic bullying may be more damaging to youth than traditional bullying.

Studies by Bandyopadhyay, Cornell and Konald (2009), Olweus (1993), Peskin, Tortolero, Markham, Addy and Baumler (2007) and Wang et al. (2009) illustrate that students who engage in frequent traditional bullying behaviors (i.e., bullies) are more likely to encourage bullying by their peers, have aggressive attitudes, underperform in school, partake in delinquent or criminal acts, be part of a gang, carry weapons, express psychological dysfunction in the form of externalizing symptoms, drop out of school, and become abusive partners or parents. Other studies also point out that cyber bullies demonstrate various psychosocial challenges related to substance use/abuse, delinquency, and poor parent-child relationships (Appel, Holtz, Stiglbauer, & Batinic, 2012; Gofin & Avitzour, 2012; Raskauskas & Stoltz, 2007; Sticca, Ruggieri, Alsaker, & Perren, 2013). In like manner, numerous researchers jointly identify that victims of traditional and/or cyber bullying have also been observed displaying multiple negative psychological and emotional outcomes such as poor academic achievement, student absenteeism, somatic symptoms, social isolation, internalizing problems, negative self-appraisals, anger, frustration, anxiety, depression, low self-esteem, skipping school, school failure and dropout, receiving more detentions or suspensions, carrying weapons to school, suicidal ideation, and in the most very unfortunate and extreme cases, school shootings and/or suicide (Berry, 2013; Marsh, McGee, Nada-Raja, & Williams, 2010; Wade & Beran, 2011; Wang, Nansel, & Iannotti, 2011; Yilmaz, 2011).

Life Satisfaction and School Bullying

Life satisfaction is a positive psychology construct and a useful indicator of positive subjective well-being in both adults and children (Proctor, Linley, & Maltby, 2009; Seligson, Huebner, & Valois, 2005). However, children's global life satisfaction and particularly,

children's multidimensional or domain-specific life satisfaction are identified as under researched constructs or links in the field of school bullying, in particular, cyber bullying (Moore et al., 2012). A universal description of life satisfaction defines it as a cognitive, overall appraisal that individuals make when considering their contentment with their life as a whole or in regard to specific, important domains of life such as family, friendship, school, living environment (neighborhood) and self (Kerr, Valois, Huebner, & Drane, 2011; Suldo & Huebner, 2006).

Most research linking children and adolescents' life satisfaction with school bullying have utilized life satisfaction as an outcome variable with a predominant focus on victimization (Flaspohler, Elfstrom, Vanderzee, Sink, & Birchmeier, 2009; Moore et al., 2012). Studies linking life satisfaction and school bullying have been useful in identifying relationships between student involvement/noninvolvement in school bullying and levels of life satisfaction as well as clarifying how students react to stressful or challenging circumstances (Bradley & Corwyn, 2004; Flaspohler et al., 2009; Proctor et al., 2009). Although recent research involving 10-12-year-old children showed no associations between involvement as cyber bullies and levels of domain-specific and global life satisfaction, children who self-identified as social victims, cyber victims, and social bullies reported lower levels of satisfaction with family, friends, school, self and overall life than noninvolved students (Navarro, Ruiz-Oliva, Larranaga, & Santiago, 2013). A study by Flaspohler et al. (2009) investigating the relationship between traditional bullying and adolescents' overall life satisfaction reported similar findings – (a) bullies and/or victims demonstrated reduced life satisfaction as compared to children who were neither victims or perpetrators of bullying (b) compared to students who were bullies or victims, students who were

not engaged in bullying reported higher levels of life satisfaction and (c) bully/victims thrived the least in regard to life satisfaction.

An associated study by Moore et al. (2012) examining the relationships between electronic bullying and victimization and life satisfaction in middle school students found modest, negative correlations occurring across multiple important life domains such as family, friends, living environment, self and school. Consistent with the findings in Flaspohler et al.'s (2009) study, the middle school students in Moore et al.'s (2012) study who engaged in electronic bullying and victimization also indicated lower levels of life satisfaction compared to their noninvolved peers. Likewise, Navarro et al.'s (2013) study also found that 10-12 year old self-identified social and cyber victims experienced significant reductions in optimism, happiness, and life satisfaction.

Research clearly postulates various useful protective and risk factors with links and potential links to school bullying and life satisfaction (Gilman & Huebner, 2006; Joliffe & Farrington, 2011; Luk, Wang, & Simons-Morton, 2012; Smokowski & Kopasz, 2005). In a similar vein, other studies also identify worthwhile positive and negative correlations between traditional and cyber bullying and/or victimization and life satisfaction including their utilization in anti-bullying and health promotion programs (Gilman & Huebner, 2006; Kowalski & Limber, 2013; Laftman, Modin, & Ostberg, 2013; Oberle, Schonert-Reichl, & Zumbo, 2011; Proctor et al., 2009).

Although limited empirical evidence exists associating the presence and/or absence of cyber bullying to the unhealthy/healthy development of elementary and high school children, a

multitude of empirical evidence exists associating the presence and/or absence of traditional bullying to the unhealthy/healthy development of school children (Tokunaga, 2010; Vollink et al., 2013). As Flaspohler et al. (2009) and Moore et al. (2012) point out, limited empirical evidence exists on associations between school bullying and life satisfaction especially for elementary school students.

The Current Study

The main purpose of the current study is to broaden the link between life satisfaction and school bullying by using multidimensional and unidimensional measures to fully assess elementary students' domain-specific and overall life satisfaction and furthermore, to explore student involvement as perpetrators in physical, verbal, social, cyber (internet/computer) and cyber (cell phone) bullying. Hence, in contrast to previous research linking life satisfaction and school bullying wherein life satisfaction is used as a predominantly unidimensional and outcome variable, the current study will utilize both domain-specific and global life satisfaction as predictor variables and specifically investigate whether satisfaction with family, friends, school, self, living environment (neighborhood) and overall life predict student involvement as perpetrators in traditional and cyber bullying. The current study also explores sex and grade-level as predictors of elementary student involvement as bullies in traditional and cyber bullying. The current study aims to specifically promote and broaden community understanding of children's well-being by assessing sex, grade-level and general levels of elementary students' domain-specific and overall life satisfaction. The current study also attempts to increase community awareness of school bullying by assessing the incidence of elementary student

involvement in traditional and cyber bullying and victimization in the Newfoundland schools participating in this study.

In the current study, it is assumed that elementary students' levels of multidimensional and unidimensional life satisfaction including sex and grade-level differences will not only provide a diversity of information regarding the underlying structure of domain-specific and overall life satisfaction but will also relate to students' involvement as perpetrators in traditional and cyber bullying (Bradley, Cunningham, & Gilman, 2013; Park, Huebner, Laughlin, Valois, & Gilman, 2004). In the current study, it is specifically hypothesized that students who report high overall life satisfaction and/or high domain-specific satisfaction will experience a higher overall preponderance of positive emotions and moods relative to negative affect (Huebner, Antaramian, Hills, Lewis, & Saha, 2011) and thus report the least or no involvement as perpetrators in traditional and cyber bullying and vice versa. In the current study, it is also hypothesized that students' overall life satisfaction may be masked by variances within and/or between students' domain-specific satisfaction (Haranin, Huebner, & Suldo, 2007) and accordingly, these students will experience a variable preponderance of positive and negative emotions and moods and thus report variable involvement in school bullying and victimization. More specifically, the current study sets out to answer the following questions:

1. What are the prevalence rates within the schools studied for elementary students' involvement in school bullying and victimization?
2. What are the levels of domain – specific and overall life satisfaction in the students in the schools studied?

3. How do the sex and grade-level of the students studied relate to (a) their involvement in school bullying and victimization and (b) their domain – specific and overall life satisfaction?
4. Does elementary students' domain-specific and overall life satisfaction predict involvement as bullies in school bullying (above and beyond their sex and grade-level)?

On a broad scale, the study attempts to add minute contextual knowledge to an empirically identified learning gap and specifically advance greater community understanding of the relationships between school bullying and life satisfaction (Cross, Monks, Campbell, Spears, & Slee, 2011; Flaspohler et al., 2009; Gobina, Zaborskis, Pudule, Kalnins, & Villerusa, 2008; Moore et al., 2012; Navarro et al., 2013). It is foreseen that the study's findings will not only enhance both general and specific understandings of school bullying and life satisfaction in elementary schools but will be meaningfully and purposefully infused within whole-school approaches to minimize student involvement in traditional and cyber bullying and victimization and optimize levels of student life satisfaction. Hopefully, the study's findings arouse increased dialogue in the research community and garner enriched community awareness for students, teachers, and parents/caregivers. Lastly, the outcomes of this study will hopefully serve as an inviting stimulus for future research.

For the purpose of this study:

- School bullying and victimization are identified as falling into two main categories (1) traditional and (2) cyber. Inherent within the traditional category

are three (3) major subcategories - (a) physical (b) verbal and (c) social or relational. Inherent within the cyber category are two (2) major subcategories - (a) internet/computer and (b) cell phone.

- Life satisfaction is identified as falling into six (6) domains – (a) family (b) friendship (c) school (d) self (e) living environment (neighborhood) and (f) overall or global.

Chapter I has provided information related to the study's problem, purpose and research questions. Chapter II will provide a review of literature focused on describing/defining school bullying, prevalence of school bullying, sex and grade-level/age associations in school bullying, impact of school bullying, enhancing conceptual understanding of student involvement in school bullying, and life satisfaction and school bullying.

CHAPTER II

REVIEW OF LITERATURE

Introduction and Overview of School Bullying

As captured by a large international research base, school bullying is not an isolated problem unique to specific cultures but is a pervasive and troublesome phenomenon of school violence all over the world. In fact, it contributes to a variety of mental health problems which have significant impacts on the lives of individuals concerned, their families and society (Arslan, Hallett, Akkas, & Akkas, 2012; Elledge, Cavell, Ogle, Malcolm, Newgent, & Faith, 2010; Pozzoli & Gini, 2010; Siyahhan, Aricak, & Cayirdag-Acar, 2012; van Goethem, Scholte, & Wiers, 2010). The abundance of empirical evidence associating a host of serious short- and long-term negative consequences with bullying among school children is even more distressing (Campbell et al., 2012; Cassidy, Brown, & Jackson, 2012; Proctor et al., 2009; Sticca et al., 2013).

Current school bullying research indicates that traditional bullying and victimization among primary, elementary and secondary students is a global phenomenon (Rigby & Griffiths, 2011; Shin, D'Antonio, Son, Kim, & Park, 2011; Tenenbaum, Varjas, Meyers, & Parris, 2011; Wei & Chen, 2012; Wei & Jonson-Red, 2011), that cyber bullying and victimization among elementary and secondary school students is an emerging phenomenon (Bastiaensens et al., 2014; Cassidy et al., 2012; Fenaughty & Harre, 2013) and that traditional and cyber bullying and victimization co-occur among elementary and secondary school children (Gofin & Avitzour, 2012; Jang, Song, & Kim, 2014; Kowalski & Limber, 2013; Slonje, Smith, & Frisen, 2013).

Describing/Defining School Bullying

School bullying, a term sometimes used interchangeably with peer victimization, (Jimenez, Musitu, Ramos, & Murgui, 2009; Wei & Jonson-Reid, 2011) is generally defined as a specific type of peer victimization (Greif & Furlong, 2006), specific form of antisocial behaviour (Machackova, Dedkova, Sevcikova, & Cerna, 2013) and systematic abuse of power (Jolliffe & Farrington, 2011) culminating in a “destructive relationship problem” (Craig & Pepler, 2007, p. 86). Rigby and Smith (2011) note that despite variations in definitions of school bullying, “a general consensus has emerged in which it is seen as a form of aggressive behavior in which there is an imbalance of power favoring the perpetrator(s) who repeatedly seek to hurt or intimidate a targeted individual” (p. 1). Bullying may be perpetrated either individually or in groups. Hanish et al. (2013) and Machackova et al. (2013) note that the majority of school bullying definitions contains three universal features: (a) a thoughtful (deliberate) intention to harm the other individual (b) a replication (repetition) of behavior over a period of time and (c) relational asymmetry (power imbalance) between the bully and the victim.

School bullying is identified in the literature as consisting of two main categories – traditional and cyber bullying (Kowalski & Limber, 2013; Laftman et al., 2013; Tokunaga, 2010). Traditional bullying is viewed as static and encompassing three different forms – physical, verbal, and social or relational. Physical bullying (hitting, punching, pushing, slapping, kicking, spitting or stealing) and verbal bullying (name-calling, insulting, threatening speech, teasing in a hurtful way or psychological intimidation) are direct or overt forms of bullying whereas social or relational bullying (spreading rumors, social exclusion, facial grimaces, turning

one's back on the person, directing threatening or intimidating stares towards the victim) is seen as an indirect or covert form of bullying (Laftman et al., 2013; Wang et al., 2009).

A second category of school bullying identified as cyber, digital, or electronic bullying is sometimes used interchangeably with the term online harassment (Lwin, Li, & Ang, 2012). Patchin and Hinduja (2006) define cyber bullying as “willful and repeated harm inflicted through the medium of electronic text” (p. 152). Two additional terse definitions of cyber bullying include “bullying via the use of internet, mobile phone, or a combination of both” (von Marees & Petermann, 2012, p. 468) and a computer-mediated form of indirect aggression (Piazza & Hinduja, 2009). Most research describe cyber bullying as any behaviour perpetrated by individuals or groups using information and communication technologies to communicate hostile messages intended to inflict harm or discomfort on others (Barlinska et al., 2013; Tokunaga, 2010).

Unlike traditional bullying, new forms of cyber bullying continuously evolve entailing for example, bullying by - phone calls, text messages, instant messaging (IM), emails, posting or sending embarrassing photos or video clips, distributing sexually explicit graphics or photos, creating hate-websites, flaming, cyber stalking, happy slapping, slandering, denigration, impersonation (hacking), defamation, outing, trickery and exclusion (Calvete, Orue, Estevez, Villardon, & Padilla, 2010; Paul, Smith, & Blumberg, 2012; Yilmaz, 2011). Also, unlike traditional bullying, in which the bully usually is known to his or her victims, cyber bullies frequently conduct cyber bullying under a cloak of anonymity and communicate things that they would not say if their identities were known (Cross et al., 2011; Schneider et al., 2012; Varjas,

Meyers, Kiperman, & Howard, 2013). Meanwhile, similar to traditional bullying, cyber bullying appears in a social or relational form (direct and/or indirect) and involves both overt and covert acts of bullying using electronic and digital media such as computers and cell phones (Spears, Slee, Owens, & Johnson, 2009; Varjas et al., 2013; Ybarra, Mitchell, Wolak, & Finkelhor, 2006).

It is important to note that while cyber bullying may have similarities to traditional bullying, two key elements, repetition and power imbalance are more challenging to define (Jang et al., 2014; Varjas, Talley, Meyers, Parris, & Cutts, 2010; von Marees & Petermann, 2012). An example of repetition in cyber bullying is an embarrassing photo, once uploaded to a website, may be viewed repeatedly by a very large audience, thereby creating extreme humiliation for the cyber victim (Dooley, Pyzalski, & Cross, 2009). In terms of power imbalance, for cyber victims, there is no getting away from cyber bullying since technology-based interactions can take place at any time and in any place leaving several victims suffering severe bouts of helplessness, especially if their bullies remain anonymous (Dooley et al., 2009; Tokunaga, 2010). Worsening this situation is the perception that cyber bullies are physically and emotionally removed from their victims and moreover, do not experience the impact of their actions resulting in a disinhibition effect (Raskauskas & Stoltz, 2007).

Since the current study assesses three forms of traditional and two forms of cyber bullying and victimization in elementary students with a particular focus on perpetration, it is important that readers be familiar with relevant terminology. Some common terms used in the field of school bullying and applicable to the current study include traditional (physical, verbal, or social/relational) bullies, traditional (physical, verbal, or social/relational) victims, cyber

bullies, cyber victims, and noninvolved students. Research describes traditional bullies as students who engage as perpetrators in traditional forms of bullying and traditional victims as students who are the targets of traditional bullies and cannot defend themselves easily for one or several reasons – they are outnumbered, smaller or less physically strong, or less psychologically resilient than the person(s) doing the bullying (Ju, Wang & Zhang, 2009; Kowalski & Limber, 2007).

In a similar and more specific manner, students who are bullied with kicking, spitting and pushing are classified as physical victims whereas students who perpetrate such physical acts are referred to as physical bullies. Students who are bullied with mean names or threatening remarks are classified as verbal victims and students who perpetrate these verbal acts are acknowledged as verbal bullies. Social or relational victims refer to students who are bullied by facial grimacing, turning one's back and/or social exclusion. Students who perpetrate these social or relational acts are recognized as social or relational bullies. Additional terminology relevant to school bullying and deemed useful for this study include cyber bullies - a term used to refer to students who repeatedly misuse technology and engage as perpetrators in cyber bullying to harass, intimidate or terrorize another person; cyber victims - a term used to refer to students who are the targets of cyber bullies and experience helplessness, harmfulness, and discomfort; and noninvolved students - a term used to refer to students who do not bully others and are not being bullied by others in traditional and cyber bullying.

In summary, school bullying consists of two predominant categories – traditional and cyber. The most commonly adopted roles by students in school bullying are bullies, victims and

noninvolved students. With a particular focus on student involvement as bullies, the current study centers on three forms of traditional (physical, verbal, social or relational) and two main forms of cyber bullying and victimization (internet/computer and cell phone). As Smith and Ananiadou (2003) remark, although a number of different definitions of school bullying exist in the literature, school bullying is usually defined as a subset of aggression characterized by intention to harm, repetition, and power imbalance.

Prevalence/Incidence of School Bullying

The prevalence of school bullying varies based on community and school environments as well as how it is defined and studied. Estimates of school bullying incidence vary according to geographical location, the ages of the children sampled, the method of data collection, school bullying assessment tools, and the operationalization of school bullying (Fenaughty & Harre, 2013; Greif & Furlong, 2006; Rigby, 2000; Trach, Hymel, Waterhouse, & Neale, 2010). Most research on traditional bullying show that traditional perpetration and victimization rates range from 10% of students reporting physical bullying or victimization to more than 50% reporting verbal and/or social bullying or victimization (Gofin & Avitzour, 2102; Wang et al., 2011; Williams & Guerra, 2007). Research on cyber bullying show a similar trend but an overall lower prevalence rate of student involvement as cyber victims and cyber perpetrators with rates ranging anywhere from 6.5% to 40% (Gofin & Avitzour, 2012; Navarro et al., 2013; Schneider et al., 2012; Tokunaga, 2010). That said, individual studies on school bullying in the United States have reported ranges of student involvement as victims and/or bullies from a low of less than 4% to a high of more than 70% with insults and name-calling being the most common (Graham, 2013; Juvoven & Gross, 2008; Kowalski and Limber, 2013; Lwin et al., 2012).

A recent study indicates the pervasiveness of school bullying. According to Graham (2013), 70% of middle and high school students have experienced bullying at some point in their schooling, 20-40% report being a bully or victim, 5-15% of students are chronic victims, 7-12% are chronic bullies, 8-15 year olds rank bullying as more of a problem in their lives than violence and 5th-12th graders are more concerned about emotional maltreatment and social cruelty from peers than anything else. Research also shows that as many as 34.5% of students between the ages of 10 and 15 are harassed through some form of Internet communication with up to 11% of participants being cyber victims, 7% being cyber bully/victims and 4% being cyber bullies (Kowalski & Limber, 2007).

Although several studies show that students are less involved as bullies than victims in traditional and cyber bullying (Gofin & Avitzour, 2012; Ilola & Sourander, 2012; Kowalski & Limber, 2013), it has also been pointed out that more children are not only becoming victims but also perpetrators of cyber bullying with perpetration rates ranging from 3% to 23% (Kowalski and Limber, 2013). Students report more involvement as traditional bullies than cyber bullies (Gofin & Avitzour, 2012; Tokunaga, 2010; Wang et al., 2011; Ybarra, Boyd, Korchmaros, & Oppenheim, 2012). In their 2012 study, Ybarra et al. established that twice as many 6-17 year-olds report involvement in traditional (face-to-face) forms of bullying versus online modes of cyber bullying. Of those students who report being bullies, the majority report higher levels of social bullying and verbal bullying followed by physical and cyber bullying (Wang et al., 2009; Williams & Guerra, 2007; Ybarra et al., 2012). Although cyber bullying presents with overall lower prevalence rates of bullying and victimization than traditional bullying, research shows

that cyber bullying is becoming relatively commonplace in schools (Bostic & Brunt, 2011; Pettalia, Levin, & Dickinson, 2013; Yilmaz, 2011).

Most cyber bullies report using text messaging and emails as frequently used modes of cyber bullying (Moore et al., 2012; Ybarra et al., 2012). Compared to Internet bullying, Fenaughty and Harre (2013) found that 7% more of 12-19 year-olds report cell phone bullying as more common. Cyber bullies also report slightly higher prevalence rates of using cell phones rather than the internet/computer to cyber bully others (Fenaughty & Harre, 2013).

In summary, prevalence rates for traditional and cyber bullying and victimization are quite variable ranging from approximately 10% to above 50% for traditional bullying and victimization and from approximately 6% to approximately 40% for cyber bullying and victimization pending geographical location, ages of the children sampled, method of data collection, school bullying assessment tools, and operationalization of school bullying. A point of relevance to note when reviewing statistics on the prevalence of school bullying is that such data may underscore the magnitude of the problem because many students still do not report incidents of traditional and/or cyber bullying (Agatson, Kowalski, & Limber, 2007; Pettalia et al., 2013).

