

Peer Victimization in Northern Ontario: The Search for Protective Factors to Combat Reported

Health Concerns

by

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Abstract

This master's thesis study looked to expand on the current body of literature regarding the potential role of social support for individuals who have been exposed to bullying. More specifically, the study examined how connected social support is to the concept of resilience, and compared levels of social support, levels of resilience, and health concerns between victims of bullying and those not involved in incidents of victimization. Questionnaires were completed by 112 students in grades seven and eight from two school boards in Northern Ontario. Participants were asked to complete a questionnaire booklet consisting of four separate questionnaires. The Behaviour Assessment System for Children, Second Edition, Child and Adolescent Social Support Scale, Child and Youth Resilience Measure, and a modified version of the Revised Olweus Bullying Victim Questionnaire were used in this study. The questionnaires were completed after a brief presentation on the definition of bullying, forms of bullying, and how students may be involved. Analyses showed that overall social support did not act as a buffer for total health concerns based on one's bully status (victim versus not-involved). Social support and resilience were found to be moderately and positively correlated to one another based on self-reports. Lastly, similar to previous literature, victims had higher mean scores for health concerns, and lower mean scores for social support and resilience compared to the non-victim group. Therefore, all students may benefit from perceiving strong social support systems, not just victims of bullying. Prevention and intervention programs should include training for school personnel to expand support networks that are currently perceived as lacking by victims of bullying, especially with the results of this study indicating results surrounding negative health outcomes, lower levels of perceived social support and low levels of resilience for victims.

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Peer Victimization in Northern Ontario: The Search for Protective Factors to Combat Reported Health Concerns

Currently in Ontario the Ministry of Education continues to strive for better prevention and intervention strategies to assist students who are being exposed to bullying (Ontario Ministry of Education, 2012a). In 2012, the Accepting Schools Act (also known as Bill 13) was passed into law by the Legislative Assembly of Ontario to work towards the prevention of bullying and addressing incidents of victimization when they occur within the school environment (Ontario Ministry of Education, 2012b). When it comes to involvement in bullying, whether it is as a bully, a victim, or a bully-victim previous studies have demonstrated a fairly high prevalence rate of involvement reported with the range of victimization being 2% to 32% and the range of bullying sitting between 1% to 36% in middle school and the beginning of high school (Currie, Zanotti, Morgan, Currie, Looze, Roberts, Sandal, Smith, & Barnekow, 2012). While this is a broad range, there has been an increase in awareness of bullying and its effects on those involved by educators, parents, students, and even individuals within the community (Swearer & Hymel, 2015; Craig, 1998; McDougall & Vaillancourt, 2015). These ongoing efforts may be positively impacting prevalence rates, as a slight decline in prevalence rates has been reported in the Health Behaviour in School-aged Children study by the World Health Organization (Currie et al., 2012) but the decline is seen as small at the present time (Hymel & Swearer, 2015).

Bullying has been linked to impairments in several areas of an individual's life, which has lead to concerns with physical health, mental/emotional health, and the ability to cope effectively with the stress of being victimized (Houbre, Tarquino, Thuillier, & Hergott, 2006;

Craig, 1998; Nansel et al., 2004; Wolke, Woods, Bloomfield, & Karstadt, 2001a; Gini 2008; Newman, Holden, & Delville, 2005). Previous studies have shown that students' overall well-being can be significantly impacted by being victimized, and these debilitating effects on health can follow them into adulthood (Allison, Roeger, & Reinfeld-Kirkman, 2009; Wolke, Copeland, Angold, & Costello, 2013; Copeland, Wolke, Angold & Costello, 2013; Sigurdson, Wallander, & Sund, 2015). Ultimately, bullying has been said to cause detrimental effects on victim's health and overall well-being. Therefore, the continued improvement of prevention and intervention strategies is crucial for offering assistance to those individuals who report being victimized by their peers.

The research on bullying has covered a large number of topics and is rather extensive, ranging from when the peak in exposure to bullying occurs, one's coping abilities, to effectiveness of prevention and intervention programs, and behaviours associated with bullying (Nansel et al., 2001; Currie, Zanotti, Morgan, Currie, Looze, Roberts, & Barnekow, 2012). Meanwhile, other studies have focused on the potential health concerns linked to exposure to bullying (Gini, 2008; Yang, Kim, Kim, Shin, & Yoon, 2006; Turner, Exum, Brame, & Holt., 2013; Due, Holstein, Lynch, Diderichsen, Gabhain, Scheidt, & Currie, 2005). Studies have identified physical health concerns such as dizzy spells, challenges breathing (Houbre, Tarquinio, Thuillier, & Hergott, 2006), colds and sore throats (Wolke, Woods, Bloomfield, & Karstadt, 2001a). Anxiety and depression have also been linked to bullying for victims with regards to mental and emotional health concerns (Craig, 1998), as well as suicide ideation (Turner et al., 2013).

Therefore, research has also focused on potential protective factors that can decrease the detrimental results of peer victimization. Given that humans are social beings, the protective value of social support has become a key topic of bullying research (Stadler, Feifel, Rohrmann, Vermeiren, & Poustka, 2010; Yeung & Leadbeater, 2010), along with a greater focus on an individual's level of resilience (Ungar, 2013; Sapouna & Wolke, 2013). More importantly, research has expanded to evaluate whether or not these two factors can help to reduce the negative effects bullying can have on physical health and mental/emotional health (Demaray & Malecki, 2003; Frisén, Hasselblad, & Holmqvist, 2012; Plaskon, 2011).

While social support has been found to be a protective factor for individuals exposed to bullying, the results from previous literature are currently mixed on who can offer the necessary support to victims. More specifically, while there are indications that social support can be beneficial to individuals dealing with bullying, different sources have been identified as being more influential depending on the study (Bowes et al., 2010; Stadler et al., 2010; Davidson & Demaray, 2007). Even though there has been an increase in research focusing on social support, people within an individual's community are often not evaluated as a potential support system (Engle, Castle, & Menon, 1996).

With a potential association being reported in the literature regarding social support as a buffer against negative health effects linked to bullying it is important to continue to identify who can provide the best assistance for individuals dealing with bullying whether it is family members, school personnel, friends, community members or a mixture of different support systems. It is also crucial to evaluate the influence of community members and their role in supporting those who are exposed to victimization as it may be a missing piece to the puzzle.

There is a current gap in the literature when considering where support might come from; with special focus on family, friends, and teachers as social support systems for children and adolescents in a majority of studies, while community members that individuals may interact with are excluded.

Another important concept that may play a role in protecting against negative health concerns linked to bullying is the ability to successfully navigate challenging situations through the use of one's own characteristics and the assistance of supports available; which is known as one's level of resilience (Ungar, 2008). Resilience is described as being exposed to adverse life events but still having the ability to continue through life by adapting successfully (Rutter, 1987; Ungar, 2008).

The purpose of this study was to further explore the impact of social support on the deleterious health concerns associated with being a victim of bullying. It aimed to add to the bullying and social support literature by focusing on a support system that has been neglected in the past: community members. The relationship between social support and resilience was also a concept that was evaluated in this study, as social support is seen as a key component when deciding one's level of resilience. To be considered resilient it is said that one must not only possess key personality traits internally but on an external level they must have support systems in place that can provide the person in need with tools that can get them through the stressful life event they are faced with (Fergus & Zimmerman, 2005; Ungar, 2013). Lastly this study looked to compare victims of bullying to those not involved in bullying incidents to each other to see if there were any differences with regards to their level of perceived social support, level of resilience, and overall number of health concerns (both physical and mental/emotional).