The Role of Sex¹ and Grade-Level/Age in School Bullying

Collectively, the findings from research on sex differences in traditional and cyber bullying are inconsistent (Hinduja & Patchin, 2008; Tokunaga, 2010). Some research shows that

¹ For the purposes of this thesis, I have described sex as a binary concept.

males scored significantly higher on physical and verbal victimization than females. Andreou, Vlachou and Didaskalou (2005) corroborate these findings with 4th to 6th graders and further report that direct (physical and verbal) forms of victimization are more likely to be experienced by males. Other studies show that more females than males report verbal victimization (being teased and called hurtful names) (Harris, Petrie, & Willoughby, 2002) in addition to slightly higher levels of social victimization (Andreou et al., 2005; Smith, 2004; Wang et al., 2009). Studies also show that males are sometimes just as likely as females to suffer indirect bullying, that is, being rejected and having rumors spread about them (Baldry & Farrington, 1999; Harris et al., 2002) whereas females are more likely than males to be noninvolved in school bullying (Hilooglu & Cenkseven-Onder, 2010).

Generally, males, regardless of grade-level are overrepresented among bullies, especially bully/victims, and engage in more physical aggression and direct bullying such as hitting and threatening than females (Aluedse, 2006; Espelage & Swearer, 2008; Ivarsson, Broberg, Arvidsson, & Gillberg, 2005; Luk, Wang & Simons-Morton, 2012). Males also report comparable and higher levels of social perpetration than females (Craig et al., 2007; Smith, 2004; Tokunaga, 2010; Wang et al., 2009). However, males and females appear to be equally involved as verbal bullies (name calling) (Rigby, 2005) and more females than males use relational and indirect bullying such as gossiping (Palmer & Farmer, 2002; Veenstra et al., 2005).

Compared to findings from traditional bullying, research suggests that females are more involved in cyber bullying as cyber victims and cyber bully/victims than males (Beckman et al.,

2013; Pettalia et al., 2013; Vollink et al., 2013; Ybarra & Mitchell, 2008) and females are just as likely as males to be cyber bullies (Beckman et al., 2013). In their study, Kowalski and Limber (2007) found that 15% of females and 7% of males were cyber victims, 10% of females and 4% of males were cyber bully/victims, and 4% of females and 5% of males were cyber bullies. Consistent with research on traditional bullying, Kowalski and Limber (2013) reported that male cyber bully/victims experienced the most negative effects of cyber bullying.

In their 2013 study involving 12-19 year-olds, Fenaughty and Harre observed significant sex differences in cell phone and internet bullying. For example, Fenaughty and Harre (2013) highlight that males are significantly more likely than females to report cell phone bullying by anonymous male bullies whereas females are more likely than males to report cell phone bullying that involves mean, nasty or hurtful comments by same-age female bullies. In addition, Fenaughty and Harre (2013) also note that males are more likely than females to have mean or embarrassing cell phone images of themselves sent to others and to be sent scary cell phone images. In regards to internet bullying, Fenaughty and Harre (2013) similarly point out that males are significantly more likely than females to be sent scary images and have mean or embarrassing images of themselves sent to others whereas females who are bullied on the internet are more likely than males to report bullying that involves mean, nasty or hurtful comments.

Research suggests that there are no classic individual grade-level/age-related characteristics that can be identified in order to determine who will likely engage in bullying others or who will likely become victimized and furthermore, a profile does not exist despite

researchers' explorations of the link between age, race, and psychological variables (Espelage & Swearer, 2008). Solberg et al. (2007) also state that it is difficult to detect age-trends in school bullying and compare estimates across developmental periods since most studies have chosen to report prevalence data by collapsing across multiple ages. Meanwhile, meta-analytic research describes the association between age and student involvement in school bullying as curvilinear and maintains that this relationship holds true for both traditional and cyber bullying and victimization (Tokunaga, 2010).

Affirming a curvilinear grade-level/age-related pattern of bullying by school children, student involvement in traditional bullying is considered to peak at around 10-12 years of age (that is, between 4th and 6th grades) whereas student involvement in cyber bullying is believed to peak during adolescence with the greatest incidence of cyber bullying occurring at 7th and 8th grades (around 13-15 years old) (Espelage & Swearer, 2008; Tokunaga, 2010; Williams & Guerra, 2007). Tokunaga (2010) specifically notes that “cyber bullying is not restricted by age and may emerge from elementary school to college” (p. 280).

Bullying and attitudes supporting bullying are higher among older students (Frey et al., 2005; Oh & Hazler, 2009; von Marees & Petermann, 2010). In fact, Andreou et al. (2005) proceed to say that age impacts greatly on students' underlying beliefs and attitudes towards aggression in peer interactions and as children age, they increase in both aggression and belief in the legitimacy of aggression. In their 2005 study involving grades 3 to 6 students, Frey et al. (2005) identify that younger students are targeted for bullying more frequently and report more victimization than older students.

Younger children have also been observed to often resort to direct (physical and verbal) forms of aggression whereas older children prefer more relational, indirect forms of aggression (Houbre, Tarquinio, & Thuillier, 2006). Studies by Kowalski and Limber (2007), Wade and Beran (2011) and Wang et al. (2009) showed that older students are more likely than younger students to be involved in cyber bullying as victims, bullies and/or bully/victims. Craig et al. (2007) warn us that the longer the school bullying has been going on, the more difficult it is for students regardless of age to use disengagement strategies such as denial and avoidance.

In summary, existing research on the role of sex and grade-level/age in school bullying appear mixed and inconsistent. Nonetheless, males appear to be more involved than females in school bullying as bullies. Males also appear to be more involved in physical bullying than females whereas slightly more females than males appear to be involved in social or relational bullying. Both sexes experience similar victimization and appear to be similarly involved in verbal and cyber bullying. Considerable research consensus exists supporting a curvilinear relationship between age and student involvement in traditional and/or cyber bullying and victimization. It appears that student involvement as bullies and victims in cyber bullying peaks during adolescence at the 7th and 8th grades and student involvement as bullies and victims in traditional bullying peaks during elementary/middle school between 4th and 6th grades.

Impact of School Bullying

The impact of student involvement as traditional and cyber bullies and victims in school bullying has far-reaching effects with adverse effects on optimal learning, healthy human development and subjective well-being (Gamez-Gaudix, Orue, & Smith, 2013; Kyriakides &

Creemers, 2012; Laftman et al., 2013; Tsang, Hui, & Law, 2011). Effects of school bullying range from general to specific, from physical, psychological, social, emotional, mental to academic, from intrapersonal to interpersonal and from short- to long-term (Cook, Williams, Guerra, Kim, & Sadek, 2010; Ilola & Sourander, 2012; Kowalski & Limber, 2013). In their 2012 study, Campbell et al. report that 47.7% of students feel that traditional victimization is worse than cyber victimization, 16.7% feel that cyber victimization is worse than traditional victimization and 35.5% feel that they are about the same.

Research acknowledges a range of effects of student involvement in cyber and traditional bullying and victimization - lower academic performance, higher levels of stress, low self-esteem, changes in interests, anxiety and depression (Kowalski & Limber, 2013; Pettalia et al., 2013; Twyman, Conway, Taylor, & Comeaux, 2010). Research shows that both direct and indirect victims report increased maladaptive coping, anger control problems and negative self-appraisals (Andreou et al., 2005; Hampel, Manhal, & Hayer, 2009). Students involved as victims in school bullying report lower self-worth, fewer friends at school, increased sensitivity to failure and punishment, school dissatisfaction, feelings of loneliness, negative social comparison, lack of peer and teacher support, and affiliation with deviant friends who victimize and bully children (Borotrager, Davis, Bernstein, & Gorman, 2009; Bostic & Brunt, 2011; Scholte, Engels, Overbeck, de Kemp, & Haselager, 2007; van Lier et al., 2012).

Being a victim of school bullying is also associated with feelings of uselessness, a sense of helplessness and psychological maladjustment that increase over time (Chen & Graham, 2012; Richard, Schneider, & Mallet, 2011; Schneider et al., 2012). Such maladjustment is rooted in

self-blame which results in the victim internalizing the victimization (*It must be me*), engendering feelings of shame, expecting reoccurring victimization, and becoming incapable of altering the course of future victimization (Borntrager et al., 2009; Chen & Graham, 2012). Students who experience frequent victimization also report suicidal ideation/attempts, eating disorders, and various somatic symptoms, including sore throats, coughs, colds, poor appetite, headaches, sleep disturbances, abdominal pain, musculoskeletal pain, dizziness, and fatigue, greater medication use, and possible alterations in neurohormonal functioning (Borntrager et al., 2009; Sansone, Leung, & Wiederman, 2012; Sharp, 1996; Wade & Beran, 2011). Additionally, such victims suffer acute subsequent behavioral problems, externalizing behaviors such as aggression, hyperactivity, alcohol and substance misuse, smoking behavior, and greater problematic Internet use (Borntrager et al., 2009; Gamez-Gaudix et al., 2013; Hinduja & Patchin, 2008; Nansel et al., 2001; Sharp, 1996; Wade & Beran, 2011).

In addition to diverse variation and magnitude of childhood victimization of school bullying reported by students, students also report that victimization may be long-term. For example, Muraco and Russell (2011) found that being bullied prior to or by age 8 is linked to anxiety 10-15 years later. Children who report being victims at age 12 also report a greater probability of relationship problems such as being irritable, isolated and rejected three years later (Scholte et al., 2007). A 2012 study by Sansone et al. identified a long-term effect of school bullying given its associations with reduced employment viability, significantly greater number of jobs, significantly greater likelihood of being paid 'under the table' and significantly higher number of firings in adulthood.

Compared to victims, bullies and students noninvolved in school bullying have been observed to report less self-blaming attributions, school avoidance, suicidal ideation, depression, internalizing behavior and passive response style (Borntrager et al. 2009; Espelage & Swearer, 2008; Sharp, 1996). Bullies and noninvolved students also score higher than victims on positive interaction scales (Andreou et al., 2005; Hampel et al., 2009). Bullies have also been observed to make friends easily, obtain classmate support similar to that of noninvolved students, have average levels of perceived popularity, be less isolated than noninvolved students, and be clearly integrated into the social network of the classroom (Borntrager et al., 2009; Veenstra et al., 2005).

Being stably involved in school bullying as bullies in the formative years may deprive children from positive social experiences, inhibit the acquisition of pro-social skills and foster social skills deficits (Borntrager et al., 2009; Snyder et al., 2003). The unfortunate consequence of these children's failures to learn how to adequately react in social interactions elevates their risk of development of desensitized and dysfunctional interactional styles which may make them prone to social adjustment problems later in life (Snyder et al., 2003; Tsang et al., 2011; von Marees & Petermann, 2012).

Another impact of students' continual involvement as bullies in school bullying is serial bullying which frequently reflects different levels and stages in the formation of unusual behavior (Chan, 2006). In younger students, serial bullying signals experimentation marked by a random sampling of targets and the subtle beginning of a bullying career whereas for older students, serial bullying is described as a crystallized behavioral pattern resulting in a series of systematic and planned attacks on a selected range of targets or older students (Chan, 2006).

One of the disturbing effects of cyber bullying is the ‘cockpit effect’ which results from limited feedback regarding the impact of cyber perpetration on both cyber bullies and cyber victims (Barlinska et al., 2013; Vollink et al., 2013). Cyber bullying lacks access to a whole host of information such as that provided by facial expressions, eye contact, or physical distance which could modify cyber bullies’ behaviours through the automatic activation of empathy as an inhibitor of aggression (Barlinska et al., 2013). Twyman et al. (2010) and Pettalia et al. (2013) also acknowledge that the anonymity of cyber bullies allows for reduced social accountability and perpetuates the encouragement of individuals engaging in cyber bullying behaviour. In addition, Twyman et al. (2010) comment that many cyber bullies think cyber bullying is entertaining and funny and do not realize the impact it has on their cyber victims who feel trapped when they know that they may receive a harassing message every time they turn on a digital device, such as internet/computer and/or cell phone.

Students who are involved as bullies in school bullying are described by several researchers as uncompassionate, lacking concern and empathy for others, possessing low self-control, having high acceptance of antisocial behavior, scoring high on self-efficacy for aggression and more likely to indulge in the satisfaction of aggressive and/or antisocial behavior instead of academic pursuits, become school dropouts, gang members and criminals, experience difficulty in maintaining intimate interpersonal relationships, and become abusive spouses and parents (Andreou et al., 2005; Borntrager et al., 2009; Marini, Dane, Bosacki, & YLC-CURA, 2006; Tsang et al., 2011). Additionally, bullies tend to be controversial, display negative attitudes to institutional authorities (for example, police, law, school, and teachers), engage in alcohol consumption and smoking, have academic difficulties, display a strong need for

dominance and frequently misunderstand peers' intentions, indicating that other students provoke them (Andreou et al., 2005; Ivarsson et al., 2005; Lopez, Perez, Ochoa, & Ruiz, 2008; Richard et al., 2011).

Studies show that bullies may experience satisfaction vicariously through assisting or reinforcing bullying, and become very hostile and intimidating toward peers (Borntrager et al., 2009; Oh & Hazler, 2009; Salmivalli, 1999). In fact, it is believed that that bullies are normally unable to anticipate the negative consequences of their behaviours for the victim and show preference towards being considered powerful, socially accepted, different and rebellious by classmates (Borntrager et al., 2009; Bostic & Brunt, 2011; Lopez et al., 2008). One of the more notable outcomes of student involvement as bullies in school bullying is that bullies quickly learn that bullying is an easy and effective way to get what they want and hence resort to increased externalizing behaviour resulting in amplified physical, verbal and social bullying (Hampel et al., 2009; Kyriakides & Creemers, 2012). A long-term impact of being a bully is increased risk of depression and suicide (Borntrager et al., 2009; Ivarsson et al., 2005).

In summary, the impact of student involvement as bullies and victims in school bullying is very far-reaching. As illustrated above, being involved as victims and/or bullies in traditional and cyber bullying may have adverse consequences for students' short- and long-term socio-emotional, interpersonal, intrapersonal, physical, mental, social, and academic development. The potentially devastating impact of school bullying on healthy youth development beckons researchers and educators to explore new and ongoing relationships in school bullying and hence, increase conceptual understanding of student involvement in such phenomena.

Enhancing Conceptual Understanding of Student Involvement in School Bullying

To date, no one specific factor or theory fully explains student involvement in school bullying (Rigby, 2004). Several theoretical conceptualizations have applicability to student involvement in school bullying (Monks et al., 2009; Rigby, 2004; Tokunaga, 2010). One theory with applicability to school bullying is social cognitive theory. Social cognitive theory hypothesizes that student engagement as bullies in school bullying is a maladaptive cognitive or social response determined by distorted or deviant processing of social information resulting in aggression. The maladaptive response is based on students' inability to read social cues and/or prior experiences with bullying in conjunction with the students' cognitive constructions of those experiences (Monks et al., 2009). One simple application of social cognitive theory in school bullying involves bullies who are unprovoked by their victims but feel that the victims deserve the act(s) of bullying. Agreeably, Tokunaga (2010) also feels that social cognitive theory has applicability to cyber bullying and specifically vocalizes that such theory "may hold utility in explaining the phenomenon of victims or observers of cyber bullying who eventually become cyber bullies themselves, through the process of social learning from direct experiences or vicarious observations" (p. 285).

Similar to social cognitive theory, another theory with applicability to school bullying is social learning theory. Social learning theory assumes that students become involved as bullies via social learning with individuals learning the bullying behaviours through role modeling, observation and reinforcement (Monks et al., 2009). One concrete application of social learning theory in school bullying involves school children engaging in acts of bullying as a result of

having observed the same or similar bullying actions occur among family members, peers, classmates, and/or neighbors.

General strain theory offers another relevant theoretical conceptualization of student involvement in school bullying. General strain theory hypothesizes that students become involved as bullies in school bullying because they are feeling distressed (Jang et al., 2014). The more distress and/or strain that one feels, the greater the likelihood of being involved as a bully in school bullying. One relevant application of general strain theory to cyber bullying acknowledges that youth who are victims of traditional bullying show a higher tendency of becoming cyber bullies by externalizing their strain in cyberspace (Jang et al., 2014). Other applicable examples of general strain theory in school bullying include parental strain, study strain, financial strain, low self-control, and associations with delinquent peers which significantly increase the odds of student involvement as bullies (Jang et al., 2014).

Another relevant theoretical conceptualization of student involvement as bullies in school bullying is theory of mind. Theory of mind asserts that some students become involved as school bullies because they are very adept at attributing mental states to others and moreover, they bully others because they can determine who is weaker, who can be picked on, and who is unlikely to defend themselves (Leslie, 1987). A pertinent application of theory of mind in school bullying involves bullies who target very vulnerable students including for example, students with physical, cognitive and/or learning disabilities.

Social Dominance Theory (SDT) also demonstrates relevance to student involvement in school bullying and suggests that school bullying is a deliberate strategy used by students to

attain dominance in newly formed peer groups with whom they are required to renegotiate their dominance relationships (Adams, 2009). SDT views student involvement as bullies in school bullying as a developmental process compatible with evolutionary theory and argues that “dominance over others has been, and still is, a primary goal ensuring an individual’s survival in a competitive environment and is the means by which the strongest prevail and the existence of the species is prolonged” (Rigby, 2004, p. 291). One concrete application of social dominance theory in school bullying involves ongoing renegotiation for friendship and peer status by students during various transitions from primary to elementary to junior high to senior high school.

Another relevant theoretical conceptualization of school bullying is the developmental pathways model. The developmental pathways model hypothesizes that even though a relatively large proportion of school children engage in traditional and cyber bullying, as children get older, school bullying is displayed by a smaller proportion of students (Berkowitz & Benbenishty, 2012). One concrete application of the developmental pathways model in school bullying is age or grade-level. As students get older, their involvement as physical bullies decline.

Another relevant theoretical conceptualization of school bullying is attachment theory. Attachment theory assumes that bullies have insecure parental/caregiver attachment which results in higher than expected levels of hostile and aggressive responses toward others (Monks et al., 2009). In other words, bullies develop negative internal working models of relationships, which in turn influence how they relate, in this case, negatively to others. One concrete example

of attachment theory in school bullying involves authoritarian (strict and rigid) parenting which positively correlates with student involvement as bullies.

While the theories presented above provide appropriate conceptualizations of student involvement in school bullying, it is this author's stance that student involvement as bullies in school bullying is more adequately explained by social-ecological theory. A social-ecological view conceives school bullying as a reciprocal and systemic interplay between individuals (selves), peer groups (friendships), families, schools, communities (neighborhoods) and cultures (Card & Hodges, 2008; Gini, Albiero, Benelli & Altoe, 2008; Machackova et al., 2013). Monks et al. (2009) and Rigby (2004) also regard student involvement in school bullying within the roles of Bronfenbrenner's (1994) social-ecological taxonomy where for example, peer, friendship, school, and family factors can be considered microsystemic, parents and teachers' communications about school bullying as mesosystemic, and school location and neighborhood characteristics as exosystemic. Relatedly, other proponents of the socio-ecological perspective similarly maintain that school bullying involves and is enabled by several participant roles, in addition to bully-victim dyads, bullies, victims and traditional bystander roles (Craig & Pepler, 2007; Richard et al., 2011; Salmivalli, Lagerspetz, Bjorkqvist, Osterman, & Kaukiainen, 1996).

In essence, social-ecological theory states that individual (self) and environmental (family, school, peer group (friendship), and living environment (neighborhood/community)) variables influence and/or predict student involvement as bullies in school bullying. Socio-ecological perspectives endorse the view that students' adoption of roles in bullying situations are mainly constructed by and defined within the peer interaction context. As acknowledged by

Craig and Pepler (2007) and Porter and Smith-Adcock (2011), problems with school bullying surface through a multifaceted process of interactions with significant others within which peers are of great importance in developing, maintaining or altering the social environment in which bullying occurs.

In their 2005 study, Andreou et al. elaborate on the social perspective of school bullying when they affirm that only a minority of children who bully others lack pro-social skills and in most cases, school bullying is not a defensive, legitimized response to an anger-infuriating condition but more particularly a proactive form of aggression intending to gain social outcomes such as peer status or dominance. Other research concurs with this view and also hypothesizes school bullying as a form of proactive aggression whereby the bully uses aggressive acts over others to achieve interpersonal dominance (Coie, Dodge, Terry & Wright, 1991).

The ecological perspective intertwined within socio-ecological framework on school bullying hypothesizes the existence of a link between various environmental factors (family environment, school environment, peer group (friendship) environment, and neighborhood environment) and school bullying. The ecological view espouses that problems related to school bullying stem from interactions between children and the environments they inhabit (Monks et al., 2009; Rigby, 2004; Salmivalli et al., 1996).

Considerable research reinforces the ecological view when it observes the influence that exposure to violence has on psycho-social adaptation in young people. For example, several researchers report that bullies regard school bullying as a customary feature of school life and perceive it as a normal part of everyday living (Borntrager et al. 2009; Murray-Harvey & Slee,

2010; Navarro et al., 2013). Consequently, the normalizing of bullying behaviors by bullies elevates their risk for greater potential desensitization of violence and greater perpetrator involvement (Ahmed & Braithwaite, 2004; Borntrager et al., 2009; Hernandez, 2009). Singh and Ghandour (2012) and Woolley and Grogan-Kaylor (2006) also support the ecological notion by showing that students' exposure to neighborhood violence and adverse neighborhood social conditions can increase the risk of bullying by peers.