This paper begins with a review of the impact bullying can have on children and adolescents, along with a review of what bullying is by definition and what bullying incidents may entail, then the negative physical, mental/ emotional health concerns found in previous literature are discussed. This is followed by the research on resilience and social support, and lastly, prevention and intervention programs are discussed, followed by the description of the research design and the results found by the study.

Canada's Ranking for Victimization Rates

Bullying has been an issue faced by children and adolescents for many decades, but it continues to be a key area of research within the school environment (Rigby, 2003; Rigby & Smith, 2011). In Canada, students have reported higher levels of victimization than a majority of other countries around the world (Currie et al., 2012). Based on the Health Behaviour in School Aged Children survey the countries with the lowest percentage of victimization were ranked much lower out of 38 compared to Canada. The higher a countries ranking, the greater the percentage of victimization being reported. More specifically, Canada currently has been ranked 29th out of 38 countries for victimization at age 11, 30th out of 38 countries for victimization at age 13, and 24th out of 38 countries with regards to the percentage of students who have reported being bullied at least twice in the past few months at the age of 15 (Currie et al., 2012). These results indicate that youth in Canada, between the ages of 11-15, who are willing to report victimization are experiencing more bullying than a majority of youth around the world. It is important to note that while the rate of victimization appears to be fairly high in Canada instances of bullying continue to go unreported, especially in middle school (Unnever & Cornell,

2004) which indicates there is potential for true bullying rates to be slightly higher than presently reported.

Even though bullying has been a heavily researched field over the past few decades, the definition of bullying still lacks consensus (Modecki, Minchin, Harbaugh, Guerra & Runions, 2014; Brown, 2008). However a commonly cited definition of bullying consists of three key components: (1) aggressive behaviour that is intentional and (2) repeated over time, and involves (3) an imbalance of power between the perpetrator and the victim (Olweus, 1993, 1994; Vaillancourt, McDougall, Hymel, Krygsman, Miller, Stiver, & Davis, 2008). Bullying can be done through physical (examples include: hitting, kicking), verbal (such as calling someone names or teasing them), relational/social (includes behaviours such as excluding someone from activities or gossiping about them), and technological (for instance using the internet or cellphone to send messages that are hurtful) means (Olweus, 1993; Galen & Underwood, 1997; Owens, Shute, & Slee, 2010; Wang, Ianotti & Nansel, 2009). The Ontario Ministry of Education (2012a) has also identified a fifth form of bullying known as written bullying (meaning that the perpetrator uses notes to gossip or spread rumours about the victim). Furthermore, the Ontario Ministry of Education has also developed a list of specific types of bullying that students may engage in (Ontario Ministry, 2013d). The types outlined by the Ontario Ministry of Education include: racial/ethnocultural, sexual, gender role-based, homophobic, religion-based, disability based, and income based (Ontario Ministry, 2013d).

Bullying Prevention and Intervention Programs

As bullying continues to be an ongoing concern for students, prevention and intervention programs have been developed and utilized with the hopes of decreasing this ongoing issue

(Craig & Pepler, 2003). Current prevention and intervention programs, that are delivered in schools are regulated by Bill 13, the Accepting Schools Act, which was passed into law in 2012 and is further outlined by the Ontario Ministry of Education in the Policy/Program Memorandum no. 144- Bullying Prevention and Intervention (Ontario, 2012a). These programs regularly change to help students battle against the negative outcomes of being victimized as more results from evidence-based research comes available (Ontario, 2012a). This policy has been set in place because there is an abundance of research that shows that students who are victims of bullying show poorer health outcomes and functioning (Allison et al., 2009; Rethon, Head, Klineberg, & Stansfeld, 2011; Ontario, 2012a).

More specifically, these prevention and intervention programs focus not only on the individuals who are involved but also includes peers, teachers, parents, and even community members (Hutchings & Clarkson, 2015; Bryn, 2011; Pepler & Craig, 2000; Bradshaw, 2015). This holistic approach to dealing with peer victimization stems from Bronfenbrenner's ecological systems theory (Espelage & Swearer, 2003). Bullying behaviours have been found to develop based on not only inter-individual factors but intra-individual factors as well. This has led to bullying being seen as an event that does not occur in an isolated manner (Espelage & Swearer, 2003). Given that bullying is said to be a systemically developed behaviour, programs have been developed to utilize multiple systems that influence a child and adolescent's life (Hutchings & Clarkson, 2015). Therefore, programs that involve family, school personnel, peers, and the community to counter the development of bullying are becoming popular. All of this began with the Olweus Bullying Prevention Program (Olweus, 1993), that is the most commonly studied program and one which has been implemented and adapted by school boards all around the

world. The Olweus Bullying Prevention Program has been evaluated and found to be effective (Olweus & Limber, 2010), however, current strategies being utilized by all school boards may not follow such a rigid program. For instance, in Ontario, even though Bill 13 mandates that school boards must develop policies and plans to prevent bullying, not all school boards will implement the same policy and plan. The Policy/Plan Memorandum No.144 states that “boards have the flexibility to take into account local needs and circumstances [when developing policies]” (Ontario, 2012a). Therefore, in some situations students are finding the present solutions offered by people in their support networks to be unhelpful to stopping incidents of bullying (Frisén, Hasselblad & Holmqvist, 2012).

Solutions for Stopping Bullying

For many years children who have found themselves to be victims of bullying have been told to “ignore it”, “tell a teacher”, or even given advice as extreme as “fight back” (Frisén et al., 2012). In some instances, these suggestions may be successful solutions; there are also times when these tips offer little to no relief and may even increase the victimization (Frisén et al., 2012). So while some individuals view these suggestions as helpful and clear solutions to an experience children will simply face while growing up, there is now a greater concern about how being bullied can affect a child’s overall health (Frisén et al., 2012; Wolke et al., 2001a; Turner et al., 2013).

Some suggestions have proven to be more successful than others as research has indicated that some strategies reported by victims of bullying were effective at stopping the incidents of bullying (Craig, Pepler, & Blais, 2007; Frisén & Holmqvist, 2010). Strategies that have been perceived as successful in stopping incidents of bullying based on the victimized

individuals perspective include doing nothing, telling a friend or an adult, or by being more assertive (Craig, Pepler, & Blais, 2007; Frisén et al., 2012; Frisén & Holmqvist, 2010).

Therefore, it would appear as though it is crucial for research to continue to evaluate the detrimental effects bullying can have on those individuals involved and how specific prevention and intervention strategies can be helpful in decreasing and more importantly stopping incidents of bullying. It is also important to review current prevention and intervention programs to address effective strategies and make adjustments to ongoing programs when necessary.

Health Concerns Linked to Bullying

The results from previous research indicate that students who are exposed to bullying not only have more physical health concerns but also more mental and emotional health concerns than students who are not bullied (Due et al., 2005; Nansel, Overpeck, Pilla, Ruan, Simons-Morton & Scheidt, 2001). Negative effects include decreasing the individual's level of functioning with regards to everyday tasks such as attending school (Rigby, 2003), social interactions (Craig & Pepler, 2007) and developing behavioural issues (Gini, 2008). It has become evident that there needs to be a buffer against the negative effects bullying has on these individuals in addition to working to stop the bully.

Children that have been victimized display higher levels of depression, anxiety, suicidal thoughts, and have a greater likelihood of developing behavioural difficulties than classmates who have not been subject to bullying (Yang et al., 2006; Ng & Tsang, 2008; Turner et al., 2013; Rothon et al., 2011). For example, Ng and Tsang (2008) conducted a study with 364 participants from secondary school (mean age of 13.55) focusing on mental health and bullying. The study was a cross-sectional study that utilized a self-report questionnaire. The questionnaire focused on

bullying, mental health, psychosocial factors, and demographic information. Results from the study indicated that there were significant and positive correlations for the victims on mental health, as well as psychosocial factors. Not only do victims of bullying show severe emotional and mental issues but research suggests that bullying also has a tremendous impact on a child's physical health (Allison et al., 2009; Hoel & Faragher, 2004; Houbre et al., 2006). Common symptoms that individuals report range from headaches, dizziness, and stomachaches, to nausea, skin conditions, and fevers (Wolke et al., 2001a; Houbre et al., 2006; Knack, Gomez, & Jensen-Campbell, 2011). Wolke and colleagues (2001a) investigated bullying and common health problems through a cross-sectional study that involved 1,639 children aged 6-9 years old. The participants completed a structured interview that focused on bullying and their parents completed a questionnaire about the child's health. The participants that were exposed to direct bullying reported higher levels of physical health concerns such as sore throats, colds, breathing problems, nausea and poor appetite (Wolke et al., 2001a). Bullying can also be seen as a serious problem in multiple aspects of a victim's life; not only mentally, emotionally, and physically but socially and academically as well (Cornell, Gregory, Haunh, & Fan, 2013; Veenstra, Lindenberg, Winter, Oldehinkel, Verhulst & Ormel, 2005). A study conducted by Veenstra et al. (2005) investigated bullying incidents within elementary school, with 1,065 elementary school students (mean age of 11.09 years old) and their parents. The study consisted of participants completing peer nominations for bullying and victimization, as well as completing a questionnaire that evaluated parents' rearing practices. The parents completed questions focusing on their own psychopathology, and teachers were asked to complete a survey for the participant's individual characteristics. Based on the data gathered from the participants, their parents, and teachers the

results indicated that victims were more isolated, and more disliked than those uninvolved in bully incidents (Veenstra et al., 2005).

Even though, there have been attempts to assist victimized individuals by implementing prevention and intervention strategies; health concerns (Craig & Pepler, 2003; Hase, Goldberg, Smith, Stuck & Campain, 2015; Modin, Låftman, & Östberg, 2015). With children and adolescents still having their health and well-being jeopardized it seems necessary for research to look at other solutions to this ongoing problem. One potential solution might be social support. Support can come from multiple individuals in a student's life, such as from parents, teachers, friends, peers and possibly other community members (Engle, Castle, Menon, 1996; Demaray & Malecki, 2003).

Social Support and Victimization

Social support is defined as the availability and access to individuals in one's life who can offer assistance when in need, and they can be relied on to help (Demaray & Malecki, 2003; House, 1981). Social support is said to be available for people in four different ways: emotional, instrumental, informational, and appraisal (House, 1981). Emotional support has been described as empathy or caring for another person, whereas instrumental support is helpful behaviours such as giving up time for someone or letting them borrow money (Tardy, 1985). Informational support is provided in the form of giving advice and appraisal support is giving someone evaluative feedback (Tardy, 1985). It is also believed that social support falls into two different models; the main effect model and the stress-buffering model (Cohen, Gottlieb, & Underwood 2000). The first model is the main effect model which states that everyone will benefit from social support even when they are not faced with an adverse life event. The second is the stress-

buffering model which states that social support will only be beneficial for those who are dealing with a stressful life event and need assistance (Cohen et al., 2000). Having this social support available from various people in a child or adolescent's life has been found to be a possible buffer against the negative health concerns linked to bullying (Bilsky et al., 2013; Bowes, Maughan, Caspi, Moffitt, & Arsenuault, 2010; Davidson & Demaray, 2007; Kendrick, Jutengren, & Stattin, 2012). For example, Bilsky et al. (2013) conducted a study with 1,888 students aged 8-14 years old to evaluate if parental support can assist with victimization. Peer nominations and self-reports were used to gather information on victimization. Self-reports were also completed to gather information on the participant's perception of their parents' support, potential levels of depression, negative self-cognitions, and self-concept. Parental support and depression and cognitions were found to be significantly correlated. With more support from parents there appeared to be less depressive symptoms reported by victims (Bilsky et al., 2013). Furthermore, Kendrick and colleagues (2010) assessed the protective role of friends offering social support for victims of bullying. The study involved 880 students aged 12-16 years old who participated in two separate sessions, one year apart. The sessions consisted of completing a questionnaire booklet that had questions on bullying, support from friends, depression, and property crimes (Kendrick et al., 2010). Support from friends was found to be related to lower levels of victimization and bullying. The quality of the friendship also predicted lower levels of being bullied in the future (Kendrick et al., 2010).

Though multiple studies have indicated that different forms of social support are beneficial for children and adolescents who are dealing with peer victimization, there have been inconsistent findings with regards to which social support group is most likely to help

(Flaspohler, Elfstrom, Vanderzee & Sink, 2009; Rothon et al., 2011; Yeung & Leadbeater, 2010).

The lack of consistency in previous findings suggests that it is important to continue investigating social support and the role it plays for individuals dealing with bullying.

Social Support and Resilience.

A concept that has social support as one of its core ideas is resilience (Ungar, 2008). Resilience is said to occur when someone is exposed to an adverse life event (Rutter, 1987; Luthar, Cicchetti, & Beck, 2000), however, the individual can take the stress in stride and function in an adaptive manner (Luthar, 1991). Another important component of resilience is that one must be able to push past the stressor or adverse event and continue to develop and adapt in a positive manner (Fergus & Zimmerman, 2005; Luthar & Zigler, 1991).

People are currently said to be resilient based on a selection of interpersonal characteristics (internal), as well as the availability and access to resources offered by individuals around the person in need (external) (Fergus & Zimmerman, 2005; Ungar, 2008). This is different from previous definitions of resilience whereby resilience is no longer seen as a fixed trait but more as a process between the individual and their environment (Ungar, 2008; Rutter, 1987; Everall, Altrows, & Paulso, 2006).

There has been a big shift over the past few decades with regards to what resilience research has focused on (Luthar et al., 2000). Previously, researchers focused on what might lead a child to grow up and develop psychopathology (Werner & Smith, 1982; Garmezy, Masten, & Tellegen, 1985). Now the focus is what allows a person to be raised in conditions riddled with risks and still be able to develop into a functional adult (Luthar et al., 2000). By being aware of possible risks as well as protective mechanisms, interventions and prevention plans can be

developed to assist children in high risk situations to adapt and live their life without suffering from the potential negative consequences associated with exposure to stressful or adverse life events (Rutter, 1987).

In the past, a common belief was that if children were exposed to risky lifestyles or events they would face maldevelopment, however, research now shows that maldevelopment may not occur for all individuals exposed to adverse life events (Werner, 2005). Further it is now clear that even in the face of adverse life events such as poverty, parental conflict, and parents dealing with mental illness themselves, it does not mean that the children will be negatively affected (Werner, 2005). One adverse life event that is reported by children and adolescents is bullying (Bowes et al., 2010). Bullying is a specific stressor that has gained the attention of parents, educators, and the community over the past decade when looking at health concerns and one's ability to be resilient.

What is Bullying?

Bullying has been said to be challenging to define (Aaslama & Brown, 2008), though a majority of studies still define bullying based on the definition developed back in the 1970's by a Scandinavian researcher, Dan Olweus, the pioneer in research on bullying. Therefore bullying is commonly defined as a form of behaviour that involves an imbalance of power, is distressing for the victim, and is experienced repeatedly over a duration of time (Olweus, 1993, 1994; Espelage & Swearer, 2003). Bullying is ultimately considered to be a form of aggressive behaviour (Nansel et al., 2001; Olweus, 1994). It is deemed to be different from other forms of aggression in that it must always have three essential elements to be called bullying: a power imbalance, intentional and aggressive, and repeated occurrence of the behaviour (Olweus, 1993).