In summary, a diversity of conceptual understanding exists relative to student involvement as bullies in school bullying. Adopting a social-ecological stance, this author believes that student involvement as bullies in school bullying occurs along a continuum of no involvement to very high involvement and is the result of a multifaceted interplay between individuals and their broader multiple environments. Hence, student involvement as school bullies is conceptualized as a complex relationship problem in which many actors play roles including for example, the individual, family, peer group (friendship), school, neighborhood, community, and culture resulting in systemic patterns and erratic incidences of traditional and cyber bullying.

Life Satisfaction and School Bullying

As the previous section indicates, factors related to self, family, school, peer group (friendship), and neighborhood (community) influence, determine, and/or predict student involvement in traditional and cyber bullying. Coincidentally, research also shows that the same or similar factors influence and/or determine student levels of life satisfaction (Oberle et al., 2011; Proctor et. al., 2009; Seligson et al., 2005). It is conceivable then in light of these shared

determinants or predictors that students' life satisfaction may determine and/or predict their involvement as traditional and/or cyber bullies in school bullying - the major focus of the current study.

Recognized as one component of an individual's subjective well-being, life satisfaction is defined as a cognitive evaluation of the positivity of an individual's life overall or within specific domains (family, school, friendship, self and neighborhood) (Bradley et al., 2013; Proctor et. al., 2009; Seligson et al., 2005). Overall or global life satisfaction is conceptualized as unidimensional life satisfaction which provides a general measure of life satisfaction that is context-free (Ferguson, Kasser, & Jahng, 2010; Haranin et al., 2007). For the purpose of this study, overall or global life satisfaction is defined as the degree to which a student appraises the overall quality of his/her life as-a-whole – how much the student likes his/her life.

Family, school, friendship, self and living environment (neighborhood) satisfaction are conceptualized as multidimensional or domain-specific life satisfaction which provide measures of life satisfaction that are context-specific (Haranin et al., 2007; Seligson et al., 2005). For the purpose of this study, school satisfaction is defined as the degree to which a student is satisfied with his/her schooling experiences; family satisfaction is defined as the degree to which a student is satisfied with his/her family experiences; friendship satisfaction is defined as the degree to which a student is satisfied with his/her friendship experiences; living environment (neighborhood) satisfaction is defined as the degree to which a student is satisfied with his/her living environment (neighborhood) experiences; and self-satisfaction is defined as the degree to which a student is satisfied with the self.

Numerous researchers argue that assessing children and adolescents', in this case bullies' unidimensional and multidimensional life satisfaction is worthy of specific research attention because such measures provide both global and domain-specific indices of subjective well-being based on criteria that are determined by youths themselves rather than researchers (Gilman & Huebner, 2006; Seligson et al., 2005). Children and adolescents' (including bullies) global and domain-specific life satisfaction reports are also believed to transcend temporary emotional fluctuations, influence behavioral changes, be relatively free of social desirability bias and provide a more differentiated analysis of students' well-being ranging from 'low' to 'neutral' to 'mildly high' to 'very high' (Gilman & Huebner, 2006; Moore et al., 2012). In addition, elementary and high school students' life satisfaction measures function in both adaptive and maladaptive ways, have valuable predictive abilities and provide important information for prevention, early identification, and intervention in these populations (Bradley & Corwyn, 2004; Flaspohler et al., 2009; Huebner et al., 2006; Seligson et al., 2005).

Similar to adults, children and adolescents report predominantly positive levels of overall or global life satisfaction (Huebner et al., 2006; Seligson et al., 2005). Most children and adolescents also report high levels of domain-specific satisfaction involving family, school, friendships, living environment (neighborhood) and self (Proctor et al., 2009; Seligson et al., 2005). In fact, children and adolescents' positive levels of life satisfaction range from 'mostly satisfied' to 'pleased' to 'delighted' (Huebner, 2004; Huebner et al., 2011; Seligson et al., 2005).

In their 2005 study involving 2278 students in grades 6, 7 and 8, Huebner et al. observed that approximately 73% of students self-reported high global satisfaction, 66% self-reported high

family satisfaction, 56% self-reported high school satisfaction, 79% self-reported high friendship satisfaction, 76% self-reported high self-satisfaction and 73% self-reported high living environment (neighborhood) satisfaction. Similar overall positive levels of domain-specific satisfaction were reported by grades 3 to 5 students with living environment receiving the highest level of satisfaction followed by respectively, friendships, family and self, overall and school (Seligson et al., 2005).

Although children and adolescents' report mostly positive overall and domain-specific life satisfaction, relationships between children and adolescents' life satisfaction and demographic variables such as sex, age and grade-level are weak and contribute only modestly to life satisfaction (Huebner et al., 2011; Proctor et al., 2009; Seligson et al., 2005). That said, exceptions are reported in the literature. For example, a study by Huebner et al. (2005) found that boys reported lower school and friendship satisfaction than girls and students in the younger grades reported higher levels of satisfaction with family and school compared to older students. In their 2008 study, Martin, Huebner and Valois found that girls reported higher levels of global life satisfaction than boys and as grade level increased, students reported lower levels of global life satisfaction.

Knowledge of elementary and high school students' life satisfaction, correlates of life satisfaction and in particular, relationships between students' life satisfaction and involvement in school bullying are recognized by some researchers as neglected and under studied components of child and adolescent health assessment (Bradley et al., 2013; Huebner et al. 2004; Moore et al., 2012). Moore et al. (2012) point out that there is very limited research

investigating relationships between student involvement in traditional and in particular, cyber bullying and “the few studies that have investigated life satisfaction and bullying behaviors have focused on the victimization component, excluding the possible link between life satisfaction and perpetration” (p. 433). The current study specifically attempts to address this gap by determining whether students’ levels of domain-specific and global life satisfaction predict their involvement as traditional and cyber bullies in school bullying.

Moreover, the current study creates both a unidimensional and multidimensional life satisfaction profile for the students studied by assessing global and domain-specific levels of life satisfaction and relating this information to students’ involvement as physical, verbal, social, cyber (internet/computer) and cyber (cell phone) bullies. The current study also extends previous unidimensional (global) research on life satisfaction with children to include both unidimensional (global) and multidimensional (domain-specific) measures in an attempt to provide more comprehensive and differentiated analyses of children’s life satisfaction within specific and other important life domains. Additionally, in contrast to previous research linking student involvement in school bullying and life satisfaction wherein life satisfaction is used as an outcome or dependent variable with a predominant focus on victimization (Flaspohler et al., 2009; Moore et al., 2012; Navarro et al., 2013), the current study expands this research base by treating students’ levels of global and domain-specific life satisfaction as independent or predictor variables with a sole focus on perpetration.

Increased awareness and understanding of interactions between student involvement as bullies and life satisfaction in children and adolescents may provide promising information

which may be used not only as part of schools' comprehensive screening programs to monitor levels of students' global and/or domain-specific life satisfaction but may also support school, home, and interagency efforts at earlier identification of students who are at risk and/or protected from perpetration involvement in traditional and cyber bullying (Flaspohler et al., 2009; Moore et al., 2012; Navarro et al., 2013; Oberle et al., 2011). Additionally, such evidence may be used to develop more effective interventions programs to enhance all students, in particular, bullies' levels of global and/or domain-specific life satisfaction while concurrently preventing and reducing the psychosocial and psychological impact of their involvement in traditional and cyber bullying (Huebner et al., 2011; Proctor et al., 2009; Valois et al., 2004). Bradley et al. (2013) state that life satisfaction measures that assess multiple domains of children's, in this case, bullies' life satisfaction specifically support the development of more comprehensive individual intervention plans. For instance, a child or more specifically, a bully who indicates lowest satisfaction ratings in the family domain will likely need a different intervention relative to a child or bully who indicates lowest satisfaction in the peer or school domain.

Despite limited research between students' life satisfaction and their involvement as bullies in traditional and cyber bullying, studies have revealed important relationships between these variables. For example, a study involving Latvian and Lithuanian adolescents by Gobina et al. (2008) corroborates findings of other studies when it detects that being involved in school bullying either as pure bully or bully/victim is associated with a higher likelihood of reporting poorer subjective well-being and lower overall life satisfaction. Related research also shows that bullies report significant reductions in school satisfaction relative to their noninvolved counterparts (Arslan et al., 2012; Forero, McLellan, Rissel, & Bauman, 1999; Glew, Fan, Katon,

Rivara, & Kernic, 2005). Other research involving life satisfaction and school bullying also acknowledge that children and adolescent dissatisfaction with life is associated with internalizing problems such as depression, anxiety, and low self-esteem as well as with externalizing problems such as for example, being a bully or bully/victim in either traditional and/or cyber bullying (Proctor et al., 2009).

A study involving 7th and 8th grade students by Moore et al. (2012) reveals modest, negative correlations between electronic bullying and global life satisfaction as well as satisfaction with family, friends, school, living environment (neighborhood) and self. Similar results, found in Flaspohler et al.'s (2009) study involving grades 3-8 students also indicate that traditional bullies report lower levels of life satisfaction compared to their noninvolved peers in school bullying. Relatedly, a recent study by Navarro et al. (2013) involving 10-12-year-old school children similarly finds that children's involvement in cyber and social bullying significantly reduces their optimism, happiness, and satisfaction with school, family, friends and self. More particularly, Navarro et al. (2013) discern that social bullies report lower levels of life satisfaction compared to cyber bullies and noninvolved peers. Navarro et al. (2013) find no significant relationship between cyber bullying perpetration and family, friend, school and self-satisfaction. A study involving 11-16-year-olds by Buelga, Misitu, Murgui and Pons (2008) finds that life satisfaction has a direct and negative effect on one's aggression in that higher life satisfaction decreases aggression among peer adolescents. This observation is also ratified in a study by MacDonald, Piquero, Valois, and Zullig (2005) who confirm that greater satisfaction with life is related to youths' lesser involvement in violent behaviors and vice versa.

In summary, multidimensional life satisfaction of elementary students is a relatively novel and important research variable in the realm of traditional and cyber bullying. Knowledge of elementary students' multidimensional life satisfaction is garnering increased interest by researchers, educators, and mental health practitioners because it provides a positive and differentiated mental health orientation of students by reflecting on important areas in students' lives - self, school, family, friendship and living environment (neighborhood). Collectively, children and adolescents report positive overall and domain-specific life satisfaction with insignificant relationships to sex and grade-level/age. Research on relationships between student involvement in traditional and/or cyber bullying and life satisfaction clearly show that students who are noninvolved in school bullying report higher levels of global and domain-specific life satisfaction compared to students who self-identify as bullies, victims, and bully/victims.

Summary

From a theoretical perspective, the author of this project supports the notion that student involvement as bullies and/or victims in traditional and cyber bullying is a serious social-ecological phenomenon. School bullying is considered to be a subset of aggression and is characterized as having three main elements – intention to harm, repetition and power imbalance. Elementary and high school students report prevalence rates for traditional and cyber bullying and victimization ranging from 6.5% to more than 50%.

The prevailing notion in the research community is that slightly more boys than girls are reported as involved in traditional and cyber bullying and victimization and that student involvement as traditional bullies and/or victims peaks during elementary school whereas student

involvement as cyber bullies and/or victims peaks during early adolescence. The psychosocial impact of student involvement as bullies and/or victims in school bullying is considered to be widespread with very adverse effects.

As previously noted, an abundance of research is available on traditional forms of bullying with particular emphases on student involvement as victims. In contrast, less research is available on traditional forms of bullying with specific emphases on student involvement as bullies. Limited research also exists on student involvement as cyber bullies and cyber victims. The current study attempts to address this gap by establishing prevalence rates for student involvement as bullies and victims in both traditional and cyber bullying.

Research demonstrates that elementary and high school students report positive overall or global life satisfaction along with positive family, school, friendship, living environment (neighborhood) and self-satisfaction inclusive of the context of school bullying. Research also illustrates that elementary students' multidimensional life satisfaction is a useful exploratory variable but under researched construct in school bullying. More specifically, students' global and domain-specific life satisfaction is positively and negatively influenced by their involvement as bullies and victims in school bullying.

Research readily acknowledges that most studies of students' life satisfaction only assess overall or global life satisfaction and moreover, the few studies that have explored relationships between life satisfaction and school bullying have focused on victimization, excluding possible links between life satisfaction and perpetration. The current study specifically attempts to address the above shortcoming in life satisfaction-school bullying research by assessing students'

domain-specific and overall life satisfaction and relating it to their involvement as bullies in both traditional and cyber forms of bullying.

Chapter II has provided a review of literature related to describing/defining school bullying, prevalence of school bullying, role of sex and grade-level/age in school bullying, impact of school bullying, enhancing conceptual understanding of student involvement in school bullying, and links between life satisfaction and school bullying. Chapter III will provide information related to the study's methodology.

CHAPTER III
METHODOLOGY

In this chapter, a description of the study’s methodology is provided with emphases on participant demographics, ethical assurances, sampling approach, research design and procedures, survey instruments, data collection, variables and data analysis methods.

Participants

A total of 299 students in grades 4 to 6 in three K-6 schools in a southeastern township on the Avalon Peninsula in Newfoundland and Labrador participated in the study. Tables 1, 2 and 3 respectively display student participation by sex, grade and age. As Table 1 illustrates, approximately 10% more females than males participated in the study resulting in a slightly unequal distribution of males and females. Using grade six as a reference point, Table 2 shows a similar grade differential rate of participation with approximately 7% more grade four and 12% more grade five students partaking in the study.

Table 1

Student Participation by Sex

| Gender | N | |
|--------|-----|-----|
| Male | 135 | 45% |
| Female | 164 | 55% |

Table 2

Student Participation by Grade

| Grade | N | |
|-------|-----|-------|
| 4 | 103 | 34.4% |
| 5 | 116 | 38.8% |
| 6 | 80 | 26.8% |

Table 3

Student Participation by Age

| Age | N | |
|-----|-----|-------|
| 9 | 67 | 22.4% |
| 10 | 102 | 34.1% |
| 11 | 96 | 32.1% |
| 12 | 33 | 11.0% |
| 13 | 1 | 0.3% |

Ethical Assurances

As previously noted, this study involves human subjects. Prior to data collection which involved anonymous administration of questionnaires to students by teachers, ethical assurances were sought by the researcher and granted by Memorial University's Interdisciplinary Committee on Ethics, Eastern School District and school administrators. This study made every effort to optimize ethical assurances and comply with ethical standards when conducting research with human subjects.

Measures

Bullying/Victimization

Items from the revised Olweus Bully/Victim self-report questionnaire (Feldman, 2008) were adapted and used to assess school bullying and victimization (See Appendix A). The revised Olweus Bully/Victim questionnaire has been used extensively with elementary and high school students with adequate reliability and validity (Flaspohler et al., 2009; Kowalski & Limber, 2007; Solberg & Olweus, 2003).

Higher scores on the bully/victim scale reflect higher levels of student involvement in school bullying. Because of the novel and emergent nature of elementary student involvement in cyber bullying and victimization, a cutoff point of ‘only once or twice’ or more during the past couple of months is used to code a student as involved in traditional and cyber bullying (Kowalski & Limber, 2007). Student responses are re-coded to reflect a dichotomous response of either involved or noninvolved in school bullying.

Life Satisfaction

For the sake of survey name simplicity and use with young children in this study, The Brief Multidimensional Students’ Life Satisfaction Scale (BMSLSS), a 6-item self-report scale designed for use with children ages 8 – 18 (Flaspohler et al., 2009; Seligson et al., 2005; Suldo, Riley & Shaffer, 2006) is renamed Life Satisfaction Questionnaire (See Appendix B). The Life Satisfaction Questionnaire assesses students’ life satisfaction judgments using a 7-point Likert scale ranging from terrible to delighted focusing specifically on overall or global life satisfaction

(item #6) as well as satisfaction across five important life domains – family (item #1), friends (item #2), school (item #3), self (item #4) and living environment or neighborhood (item #5).

As an additional comment on the life satisfaction questionnaire's acceptable reliability and validity, Flaspohler et al. (2009) cite alpha coefficients ranging from .68 for elementary students to .75 for secondary students and a one-dimensional factor structure which has been supported for students across ages 8 to 18. It is important to note in this instance however that Nunnally (1978) recommends that scales achieve a reliability of at least .70 or better. Flaspohler et al. (2009) also allude to the life satisfaction questionnaire's acceptable (a) convergent and discriminant validity which have been demonstrated through appropriate correlations with parent ratings and (b) concurrent validity which has been supported by predicted relationships with a variety of criterion measures, including mental health, physical health and other life satisfaction measures.

Student responses on the Life Satisfaction Questionnaire are also re-coded to reflect high or low life satisfaction across six domains. Student response options including 'terrible, unhappy, mostly dissatisfied, and mixed' are recorded to reflect low domain satisfaction and student response options including 'mostly satisfied, pleased, and delighted' are recorded to reflect high domain satisfaction.

Procedure

The three schools participating in this study were randomly selected by this author and in consultation with school principals. Each school distributed information letters and consent forms (See Appendix D) to parents/guardians of grades four, five and six students. Only

students who were given parental consent and assented themselves (Appendix E) were permitted to participate in the study. A total of 299 students out of a possible 679 students or 44% of elementary students in three elementary schools participated in the study. In each school, participating students were removed from their regular classrooms and administered the surveys with other participating grade-level peers in groups not exceeding thirty (30) students.

Using the following sequence, the administering teacher (s) read aloud to participating students:

- the definition of bullying stipulated on the Bully/Victim Questionnaire (Appendix A).
- the general question “Have you been bullied at school in the past couple of months in one or more of the following ways (questions 1-14)?”
- beginning with item number one, each of the items from one to fourteen including a 5-point Likert scale as follows – it has not happened to me during the past couple of months, only once or twice during the past couple of months, 2 or 3 times a month, about once a week, and several times a week.
- the general question “Have you bullied (an) other student(s) at school in the past couple of months in one or more of the following ways (questions 15 -28)?”
- beginning with item or question number fifteen, each of the items from fifteen to twenty-eight and the five possible response options mentioned above.
- the short preamble for the Life Satisfaction Scale (See Appendix B).

- each of the six items comprising the Life Satisfaction Scale and seven (7) response options – terrible, unhappy, mostly dissatisfied, mixed (about equally satisfied and dissatisfied), mostly satisfied, pleased, and delighted

Upon completion of the survey, students were provided individual envelopes within which they could anonymously secure their questionnaires.

Variables

There are two main types of variables used in this study – predictor (independent) and criterion (dependent) variables. Each of the life satisfaction subscales or single items are treated as independent variables. The independent variables are family satisfaction, friend satisfaction, school satisfaction, self-satisfaction, living environment (neighborhood) satisfaction and overall life satisfaction. Sex and grade are also included as independent variables in each model. The dependent variables are physical bullying, verbal bullying, social or relational bullying, cyber [internet/computer] bullying and cyber [cell phone] bullying.

Data Analysis Method

Using SPSS 20.0.0, statistical analyses involving both descriptive and inferential statistics are employed. Sample, sex and grade-level frequencies and means are computed for seven response options across six different life satisfaction domains and five response options across ten different forms of school bullying are computed. These frequencies form the study's prevalence rates for both life satisfaction domains and school bullying.

In addition to the above, scale reliabilities are also computed for eight forms of school bullying, namely, verbal victimization (Cronbach's alpha = .62), social or relational victimization (Cronbach's alpha = .57), cyber victimization using the internet via computer (Cronbach's alpha = .85), cyber victimization using a cell phone (Cronbach's alpha = .83), verbal bullying (Cronbach's alpha = .78), social or relational bullying (Cronbach's alpha = .53), cyber bullying using the internet via computer (Cronbach's alpha = .97) and cyber bullying using a cell phone (Cronbach's alpha = .97). Research points out those Cronbach alpha values between .60 and .70 and lower are deemed at the lower limits of acceptability (Hair, Black, Babin, & Anderson, 2010). It is also important to note that since "Cronbach's alpha does not provide reliability estimates for single items" (Gliem & Gliem, 2003, p. 88), no scale reliabilities are computed for physical victimization, physical bullying, family satisfaction, friendship satisfaction, school satisfaction, self-satisfaction, neighborhood satisfaction and global or overall life satisfaction.

In the current study, the results for elementary student involvement in verbal victimization, social victimization and social bullying should be treated with caution. Verbal bullying consisted of three items: 1) I called another student(s) mean names and made fun of or teased him or her in a hurtful way, 2) I bullied him or her with mean names or comments about his or her race or color, and 3) I bullied him or her with mean names, comments or gestures with a sexual meaning. The item scales ranged from *it has not happened to me during the past couple of months, only once or twice during the past couple of months, two or three times a month, about once a month, to several times a week*. The three items were summed and then divided by

3 to create a scale ranging from 1 (no bullying) to 5 (often). Higher scores indicate higher levels of verbal bullying.

Social bullying consisted of two items: 1) I kept him or her out of things on purpose, excluded him or her from my group of friends, or completely ignored him or her, and 2) I spread false rumors about him or her and tried to make others dislike him or her. The item scales ranged from *it has not happened to me during the past couple of months, only once or twice during the past couple of months, two or three times a month, about once a month, to several times a week*. The two items were summed and then divided by 2 to create a scale ranging from 1 (no bullying) to 5 (often). Higher scores indicate higher levels of social bullying

Cyber bullying using the internet via computer consisted four items: 1) I bullied him or her with mean or hurtful email messages over the internet using a computer, 2) I bullied him or her with mean or hurtful pictures over the internet using a computer, 3) I bullied him or her with mean or hurtful telephone calls over the internet using a computer, and 4) I bullied him or her in other mean or hurtful ways over the internet using a computer. The item scales ranged from *it has not happened to me during the past couple of months, only once or twice during the past couple of months, two or three times a month, about once a month, to several times a week*. The four items were summed and then divided by 4 to create a scale ranging from 1 (no bullying) to 5 (often). Higher scores indicate higher levels of cyber bullying using the Internet via computer.

Cyber bullying using a cell phone consisted of four items: 1) I bullied him or her with mean or hurtful text messages using a cell phone, 2) I bullied him or her with mean or hurtful pictures using a cell phone, 3) I bullied him or her with mean or hurtful telephone calls using a

cell phone, and 4) I bullied him or her in other mean or hurtful ways using a cell phone. The item scales ranged from *it has not happened to me during the past couple of months, only once or twice during the past couple of months, two or three times a month, about once a month, to several times a week*. The four items were summed and then divided by 4 to create a scale ranging from 1 (no bullying) to 5 (often). Higher scores indicate higher levels of cyber bullying using a cell phone.

Regression models are utilized to explore the association between student involvement as bullies across five forms of school bullying relative to sex, grade, and scores on six life satisfaction scales. More specifically, treating student involvement as bullies in each of the five forms of school bullying as outcomes, ANOVA models are used to generate regression analyses (Worster, Fan, & Ismailia, 2007) using two (2) socio-demographic variables (sex and grade) and six (6) life satisfaction variables as predictors (family, friends, school, self, living environment (neighborhood) and overall life satisfaction). A total of five (5) regression models are generated and analyzed. All analyses are conducted using an alpha of .05 as the significance level.

Chapter III has provided a description of the study's methodology including specific information on participant demographics, ethical assurances, sampling approach, research design and procedures, survey instruments, data collection, variables and data analysis methods. Chapter IV will provide a description of the results of the study.

CHAPTER IV

RESULTS

The results of this study are prepared in accordance with four (4) research questions posed in Chapter I and organized in three (3) main sections. The first section provides findings related to specific, sex and grade-level prevalence rates for elementary student involvement as victims and/or bullies in both traditional and cyber bullying. The second section provides findings related to sex, grade-level and specific levels of elementary students' life satisfaction across six (6) domains. The third section provides findings related to the predictive abilities of elementary students' sex, grade-level, and life satisfaction domains (beyond sex and grade-level) in determining student involvement as bullies in traditional and cyber bullying.

Section One

Prevalence Rates of Elementary Student Involvement in School Bullying

Frequencies of elementary student involvement in traditional (physical, verbal, social or relational) and cyber bullying (internet/computer, cell phone) were assessed in this study. These frequencies established specific prevalence rates of student involvement and noninvolvement as victims and/or bullies in five (5) forms of school bullying. Students were asked to self-report how frequently they had been bullies as well as victims in elementary school bullying. Because student responses were re-coded as dichotomous responses, student involvement as a bully and/or victim was classified as either involved or noninvolved in school bullying.

Table 4 provides a description of student involvement and noninvolvement as victims in elementary school bullying. The results showed that a majority of elementary school students, in particular, 85.9% or more of students self-reported no cyber victimization in elementary school during the past couple of months. The results also showed that 88.4% similarly reported not being verbally victimized with mean names or comments about race or color. That said, there does exist a presence of student involvement in traditional and cyber victimization across all forms of elementary school bullying with percentages ranging from 3.4% to 56.7%.

Cyber victimization involving the internet/computer or cell phone with overall noninvolved rates ranging from 85.9% and higher was the least prominent form of victimization reported by elementary students. The most frequently identified form of cyber victimization by elementary students was being bullied with mean or hurtful text messages using a cell phone (14.1%) and the least frequently reported forms of cyber victimization by elementary students included being bullied with mean or hurtful pictures using a cell phone as well as over the internet using a computer (3.4%).

The most self-reported overall form of victimization reported by elementary students was traditional in nature, namely, social or relational victimization. For example, 57.6% of elementary students reported being left out of things on purpose, excluded from others' groups of friends or completely ignored and 44.9% of elementary students indicated that other students told lies, spread false rumors about them or tried to make others dislike them. Another highly self-reported form of traditional victimization occurred in a particular area of verbal victimization where slightly more than one half of elementary students reported being verbally victimized

(52.5%) by being called mean names, made fun of or teased in a hurtful way. A less self-reported albeit concerning form of student involvement in traditional victimization in elementary school involved physical victimization with 31.4% of the respondents communicating being hit, kicked, pushed, shoved around or locked indoors.

Table 4

| Prevalence of Being a Victim | | | | |
|---|-------------|-----|-------------------|-----|
| Form of Involvement as a Victim | Noninvolved | N | Involved | N |
| | (Never) | | (Sometimes/Often) | |
| Physical [Was hit, kicked, pushed, shoved around or locked indoors] | 68.6 | 205 | 31.4 | 94 |
| Verbal [Was called mean names, was made fun of, or teased in a hurtful way] | 47.5 | 142 | 52.5 | 157 |
| Verbal [Was bullied with mean names or comments about my race or color] | 88.4 | 260 | 11.6 | 34 |
| Verbal [Was bullied with mean names, comments or gestures with a sexual meaning] | 77.9 | 229 | 22.1 | 65 |
| Social/Relational [Left me out of things on purpose, excluded me from their group of friends, or completely ignored me] | 42.4 | 126 | 57.6 | 171 |
| Social/Relational [Told lies or spread false rumors about me and tried to make others dislike me] | 55.1 | 162 | 44.9 | 132 |
| Cyber (Internet/Computer) [Was bullied with mean or hurtful email messages over the Internet using a computer] | 89.8 | 264 | 10.1 | 30 |
| Cyber (Internet/Computer) [Was bullied with mean or hurtful pictures over the Internet using a computer] | 96.6 | 284 | 3.4 | 10 |
| Cyber (Internet/Computer) [Was bullied with mean or hurtful telephone calls over the Internet using a computer] | 91.8 | 270 | 8.2 | 24 |
| Cyber (Internet/Computer) [Was bullied in other mean or hurtful ways over the Internet using a computer] | 90.5 | 267 | 9.5 | 28 |
| Cyber (Cell Phone) [Was bullied with mean or hurtful text messages using a cell phone] | 85.9 | 255 | 14.1 | 42 |
| Cyber (Cell Phone) [Was bullied with mean or | 96.6 | 283 | 3.4 | 10 |

| | | | | |
|--|------|-----|-----|----|
| hurtful pictures using a cell phone] | | | | |
| Cyber (Cell Phone) [Was bullied with mean or hurtful telephone calls using a cell phone] | 93.2 | 275 | 6.8 | 20 |
| Cyber (Cell Phone) [Was bullied in other mean or hurtful ways using a cell phone] | 91.1 | 267 | 8.9 | 26 |

Table 5 displays overall levels of elementary student involvement and noninvolvement as bullies in school bullying. Compared to the number of self-identified victims with percentages ranging from 3.4% to 56.7% in Table 4, substantially lower numbers of self-identified bullies are observed in Table 5 with percentages ranging from 0.1% to 18.0%. However, similar to being involved as a victim in all forms of elementary school bullying, being involved as a bully is also evident in each form of elementary school bullying in this study.

Illustrated by noninvolvement rates greater than 90%, Table 5 shows that a substantively high number of elementary school students reported no involvement as bullies in all forms of school bullying. Being involved as a cyber bully using the internet/computer and cell phone were the least overall self-reported forms of student involvement as bullies in elementary school bullying. Being noninvolved in traditional bullying as physical, verbal (race or color or sexual meaning) and social (spreading false rumors or making students dislike other students) bullies were also largely self-reported by elementary students.

Being a cyber bully using mean or hurtful pictures and/or telephone calls over the internet via computer (99.3%) was reported as the least prominent form of elementary student involvement in school bullying. Meanwhile, being a cyber bully using mean or hurtful email messages over the internet via computer (3.4%) and mean or hurtful telephone calls (2.7%) and

text messages (2.1%) using a cell phone was reported as the greatest areas of student involvement in cyber bullying.

The most highly self-reported form of elementary student involvement as bullies in school bullying was social or relational bullying with 18.3% of students revealing that they kept others out of things on purpose, excluded others from their group(s) of friends or completely ignored others. The second and third most highly self-reported forms of elementary student involvement as bullies in school bullying were respectively, verbal bullying which included calling others mean names, making fun of others or teasing others in a hurtful way (12%) and physical bullying which involved hitting, kicking, pushing, shoving around or locking others indoors (8.1%).

Table 5

| Prevalence of Being a Bully | | | | |
|--|-------------|-----|-------------------|----|
| Form of Involvement as a Bully | Noninvolved | | Involved | |
| | (Never) | N | (Sometimes/Often) | N |
| Physical [Hit, kicked, pushed, shoved around or locked him/her indoors] | 91.9 | 272 | 8.1 | 24 |
| Verbal [Called others mean names, made fun of others, or teased others in a hurtful way] | 87.4 | 257 | 12.6 | 37 |
| Verbal [Bullied others with mean names or comments about their race or color] | 99.0 | 289 | 0.1 | 3 |
| Verbal [Bullied others with mean names, comments or gestures with a sexual meaning] | 96.2 | 281 | 3.8 | 11 |
| Social/Relational [Kept others out of things on purpose, excluded others from my group of friends, or completely ignored others] | 82.0 | 241 | 18.0 | 53 |
| Social/Relational [Spread false rumors about others and tried to make other students dislike others] | 93.9 | 276 | 6.1 | 18 |
| Cyber (Internet/Computer) [Bullied others with mean or hurtful email messages over the Internet] | 96.6 | 282 | 3.4 | 10 |

| | | | | | |
|--|------|-----|-----|---|--|
| using a computer] | | | | | |
| Cyber (Internet/Computer) [Bullied others with mean or hurtful pictures over the Internet using a computer] | 99.3 | 290 | 0.7 | 2 | |
| Cyber (Internet/Computer) [Bullied others with mean or hurtful telephone calls over the Internet using a computer] | 99.3 | 291 | 0.7 | 2 | |
| Cyber (Internet/Computer) [Bullied students in other mean or hurtful ways over the Internet using a computer] | 98.6 | 288 | 1.4 | 4 | |
| Cyber (Cell Phone) [Bullied others with mean or hurtful text messages using a cell phone] | 97.9 | 286 | 2.1 | 6 | |
| Cyber (Cell Phone) [Bullied others with mean or hurtful pictures using a cell phone] | 99.0 | 289 | 1.0 | 3 | |
| Cyber (Cell Phone) [Bullied others with mean or hurtful telephone calls using a cell phone] | 97.3 | 284 | 2.7 | 8 | |
| Cyber (Cell Phone) [Bullied students in other mean or hurtful ways using a cell phone] | 98.6 | 288 | 1.4 | 4 | |

Prevalence Rates of Elementary Student Involvement in School Bullying by Sex

Table 6 illustrates sex frequencies of student involvement and noninvolvement as victims in each form of school bullying. Both males and females reported variable levels of victimization across all forms school bullying with females reporting higher overall involvement as victims in cyber bullying than males, males reporting higher overall involvement as victims in physical bullying than females, females reporting higher overall involvement as verbal victims than males and females reporting higher overall involvement as social victims than males.

Although being cyber victimized via cell phone or internet/computer were the two overall less frequently reported forms of being a victim in this study, being cyber victimized with mean or hurtful pictures using a cell phone was the least occurring form of cyber victimization for both males (1.5%) and females (4.3%) and being cyber victimized with mean or hurtful text messages using a cell phone was the highest occurring form of cyber victimization for both males (9.8%)

and females (17.2%). With considerable similarity, both males and females respectively reported being cyber victimized in other mean or hurtful ways using both the internet/computer (8.3% and 9.8%) and cell phone (8.5% and 8.6%).

Females consistently reported overall higher levels of involvement than males as cyber victims involving both the internet/computer and cell phone with the exception of males (6.8%) reporting a slightly higher level of experiencing mean or hurtful telephone calls over the internet/computer than females (6.2%). Specifically, females, in contrast to males reported greater frequencies of cyber victimization (a) over the internet/computer with mean or hurtful: email messages (12.4% vs. 6.8%), pictures (3.7% vs. 2.3%), and other ways (9.8% vs. 8.3%) and (b) using a cell phone with mean or hurtful: text messages (17.2% vs. 9.8%), pictures (4.3% vs. 1.5%), telephone calls (8.7% vs. 3.8%), and other ways (8.6% vs. 8.5%). Of particular importance in this instance were females reporting significantly higher levels of cyber victimization than males involving mean or hurtful pictures with a cell phone [$\chi^2(2) = 8.213$, $p = .02$, $p < .05$].

Table 6 shows that social or relational victimization was the most overall highly self-reported form of elementary school bullying for both genders with females reporting significantly higher (65.2% vs. 48.4%) levels of social victimization than males [$\chi^2(4) = 11.194$, $p = .02$, $p < .05$]. The data in Table 6 also demonstrate that females reported overall higher verbal victimization than males although both sexes reported comparable high levels of verbal victimization (47.0% and 56.7%) by being called mean names, made fun of or teased in a hurtful way. Additionally, in contrast to social and verbal victimization, Table 6 also shows that student

involvement in physical victimization was self-reported on a lesser scale by both males and females; however, more males respectively reported being physically victimized than females in elementary school (34.3% vs. 28.7%).

Table 6

| Prevalence of Being a Victim by Sex | | | | | |
|---|-----|-------------|-----|-------------------|-----|
| Form of Involvement as a Victim | Sex | Noninvolved | | Involved | |
| | | (Never) | N | (Sometimes/Often) | N |
| Physical [Was hit, kicked, pushed, shoved around or locked him/her indoors] | M | 65.7 | 88 | 34.3 | 46 |
| | F | 71.3 | 117 | 28.7 | 47 |
| Verbal [Was called mean names, made fun of others, or teased in a hurtful way] | M | 53.0 | 71 | 47.0 | 63 |
| | F | 43.3 | 71 | 56.7 | 93 |
| Verbal [Was bullied with mean names or comments about my race or color] | M | 88.5 | 116 | 11.5 | 15 |
| | F | 88.9 | 144 | 11.1 | 18 |
| Verbal [Was bullied with mean names, comments or gestures with a sexual meaning] | M | 78.0 | 103 | 22.0 | 29 |
| | F | 78.3 | 126 | 21.7 | 35 |
| Social/Relational [Was left out of things on purpose, excluded from my group of friends, or completely ignored] | M | 52.3 | 69 | 47.7 | 63 |
| | F | 34.8 | 57 | 65.2 ^a | 107 |
| Social/Relational [Told lies or spread false rumors about others and tried to make others dislike me] | M | 59.8 | 79 | 40.2 | 53 |
| | F | 51.6 | 83 | 48.4 | 78 |
| Cyber (Internet/Computer) [Was bullied with mean or hurtful email messages over the Internet using a computer] | M | 93.2 | 123 | 6.8 | 9 |
| | F | 87.6 | 141 | 12.4 | 20 |
| Cyber (Internet/Computer) [Was bullied with mean or hurtful pictures over the Internet using a computer] | M | 97.7 | 129 | 2.3 | 3 |
| | F | 96.3 | 155 | 3.7 | 6 |
| Cyber (Internet/Computer) [Was bullied with mean or hurtful telephone calls over the Internet using a computer] | M | 93.2 | 123 | 6.8 | 9 |
| | F | 91.3 | 147 | 6.2 | 14 |
| Cyber (Internet/Computer) [Was bullied in other mean or hurtful ways over the Internet using a computer] | M | 91.7 | 121 | 8.3 | 11 |
| | F | 90.2 | 146 | 9.8 | 16 |
| Cyber (Cell Phone) [Was bullied with mean or hurtful text messages using a cell phone] | M | 90.2 | 120 | 9.8 | 13 |
| | F | 82.8 | 135 | 17.2 | 28 |
| Cyber (Cell Phone) [Was bullied with | M | 98.5 | 129 | 1.5 | 2 |

| | | | | | |
|--|---|------|-----|------------------|----|
| mean or hurtful pictures using a cell phone] | F | 95.7 | 154 | 4.3 ^b | 7 |
| Cyber (Cell Phone) [Was bullied with mean or hurtful telephone calls using a cell phone] | M | 96.2 | 128 | 3.8 | 5 |
| | F | 91.3 | 147 | 8.7 | 14 |
| Cyber (Cell Phone) [Was bullied in other mean or hurtful ways using a cell phone] | M | 91.5 | 119 | 8.5 | 11 |
| | F | 91.4 | 148 | 8.6 | 14 |

Note. a. $\chi^2(4) = 11.194, p = .02,$
 b. $\chi^2(2) = 8.213, p = .02$

Presented in Table 7 are the findings for sex frequencies of elementary student involvement and noninvolvement as bullies in each form of school bullying. While elementary students' noninvolvement as bullies in school bullying was 80% and higher, both males and females reported variable involvement as bullies across all forms of school bullying. In fact, females' involvement as traditional and cyber bullies permeated all forms of school bullying ranging from less than 1% to 16.0% whereas males' involvement as bullies ranged from 0% to 20.0% and permeated all forms of school bullying except cyber bullying others with mean or hurtful pictures and/or telephone calls over the internet with a computer.

As illustrated by Table 7, compared with being a physical, verbal, and social or relational bully, being a cyber bully via internet/computer and cell phone were the least overall reported forms of elementary student involvement as bullies by both males and females. Although being a cyber bully with mean or hurtful pictures (0% and 0.6%) and/or telephone calls (0% and 0.6%) over the internet using a computer were the least overall respectively reported forms of being a bully by both males and females, females reported overall greater involvement than males as cyber bullies in all but one form of cyber bullying. Males reported their greatest involvement as cyber bullies using mean or hurtful email messages over the internet using a computer (2.3%).

Table 7 also shows that both males and females reported their greatest involvement in elementary school bullying as traditional bullies. Although males and females reported similar levels of involvement in elementary school bullying as physical, verbal and social bullies, males reported overall higher prevalence rates than females as bullies in all forms of traditional bullying (9.1% vs. 6.7%, 15.9% vs. 9.3%, 0.8% vs. 0.6%, 20.0% vs. 16.0%, and 6.1% vs. 5.6%) with the exception of females reporting greater involvement as verbal bullies using mean names, comments or gestures with a sexual meaning (3.7% vs. 3.1%).

Table 7

| Prevalence of Being a Bully by Sex | | | | | |
|--|-----|-------------|-----|-------------------|----|
| Form of Involvement as a Bully | Sex | Noninvolved | | Involved | |
| | | (Never) | N | (Sometimes/Often) | N |
| Physical [Hit, kicked, pushed, shoved around or locked others indoors] | M | 90.9 | 120 | 9.1 | 12 |
| | F | 93.3 | 152 | 6.7 | 11 |
| Verbal [Called others mean names, made fun of others, or teased others in a hurtful way] | M | 84.1 | 111 | 15.9 | 21 |
| | F | 90.7 | 146 | 9.3 | 15 |
| Verbal [Bullied others with mean names or comments about their race or color] | M | 99.2 | 128 | 0.8 | 1 |
| | F | 99.4 | 161 | 0.6 | 1 |
| Verbal [Bullied others with mean names, comments or gestures with a sexual meaning] | M | 96.9 | 125 | 3.1 | 4 |
| | F | 96.3 | 156 | 3.7 | 6 |
| Social/Relational [Kept others out of things on purpose, excluded others from my group of friends, or completely ignored others] | M | 80.0 | 104 | 20.0 | 26 |
| | F | 84.0 | 137 | 16.0 | 26 |
| Social/Relational [Spread false rumors about other students and tried to make other students dislike certain students] | M | 93.9 | 123 | 6.1 | 8 |
| | F | 94.4 | 153 | 5.6 | 9 |
| Cyber (Internet/Computer) [Bullied others with mean or hurtful email messages over the Internet using a computer] | M | 97.7 | 126 | 2.3 | 3 |
| | F | 96.3 | 156 | 3.7 | 6 |
| Cyber (Internet/Computer) [Bullied others with mean or hurtful pictures over the Internet using a computer] | M | 100 | 129 | 0 | 0 |
| | F | 99.4 | 161 | 0.6 | 1 |

| | | | | | |
|--|---|------|-----|-----|---|
| Cyber (Internet/Computer) [Bullied others with mean or hurtful telephone calls over the Internet using a computer] | M | 100 | 130 | 0 | 0 |
| | F | 99.4 | 161 | 0.6 | 1 |
| Cyber (Internet/Computer) [Bullied students in other mean or hurtful ways over the Internet using a computer] | M | 99.2 | 128 | 0.8 | 1 |
| | F | 98.8 | 160 | 1.2 | 2 |
| Cyber (Cell Phone) [Bullied others with mean or hurtful text messages using a cell phone] | M | 98.4 | 127 | 1.6 | 2 |
| | F | 98.1 | 159 | 1.9 | 3 |
| Cyber (Cell Phone) [Bullied others with mean or hurtful pictures using a cell phone] | M | 99.2 | 128 | 0.8 | 1 |
| | F | 99.4 | 161 | 0.6 | 1 |
| Cyber (Cell Phone) [Bullied others with mean or hurtful telephone calls using a cell phone] | M | 99.2 | 128 | 0.8 | 1 |
| | F | 96.3 | 156 | 3.7 | 6 |
| Cyber (Cell Phone) [Bullied students in other mean or hurtful ways using a cell phone] | M | 99.2 | 128 | 0.8 | 1 |
| | F | 98.8 | 160 | 1.2 | 2 |

Prevalence Rates of Elementary Student Involvement in School Bullying by Grade-Level

Table 8 presents grade-level frequencies of elementary student involvement and noninvolvement as victims in each form of school bullying. As illustrated by Table 8, elementary students' grade-level involvement as victims in school bullying reveals considerable variability within and between various forms of school bullying. For example, elementary students' overall least involvement as victims in school bullying was reported by grade four students involving the internet/computer with mean or hurtful pictures (1%) and elementary students' overall greatest involvement as victims in school bullying was reported by grade four students involving social or relational victimization (leaving students out of things on purpose, excluding students from groups of friends or completely ignoring students [65.7%]). Being cyber victimized involving the internet/computer and cell phone plus being verbally victimized

with mean names/comments about race or color are the least overall self-reported forms of victimization by elementary students across all grades.