First, there must be an imbalance of power found among the individuals considered to be a part of the social relationship (Olweus, 1993). This power imbalance can be physical features such as one's strength, size, weight, height (Chan, 2009; Craig & Pepler, 2007), age, or popularity (Aresenault, Bowes, & Shakoor, 2010). Level of intelligence, and peer group status (Ontario, 2012) have also been noted as potential areas that might cause an imbalance between individuals, as well as psychological differences (Rigby, 2007; Craig, 1998). By knowing how the victim is potentially vulnerable such as the possibility that they have a learning disability or disorder can be used by the bully as an advantage and can be a point of distress for the victim (Craig & Pepler, 2007). Over time this difference in power makes victims feel as though they lack the ability to defend themselves against the attacks of their perpetrators (Olweus, 1994), and the power imbalance can then increase in the bullies' favour (Craig & Pepler, 2003).

The second key element in the definition of bullying is that the behaviour is seen as not only aggressive but also intentional, meaning that the perpetrator should know that the behaviour will cause another person harm (Olweus 1993; Ontario Ministry, 2012a). This particular piece of the definition may be the most challenging to define. It has been described as direct or indirect aggression by Olweus (1994) or relational aggression or physical aggression by Crick, Gropeter, and Bigbee (2002). The definitions developed by Olweus (1994) and Crick, Gropeter and Bigbee (2002) both describe the aggressive nature involved in bullying. Based on Olweus's (1993) description of the aggressive behaviour of bullying, direct aggression is open attacks on the victim, while indirect attacks are seen as more social attacks. Physical aggression is when physical force is used by someone to cause distress or harm to another person and relational aggression is more about the use of relationships or even friendships to cause harm and distress

(Crick et al., 2002). Though the titles are different, the concept behind the forms of aggression is very similar. The third and final element used in defining bullying is the idea that bullying is not a one-time occurrence, but an experience that repeatedly happens for an extended period of time (Olweus, 1993). This repeated behaviour is distressing for victims as they know it is likely to occur again in the future and they learn to expect the hurtful behaviour, which in turn continues to give power to the bully (Rigby, 2007). If someone is exposed to a one-time occurrence of a behaviour that is deemed hurtful, it is not to be considered bullying based on the definition developed by Olweus (1993).

By definition, all bullying situations must involve an imbalance of power, aggressive and intentional behaviour, and repetition occurs, however, each situation can still be very different depending on each case of peer victimization. For instance, exposure to bullying may involve one or more bullies and it may involve one or more victims, though more often than not in the school environment there is only one victim (Olweus, 1993). There is also no need for provocation to lead to incidents of bullying (Olweus, 1994). Even though children and adolescents may not describe identical experiences with regards to how they were bullied, previous literature indicates that there is still a risk for negative health concerns and detrimental implications on one's well-being (Due et al., 2005; Nordhagen, Nielsen, Stigum, & Kohler, 2005; Baldry, 2003; Juvonven, Nishina, & Graham, 2000).

Currently, in Ontario the Ministry of Education (2012a) utilizes a definition bullying of bullying that is similar to the definition described by Olweus (1993, 1994). The definition is outlined by the Education Act as:

“ ‘bullying’ means aggressive and typically repeated behaviour by a pupil where,

(a) the behaviour is intended by the pupil to have the effect of, or the pupil ought to know that the behaviour would be likely to have the effect of, (i) causing harm, fear or distress to another individual, including physical, psychological, social or academic harm, harm to the individual's reputation or harm to the individual's property, or (ii) creating a negative environment at a school for another individual, and (b) the behaviour occurs in a context where there is a real or perceived power imbalance between the pupil and the individual based on factors such as size, strength, age, intelligence, peer group power, economic status, social status, religion, ethnic origin, sexual orientation, family circumstances, gender, gender identity, gender expression, race, disability or the receipt of special education" (p. 4).

Not only are there differing definitions of bullying currently found within the literature, but it is important to understand that not all students will be exposed to the same experiences when it comes to being victimized. There are many different forms of bullying and types of bullying that may occur. Regardless of the different experiences with a bully, the forms of bullying that a child or adolescent can experience is important information to gather when offering assistance to potentially eliminating the bullying.

Forms of Bullying

Bullying can take on several different forms (Olweus, 1993; Arseneault et al., 2009). While there are four commonly described ways that someone can be bullied or can bully, these forms are usually characterized as being either a direct form of bullying or an indirect form of bullying (Olweus, 1993). Direct bullying is said to occur when the bully is face to face with their victim, and indirect bullying is seen as the opposite which implies that the encounter does not

need to involve a face to face confrontation between the perpetrator and the victim. Indirect forms of bullying are also said to be harder to pick up on in comparison to direct forms (Olweus, 1993). The first form of bullying is defined as *physical* and involves a direct encounter where the bully may use various forms of physical contact to cause harm or distress to their victim.

Physical bullying can range from hitting and kicking to pushing and in some cases the victim may even be physically restrained by the bully (Olweus, 1993).

Another form of direct bullying is labelled *verbal* bullying, which can involve calling someone names, teasing or taunting another person or making threats (Olweus, 1993). The third form of bullying is known as *social* (Galen & Underwood, 1997) or *relational* bullying (Owens et al., 2000) which is normally done in an indirect manner. More specifically it can include negative actions such as spreading rumours about someone, gossiping about the victim or excluding them from activities (Galen & Underwood, 1997; Owens et al., 2000).

Next, with the continued advancement of technology children and adolescents have multiple new ways of communicating at their fingertips. Technology has led to a newer form of bullying being developed; it is known as *technological/electronic bullying* or *cyberbullying* (Ontario, 2012; Raskaukas & Stoltz, 2007). Electronic or cyberbullying is done through the use of technology based products such as cellphones and computers (Wang et al., 2009). The availability of these products allows for a large avenue of situations where electronic bullying can occur: emails, instant messaging, text messaging, social networking websites, chatrooms, and even through pictures (Kowalski, Schroeder, Giumetti, & Lattaner, 2014).

An additional form of bullying that is not commonly seen in the literature is *written* bullying. Interestingly, in Ontario, the Ministry of Education (2012a, 2013b) has included written

bullying as a separate form of bullying in their guide for parents known as “Bullying: We Can All Help Stop it” (Ontario Ministry of Education, 2013b). This manual is used to provide information set out in the policy/ program developed for bullying by the Ministry of Education for parents. Written forms of bullying are activities such as writing notes to the victim or about the victim to someone else, or creating signs that are harmful or distressing to victims of bullying (Ontario, 2013b). While all forms of bullying can have a significant impact on a child or adolescent’s well-being as they are distressing and harmful acts, not all forms of bullying are seen to occur as often as others (Nansel et al., 2001).

Forms of Bullying by Gender. The forms of bullying that victimized individuals report has been shown to vary depending on gender and age (Nansel et al., 2001; McClanahan, McCoy, & Jacobsen, 2014). Several different studies have reported that boys are more likely to use direct forms of bullying such as being physical, whereas females use verbal or relational forms (McClanahan, McCoy, & Jacobsen, 2015).

In 2015, McClanahan, McCoy, and Jacobsen published a study that involved 25,000 students from middle-school and focused on comparing bullying experiences of males and females, as well as comparing the different types of bullying reported. The study involved the completion of the Global School-based Student Health Survey (McClanahan et al., 2015). Results showed that 14 of the 15 countries had girls reporting bullying where they were verbally bullied, and boys reported physical forms of bullying as the most commonly experienced type of bullying in 10 out of 15 countries (McClanahan, McCoy, & Jacobsen, 2015). This study shows results that are consistent with older studies published in that boys are more likely to be exposed to direct forms of bullying and girls are more likely to experience indirect forms of bullying

(Baldry & Farrington, 1999; Scheithaur, Hayer, Petetermann, & Jugert, 2006; Nansel et al., 2001).

Forms of Bullying by Age Group. As individuals age there also appears to be a shift in forms of bullying that are reported by victims, with a change in preference going from physical bullying and turning into verbal forms of bullying as victims get older (Nansel et al., 2001). Scheithauer and colleagues (2006) found that in grade eight physical bullying declined and verbal and relational bullying increased and peaked during grade 9. Boys in younger grades were more likely to be exposed solely to physical bullying but as they progressed through school, physical bullying and verbal bullying were both used as boys began to further develop their language skills (Craig, 1998).

Types of Bullying

To further describe what bullying might involve, the Ontario Ministry of Education (2013d) has incorporated bullying types into their school climate documents when discussing bullying. Not only is it important to know the different forms and types of bullying that an individual may be exposed to, it is also crucial to understand how a child or adolescent may be involved in these reported incidents of bullying. These types of bullying are not as commonly seen in research in comparison to the forms of bullying, however, there are several types to be aware of. The first type of bullying is racial/ethnocultural, which is described as bullying that involves telling jokes that are racist, saying negative things that are specific to an individual's race/ethnic background, culture or skin colour, or treating them poorly based on their ethnicity, race, or culture (Ontario, 2013d). The second type is sexual, where the individual might report harassment that involves physical contact in a manner that is considered sexual, spreading rumours about another person that are sexual in nature, or making jokes and comments about

someone that are sexual (Ontario, 2013d). Bullying incidents can also be considered gender role based which involves using gender stereotypes when making jokes or comments, and treating someone poorly because of their gender identity (Ontario, 2013d). Next, the Ontario Ministry of Education (2013d) outlines another type called homophobic bullying/harassment. This can occur when individuals use terms that are related to homosexuality such as “gay” or lesbian” in a hurtful manner, making fun of someone because their parents are known to be gay or lesbian, or making jokes, comments and spreading rumours based on sexual preference (one’s perceived or actual identity). Another type of bullying is religion-based, this involves telling jokes that focus on religion, speaking in a negative manner about someone else’s religion, or treating them disrespectfully based on their religion (Ontario, 2013d). Disability-based bullying/harassment means that someone is treated badly because they have a certain disability. This can involve calling someone names, making jokes, and comments or making that individual or individuals feeling excluded due to their disability, or a disability some perceives them to have (Ontario, 2013d). The last type of bully/harassment mentioned by the Ontario Ministry of Education (2013d) is called income-based. This involves spreading rumours or gossiping about someone based on socioeconomic stereotypes, making jokes based on someone giving the off the appearance that they do not have much money, and treating them poorly because of where they might live.

Bully Status

Four categories have been used to describe how a person may be involved in the act of bullying (Arsenault et al., 2009). Three of the four categories are used to label individuals who are directly involved in bullying (Arsenault et al., 2009; Nansel et al., 2001), while the fourth is

used to characterize those who are not involved in situations of bullying, often known as the comparison group in studies (Austin & Joseph, 1996). The first category is used to delineate people who perpetrate the negative actions that are considered to be bullying; individuals who fall into this category are given the name of bully (Arsenault et al., 2009; Nansel et al., 2001). People who endure the bullying done by the perpetrators are known as the victim. The last category used to describe individuals directly involved in bullying are said to not only partake in bullying of others but also experience the role of a victim themselves; they are known as the bully-victim (Arsenault et al., 2009; Nansel et al., 2001). The group that is used to describe those who are not taking part in bullying incidents are defined as the not involved group or non-victims as they do not fit into the role of bully or victim (Austin & Joseph, 1996)

Characteristics of Bully Status Groups

Out of the four groups used to describe the involvement in bullying, three are often reported on and impacted by peer victimization (Houbre et al., 2006, Wolke et al., 2001a). Victims, bullies, and bully-victims all have special characteristics that may influence why they might take on the role they do in a bully situation (Olweus, 1993; Fekkes et al., 2006).

Victims of bullying are described as being more insecure, anxious, withdrawn, and depressed (Olweus, 1993; Craig 1998; Fekkes et al., 2006). As they get older they are also more likely to report having fewer friends than others which can result in feelings of being isolated and abandoned (Olweus, 1993; Nansel et al., 2004)

Bullies are often described as aggressive and impulsive individuals, with a need to be dominant, and reportedly lack empathy and guilt (Olweus, 1993; Craig, 1998). They are also more likely to use alcohol, carry a weapon and smoke (Nansel et al., 2001, 2004).

Bully-victims also face challenges with their social relationships and often have health concerns similar to victims of bullying (Nansel et al., 2001, 2004). They are also more likely to display high levels of alcohol use, and smoking and they tend to be worse off from their involvement in bullying incidents than both bullies and victims in many domains as well (Nansel et al., 2001, 2004). More specifically, bully-victims have been said to be the most at-risk group for all those involved in bullying situations (Stein, Dukes, & Warren, 2006). These individuals may have more problem behaviours such as delinquency and the use of common drugs and hard drugs, poorer psychological health, more physical injuries that require a bandage or assistance from a doctor, and negative school attitudes, bully-victims appear to be worse off than pure bullies and pure victims (Stein, Dukes, & Warren, 2006).

Currently, there is minimal research focusing on specific characteristics of individuals who are classified as not-involved in bullying incidents (Rivers & Noret, 2010). Based on the limited research on this particular group those not-involved report lower risk for depression, having thoughts of suicide or attempting suicide (Klomek, Marrocco, Kleinman, Schonfeld, & Gould, 2007). Compared to bullies, victims, and bully-victims, those classified as not-involved in bullying incidents also report feeling safe at school, feeling as if they belonged, and they were less likely to report feelings of sadness (Glew, Fan, Katon, Rivara, & Kernic 2005).

By using measures that allow for the categorization of participants into bully status groups, researchers have been able to offer more detailed information on the rates of engagement in bullying incidents.

Prevalence Rates

With a strong understanding of how people can be involved in bullying, researchers have evaluated how often bullying occurs, and how students are involved based on their bully status. All over the globe bullying has been the focus of many research studies, with the specific intent on uncovering the potential risks to a child or adolescent's well-being. An estimated range of bullying involvement (as a bully, victim, or bully-victim) between 15- 25% has been found all over the world (Nansel et al., 2001; Kaltiala-Heino, Rimpela, Rantanen & Rimpela, 2000; Wolke, Woods, Stanford, & Schulz, 2001b; Currie et al., 2012). In the United States, 29.9% of the sample in a study done by Nansel et al., (2001) reported being involved in incidents of bullying, with 13% of the participants being categorized as a bully, 10.6% as a victim, and 6.3% as a bully-victim. In Finland, Kaltiala-Heino et al., (2000) reported prevalence rates of 9% of girls and 17% of boys as having been involved in bullying in some form on a weekly basis. England's prevalence rates were amongst the higher end of the estimated range with 24% of participants reporting victimization (Wolke et al., 2001b), compared to Germany with victimized individuals sitting below the estimated range with 8% and 4.8% for bullies (Wolke et al., 2001b).