In comparison to grade five and six students, chi-square analyses revealed that grade four students reported significantly higher levels of cyber victimization with telephone calls over the internet using a computer [$\chi^2(8) = 16.912, p = .03, p < .05$]. Compared to older students, grade four students also reported the highest levels of cyber victimization with a cell phone in other mean or hurtful ways (15%). Both grade five and six students respectively reported being the least cyber victimized with mean or hurtful pictures using a cell phone (2.6% and 3.8%) and the most cyber victimized with mean or hurtful text messages using a cell phone (12.9% and 21.9%). Compared to younger grades, chi-square analyses also revealed that grade six students significantly reported higher levels of cyber victimization with email messages over the internet using a computer [$\chi^2(8) = 20.051, p = .01, p < .05$]. Relative to lower grades, grade six students also reported a high incidence of cyber victimization in other mean or hurtful ways over the internet using a computer (12.7%).

A significant relationship also emerged between grade-level and verbal victimization in this study. Chi-square analyses revealed that in comparison to older students, grade four students reported significantly higher levels of verbal victimization by being called mean names, comments, or gestures with a sexual meaning [$\chi^2(8) = 24.751, p = .00, p < .05$]. Relative to older students, grade four students also consistently reported the highest levels of physical victimization (38.8%), verbal victimization (58.3% and 18.6%) and social or relational victimization (65.7% and 51.5%). Substantially high numbers of grade five and six students also

reported being social or relational victims with rates of involvement respectively ranging from 36.8% to 57.4%. The results specifically illustrate that grade five students reported the least involvement in school bullying as physical victims (24.1%). However, approximately one third or more of grades four and six students reported being involved as physical victims in school bullying.

Table 8

| Prevalence of Being a Victim by Grade | | | | | |
|---|-------|-------------|-----|-------------------|----|
| Form of Involvement as a Victim | Grade | Noninvolved | | Involved | |
| | | (Never) | N | (Sometimes/Often) | N |
| Physical [Was hit, kicked, pushed shoved around or locked indoors] | 4 | 61.2 | 63 | 38.8 | 40 |
| | 5 | 75.9 | 88 | 24.1 | 28 |
| | 6 | 67.5 | 54 | 32.5 | 26 |
| Verbal [Was called mean names, made fun of, or teased in a hurtful way] | 4 | 41.7 | 43 | 58.3 | 61 |
| | 5 | 51.7 | 60 | 48.3 | 56 |
| | 6 | 48.8 | 39 | 51.2 | 41 |
| Verbal [Was bullied with mean names or comments about my race or color] | 4 | 81.4 | 83 | 18.6 | 19 |
| | 5 | 92.2 | 106 | 7.8 | 9 |
| | 6 | 92.2 | 71 | 7.8 | 6 |
| Verbal [Was bullied with mean names, comments or gestures with a sexual meaning] | 4 | 67.3 | 68 | 32.7 ^a | 33 |
| | 5 | 87.8 | 101 | 12.2 | 14 |
| | 6 | 76.9 | 60 | 23.1 | 18 |
| Social/Relational [Left me out of things on purpose, excluded me from their group of friends, or completely ignored me] | 4 | 34.3 | 35 | 65.7 | 67 |
| | 5 | 42.6 | 49 | 57.4 | 66 |
| | 6 | 52.5 | 42 | 47.5 | 38 |
| Social/Relational [Told lies or spread false rumors about me and tried to make others dislike me] | 4 | 48.5 | 49 | 51.5 | 52 |
| | 5 | 63.2 | 72 | 36.8 | 42 |
| | 6 | 51.9 | 41 | 48.1 | 38 |
| Cyber (Internet/Computer) [Was bullied with mean or hurtful email messages over the Internet using a computer] | 4 | 91.1 | 92 | 8.9 | 9 |
| | 5 | 91.3 | 105 | 8.7 | 10 |
| | 6 | 85.9 | 67 | 14.1 ^b | 11 |
| Cyber (Internet/Computer) [Was bullied with mean or hurtful pictures over the Internet using a computer] | 4 | 99.0 | 100 | 1.0 | 1 |
| | 5 | 95.7 | 110 | 4.3 | 5 |
| | 6 | 94.8 | 74 | 5.2 | 6 |
| Cyber (Internet/Computer) [Was bullied | 4 | 85.3 | 87 | 14.7 ^c | 15 |

| | | | | | |
|--|---|------|-----|------|----|
| with mean or hurtful telephone calls over the Internet using a computer] | 5 | 94.8 | 110 | 5.2 | 6 |
| | 6 | 96.1 | 73 | 3.9 | 3 |
| Cyber (Internet/Computer) [Was bullied in other mean or hurtful ways over the Internet using a computer] | 4 | 89.1 | 90 | 10.9 | 11 |
| | 5 | 93.9 | 108 | 6.1 | 7 |
| | 6 | 87.3 | 69 | 12.7 | 10 |
| Cyber (Cell Phone) [Was bullied with mean or hurtful text messages using a cell phone] | 4 | 90.1 | 91 | 9.9 | 10 |
| | 5 | 87.1 | 101 | 12.9 | 15 |
| | 6 | 78.8 | 63 | 21.2 | 17 |
| Cyber (Cell Phone) [Was bullied with mean or hurtful pictures using a cell phone] | 4 | 96.0 | 97 | 4.0 | 4 |
| | 5 | 97.4 | 111 | 2.6 | 3 |
| | 6 | 96.2 | 75 | 3.8 | 3 |
| Cyber (Cell Phone) [Was bullied with mean or hurtful telephone calls using a cell phone] | 4 | 92.0 | 92 | 8.0 | 8 |
| | 5 | 94.8 | 110 | 5.2 | 6 |
| | 6 | 92.4 | 73 | 7.6 | 6 |
| Cyber (Cell Phone) [Was bullied in other mean or hurtful ways using a cell phone] | 4 | 85.0 | 85 | 15.0 | 15 |
| | 5 | 94.8 | 109 | 5.2 | 6 |
| | 6 | 93.6 | 73 | 6.4 | 5 |

Note. a. $\chi^2(8) = 24.751, p = .00$

b. $\chi^2(8) = 20.051, p = .01$

c. $\chi^2(8) = 16.912, p = .03$

Table 9 presents grade-level frequencies and numbers of elementary students' involvement and noninvolvement as traditional and cyber bullies. Although no significant relationships were evident between grade-level and student involvement as traditional and/or cyber bullies in this study, variable grade-level involvement bully relationships were apparent among elementary students. With the exceptions of grade four students reporting no involvement as cyber bullies using mean or hurtful pictures and telephone calls over the internet with a computer and grade five students reporting no involvement as verbal bullies with mean names about race or color, elementary students in all grades reported the presence of bullies in all forms of school bullying.

Elementary student involvement as cyber bullies across all grades in the current study ranged from 0% to 4.3%. Elementary students in general and grade five students in particular

reported the greatest involvement as cyber bullies with mean or hurtful email messages over the internet using a computer whereas grade four students reported the greatest involvement as cyber bullies with mean or hurtful telephone calls using a cell phone. Grade six students reported the greatest involvement as cyber bullies with mean or hurtful email messages over the internet using a computer and with mean or hurtful telephone calls using a cell phone.

Compared to grade four students, both grade five and six students reported greater involvement as cyber bullies with mean or hurtful text messages using a cell phone. Grade six students reported their least involvement as cyber bullies with mean or hurtful pictures using a cell phone and/or internet/computer in addition to mean or hurtful telephone calls or other ways over the internet using a computer.

Student involvement as bullies in physical, verbal and social or relational bullying ranged from 0% to 18.3%. In comparison to grade five and six students, grade four students reported overall less involvement in traditional forms of bullying as physical and social bullies and greater involvement as verbal bullies. Compared to grade four and six students, grade five students reported the greatest involvement as social bullies. Grade five students reported overall less involvement as verbal bullies than grade four and six students. Relative to students in younger grades, grade six students reported the greatest involvement as physical bullies and comparable involvement as verbal and social bullies.

Table 9

Prevalence of Being a Bully by Grade

| Form of Involvement as a Bully | Grade | Noninvolved | | Involved | |
|--|-------|-------------|-----|-------------------|----|
| | | (Never) | N | (Sometimes/Often) | N |
| Physical [Hit, kicked, pushed, shoved around or locked others indoors] | 4 | 94.2 | 96 | 5.8 | 6 |
| | 5 | 93.0 | 107 | 7.0 | 8 |
| | 6 | 87.3 | 69 | 12.7 | 10 |
| Verbal [Called others mean names, made fun of others, or teased others in a hurtful way] | 4 | 83.2 | 84 | 16.8 | 17 |
| | 5 | 89.5 | 102 | 10.5 | 12 |
| | 6 | 89.9 | 71 | 10.1 | 8 |
| Verbal [Bullied others with mean names or comments about their race or color] | 4 | 98.0 | 97 | 2.0 | 2 |
| | 5 | 100 | 115 | 0 | 0 |
| | 6 | 98.7 | 77 | 1.3 | 1 |
| Verbal [Bullied others with mean names, comments or gestures with a sexual meaning] | 4 | 95.0 | 94 | 5.0 | 5 |
| | 5 | 97.4 | 112 | 2.6 | 3 |
| | 6 | 96.1 | 75 | 3.9 | 3 |
| Social/Relational [Left others out of things on purpose, excluded others from my group of friends, or completely ignored others] | 4 | 82.2 | 83 | 17.8 | 18 |
| | 5 | 81.7 | 94 | 18.3 | 21 |
| | 6 | 82.0 | 64 | 18.0 | 14 |
| Social/Relational [Told lies or spread false rumors about others and tried to make other students dislike others] | 4 | 95.0 | 95 | 5.0 | 5 |
| | 5 | 93.0 | 107 | 7.0 | 8 |
| | 6 | 93.7 | 74 | 6.3 | 5 |
| Cyber (Internet/Computer) [Bullied others with mean or hurtful email messages over the Internet using a computer] | 4 | 98.0 | 97 | 2.0 | 2 |
| | 5 | 95.7 | 100 | 4.3 | 5 |
| | 6 | 96.1 | 75 | 3.9 | 3 |
| Cyber (Internet/Computer) [Bullied others with mean or hurtful pictures over the Internet using a computer] | 4 | 100 | 99 | 0 | 0 |
| | 5 | 99.1 | 114 | 0.9 | 1 |
| | 6 | 98.7 | 77 | 1.3 | 1 |
| Cyber (Internet/Computer) [Bullied others with mean or hurtful telephone calls over the Internet using a computer] | 4 | 100 | 100 | 0 | 0 |
| | 5 | 99.1 | 114 | 0.9 | 1 |
| | 6 | 98.7 | 77 | 1.3 | 1 |
| Cyber (Internet/Computer) [Bullied students in other mean or hurtful ways over the Internet using a computer] | 4 | 99.0 | 98 | 1.0 | 1 |
| | 5 | 98.3 | 113 | 1.7 | 2 |
| | 6 | 98.7 | 77 | 1.3 | 1 |
| Cyber (Cell Phone) [Bullied others with mean or hurtful text messages using a cell phone] | 4 | 99.0 | 98 | 1.0 | 1 |
| | 5 | 97.4 | 112 | 2.6 | 3 |
| | 6 | 97.4 | 76 | 2.6 | 2 |
| Cyber (Cell Phone) [Bullied others with mean or hurtful pictures using a cell | 4 | 99.0 | 98 | 1.0 | 1 |
| | 5 | 99.1 | 114 | 0.9 | 1 |

| | | | | | |
|---|---|------|-----|-----|---|
| phone] | 6 | 98.7 | 77 | 1.3 | 1 |
| Cyber (Cell Phone) [Bullied others with mean or hurtful telephone calls using a cell phone] | 4 | 97.0 | 96 | 3.0 | 3 |
| | 5 | 98.3 | 113 | 1.7 | 2 |
| | 6 | 96.1 | 75 | 3.9 | 3 |
| Cyber (Cell Phone) [Bullied students in other mean or hurtful ways using a cell phone] | 4 | 99.0 | 98 | 1.0 | 1 |
| | 5 | 99.1 | 114 | 0.9 | 1 |
| | 6 | 97.4 | 76 | 2.6 | 2 |

Section Two

Sex, Grade-Level and Levels of Elementary Students' Overall and Domain-Specific

Life Satisfaction

Table 10 shows that 85.3% of elementary students self-reported high levels of overall life satisfaction. In the areas of domain-specific satisfaction, elementary students also reported high levels of domain-specific satisfaction ranging from 74.9% to 86.1%. Elementary students reported the least satisfaction with school and most satisfaction with self. Relative to their satisfaction with family and friends, elementary students reported higher levels of satisfaction with their living environment (neighborhood).

Table 10

Levels of Students' Overall and Domain-Specific Life Satisfaction

| Domain | High | N | Low | N |
|------------------------|------|-----|------|----|
| Family | 82.4 | 243 | 17.6 | 52 |
| Friendships | 82.0 | 242 | 18.0 | 53 |
| School | 74.9 | 221 | 25.1 | 74 |
| Self | 86.1 | 254 | 13.9 | 41 |
| Living Environment | 84.1 | 248 | 15.9 | 47 |
| Global or Overall Life | 85.3 | 250 | 14.7 | 43 |

Levels of Elementary Students' Life Satisfaction by Sex

Table 11 demonstrates considerable variability in sex prevalence rates of elementary students' life satisfaction. Compared to females, males reported higher levels of family (85.3% vs. 79.9%), friendship (89.2% vs. 76.3%), self (89.2% vs. 83.6%) and global (90.7% vs. 81.0%) life satisfaction. However, slightly more females than males reported higher levels of school (75.6% vs. 73.8%) and neighborhood satisfaction (84.8% vs. 83.1%). As previously noted, males and females reported being least satisfied with their school experiences. Whereas more males than females reported higher overall life satisfaction, significantly more females than males reported satisfaction with living environment (neighborhood) [$\chi^2(6) = 15.166, p = .02, p < .05$]. In comparison to males, slightly more than twice as many females in this study report being dissatisfied with their friendships (23.7% vs. 10.8%).

Table 11

| Levels of Life Satisfaction by Sex | | | | | |
|--------------------------------------|-----|-------------------|-----|------|----|
| Domain | Sex | High | N | Low | N |
| Family | M | 85.3 | 111 | 14.7 | 19 |
| | F | 79.9 | 131 | 20.1 | 33 |
| Friendships | M | 89.2 | 116 | 10.8 | 14 |
| | F | 76.3 | 125 | 23.7 | 39 |
| School | M | 73.8 | 96 | 26.2 | 34 |
| | F | 75.6 | 124 | 24.4 | 40 |
| Self | M | 89.2 | 116 | 10.8 | 14 |
| | F | 83.6 | 137 | 16.4 | 27 |
| Living Environment (Neighborhood) | M | 83.1 | 108 | 16.9 | 22 |
| | F | 84.8 ^a | 139 | 15.2 | 25 |
| Global or Overall Life | M | 90.7 | 117 | 9.3 | 12 |
| | F | 81.0 | 132 | 19.0 | 31 |

Note. a. $\chi^2(6) = 15.166, p = .02$

Levels of Elementary Students' Life Satisfaction by Grade-Level

Table 12 illustrates variable, albeit no significant relationships between grade-level and elementary students' life satisfaction. Students in all grades reported comparably high levels of global or overall life satisfaction with rates ranging from 82.3% to 89.2%. Compared to grade four and six students, grade five students consistently reported the highest levels of overall and domain-specific life satisfaction. Less than 10% of grade five students reported self-dissatisfaction.

Compared to older students, grade four students reported overall lower life satisfaction and specifically reported greater dissatisfaction with family, friendships and neighborhood. Compared to younger students, grade six students specifically reported their lowest satisfaction with school and self. More than one fifth of grades four and six students respectively reported low levels of satisfaction with family and school.

Table 12

| Levels of Students' Life Satisfaction by Grade | | | | | |
|--|-------|------|-----|------|----|
| Life Satisfaction Domain | Grade | High | N | Low | N |
| Family | 4 | 77.4 | 79 | 22.6 | 23 |
| | 5 | 88.5 | 100 | 11.5 | 13 |
| | 6 | 79.9 | 64 | 20.1 | 16 |
| Friendships | 4 | 74.5 | 76 | 25.5 | 26 |
| | 5 | 87.6 | 99 | 12.4 | 14 |
| | 6 | 83.7 | 67 | 16.3 | 13 |
| School | 4 | 71.6 | 73 | 28.4 | 29 |
| | 5 | 82.3 | 93 | 17.7 | 20 |
| | 6 | 68.8 | 55 | 31.2 | 25 |
| Self | 4 | 85.3 | 87 | 14.7 | 15 |
| | 5 | 91.1 | 103 | 8.9 | 10 |
| | 6 | 80.0 | 64 | 20.0 | 16 |

| | | | | | |
|------------------------|---|------|-----|------|----|
| Living Environment | 4 | 76.5 | 78 | 23.5 | 24 |
| | 5 | 89.4 | 101 | 10.6 | 12 |
| | 6 | 86.2 | 69 | 13.8 | 11 |
| Global or Overall Life | 4 | 82.3 | 84 | 17.7 | 18 |
| | 5 | 89.2 | 100 | 10.8 | 12 |
| | 6 | 83.5 | 66 | 16.5 | 13 |

Section Three

Grade, Sex and Life Satisfaction as Predictors of Being a Bully in Elementary

School Bullying

Two socio-demographic predictors, namely, grade and sex, in conjunction with six life satisfaction predictors were respectively entered into multiple linear regression models to test elementary students' involvement in school bullying as physical, verbal, social, cyber (internet/computer) and cyber (cell phone) bullies. The results are presented in the tables which follow.

Table 13 shows the results for the predictor variables and student involvement as physical bullies. The table shows that the model approaches significance with student self-satisfaction; however, the model failed to reach significance for any independent variable. Since there were no significant associations established between elementary students' domain-specific satisfaction, overall life satisfaction, grade, sex and involvement as physical bullies, no predictors were identified in this study for elementary students' involvement as physical bullies.

Table 13

| Grade, Sex, and Life Satisfaction as Predictors of being a Physical Bully | | | | | |
|---|----------------------------|----------------------------|--------------------------|----------|----------------|
| Linear Regression Summary | Unstandardized Coefficient | Unstandardized Coefficient | Standardized Coefficient | | |
| Variable | <i>B</i> | <i>SE</i> | β | <i>T</i> | <i>p-value</i> |
| (Constant) | .31 | .15 | | 2.03 | .04 |
| Grade | .02 | .02 | .06 | 1.02 | .31 |
| Sex | -.03 | .03 | -.05 | -.87 | .39 |
| Family Satisfaction | .05 | .05 | .07 | 1.00 | .32 |
| Friend Satisfaction | -.03 | .05 | -.04 | -.55 | .58 |
| School Satisfaction | .00 | .05 | .01 | .06 | .95 |
| Self-Satisfaction | -.10 | .06 | -.13 | -1.72 | .09 |
| Living Environment Satisfaction | -.04 | .05 | -.06 | -.86 | .39 |
| Overall Life Satisfaction | -.05 | .06 | -.07 | -.91 | .36 |

Note. $R = .20$; $R^2 = .04$; Adjusted $R^2 = .01$; Std. Error of Estimate = .26; * $p < .05$; Physical Bully item codes – 0 (Never), 1 (Often/Sometimes); Sex codes – 0 (Male), 1 (Female); Grade codes – 4 (Grade 4), 5 (Grade 5), 6 (Grade 6); Satisfaction Level codes – 0 (Low), 1 (High).

Table 14 shows the results for the predictor variables and student involvement as verbal bullies. The table shows that the model is significant for grade only ($p = .03$). In other words, this study established that grade-level significantly predicts elementary students' involvement as verbal bullies. In particular, being an elementary student in the lower grades was a significant predictor of being involved as a verbal bully in this study.