Perhaps more importantly given that the focus of this study is looking at bullying in Northern Ontario, Canada's rates of involvement in bullying fall within the estimated range of 15-25% (Currie et al., 2012). Remarkably, while there has been a decrease in reports of bullying from the 1993-1994 Health Behaviour in School-Aged Children: A WHO Cross-National Study (King, Wold, Tudor-Smith, & Harel, 1996) to the 2009-2010 Health Behaviour in School-Aged Children: A WHO Cross-National Study (Currie et al., 2012), there are still some concerning results for Canada and the level of bullying reported. In 1993-1994, Canada ranked 4th for

reports of victimization for participants aged 11 years old, 5th for victimization at age 13, and 6th for age 15 (King et al., 1996). Based on the most recent Health Behaviour in School-Aged Children Study, Canada ranks as follows for rates of victimization: 29th out of 38 for 11 year olds reporting victimization, 30th for rate of victimization at 13 years old, and 24th out of 38 for victimization rates at 15 years of age (Currie et al., 2012). So while rates are showing a decrease from 20-30% for girls and 26-39% for boys (King et al., 1996) to 8-17% for girls and 12-17% for boys in 2009-2010 (Currie et al., 2012), this comparison of data indicates that other countries are having a greater level of success with prevention and intervention programs, while Canada is falling behind (Craig & Pepler, 2007).

When bullying is compared across genders there appears to be consistent findings that boys are not only more liable to be involved as bullies but they are also more likely to be bully-victims (Nansel et al., 2001; Ybarra & Mitchell, 2007; Veenstra et al., 2005; Yang et al., 2006; Currie et al., 2012).

With the evidence showing troubling prevalence rates, researchers have looked further into the impact that peer victimization can have on the individuals involved. Studies have found that being victimized can have a serious impact on one's health and well-being (Houbre et al., 2006; Hoel, Faragher, & Cooper., 2004; Turner et al., 2013; Yang et al., 2006). Specifically, being a victim, even a bully-victim appears to result in an increase in serious physical health issues (Houbre et al., 2006; Wolke et al., 2001a), mental and emotional health concerns (Craig, 1998; Turner et al., 2013), along with academic issues (Strom, Thoresen, Wentzel-Larsen, & Dyb, 2013), social relations (Rigby, 2000; Veenstra et al., 2005) and behavioural problems (Gini,

2008). The wide range of literature on victimization indicates that bullying can effect multiple domains of functioning, which is a cause for concern.

Physical Health

More specifically, previous research has indicated that bullying can lead to detrimental health effects for individuals who are involved in bullying. The influence that peer victimization can have on children and adolescents is much more severe than cuts and bruises from being in a physical altercation (Knack, Jensen-Campbell, & Baum, 2011; Gini, 2008). Victims of bullying have been found to report a larger number of psychosomatic symptoms in comparison to individuals not involved in bullying (Houbre et al., 2006). In the study done by Houbre and colleagues (2006) they found that 85 individuals who classified themselves as bully-victims or victims were more likely than bullies or the control group to report over fifteen different symptoms. Bully-victims had more severe symptoms compared to all other groups in the study which included problems with their eyesight, dizziness, issues with digestion, difficulty breathing, along with heart palpitations, somatic disorders and skin conditions. Victims had all the same physical health issues along with cognitive difficulties. The results also showed that bullies and those not involved did not experience as many health issues, with the group described as not being involved in any part of bullying having the lowest number of physical health complaints in comparison to the other three groups (Houbre et al., 2006).

A study by Hoel, Faragher and Cooper (2004) also found alarming results with respect to the level of physical ailments being reported by victims of bullying. One interesting point made by the researchers was that individuals who reported extreme cases of victimization did not complete the full study due to being sick and in poor health at the time of the study. The lack of

completion could be a key indication that while the overall results from the study are concerning, the issue may be more detrimental than previously believed (Hoel et al., 2004). The study conducted by Hoel et al. (2004) had a total of 5288 participants complete and return a self-report questionnaire that focused on victimization within the previous 6 months, whether or not they witnessed bullying of others, and if they experienced bullying themselves previously. Results indicated that those individuals who reported very high levels of bullying were also more likely to report a greater number of health problems (Hoel et al., 2004).

Another study by Wolke, Woods, Bloomfield, and Karstadt (2001a) had 1982 children at the primary school level complete an interview where they were asked 12 questions about their experiences with bullying. The children's parents were also asked to complete a health questionnaire focusing on physical and psychosomatic symptoms for their child over the past six months. The results of the study indicated that sore throats, colds, problems breathing, nausea, and poor appetites were reported by victims at a significantly higher rate than those classified as bullies or not involved individuals (Wolke et al., 2001a).

On a more extreme level, there have even been links in bullying being a cause for changes in body chemistry (Knack, Jensen-Campbell, & Baum, 2011). During childhood and early adolescence, the body, including the brain, goes through significant developmental changes. Studies have found that bullying negatively influences the brains of victims during early childhood and adolescence. A two-part study was conducted with 107 participants in grade 5 to 8 by Knack et al. (2011) to investigate the link between bullying, level of physical health and the functioning of the neuroendocrine system. During the first phase of the study, the participants completed a questionnaire on their health and experiences of bullying incidents. The

second portion of the study was broken into two sessions where the first session involved showing the participants how to collect their saliva samples. The participants were asked to take their saliva sample for two days, a total of four times each day. The next session involved asking participants to prepare and deliver a speech, at which time their saliva was collected again to evaluate cortisol levels. The study found that the more severely someone was victimized the more the number and severity of health concerns; victims reported more visits to health care providers, and specifically more abdominal pain (Knack et al., 2011). With regards to cortisol levels, victims of bullying had lower levels of cortisol which was reportedly found in previous studies where individuals are exposed to stressful life events, therefore it is not to be seen as a normal part of life that all students endure (Knack et al., 2011). Ultimately, Knack et al., (2011) found that the same part of the brain that reacts to physical pain reacts to the social pain when being victimized. The results reported by Knack et al. (2011) are similar to the findings of Vaillancourt, Duku, Decatanzaro, Macmillan, Muir and Schmidt (2008) who found peer victimization to be linked to differences in Hypothalamic-Pituitary-Adrenal Axis activity after controlling for confounding factors such as aggression, and maltreatment.

All in all, it is evident based on previous research that individuals who face peer victimization are at greater risk and may develop more symptoms related to physical health issues than those individuals classified as not involved (Houbre et al., 2006; Wolke et al., 2001a; Hoel et al., 2004). These physical health concerns impact the well-being of these children and adolescents who find themselves to be targets of bullying. The negative impact that bullying can have on physical health shows that research needs to continue with prevention strategies but also

finding effective ways to assist victims in ensuring that they are not facing these detrimental attacks on their health and well-being.

Mental and Emotional Health

Not only do children and adolescents who are classified as being involved in bullying show physical health concerns (Wolke et al., 2001a, Hoel et al., 2004), but they also can develop mental and emotional health concerns from the distressing experiences related to being bullied (Craig, 1998; Turner et al., 2013; Due et al., 2005). More specifically, those who have been victimized may develop depression, anxiety (Craig, 1998), suicide ideation (Turner et al., 2013), symptoms of post-traumatic stress (Houbre et al., 2006), and low self-esteem (Yang et al., 2006) based on reports in previous literature.