Table 14

| Grade, Sex, and Life Satisfaction as Predictors of being a Verbal Bully | | | | | |
|---|----------------------------|----------------------------|--------------------------|----------|----------------|
| Linear Regression Summary | Unstandardized Coefficient | Unstandardized Coefficient | Standardized Coefficient | | |
| Variable | <i>B</i> | <i>SE</i> | β | <i>T</i> | <i>p-value</i> |
| (Constant) | 1.50 | .11 | | 13.87 | .000 |
| Grade | -.03 | .02 | -.13 | -2.19 | .03* |
| Sex | -.03 | .02 | -.08 | -1.35 | .18 |
| Family Satisfaction | -.04 | .04 | -.07 | -1.02 | .31 |
| Friend Satisfaction | -.05 | .04 | -1.00 | -1.30 | .19 |
| School Satisfaction | -.05 | .04 | -.10 | -1.33 | .18 |
| Self Satisfaction | -.01 | .04 | -.02 | -.33 | .74 |
| Living Environment Satisfaction | .01 | .04 | .02 | .27 | .79 |
| Overall Life Satisfaction | -.01 | .04 | -.03 | -.32 | .75 |

Note. $R = .27$; $R^2 = .07$; Adjusted $R^2 = .05$; Std. Error of Estimate = .19; * $p < .05$; Verbal Bully item codes – 1 (Never) to 5 (Often); Sex codes – 0 (Male), 1 (Female); Grade codes – 4 (Grade 4), 5 (Grade 5), 6 (Grade 6); Satisfaction level codes – 0 (Low), 1 (High).

Table 15 shows the results for the predictor variables and student involvement as social or relational bullies. The table shows that the model approaches significance with school and family satisfaction; however, the model failed to reach significance for any independent variable. Since there were no significant associations found between elementary students' domain-specific and global life satisfaction, sex, grade and involvement as a social or relational bully, no predictors were identified for elementary students' involvement as social or relational bullies in this study.

Table 15

| Grade, Sex, and Life Satisfaction as Predictors of being a Social or Relational Bully | | | | | |
|---|----------------------------|----------------------------|--------------------------|----------|----------------|
| Linear Regression Summary | Unstandardized Coefficient | Unstandardized Coefficient | Standardized Coefficient | | |
| Variable | <i>B</i> | <i>SE</i> | β | <i>T</i> | <i>p-value</i> |
| (Constant) | 1.52 | .16 | | 9.74 | .00 |
| Grade | .01 | .02 | .01 | .22 | .83 |
| Sex | -.03 | .03 | -.06 | -.99 | .32 |
| Family Satisfaction | -.08 | .05 | -.11 | -1.58 | .12 |
| Friend Satisfaction | -.04 | .05 | -.05 | -.69 | .49 |
| School Satisfaction | -.08 | .05 | -.12 | -1.62 | .11 |
| Self-Satisfaction | .02 | .06 | .03 | .40 | .69 |
| Living Environment Satisfaction | -.03 | .05 | -.04 | -.56 | .58 |
| Overall Life Satisfaction | -.02 | .06 | -.03 | -.35 | .73 |

Note. $R = .24$; $R^2 = .06$; Adjusted $R^2 = .03$; Std. Error of Estimate = .27; * $p < .05$; Social or Relational Bully item codes – 1 (Never) to 5 (Often), Sex codes – 0 (Male), 1 (Female); Grade codes – 4 (Grade 4), 5 (Grade 5), 6 (Grade 6); Satisfaction Level codes – 0 (Low), 1 (High).

Table 16 shows the results for the predictor variables and student involvement as cyber [internet/computer] bullies. The table shows that the model approaches significance with overall life satisfaction; however, the model failed to reach significance for any independent variable. Since there were no significant associations established for elementary students' domain-specific and global life satisfaction, sex, grade and involvement as cyber [internet/computer] bullies, no predictors were identified for student involvement as cyber bullies using the internet/computer in this study.

Table 16

| Grade, Sex, and Life Satisfaction as Predictors of being a Cyber [Internet/Computer] Bully | | | | | |
|--|----------------------------|----------------------------|--------------------------|----------|----------------|
| Linear Regression Summary | Unstandardized Coefficient | Unstandardized Coefficient | Standardized Coefficient | | |
| Variable | <i>B</i> | <i>SE</i> | β | <i>T</i> | <i>p-value</i> |
| (Constant) | 1.04 | .05 | | 22.94 | .00 |
| Grade | .00 | .01 | .01 | .18 | .86 |
| Sex | .01 | .01 | .03 | .54 | .59 |
| Family Satisfaction | .00 | .01 | .02 | .30 | .77 |
| Friend Satisfaction | .00 | .02 | -.01 | -.07 | .94 |
| School Satisfaction | .01 | .01 | .05 | .65 | .52 |
| Self-Satisfaction | .00 | .02 | .00 | -.03 | .97 |
| Living Environment Satisfaction | .00 | .01 | -.01 | -.22 | .83 |
| Overall Life Satisfaction | -.03 | .02 | -.12 | -1.44 | .15 |

Note. $R = .11$; $R^2 = .01$; Adjusted $R^2 = -.02$; Std. Error of Estimate = .08; * $p < .05$; Cyber [Internet/Computer] Bully item codes – 1 (Never) to 5 (Often); Sex codes – 0 (Male), 1 (Female); Grade codes – 4 (Grade 4), 5 (Grade 5), 6 (Grade 6); Satisfaction Level codes – 0 (Low), 1 (High).

Table 17 shows the results for the predictor variables and student involvement as cyber [cell phone] bullies. The table shows that the model failed to reach significance for any independent variable. Since there were no significant associations found between elementary students' domain-specific and global life satisfaction, sex, grade and involvement as cyber [cell phone] bullies, no predictors were established for student involvement as cyber bullies using cell phones in this study.

Table 17

| Grade, Sex, and Life Satisfaction as Predictors of being a Cyber [Cell Phone] Bully | | | | | |
|---|----------------------------|----------------------------|--------------------------|----------|----------------|
| Linear Regression Summary | Unstandardized Coefficient | Unstandardized Coefficient | Standardized Coefficient | | |
| Variable | <i>B</i> | <i>SE</i> | β | <i>T</i> | <i>p-value</i> |
| (Constant) | 1.04 | .05 | | 19.49 | .00 |
| Grade | -.002 | .007 | -.021 | -.336 | .74 |
| Sex | .007 | .011 | .036 | .589 | .56 |
| Family Satisfaction | .02 | .02 | .07 | 1.04 | .30 |
| Friend Satisfaction | -.01 | .02 | -.03 | -.33 | .75 |
| School Satisfaction | -.02 | .02 | -.07 | -.88 | .38 |
| Self-Satisfaction | -.03 | .02 | -.09 | -1.25 | .21 |
| Living Environment Satisfaction | .02 | .02 | .07 | 1.11 | .27 |
| Overall Life Satisfaction | .00 | .02 | .01 | .10 | .92 |

Note. $R = .14$; $R^2 = .02$; Adjusted $R^2 = -.01$; Std. Error of Estimate = .09; * $p < .05$; Cyber [Cell Phone] Bully item codes – 1 (Never) to 5 (Often); Sex codes – 0 (Male), 1 (Female); Grade codes – 4 (Grade 4), 5 (Grade 5), 6 (Grade 6); Satisfaction Level codes – 0 (Low), 1 (High).

Chapter IV has provided the results of the study. The results were organized in accordance with the study's four (4) research questions. The results presented specific, grade-level and sex prevalence rates for elementary students' (a) involvement and noninvolvement as victims and/or bullies in five (5) forms of school bullying and (b) six (6) domains of life satisfaction. The results also identified significant and insignificant relationships between students' sex, grade-level, domain-specific, and overall life satisfaction and involvement as physical, verbal, social or relational, cyber [internet/computer and cellphone] bullies in

elementary school. Chapter V will provide a discussion of the study's results, strengths, limitations, recommendations and future research and concluding summary.

CHAPTER V

DISCUSSION

The following chapter presents a discussion of the current study's findings in light of the research questions posed in Chapter I. The discussion also includes strengths and limitations of the current study, recommendations and future research, and concluding summary.

Prevalence of Bullying and Victimization

Elementary students from the three southeastern Newfoundland and Labrador schools involved in the current study reported frequencies of school bullying involvement ranging from 0.1% to 57.6% during the past 2-3 months which is consistent with the findings from previous research in this area (Gofin & Avitzour, 2012; Navarro et al., 2013; Schneider et al., 2012; Williams & Guerra, 2007). Students reported very low to moderately high rates of involvement as bullies during the previous 2-3 months but much higher rates (moderately high to high) of involvement as victims of school bullying during the same time period.

Similar to past research, elementary students in the current study reported greater involvement as bullies or victims in traditional (physical, verbal and social) bullying and lesser involvement as bullies or victims in cyber (internet/computer and cell phone) bullying (Schneider et al., 2012; Wade & Beran, 2011). Some possible explanations for greater student involvement as bullies or victims in traditional bullying than cyber bullying may be related to the ages or grade-levels of the students who participated in the study, students' social desirability bias, under- and over-reporting of involvement as bullies or victims by students, students' access

to computers and cell phones, students' prosocial skill development and/or the fact that traditional forms of bullying are well stabilized in elementary school whereas cyber forms of bullying are continuing to emerge.

Consistent with previous research, results showed that elementary students in the current study reported greater involvement as victims than as bullies in both traditional and cyber bullying (Marsh et al., 2010; Wade & Beran, 2011). High victim to low bully prevalence rates existed across all forms of bullying in the current study. For example, 31.4% of student involvement as physical victims in the current study was reportedly determined by 8.1% of physical bullies, establishing on average, an approximate 4:1 physical victim to physical bully ratio. A similar 4:1 verbal victim to verbal bully ratio can be determined for bullying with mean names, made fun of or teased in a hurtful way. Two of the higher victim to low bully ratios in the current study occurred in social bullying (rumor spreading and making others dislike people) and cyber bullying with mean or hurtful telephone calls over the internet using a computer. For example, 44.9% of student involvement as social victims in the current study was reportedly determined by 6.1% of social bullies, establishing on average, an approximate 7:1 social victim to social bully ratio and 8.2% of student involvement as cyber victims with mean or hurtful telephone calls over the Internet was reportedly determined by 0.7% of cyber (internet/computer) bullies, establishing on average, an approximate 11:1 cyber (internet/computer) victim to cyber (internet/computer) bully ratio.

The above findings contrast with previous research which showed lower victim to higher bully ratios in school bullying (Flaspohler et al., 2009; Moore et al., 2012; Raskauskas & Stoltz,

2007; Solberg & Olweus, 2003; Wang et al., 2009; Williams & Guerra, 2007) and are interesting for at least two reasons. Firstly, the current study's findings suggest a relatively high prevalence of elementary student noninvolvement as bullies in school bullying. Secondly, the current study's findings may conceivably indicate the presence of persistent or serial traditional and cyber bullies in the three elementary schools studied resulting in an implication that either the same students or a majority of the same students are involved as both traditional and cyber bullies in elementary school bullying, a finding supported by previous research (Carlson & Cornell, 2008; Chan, 2006). In fact, research shows that "a small number of students can account for a large proportion of the victims of bullying" (Carlson & Cornell, 2008, p. 448). Of course, alternative explanations of this finding may include the current study's methodology, student under-reporting and/or over-reporting of involvement as bullies and/or victims and lack of sample generalizability to the overall elementary student population in the schools studied.

Findings related to student involvement in verbal, social and cyber bullying and victimization in the current study are also comparable with previous research. The most common form of verbal victimization and bullying reported by students in the current study was being called mean names, made fun of, or teased in a hurtful way. This finding is consistent with past research which shows that name-calling, making fun of and teasing are predominant forms of verbal bullying and victimization among elementary schoolchildren (Wang et al., 2009; Smith, 2004; Williams & Guerra, 2007). Results in the current study showed that students reported their highest level of involvement as social victims and social bullies. These findings are consistent with recent meta-analytic research which showed higher rates of elementary student involvement in social or relational bullying and victimization (Tokunaga, 2010; Wang et

al., 2009; Woods & White, 2005). Contrastingly, a 2009 study by Wang et al. showed that elementary students reported greater involvement in verbal bullying and victimization compared to cyber and other forms of traditional bullying.

Results showed that elementary students in the current study reported relatively low involvement rates in both cyber (internet/computer and cell phone) bullying and victimization. This finding is similar to past research which showed similar low rates of students' involvement in cyber (internet/computer and cell phone) bullying and victimization (Moore et al., 2012; Navarro et al., 2013; Williams & Guerra, 2007). That said, it is important to acknowledge that the current study's findings with regard to student involvement rates in cyber victimization with mean or hurtful email messages over the internet using a computer, mean or hurtful text messages using a cell phone and other mean or hurtful ways using the internet/computer and cell phone are somewhat concerning because cyber bullying and victimization rates in elementary school are expected to rise as students transition to junior high school and peak during seventh and eighth grades.

It is especially important to note the relatively low prevalence rate of student involvement as cyber bullies in the current study. In light of this positive finding, educators, health care professionals, schools and communities will need to remain vigilant in their ongoing prevention and intervention efforts to maintain such low prevalence rates and if possible, to further reduce elementary student involvement as cyber bullies to even lower levels. It is recommended that feeder schools such as the three K-6 schools who participated in the current study collaborate and share prevalence rates of student involvement in school bullying with receiving junior high

schools so that community efforts are optimized to reduce student involvement as victims or bullies in traditional and cyber bullying.

Results in the current study showed that the most common form of cyber (internet/computer and cell phone) victimization reported by students is email/text messaging, a finding similar to past research (Slonje et al., 2013). Furthermore, results in the current study also showed that the prevalence of cyber victimization using a cell phone is greater than the prevalence of cyber victimization using the internet/computer. This finding is similar to previous research which showed that student involvement in cell phone victimization is higher than student involvement in internet/computer victimization (Fenaughty & Harre, 2013). One explanation for this finding in the current study may be related to the increasing numbers of elementary school children who have access to cell phones and/or the internet. Research shows that over 97% of youth in the United States are connected to the Internet in some way (Tokunaga, 2010) and that roughly 87% of children aged 12-17 use the Internet daily and 45% own cell phones (Moore et al., 2012). In regards to cyber victimization, the higher prevalence rate of student involvement as cell phone victims in the current study appears to indicate that cell phone victimization may be the preferred modality of cyber bullying by young children as well as older children. These findings affirm that student involvement in cyber (internet/computer and cell phone) bullying and victimization is emerging as a problematic issue among elementary school students, a finding supported by Moore et al. (2012), Navarro et al. (2013) and Slonje et al. (2013).

Sex Prevalence Data of Bullying and Victimization

Considerable variability was noted with regard to sex differences in reported rates of involvement of males and females in traditional and cyber bullying and victimization. Results in the current study showed that females reported greater involvement as verbal, social and cyber (internet/computer and cell phone) victims whereas males reported greater involvement as physical victims. This finding is similar to past research which showed higher levels of male involvement as physical victims and higher levels of female involvement as cyber victims (Wang et al., 2009; Slonje et al., 2013). On the contrary, other studies have found few or no significant differences between male and female involvement as traditional or cyber victims (Li, 2006; Tokunaga, 2010) and males were overrepresented as victims in traditional bullying (Tokunaga, 2010). One possible explanation for greater female than male verbal and social victimization in the current study is that elementary females in the current study may be experiencing higher levels of childhood maltreatment than males, resulting in discrepant sex differences across these forms of victimization (Cullerton-Sen et al., 2008). Another possible explanation for this finding involves the normalizing of aggression by both males and females in the elementary schools studied (Borntrager et al., 2009). A third possible explanation may involve over-reporting of victimization by females and/or under-reporting of victimization by males. In fact, research shows that male victims are less likely than female victims to inform adults about their victimization experiences (Li, 2006).

Similar to males, females in the current study reported their greatest levels of involvement as victims in the following order – social victimization followed by verbal,

physical, and cyber victimization. The finding that significantly more females than males in the current study reported social victimization involving exclusion and isolation is similar to previous research (Borntrager et al., 2009; Rigby, 2005; Smith, 2004). One explanation for this finding is that elementary school females in the current study may have broader and more diverse social (friendship and peer) networks than males and increased female exposure to social networks may have increased the risk of greater female social victimization (Singh & Ghandour, 2012; Woolley & Grogan-Kaylor, 2006).

Results in the current study also showed that substantially more females than males reported being cyber victimized by mean or hurtful email messages (internet/computer) and mean or hurtful text messages (cell phone) and significantly more females than males reported being cyber victimized by cell phone with mean or hurtful pictures. These findings are similar to past research which showed that females reported higher levels of cyber (internet/computer and cell phone) victimization than males (Beckman et al., 2013; Fenaughty & Harre, 2013; Vollink et al., 2013). One possible explanation giving rise to these findings is that females in the current study may be more active than males on social networking sites, chatting, blogging, instant messaging and using more sites to upload pictures for public display (David-Ferdon & Hertz, 2007; Gofin & Avitzour, 2012). A second possible explanation is that females in the current study may receive less parental supervision and monitoring of their cyberspace activities than their male counterparts and/or males may receive more parental supervision and monitoring of their cyberspace activities than their female peers (David-Ferdon & Hertz, 2007). It is also important to note that other studies have found that males report higher levels of cyber

victimization than females (Calvete et al., 2010) and/or no gender differences (Williams & Guerra, 2007).

Despite females in the current study reporting higher overall incidence of cyber victimization, both males and females reported comparable levels of cyber victimization in other mean and hurtful ways using a cell phone and over the internet using a computer. This finding is similar to previous research which has shown comparable levels of cyber victimization in other ways for both males and females (Kowalski & Limber, 2007). Moreover, other ways of cyber victimization may also conceivably involve ways that are not currently acknowledged in the literature given the rapid rates of development of information and communication technologies, warranting the need for ongoing and further research (Swearer, Espelage, Vaillancourt, & Hymel, 2010).

Results in the current study showed that males reported a higher overall incidence of being physical, verbal and social bullies than females whereas females reported a slightly higher overall incidence of being cyber (internet/computer and cell phone) bullies. This finding is similar to previous research which showed greater male involvement as traditional bullies and few or no significant differences between male and female involvement as cyber bullies (Tokunaga, 2010; Wade & Beran, 2011).

Grade-Level Prevalence Data of Bullying and Victimization

Results in the current study showed that students in all grades experienced high to low rates of victimization in the following sequence – social victimization followed by verbal,

physical and cyber victimization. This finding is similar to previous research which showed the same high to low pattern or sequence of grade-level victimization by students (Wang et al., 2009). Findings in the current study also showed relatively low levels of student involvement in cyber bullying and victimization and this finding is consistent with previous research which shows that cyber bullying peaks around the seventh and eighth grades (Li, 2006; Tokunaga, 2010). One possible explanation for the above findings is that elementary students in the current study may be experiencing the normalized or stably embedded pattern of higher traditional and lower cyber victimization rates commonly reported by the majority of primary, elementary and middle school students (Kowalski & Limber, 2013; Tokunaga, 2010; Wang et al, 2009).

Results of the current study showed that younger students, in this case grade four students, reported overall greater levels of physical, verbal and social victimization than their older peers. On a more specific and significant note, younger students reported more victimization with mean names or gestures with a sexual meaning than older students. The finding that younger students in the current study reported a higher incidence of traditional victimization than older students is similar to previous research (Wang et al., 2009). However, a particular finding in the current study showed that student involvement in traditional bullying peaked in the youngest grade (grade four) as opposed to the older grades (grades five and six). Past research suggests that student involvement in traditional bullying and victimization usually peaks during the fifth and sixth grades (Tokunaga, 2010) and begs the question as to whether the peak for student involvement as traditional victims is beginning earlier, for example, during fourth grade rather than during the fifth and sixth grades.

One possible explanation for youngest students in the current study reporting the highest prevalence of traditional victimization may be related to their school's physical environment. For the most part, K-6 schools in the province of Newfoundland and Labrador are usually physically organized using two main groupings – a primary grouping involving preK-3 students in one physical area of the school and an elementary grouping involving grades 4-6 students in another physical area of the school. When grade four students transition into the elementary area, they become the youngest students in their new environment. In the current study, as newcomers to elementary school, grade four students may be engaged in more aggressive behaviors than their older peers because they are establishing social dominance in their new environment (Espelage & Swearer, 2003; Rigby, 2004). Additionally, older students may also be asserting their social dominance in the same environment by targeting younger students, in this case grade four students as victims (Espelage & Swearer, 2003; Rigby, 2004). Individually and/or collectively, these factors may have increased the likelihood that younger students in the current study were at risk to experience higher levels of traditional victimization than their older peers in elementary school and may partially explain this finding.

Results showed that younger students in the current study reported a significantly higher level of involvement as cyber (internet/computer) victims with mean or hurtful telephone calls over the internet using a computer than their older peers. Results also showed that grade four students reported slightly higher cyber victimization than older students with mean or hurtful pictures, telephone calls and other ways using a cell phone. These findings indicate that although cyber victimization is believed to peak during the 7th and 8th grades (Tokunaga, 2010),

cyber victimization is also prevalent among young elementary students, especially in the schools studied in the current study.

Previous research has shown that older students reported higher overall levels of cyber victimization than younger students (Wang et al., 2009). One possible explanation for these findings might be that younger elementary students in the current study have similar or higher levels of access to computers and cell phones as their older peers and this may have increased younger students' chances of being comparably and in some instances, more cyber victimized than older students. As Agatson et al. (2007) point out, the majority of students own cell phones and have internet access at home.

Another possible explanation for this finding is that younger students in the current study may possess fewer coping strategies such as blocking certain people from contacting them online, changing passwords or user names, and/or deleting anonymous text messages than their older peers to deal with cyber victimization and hence, younger students' fewer coping strategies may have increased their risks of greater cyber victimization (Slonje et al., 2013). In addition, younger students' cell phone use may be inadequately monitored and supervised by parents and there may be insufficient cyber bullying education available for younger students, schools, families and communities (Twyman et al., 2010). Older students may also under-report cell phone victimization and/or younger students may over-report cell phone victimization. Compared to younger students, older students in the current study may have under-reported cell phone victimization for fear of losing their cell phones (Agatson et al., 2007).

The finding that younger students in the current study are being comparably and sometimes more cyber victimized than older students is undeniably concerning and should receive immediate and ongoing attention by the schools studied. Given that cyber victimization does not usually peak until the seventh or eighth grades (Calvete et al., 2010; Slonje et al., 2013; Tokunaga, 2010), the younger students in the current study who reported significantly higher rates of cyber victimization with mean or hurtful telephone calls over the internet using a computer may be placed at increased risk for longer durations and elevated frequencies of cyber victimization during their schooling career. Long-term exposure of elementary students' involvement in cyber victimization resulting in longer durations and frequencies of cyber victimization may increase mental health risks for these students (Laftman et al., 2013; Raynor & Wylie, 2012; Scholte et al., 2007).

Compared to students in younger grades, students in older grades reported experiencing significantly greater levels of cyber victimization with mean or hurtful email messages over the internet using a computer. Additionally, students in older grades, in this case grade six students, specifically reported greater levels of involvement as cyber victims with mean or hurtful pictures or other mean or hurtful ways over the internet using a computer and mean or hurtful text messages using a cell phone. These findings are similar to past research which showed that older students are cyber victimized more frequently than younger students with both email (computer) and text (cell phone) messages (Slonje et al., 2013). However, previous research has also found a lack of association between grade-level and cyber victimization (Tokunaga, 2010).

It can be argued that the grade-level results in the current study contributed to a curvilinear relationship between grade-level and student involvement as traditional victims. Grade four students reported a higher overall prevalence of involvement as traditional victims than older students and grade five students report a lower overall prevalence of involvement as traditional victims than grade six students. Hence, the relationship between grade-level and involvement as traditional victims is bimodal and curvilinear, a finding that is reported in previous research (Tokunaga, 2010).

Results in the current study showed that student involvement as physical bullies increased with age. This finding is similar to previous research which showed a positive correlation between student involvement as physical perpetrators and grade-level (Wang et al., 2009). One explanation for this finding is that older elementary students in the current study may have reasserted their social dominance in school by specifically targeting younger students, in this instance, the grade four and five students who are less established members in elementary school (Espelage & Swearer, 2003; Rigby, 2004). Results also showed that student involvement as verbal bullies in the current study decreased with grade-level. This finding is similar to past research which shows that verbal bullying decreases with grade-level (Wang et al., 2009).

Results showed that student involvement as social bullies in the current study are comparable albeit on the rise across all grade-levels. Results also show a lower but similar trend of student involvement as cyber bullies across grade-levels. Past research has also found both no grade-level associations between student involvement as social and cyber (internet/computer and cell phone) bullies (Tokunaga, 2010; Wang et al., 2009) and increased social bullying by older

students (Rigby, 2005; Woods & White, 2005). One possible explanation for comparable levels of student involvement as social bullies across grade-levels in the current study is that elementary students in the current study may possess similar levels of ‘theory of mind’ , that is, social manipulation skills development pertinent to relational bullying (Sutton, Smith, & Swettenham, 1999).

In the current study, being a cyber (internet/computer and cell phone) bully slightly increased with grade-level. This finding is not surprising given that research points out cyber bullying increases with age beginning in middle school and peaking in grades seven and eight (Slonje et al., 2013; Tokunaga, 2009). A possible explanation for this finding is that students in higher grades relative to students in younger grades may experience less parental monitoring and supervision of their cyberspace activities (David-Ferdon & Hertz, 2007; Twyman et al., 2010).

Elementary students in all grades reported comparable levels of physical victimization with grade four students reporting the highest overall level of physical victimization. This finding is similar to observations by Borntrager et al. (2009), Wang et al. (2009) and Woods and White (2005) who reported that physical victimization declined with age. It is important to note however, that grade six students in the current study reported a high level of physical victimization, similar to younger students. Some possible explanations for this finding in the current study may be related to the lenient cutoff point used to determine student involvement as physical victims, under-reporting and/or over-reporting of physical victimization by students, and/or student misinterpretation of the bullying definition that was read aloud to students by the

survey administrator prior to completing the survey. Grade four and grade six students may also have been atypically involved in physical victimization in the schools studied.

In the current study, grade four students also reported the highest overall level of verbal victimization compared to older students. Grade four students in the current study significantly reported more victimization than older students with mean names, comments, or gestures with a sexual meaning. This finding is not surprising because as mentioned by Woods and White (2005), physical and verbal victimization usually co-occur. Grade four students also reported higher overall levels of social or relational victimization compared to older students.

On the whole, younger students in the current study reported higher overall levels of traditional and cyber victimization than older students. From a cyber (cell phone) victimization perspective, in particular, this is a worrying development because it implies that very young students have access to cell phones at very young ages and increased cell phone access by younger students is probably elevating the risk of more cyber bullying and victimization in the younger grades. Collectively, higher levels of younger students' involvement in both traditional and cyber victimization means that these students are at risk of being possibly exposed to long-term involvement (frequent and/or infrequent) as victims during their K-12 schooling and this heightens the probability of adverse psychosocial consequences for their healthy development and well-being (Laftman et al., 2013; Raynor & Wylie, 2012; Scholte et al., 2007).

Overall rates of elementary students' involvement as physical, verbal and social victims in the current study remained overall variable as grade-level increased. This finding is similar to previous research which states that student involvement as traditional victims vary across the

elementary grades (Tokunaga, 2010). Results in the current study showed that being a physical victim in elementary school is curvilinear with grade-level. Student involvement as physical victims peaked in grade four, declined in grade five and peaked again in grade six. On the contrary, results in the current study showed a positive correlation between grade-level and student involvement as physical bullies. In essence, results showed that as grade-level increased, so did student involvement as physical bullies and that there were more physical bullies in older grades than younger grades. This finding is consistent with previous research which shows that student involvement as physical bullies peaks during fifth and sixth grades (Tokunaga, 2010; Wang et al., 2009).

Results in the current study showed that being a verbal bully by calling others mean names, making fun of others or teasing others in a hurtful way declined with grade level and students in younger grades reported higher overall levels of involvement as verbal bullies than students in higher grades. A similar finding was acknowledged by Woods and White (2005) who noted that verbal bullying declines with age. However, Wang et al. (2009) found that students in higher grades reported a higher incidence of being verbal bullies than students in lower grades.

Levels of Domain-Specific and Overall Life Satisfaction

Most elementary students in the current study reported positive and moderately high levels of family, friendship, school, self, living environment (neighborhood) and global or overall life satisfaction during the past 2-3 months. These findings are similar to previous life satisfaction research involving studies of children and adolescents (Huebner, 2004; Nickerson &

Nagle, 2004; Proctor et al., 2009). Elementary students in the current study reported their highest level of satisfaction with self and their lowest level of satisfaction with school. Similar findings have been observed by Greenspoon and Saklofske (2001), Huebner (2004) and Nickerson and Nagle (2004).

The finding that elementary students in the current study reported moderately high levels of domain-specific and overall life satisfaction is very promising and encouraging news. As observed by Huebner (2004), Gilman and Huebner (2006) and Proctor et al. (2009), students who report moderately high to high levels of domain-specific and overall life satisfaction are on average likely to experience – a healthy life, good physical health, exercise, participation in sports and social activities, non-participation in risk-taking behaviors such as violence, aggression, and sexual victimization, living in a safe neighborhood, residing in a well maintained home, a supportive and caring school climate, infrequent relocation, good familial and parental relationships, good friendships, peer and teacher social support, social self-efficacy and lower levels of externalizing and internalizing behavior.

There were few sex and grade-level differences in elementary students' reports of domain-specific and global life satisfaction in the current study. This finding is common and unsurprising since “the relationship between demographic variables (i.e., age, gender, race, and socioeconomic status (SES) and LS are weak and research has shown that these variables contribute only modestly to the prediction of youth life satisfaction” (Proctor et al., 2009, p. 586). However, in the current study, slightly more females than males reported satisfaction with school, a finding similarly observed by Huebner (2004), Navarro et al. (2013) and Nickerson and

Nagle (2004). The finding that significantly more females in elementary school reported greater neighborhood satisfaction than males in the current study is important because it elevates the risk of greater male than female involvement as possible victims and in particular, as perpetrators in traditional and cyber bullying (Oberle et al., 2011; Singh & Ghandour, 2012; Woolley & Grogan-Taylor, 2006). In this instance, it is possible that neighborhood satisfaction may have conceivably acted as a protective factor for female involvement and a risk factor for male involvement as victims or bullies in traditional and/or cyber bullying in the current study (Gandelman, Piani, & Ferre, 2012; Oberle et al., 2011; Singh & Ghandour, 2012; Woolley & Grogan-Taylor, 2006).

Domain-Specific and Global Life Satisfaction as Predictors of Student Involvement as Bullies in Elementary School

The current study investigated the relationship between elementary students' domain-specific and overall life satisfaction and involvement as physical, verbal, social or relational, and cyber (internet/computer and cell phone) bullies during the past 2-3 months. The findings suggest that after controlling for sex and grade-level, elementary students who reported low levels of domain-specific and overall life satisfaction are no more likely to be involved as physical, verbal, social, and cyber (internet/computer and cell phone) bullies than elementary students who reported high levels of domain-specific and/or global life satisfaction. In other words, elementary students who reported high and/or low levels of satisfaction with family, friendships, school, self, living environment (neighborhood) and overall life are equally likely to be involved as traditional and/or cyber bullies in the current study. The current study established that elementary students' domain-specific and/or global life satisfaction did not predict student

involvement as perpetrators in traditional and cyber bullying and hence, no links were established between students' levels of satisfaction with family, friendships, school, living environment (neighborhood), self, and overall life and involvement as traditional and cyber bullies in the three schools studied.

In general, the current study's findings are largely inconsistent with previous life satisfaction and school bullying research which suggests a relationship between children's lower life satisfaction and bullying perpetration. Flaspohler et al. (2009) found that physical, verbal and relational bullies reported lower levels of general life satisfaction than noninvolved students. Navarro et al. (2013) also found social bullies reported lower levels of family, friendship, school, and self-satisfaction than noninvolved students. Moore et al. (2012) similarly found that cyber bullies reported lower levels of domain-specific and global life satisfaction than their noninvolved peers.

One possible explanation for elementary students' domain-specific and global life satisfaction not being a predictor of student involvement as bullies in the current study is that the majority of elementary students who self-identified as bullies in the current study may not be experiencing victimization. Research points out that victimized students, in particular bully-victims, fare the worst in both traditional and cyber bullying and report significantly lower levels of life satisfaction than bullies (Proctor et al., 2009; Tokunaga, 2010). Given that no life satisfaction domains were associated with bullying perpetration in the current study, it is possible that bullies in the current study were not experiencing victimization.

Another possible reason for life satisfaction not predicting student involvement as bullies in the current study might be related individual perpetrators' simultaneously experiencing high and/or low levels of domain-specific and/or global life satisfaction. Concurrent levels of high and/or low domain-specific and/or global life satisfaction within individual perpetrators implies that for example, an individual perpetrator may be pleased with their families, mostly satisfied with their friendships, mostly dissatisfied with school, mixed with self, feel terrible about living environment and mostly satisfied with overall life. Concurrent diverse variation within bullies' domain-specific and/or global life satisfaction levels may have acted as protective factors by moderating and/or buffering the frequencies of student involvement as perpetrators and hence, may have contributed to no significant relationships between students' levels of domain-specific and overall life satisfaction and involvement as physical, verbal, social or relational, cyber (internet/computer) and cyber (cell phone) bullies in the current study (Nickerson & Nagle, 2004; Suldo & Huebner, 2004).

Strengths of the Current Study

The current study's findings both complement and supplement previous research on elementary students' global life satisfaction and involvement in school bullying in general and elementary students' domain-specific life satisfaction and involvement in cyber bullying in particular. The current study established prevalence rates of elementary student involvement as victims and more particularly, as bullies in physical, verbal, social and cyber (internet/computer and cell phone) bullying. Elementary school bullying prevalence data for sex, grade-level, victims, bullies and noninvolved students in the current study may be used by the schools studied

as baseline measures for school and/or community-driven anti-bullying prevention and early intervention initiatives.

Another strength of the current study involves its assessment of the presence of two particular modalities of cyber bullying (internet/computer and cell phone) among Canadian elementary school students in southeastern Newfoundland and Labrador. The current study extended the existing elementary students' cyber bullying and victimization database by adding data specific to elementary students' sex, grade-level, noninvolvement and involvement as cyber victims and cyber bullies. Additionally, the current study also adds specific information on elementary students' involvement in cyber bullying via internet/computer and cell phone using emails, text messaging, pictures, or other ways. Cyber bullying data generated by the current study may be useful in building school and community awareness of elementary student involvement in cyber bullying, increasing cyber bully literacy education and guiding schools' anti-bullying prevention and intervention initiatives, especially for the schools who participated in the current study.

Another strength of the current study involves its focus on the integration of positive psychology in children's quality of life research. In this case, the current study extended the existing research base on children's life satisfaction by adding not only elementary students' unidimensional (global) life satisfaction data but also elementary students' multidimensional life satisfaction data including for example, satisfaction with family, school, friendships, self and living environment (neighborhood). The current study created both multidimensional and unidimensional life satisfaction profiles for elementary students who participated in the study

and hence, helps fill an identified gap in children's perceived quality of life research in North America, in particular, in the province of Newfoundland and Labrador, Canada. The life satisfaction profiles in the current study may be used by the participating schools to support elementary students' general mental health promotion, healthy development, and subjective well-being initiatives for children with a particular focus on students' domain-specific and global life satisfaction.

Limitations of the Current Study

A number of limitations pertain to the current study and consequently impact its findings. As previously mentioned, the current study's prevalence data for elementary student involvement as verbal victims, social or relational victims and social or relational bullies need to be treated with caution because these scales had inadequate reliabilities. It is also important to note that student involvement as physical victims or physical bullies in the current study was determined using single scale measures and thus, no scale reliabilities were established for student involvement as physical victims or physical bullies.

A second limitation of the current study is its relatively small sample size (299 participants) which can be attributed to the low response rate. The current study required that students obtain active (written) parental consent in order to participate and such consent may have contributed to lower participation rates by students, a finding acknowledged by Esbensen, Miller, Taylor, He and Freng (1999).

A third limitation of the current study involves methodology. The criterion point used to determine elementary students' high and low domain-specific and global life satisfaction may have been too lenient. The criteria used to determine students' low domain-specific and overall life satisfaction in the current study included mixed (about equally satisfied and dissatisfied), mostly dissatisfied, unhappy and terrible. It is quite possible that elementary students' low domain-specific and overall life satisfaction in the current study included higher levels of mixed satisfaction and lower levels of dissatisfaction involving mostly dissatisfied, unhappy and terrible. If this were the case, elementary students' mixed satisfaction might have acted as a neutralizing factor and disallowed students' domain-specific and overall life satisfaction to significantly relate to their involvement as bullies in the current study.

In a similar manner, the cutoff point used to establish student involvement in traditional and cyber bullying may also have been too lenient. The current study used a cutoff point of at least 'once or twice' during the past 2-3 months to establish student involvement as bullies in traditional and cyber bullying. Research involving life satisfaction and school bullying indicates that being a frequent bully (at least 2-3 times a month or more) is associated with reduced levels of life satisfaction in children (Flaspohler et al., 2009; Moore et al., 2012; Navarro et al., 2013). It is possible that the cutoff point used in the current study disallowed the establishment of adequate frequencies of student involvement as bullies to significantly relate to students' levels of domain-specific and overall life satisfaction. Any change(s) in the current study's cutoff points will probably reveal different findings. Hence, the cutoff measures in the current study may have contributed to a reduction in statistical explanatory power and prevented the

establishment of firm relationships between elementary student involvement as traditional and cyber bullies and levels of domain-specific and global life satisfaction.

A fourth limitation of the current study involves the restricted generalizability of the study's findings. Data for the current study was obtained from elementary students in three mid-sized K-6 schools in one suburban community in southeastern Newfoundland and Labrador. Characteristics of elementary students who participated in the current study may not be socio-demographically and/or organizationally representative of elementary students in the province or country as a whole. A fifth limitation of the current study is its cross-sectional design which cannot indicate causality of the relationships between different forms of student involvement in traditional and cyber bullying, student demographics and domain-specific and global life satisfaction.

A sixth limitation of the current study involves the use of students' (single informant) self-report measures as a valid source for measuring both criterion and predictor variables. Despite the confidential nature of the current study, students may have engaged in social desirable responding behaviors by under-reporting or over-reporting perceptions related to school bullying and life satisfaction. A seventh limitation of the current study is the lack of qualitative data which would undoubtedly provide insights into elementary students' subjective experiences relating to the forms of traditional and cyber bullying and life satisfaction domains studied.

A final limitation of the current study involves the bully/victim survey which was used to assess students' experiences in traditional and cyber bullying over the previous 2-3 months. It is

quite possible that students may have had experience with traditional and cyber bullying, albeit not within the previous 2-3 months, resulting in an underestimation of the prevalence of both traditional and cyber bullying. In addition, because there is so little research on cyber bullying, elementary students in the current study may not have recognized that what they experienced was actually a form of bullying resulting in an underestimation of the prevalence of student involvement as victims or bullies in cyber bullying.

Recommendations and Future Research

It is recommended that future research replicate the current study in a longitudinal framework with a larger and more broadly representative (urban, suburban and rural) sample of elementary school students. It is also recommended that future research replicate the current study with other samples of K-12 students, including students representing a variety of cultures. The use of qualitative data such as discussion/focus groups and in-depth interviews in a mixed-methods research design is also recommended for future research focused on student involvement in traditional and cyber bullying.

Another recommendation for future research is the use of a more conservative cutoff point or criterion to establish student involvement in school bullying as well as students' levels of domain-specific and overall life satisfaction. Given the potential frequent overlap of elementary student involvement in various forms of traditional and cyber bullying and victimization, it is recommended that future research assess the extent of overlap of elementary student involvement as bullies or victims in traditional and cyber bullying with specific emphases on sex and grade-level associations. This information will broaden the scope of

elementary student involvement in traditional and cyber bullying as persistent bullies or victims. Additionally, this information may be very useful in identifying both general and specific school bullying risk and protective factors which may be strategically integrated into schools' anti-bullying prevention and intervention initiatives, communicated to students, parents and staff and resourced with the overall aim of increasing community awareness, student noninvolvement in school bullying and positive mental health.

The utilization of a multiple informant (victim, bully, peer, teacher, caregiver) approach to establish comparative prevalence rates and perceptions of elementary students' involvement as victims or bullies in traditional and cyber bullying is recommended for future research. Since student reports of school bullying behaviors may differ from perceptions of their teachers, peers and/or caregivers, the use of multiple informants may enhance a better measurement of student involvement in school bullying behaviors.

Another recommendation for future research involves establishing prevalence rates of elementary students' internet/computer and cell phone usage and determining whether such usage relates to (a) elementary students' involvement as bullies or victims in traditional and cyber bullying and (b) elementary students' levels of domain-specific and global life satisfaction. A final recommendation for future research based on the current study is an assessment of parental/caregiver supervision and monitoring of elementary students' use of electronic media such as the internet/computer and cell phone and its potential relationships to student involvement in school bullying and students' domain-specific and overall life satisfaction.

Conclusion

The current study is one of the first to assess elementary students' domain-specific and global life satisfaction in a Newfoundland and Labrador sample using multiple life satisfaction indicators and explore potential relationships between student involvement as traditional and cyber bullies and life satisfaction. Results from the current study indicate that elementary students' domain-specific and overall life satisfaction are not associated with their involvement in physical, verbal, social and cyber (internet/computer and cell phone) bullying. In other words, elementary students' satisfaction with family, school, friendships, self and living environment (neighborhood) and global life satisfaction in the current study do not predict their involvement as bullies in traditional and cyber bullying. The current study's lack of significant findings between elementary students' domain-specific and overall life satisfaction and perpetration involvement in traditional and cyber bullying acts as an ongoing stimulus for continued research in this area.

The current study's findings demonstrate that the majority of elementary students in the schools studied report overall high levels of satisfaction with family, friendships, school, self, living environment and overall life during the past 2-3 months. The present study also establishes a higher presence of elementary student involvement in traditional bullying and a lower presence of student involvement in cyber bullying. Elementary student involvement as perpetrators is substantially less prevalent than their involvement as victims. However, elementary student perpetration increases with grade-level.

The current study establishes that elementary male students report higher levels of involvement as traditional bullies and female students report higher levels of involvement as cyber bullies. The current study affirms a more widespread presence of elementary student involvement in physical, verbal, and social bullying and a less common, more emergent presence of elementary student involvement in cyber (internet/computer and cell phone) bullying. The results of the current study underscore the need for greater school and community awareness of elementary students' involvement in traditional and cyber bullying and elementary students' global and domain-specific life satisfaction including sex and grade-level themes as a means to reduce school bullying and promote the well-being of children.

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APPENDIX A
BULLY/VICTIM QUESTIONNAIRE

Bully/Victim Questionnaire



Date: _____

Name of School: _____

Homeroom Teacher: _____

Grade: 4 5 6

Age (in years): 7 8 9 10 11 12 13

Sex: Girl Boy

You will find questions in this survey about your life in school. There are several answers next to each question. Answer each question by filling in the circle next to the answer that best describes how you REALLY think or feel, not how you think you should. **Fill in only one of the circles for each question.** Try to keep your marks inside the circle.