Notably, Houbre and colleagues (2006) found that in their study of 546 participants from grades five to eight, victims of bullying reported more symptoms of depression than their comparison group. Another study conducted by Due et al. (2005) looked at the Health Behaviour in School-age Children survey completed by 123,227 students between the ages of eleven and fifteen from twenty-eight different countries around the world for potential psychological symptoms reported by victims. The results showed that several symptoms related to depression were reported by individuals classified as victims of bullying. The symptoms included: feeling tired, difficulty sleeping, feeling low, lonely, and feeling helpless. In the Diagnostic and Statistical Manual 5th edition (2013) the above symptoms are used in the diagnosis of Major Depressive Disorder and Persistent Depressive Disorder. Given the match up of symptoms from the DSM-5 to symptoms listed by participants there is a potential for those who are victimized to

show symptoms related to depression (Yang et al., 2006) and if enough symptoms are present the diagnosis of depression may be warranted (DSM-5, 2013).

Another symptom that is commonly linked to depression is suicidal ideation (DSM-5, 2013). Turner and colleagues (2013) did a study with 1,874 participants looking at victimization and mental health in adolescents. The results revealed a significantly positive relationship between being bullied by others and having thoughts of suicide. The positive relationship between being bullied and suicidal thoughts supports the belief that the more severely one is bullied the greater the increase in suicidal thoughts these individuals may come to have.

In addition to suicide ideation, Klomel, Marrocco, Kleiman, Schonfeld, and Gould (2007) looked at suicide attempts in adolescents who reported being victims of bullying. Students in grade 9 to 12 participated in the study and completed self-reports on depression, suicidal ideation, suicide attempts, and their involvement in bullying. A total of 2,341 students participated in the study. Results from the study indicated that the more a student was victimized, the higher the likelihood that they would report not only feelings of depression, and thoughts of suicide, but there was also a higher risk for the victims to attempt suicide (Odds Ratio = 4.49, *CI* = 95% (2.4-8.38) (Klomel et al., 2007).

In combination with the symptoms of depression, multiple studies have investigated the likelihood of anxiety developing for those who are involved in bullying (Yang et al., 2006; Craig, 1998). Children who have been exposed to peer victimization are at greater risk of developing symptoms associated with anxiety (Rigby, 2003; Hawker & Boulton, 2000). For example, Yang and colleagues (2006) conducted a cross-sectional study with 1,344 students in grade four. The participants individually completed a survey package that consisted of questions about bullying,

depression, anxiety, body image, coping strategies, and self-esteem. Parents of the participants were also asked to complete a questionnaire on their child's mental health and possible behavioural issues. Overall, anxiety was reported as a health concern for victims of bullying, more frequently for girls than for boys (Yang et al., 2006). Girls have been known to be more likely than boys to develop internalizing symptoms like anxiety (Yang et al., 2006; Luukkonen, Rasanen, Hakko, & Riala, 2010).

Interestingly, students who are exposed to bullying at the beginning of the school year are at greater risk for developing anxiety, however it may be a double-edged sword as those who are already displaying symptoms of anxiety when they enter school may open themselves up to more bullying than students who are not anxious individuals (Fekkes et al., 2006).

Another alarming mental health concern that is said to be related to being a child or adolescent dealing with bullying is potential symptoms of post-traumatic stress (Houbre et al., 2006; Campbell & Morrison, 2007). Houbre et al. (2006) focused on the possibility that individuals who are exposed to traumatic experiences such as being bullied may in turn show symptoms of post-traumatic stress. The researchers predicted that the more extreme the case of bullying the greater the potential for post-traumatic stress symptoms to arise. The sample contained 162 students from middle school and special education programs. The questionnaire used looked at whether or not the participants experienced peer victimization and the impact that could have on potentially leading to post-traumatic stress. The results indicated that if participants were classified as victims then they displayed higher levels of symptomology linked to post-traumatic stress. Campbell and Morrison (2007) found that traumatic events may be linked to bullying and psychotic phenomena even though bullying is not considered an

appropriate traumatic event in the current Diagnostic and Statistical Manual 5 (2013). With 373 participants between the ages of 14-16, Campbell and Morrison (2007) investigated the relationship between victimization and experiences known as predispositions to psychotic disorders such as hallucinations, paranoia, and dissociation. Self-reports and the use of an ambiguous stimuli which was white noise used to measure one's predisposition to auditory hallucinations were the methods used within this study, which was done with large groups of participants in one sitting. Based on the methods used within this study, a total of 6.6% of the sample reported frequent victimization (Campbell & Morrison, 2007). From this group of bullied students, a significant correlation was reported between being bullied and hallucinations, paranoia and dissociation. This link between psychotic phenomena and bullying further supports previous literature (Hardy, Fowler, Freeman, Smith, Steel, Evans, Garety, Kuipers, Bebbington, & Dunn 2005; Morrison & Petersen, 2003) and their findings that being bullied during childhood may be linked to psychosis in some people (Campbell & Morrison, 2007).

Furthermore, the emotion that is more often felt by those who are victimized by their peers is anger (Ortega et al., 2012). Regardless of the form of bullying (indirect, direct, or cyberbullying) Ortega and colleagues (2012) found that out of a range of emotions one might feel due to being a victim of bullying, anger was most commonly reported. Their study involved 5,862 students from schools in Italy, Spain, and England, and entailed the participants completing a self-report questionnaire that looked at victimization experience and emotions. The emotion portion of the questionnaire asked participants to check off any emotions they felt when they were being bullied (Ortega et al., 2012). In all three countries (other than the Spanish cyber-victims) anger was the most common emotion felt by victims during a bullying incident, with

feelings of embarrassment and defencelessness being the least reported emotions by victims (Ortega et al., 2012). While anger can be seen as a personal indicator of when one's autonomy is being violated (Rozin, Lowery, Imada, & Haidt, 1999), peer victimization can also lead to victims having a bad temper and being irritable (Due et al., 2005). In this study, 43% of males (bullied sometimes odds ratio= 1.59; bullied weekly odds ratio=2.27) and 49% of females (bullied sometimes odds ratio = 1.59, *CI* = 95%; bullied weekly odds ratio = 2.26) reported the prevalence of feeling irritated and having a bad temper (Due et al., 2005)

From an emotional health standpoint, one area of concern is a victim's level of self-esteem. The meta-analysis completed by Hawker and Boulton (2000) found that across multiple studies victimized individuals reported having lower levels of self-esteem in comparison to non-victims. Another study by Nansel and colleagues (2004) used the Health Behaviour in School-age Children (HBSC) study to compare the data focusing on health-related behaviours across all countries that participated in the study. The age range for participants was 11.5-15.5 years old, and the information was gathered from 25 different countries around the world (Nansel et al., 2004). There were a total of 84 questions to be answered by participants with psychosocial adjustment being broken down into five composites: health problems, emotional adjustment, school adjustment, relationship with classmates and alcohol use. Overall, psychosocial adjustment was found to be lower for every country involved in the study for individuals involved in bullying (bullies, victims and bully-victims) (Nansel et al., 2004) In particular the researchers found that when bullies were compared to victims, victims reported not only negative relationships with peers but also a lower score for emotional adjustment (Nansel et al., 2004).