If you **fill in the wrong circle**, you can erase it and then fill in the circle where you want your answer to be.

Do not put your name on this sheet. No one will know how you have answered these questions. But it is important that you answer carefully and tell how you really feel. Sometimes it is hard to decide what to answer, but just try to give your best answer. If you have questions, raise your hand.

Most of the questions are about **your life in school in the past couple of months, that is, the period from January until now.** So when you answer, you should think of how it has been during the past 2 or 3 months and **not only how it is just now.**

This is NOT a test. There are NO right or wrong answers. Your answers will NOT affect your grades, and no one will be told your answers.

ABOUT BEING BULLIED BY OTHER STUDENTS

The following fourteen (14) questions ask you about being bullied by other students. First we explain what bullying is. We say a student is being bullied when another student or several other students:

- Say mean and hurtful things, or make fun of him or her, or call him or her mean and hurtful names
- Completely ignore or exclude him or her from their group of friends or leave him or her out of things on purpose
- Hit, kick, push, shove around, or lock him or her inside a room
- Tell lies or spread false rumors about him or her or send mean notes and try to make other students dislike him or her
- And do other hurtful things like that

When we talk about bullying, these things happen more than just once, and it is difficult for the student being bullied to defend him or herself. We also call it bullying when a student is teased more than just once in a mean and hurtful way.

But we **do not call it bullying** when the teasing is done in a friendly and playful way. Also, it is not bullying when two students of about equal strength or power argue or fight.

Have you been bullied at school in the past couple of months in one or more of the following ways (questions 1-14)?

1. I was hit, kicked, pushed, shoved around, or locked indoors.
 - It has not happened to me in the past couple of months
 - Only once or twice
 - 2 or 3 times a month
 - About once a week
 - Several times a week

2. I was called mean names, was made fun of, or teased in a hurtful way.
 - It has not happened to me in the past couple of months
 - Only once or twice
 - 2 or 3 times a month
 - About once a week
 - Several times a week

3. I was bullied with mean names or comments about my race or color.
 - It has not happened to me in the past couple of months
 - Only once or twice
 - 2 or 3 times a month
 - About once a week
 - Several times a week

4. I was bullied with mean names, comments or gestures with a sexual meaning.
 - It has not happened to me in the past couple of months
 - Only once or twice
 - 2 or 3 times a month
 - About once a week
 - Several times a week

5. Other students left me out of things on purpose, excluded me from their group of friends, or completely ignored me.

- It has not happened to me in the past couple of months
 - Only once or twice
 - 2 or 3 times a month
 - About once a week
 - Several times a week
6. Other students told lies or spread false rumors about me, and tried to make others dislike me.
- It has not happened to me in the past couple of months
 - Only once or twice
 - 2 or 3 times a month
 - About once a week
 - Several times a week
7. I was bullied with mean or hurtful email messages over the Internet using a computer.
- It has not happened to me in the past couple of months
 - Only once or twice
 - 2 or 3 times a month
 - About once a week
 - Several times a week
8. I was bullied with mean or hurtful pictures over the Internet using a computer.
- It has not happened to me in the past couple of months
 - Only once or twice
 - 2 or 3 times a month
 - About once a week
 - Several times a week
9. I was bullied with mean or hurtful telephone calls over the Internet using a computer.
- It has not happened to me in the past couple of months
 - Only once or twice
 - 2 or 3 times a month
 - About once a week
 - Several times a week
10. I was bullied in other mean or hurtful ways over the Internet using a computer.
- It has not happened to me in the past couple of months
 - Only once or twice
 - 2 or 3 times a month

- About once a week
 - Several times a week
11. I was bullied with mean or hurtful text messages using a cell phone.
- It has not happened to me in the past couple of months
 - Only once or twice
 - 2 or 3 times a month
 - About once a week
 - Several times a week
12. I was bullied with mean or hurtful pictures using a cell phone.
- It has not happened to me in the past couple of months
 - Only once or twice
 - 2 or 3 times a month
 - About once a week
 - Several times a week
13. I was bullied with mean or hurtful telephone calls using a cell phone.
- It has not happened to me in the past couple of months
 - Only once or twice
 - 2 or 3 times a month
 - About once a week
 - Several times a week
14. I was bullied in other mean or hurtful ways using a cell phone.
- It has not happened to me in the past couple of months
 - Only once or twice
 - 2 or 3 times a month
 - About once a week
 - Several times a week

ABOUT BULLYING OTHER STUDENTS

The following fourteen (14) questions ask you **about bullying other students.**

Have you bullied another student(s) at school in the past couple of months in one or more of the following ways (questions 15-28)?

15. I hit, kicked, pushed, shoved him or her around, or locked him or her indoors.
- It has not happened in the past couple of months
 - Only once or twice
 - 2 or 3 times a month
 - About once a week
 - Several times a week
16. I called another student(s) mean names and made fun of or teased him or her in a hurtful way.
- It has not happened in the past couple of months
 - Only once or twice
 - 2 or 3 times a month
 - About once a week
 - Several times a week
17. I bullied him or her with mean names or comments about his or her race or color.
- It has not happened in the past couple of months
 - Only once or twice
 - 2 or 3 times a month
 - About once a week
 - Several times a week
18. I bullied him or her with mean names, comments or gestures with a sexual meaning.
- It has not happened in the past couple of months
 - Only once or twice
 - 2 or 3 times a month
 - About once a week
 - Several times a week
19. I kept him or her out of things on purpose, excluded him or her from my group of friends, or completely ignored him or her.
- It has not happened in the past couple of months
 - Only once or twice
 - 2 or 3 times a month
 - About once a week

- Several times a week

20. I spread false rumors about him or her and tried to make others dislike him or her.

- It has not happened in the past couple of months
- Only once or twice
- 2 or 3 times a month
- About once a week
- Several times a week

21. I bullied him or her with mean or hurtful email messages over the Internet using a computer.

- It has not happened to me in the past couple of months
- Only once or twice
- 2 or 3 times a month
- About once a week
- Several times a week

22. I bullied him or her with mean or hurtful pictures over the Internet using a computer.

- It has not happened to me in the past couple of months
- Only once or twice
- 2 or 3 times a month
- About once a week
- Several times a week

23. I bullied him or her with mean or hurtful telephone calls over the Internet using a computer.

- It has not happened to me in the past couple of months
- Only once or twice
- 2 or 3 times a month
- About once a week
- Several times a week

24. I bullied him or her in other mean or hurtful ways over the Internet using a computer.

- It has not happened to me in the past couple of months
- Only once or twice
- 2 or 3 times a month
- About once a week
- Several times a week

25. I bullied him or her with mean or hurtful text messages using a cell phone.

- It has not happened to me in the past couple of months
- Only once or twice
- 2 or 3 times a month
- About once a week
- Several times a week

26. I bullied him or her with mean or hurtful pictures using a cell phone.

- It has not happened to me in the past couple of months
- Only once or twice
- 2 or 3 times a month
- About once a week
- Several times a week

27. I bullied him or her with mean or hurtful telephone calls using a cell phone.

- It has not happened to me in the past couple of months
- Only once or twice
- 2 or 3 times a month
- About once a week
- Several times a week

28. I bullied him or her in other mean or hurtful ways using a cell phone.

- It has not happened to me in the past couple of months
- Only once or twice
- 2 or 3 times a month
- About once a week
- Several times a week

APPENDIX B

LIFE SATISFACTION QUESTIONNAIRE

LIFE SATISFACTION QUESTIONNAIRE

We would like to know what thoughts about life you've had during the past 2 or 3 months. Think about how you spend each day and night and then think about how your life has been during most of this time. Here are some questions that ask you to indicate your satisfaction with life. Circle one answer using a number (from 1 to 7) next to each statement that indicates the extent to which you agree with the statement. It is important to know what you REALLY think, so please answer the question the way you really feel, not how you think you should. This is NOT a test. There is NO right or wrong answers. Your answers will NOT affect your grades, and no one will be told your answers.

Please indicate your level of agreement with the items below using the following scale:

1 = TERRIBLE

2 = UNHAPPY

3 = MOSTLY DISSATISFIED

4 = MIXED (ABOUT EQUALLY SATISFIED AND DISSATISFIED)

5 = MOSTLY SATISFIED

6 = PLEASED

7 = DELIGHTED

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1. I would describe my satisfaction with my family life as: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2. I would describe my satisfaction with my friendships as: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3. I would describe my satisfaction with my school experience as: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 4. I would describe my satisfaction with myself as: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 5. I would describe my satisfaction with where I live as: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 6. I would describe my satisfaction with my overall life as: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

APPENDIX C

INFORMATION FOR TEACHERS, AMINISTRATORS AND GUIDANCE COUNSELLORS

TEACHER NOTES AND INSTRUCTIONS

SOME GENERAL INSTRUCTIONS

Teachers are asked to:

- Read through all materials in advance, become familiar with the information packet and follow carefully the suggested instructions
- Give each student in their homeroom a copy of the Parent /Guardian Informed Consent Letter to be brought home **prior to or by March 7, 2012**
- Inform students that ONLY PAGE 4 of the informed consent form needs to be returned to the school; there are two PAGE 4s included and the parent/guardian keeps one copy
- Occasionally remind students to return signed consent forms in order to participate
- Collect and file in school records signed Parent/Guardian Informed Consent and Student Assent Forms
- Have ***alternate activities*** planned for students who will ***not participate*** in the study
- Administer survey and return to school administration from **March 14-21** (Roland plans to pick up envelopes from school administration on **March 22-23**)
- Contact Roland at 709-782-5906 or rolandparrill@yahoo.ca if there are questions or concerns

INSTRUCTIONS AND NOTES FOR ADMINISTERING THE QUESTIONNAIRES

- Just prior to administering the survey, read script on STUDENT ASSENT FORM to all students; ask students who assent to participation to sign their names on the form and collect all forms ***before*** distributing the survey
- Make sure that students sit as far apart from each other as possible so that they cannot see or copy others answers
- Ask students not to put their names on the survey and assure them that no one will know how they have answered the questions
- Encourage students to answer the questions honestly and properly
- Encourage students to raise their hands if they have questions/concerns and/or need clarification

- Preferably not walk around the classroom as this may be perceived as an attempt to see what students have answered; however, if individual students have trouble filling out the survey, the teacher will of course provide the necessary assistance
- Tell students that the survey is expected to be completed in approximately 45-60 minutes without a break
- After the survey is handed out, the teacher will ask students to provide information for - the *date* on which the survey is administered, their *school*, *homeroom*, *grade level*, *age*, and *sex*; the teacher may display some of this information on chart paper, overhead , PowerPoint or the smartboard/blackboard
- Beginning with the Bully/Victim questionnaire, **read aloud from start to finish all the text in the questionnaire** including each item and its response alternatives
- After completing the Bully/Victim questionnaire, **read aloud from start to finish all the text** in the Life Satisfaction questionnaire including each item and its response alternatives
- When everyone has completed the survey, the teacher will ask students to place the survey in envelopes and seal them
- Teachers will pass sealed envelopes along to school administration. **NOTE**: Please DO NOT ask students to bring this envelope to the office
- Teachers are asked to thank all students for sharing their thoughts and feelings about school bullying and life satisfaction. Teachers are also asked to reassure students that their voice is an insightful and useful resource in our efforts to creating safer schools and communities and moreover, better learning opportunities

P. S. I wish to acknowledge my sincere appreciation and gratitude to all teachers who have provided cooperation and assistance in the data collection process for this study. Please accept my heartfelt thanks.

Roland

APPENDIX D

PARENT/GUARDIAN INFORMATION AND CONSENT FORM

Information Letter & Informed Consent Form

Memo To: Parents/Guardians of Grades 4, 5 &6 Students
From: Graduate Student/Researcher - Roland Parrill, Faculty of Education,
Counselling Psychology, rolandparrill@yahoo.ca
Re: School bullying and life satisfaction in elementary school students
Date: March 2, 2012

All grade 4-6 students at your school are invited to take part in a research project entitled "*School bullying and life satisfaction in elementary school students*".

This form is part of the process of informed consent. It should give you the basic idea of what the research is about and what your child's participation will involve. It also describes your child's right to withdraw from the study at any time. In order to decide whether you wish your child to participate in this research study, you should understand enough about its risks and benefits to be able to make an informed decision. This is the informed consent process. Take time to read this carefully and to understand the information given to you. Please contact the researcher, Roland Parrill, if you have any questions about the study or for more information not included here before you consent.

It is entirely up to you to decide whether your child takes part in this research. If you decide that your child is to not take part in this research or if your child decides to withdraw from the research once it has started, there will be no negative consequences for the child, now or in the future.

Introduction

As part of my Master's thesis, I am conducting research under the supervision of Dr. Jackie Hesson and Dr. Sarah Pickett who are professors with Memorial's Faculty of Education. My research is focused on elementary student experiences with four forms of bullying, namely, physical, verbal, relational, and cyber bullying. The study should increase student, teacher, and community awareness and understanding about the issue of school bullying and how it may relate to general life satisfaction, satisfaction with family, satisfaction with school, satisfaction with friends, satisfaction with neighborhood and satisfaction with self. The results of this research may assist schools in developing strategies that reduce bullying and promote the well-being of students leading to improved student learning.

Purpose of study

The study will examine four forms of school bullying, with three main objectives: (1) to examine frequencies of student involvement in each form of bullying (2) to investigate gender, age and grade-level differences among students across each form of bullying and (3) to explore the roles of global life and domain-specific (i.e., family, friends, school, neighborhood, and self) satisfaction on each form of bullying. This study is among the first to examine cyber bullying with elementary students in the province of Newfoundland and Labrador.

What you will do in this study

Parents/guardians will carefully read this letter of informed consent and decide with their child (ren) whether he/she/they participate(s) in the study. Parents/guardians should know that students who participate in the study will sign an assent form on the day the survey is administered with the option to withdraw participation at any time without consequence. Parents/guardians should also know that during the survey administration, classroom teachers will **read aloud to all students all text from start to finish** in the survey and provide assistance where needed.

On the survey, students will identify the date it is being administered plus their school, homeroom, grade, age and sex. Students will anonymously complete two questionnaires in the following order – firstly, a Bully/Victim questionnaire containing twenty-eight (28) items and secondly, a Brief Multidimensional Students Life Satisfaction Scale containing six (6) items.

Length of time

It is expected that students will complete the survey in 45-60 minutes.

Withdrawal from the study

In the information packet to teachers and in particular, this letter of informed consent to parents/guardians and students outlining the purpose of the study and seeking informed consent, students, parents/guardians and teachers will be informed of students' rights to withdraw from the project at any time. Also, on the day of the data collection, prior to administering the survey, the classroom teacher will seek student assent and inform all students of their right to withdraw their participation at any time without consequence.

At the end of the survey administration, all students will place their surveys in envelopes and seal them before passing them along to the classroom teacher. The teacher will return the envelopes to the school administration.

Possible benefits

Students in this study are accorded a direct opportunity to establish 'their' voice and express their perceptions on a school bullying – a mounting issue with international, national, provincial and local concerns. An added benefit is the study's ability to expand community understanding and increase community awareness of school bullying and its associations with life satisfaction.

Another benefit includes the practicality of this research. The results of this study may provide timely evidence which may be integrated in school development and comprehensive guidance programs. The evidence may be used for whole school and/or classroom level anti-bullying prevention and positive support intervention planning in an attempt to build safer and more caring schools resulting in enhanced student learning. Should only one school be involved in the study, the results may be used by the school to establish some baseline data in the areas of bullying and life satisfaction for students.

Another positive outcome of this research is that it fosters health promotion, community collaboration and leadership capacity building among students, staff, and parents/guardians. Such efforts directly contribute to student wellness and optimal child development.

Another possible benefit of this study is its contribution to the scientific community. A perusal of the literature reveals a scarcity of research on elementary students' bullying experiences and associations with life satisfaction. Conducting ethical research with these students is an affirmative response to several scholarly scientific recommendations. Moreover, 21st millennium researchers articulate that children are knowledgeable, useful resources whose perceptions we need to empirically pursue if we wish to garner evidence-based advancements in child and youth mental health, student learning, poverty, family and community development.

Possible risks

Although highly unlikely, some students may experience some level of discomfort when completing the questionnaire. For example, a student who has been bullied by another student may feel a bit sad or angry. Staff, students and parents/guardians will be informed about this risk during the information sharing informed consent process. On the day the survey is administered, prior to completing the survey, all students will be asked for their assent. Students will also be informed that they may discontinue their participation in the survey at any time without consequence. In cases where a student has an adverse reaction, the guidance counselor and parents/guardians will be notified by the classroom teacher.

Confidentiality and Storage of Data

No limitations are foreseen with respect to protecting the confidentiality of participants' data. All the data given by students will be kept private. No student names and/or physical characteristics of students will be collected so no one will know which student gave which answers. Student responses on the surveys will be seen only by the study team and will not be shown to parents/guardians, and school staff.

Parents/guardians' consent and student assent forms will be retained in school records at the school. In consult with my co-supervisors and after questionnaires are scanned with the assistance of MUN's Faculty of Education staff in research/computing, the questionnaires will be passed along to one of the co-supervisors for storage at the university for the duration of the project and final disposal after the project is complete. Student questionnaires will be destroyed by one of the co-supervisors within the next five years, that is, ***prior to or by March 14, 2017.*** The results of the study will be electronically filed on a personal USB drive that is password protected.

Anonymity

Every reasonable effort will be made for anonymous participation of students. No barriers are foreseen that would make participants' anonymity difficult or impossible to achieve. No personally identifiable information will be required of participants. Upon completion of the questionnaires, each student will place the survey in an envelope, seal the envelope and pass the envelope along to the classroom teacher. The teacher will pass the sealed envelopes along to the school administration.

Reporting of Results

The data collected for this study will be used to write a thesis to satisfy partial requirements for the completion of a Masters degree at Memorial University. The statistical data collected will be reported only in an aggregated or summarized form.

Sharing of Results with Participants

Research results addressing the study's three (3) objectives will be summarized in a PowerPoint presentation and shared with school staff(s), school council(s) and parents/guardians. Any sharing of research results with students will be done in consultation with the school(s).

Questions

You are welcome to ask questions at any time during your participation in this research. If you would like more information about this study, please contact: Roland Parrill, rolandparrill@yahoo.ca

The proposal for this research has been reviewed by the Interdisciplinary Committee on Ethics in Human Research and found to be in compliance with Memorial University's ethics policy. If you have ethical concerns about the research (such as the way you have been treated or your rights as a participant), you may contact the Chairperson of the ICEHR at icehr@mun.ca or by telephone at 709-864-2861.

Consent

Your signature on this form means that:

- You have read the information about the research.
- You have been able to ask questions about this study.
- You are satisfied with the answers to all your questions.
- You understand what the study is about and what your child will be doing.
- You understand that your child is free to withdraw from the study at any time, without having to give a reason, and that doing so will not affect him or her now or in the future.
- You understand that any data collected from your child up to the point of his or her withdrawal will be destroyed.

If you sign this form, you do not give up your legal rights and do not release the researchers from their professional responsibilities.

Your signature

I have read and understood what this study is about and appreciate the risks and benefits. I have had adequate time to think about this and had the opportunity to ask questions and my questions have been answered.

I agree for my child to participate in the research project understanding the risks and contributions of participation, that participation is voluntary, and that I/he/she may end participation at any time.

A copy of this Informed Consent Form has been given to me for my records.

Signature of Parent/Guardian

Date

PLEASE RETURN ONLY PAGE 4 OF THIS FORM TO THE SCHOOL PRIOR TO OR BY MARCH 14, 2012.

Researcher's Signature

I have explained this study to the best of my ability. I invited questions and gave answers. I believe that the parents/guardians/ and students fully understands what is involved in being in the study, any potential risks of the study and that he or she has freely chosen to be in the study.

Signature of Principal Investigator

Date

THANK YOU SO MUCH FOR YOUR COOPERATION

APPENDIX E

STUDENT INFORMATION AND ASSENT

STUDENT ASSENT FORM

Student Assent Script (All grades 4-6 students)

***TEACHERS:** Please read the following before students sign the assent form. Collect all assent forms before distributing the surveys.*

Dear Student(s):

My name is Roland Parrill. I am a student researcher and I am working with some university professors at Memorial University. We are studying school bullying among grades four, five and six students. We would like to learn more about your experiences with school bullying and life satisfaction.

Students will answer questions on two surveys – (1) Bully/Victim survey and (2) Life Satisfaction survey. The Bully/Victim survey asks about your experiences in bullying situations at school. The Life Satisfaction survey asks about how satisfied you are with your life.

Some good things may come from your answers to the questions. We believe your answers will add to our view about bullying among students. Your answers will also help us find ways to lower school bullying. Your answers will help students to have better relationships at school. Your answers will also add to our view about your satisfaction with life.

We do not expect that completing the surveys will be a bad experience. However, some students may not like sharing their thoughts and feelings about bullying or life satisfaction. If so, they are allowed to stop completing the surveys right away.

All the answers you give will be kept private (secret). Your name will not be on any of your answer sheets so no one will know which student gave which answers. You will place your answer sheets in envelopes that your teacher will seal in your presence. Your answers will be seen only by the study team and will not be shown to your parents/guardians and teachers.

Do you have any questions? I thank you for your cooperation. I especially thank you for sharing your thoughts and feelings with us. It is really appreciated.

Please **sign your name on the line below** if you agree to complete the surveys.

Student's Name _____