These results match up with other studies that have found victims to be experiencing a wide range of negative emotions and having emotional problems (Ortega et al., 2012; Gini, 2008)

Other Domains of Well-being

Research on bullying has not only looked at physical and mental/emotional health concerns that are potentially linked to peer victimization but other areas of one's well-being as well. Another area that appears to be impacted by bullying is academic functioning (Wang, Vaillancourt, Brittain, McDougall, Krygsmag, Smith, Cunningham, Hartigan, & Hymel, 2014; Nansel et al., 2001; Rothon et al., 2011; Gini, 2008). Strom and colleagues (2013) did a study looking at bullying and academic achievement for adolescents. Their study was cross-sectional and involved 7,343 participants from Norway. The participants were students who were in grade 10 during 1999- 2001 from 56 schools in Oslo. Participants were required to provide their most recent grades, specifically for mathematics, written Norwegian, English, and social sciences. Sociodemographic information along with questions about sexual abuse, physical violence, bullying, teacher support, relationships with classmates were also part of the self-report questionnaire completed by the participants. Consistent with other research, a majority (75.4%) of the sample did not report any forms of abuse. The most prevalent form of abuse that was reported by the remaining portion of the sample was violence caused by another adolescent (16.9%). Results from the study identified a significant correlation between being bullied and having lower grades (Strom et al., 2013). Another important finding of this particular study was that if an individual experienced violence not only at school from peers but also in other ways (abuse, violence involving adults) they achieved even lower grades than those who were exposed to fewer encounters of violent behaviour based on self-reports (Strom et al., 2013). The authors

pointed out the potential influence on academics might not only impact the adolescents exposed to bullying during their time in the education system but also influence whether or not they continued with their education, and eventually it may impact what career they would aspire to obtain (Strom et al., 2013).

When looking at academic achievement and victimization, there appears to be a significant but negative relationship between the two variables. Wang and colleagues (2014) believed that a healthy school environment would have a positive effect on students' academic achievement; meanwhile ongoing victimization by peers would have a negative impact on academic achievement. Wang et al. (2014) recruited participants from a total of 50 elementary schools in an Ontario city to complete their study. There were 1,023 fifth grade students, who were asked to participate in the study by having their Ontario Student Records provided to the researchers with parental consent, and the students completed a self-report questionnaire on victimization and their views of their school environment. The parents of the participants also completed an interview. Academic achievement was evaluated based on the final grades given by all teachers at the end of the year and school absences were provided by the schools (Wang et al., 2014). Students who reported being bullied by peers had a poorer view of their school environment, leading to the conclusion that even a positive school environment is not sufficient to protect against poor academic achievement for victims (Wang et al., 2014). Results showed that with the increase in victimization there is a decrease in academic achievement based on the student's grade point average at the end of the school year (Wang et al., 2014). This may indicate that being bullied could play a role in how well a student does academically regardless of what the school environment is like.

Students are also less likely to achieve the benchmarks set out in each grade if they are exposed to regular bullying (Rothon et al., 2011). A study by Rothon and colleagues (2011) of 2,790 participants between the ages of 11-14 evaluated not only risk of depressive symptoms in bullied adolescents but also whether or not they could achieve the national achievement benchmarks in 2001. Participants completed a survey asking about their personal experiences with bullying, symptoms of depression, and social support levels. School records were used to see if students participating in the study were eligible for free meals at school based on parental income. Lastly, the participants educational achievement was measured two years after the original questionnaire was completed. The national benchmarks were provided based on examinations of mathematics, English and science with the intention of informing students if they were working at the level appropriate for their age or not. Overall, 45.6% of the sample obtained the national benchmark (Rothon et al., 2011). For those who reported being victimized the odds ratio of meeting the benchmark was 0.46, *CI* 95%, which meant that they were about half as likely to achieve the benchmark (Rothon et al. 2011). Therefore, bullying may have a serious impact on the likelihood of an adolescent achieving the set out national benchmark for academics.

Along with lower grades being linked to peer victimization, dropout rates are a concern for students, their parents and educators, therefore, dropout rates were evaluated by Cornell, Gregory, Huanh, and Fan (2013). This study was done as part of the Virginia High School Safety Study, which was developed to evaluate school environment and safety conditions within schools statewide (Cornell et al., 2013). Ninth grade students and teachers participated in the study by completing online surveys on school climate and safety conditions within their schools and

viewing a short video developed to explain the purpose of the study. Students who participated also filled out questionnaires on bullying and their perception of the amount of bullying that occurs at their high school. To evaluate crime in the areas around each school annual crime records were obtained from law enforcement offices. Dropout rates were provided by the Virginia Department of Education for the purposes of this study. There were a total of 7,082 ninth grade students and 2,764 teachers who participated in the study (Cornell et al., 2013). The researchers found that dropout rates could be predicted four years after the completion of the study based on the student and teacher reports of bullying occurring within Virginia high schools. If students do not drop out, there is an increase in the odds that they will be absent from school more often than students who are not victims of bullying (Rigby, 2003). Essentially students begin to avoid school whenever possible because they feel like they are alone, and that can lead to them not liking school (Rigby, 2003). For the students who are attempting to avoid school based on the possibility that they may be bullied if they go, they are more likely to also worry about going to school every day as they are not sure what will happen to them if they do attend class (Wolke et al., 2001a).

Likewise, students who are victims of bullying also have the potential to develop behavioural problems (Delfabbro et al., 2006). For example a study conducted by Gini (2008) involved 565 children between third and fifth grade who completed a self-report survey on their personal involvement in bullying incidents and whether or not they were having psychosomatic symptoms. Their teachers were asked to complete a strengths and difficulties questionnaire to assess the child's emotional and behaviour problems (Gini, 2008). The teachers' reports identified that students who were bullied were rated as having more issues regarding their

behaviour in the classroom and being hyperactive (Gini, 2008). More specifically they had more conduct problems (Odds Ratio=2.43, 95% *CI*, 1.18-5.03) and higher levels of hyperactive behaviour for victims (Odds Ratio=2.41, 95% *CI*, 1.05-5.53) than for bullies (Gini, 2008).

Moreover, being bullied also can lead those who are victims to feel that they are isolated from their peers and that they are, therefore, alone (Houbre et al., 2006, Due et al., 2005).

Bullying seems to be connected to having poorer relationships with peers that can lead to the feelings of loneliness often expressed by victims (Nansel et al., 2001). From the standpoint of social interactions with peers for students who are bullied there appears to be a stigma for other students being friends with the victims, leading them to avoid developing friendships with them and have a greater level of distaste for them (Craig & Pepler, 2007; Veenstra et al., 2005). The classmates of victims are less accepting of victims as the incidents of bullying continue throughout the school year (Kochel, Ladd, Bagwell, & Yabko, 2015; Shin, 2010). In turn, for the victims this lack of relationships with peers can lead to a gap in development on a social level (Craig & Pepler, 2007). For the victimized individual social interactions may be challenging for them as they progress through life and can lead to them withdrawing from social situations (Craig & Pepler, 2007).

Notably, with feelings of isolation, those who are bullied express more extreme levels of stress due to the bullying and the isolation and loneliness they feel (Newman, Holden, & Deville, 2004). Victims often find themselves to be excluded which has the potential to lead to a lack of social interactions with others, issues surrounding their ability to develop attachments which also can have a negative impact on their social development (Due et al., 2005).

In summary, being victimized has been shown to be related to multiple unfavourable outcomes (Houbre et al., 2006; Due et al., 2005) from physical (Hoel et al., 2004; Knack et al., 2011) to mental/emotional health concerns (Yang et al., 2006), to behavioural and social problems (Gini, 2008; Veenstra et al., 2005). It is clear that victims are in need of ways to survive bullying with minimal damage being done to their health and overall well-being, while progress must also continue to be made with respect to implementing effective prevention and intervention programs that stop incidents of bullying from occurring in the first place. Even after the bullying has been terminated symptoms related to physical and mental/emotional health can still linger (Arsenault et al., 2010). The potential for symptoms to remain after a person is no longer actively being victimized shows just how big the impact of being bullied can be on one's health.

Effects of Bullying in Adulthood

As a matter of fact, studies have found that children and adolescents are at risk while they are exposed to the bullying but that the effects can linger, even years after the bullying has stopped (Allison et al., 2009). While multiple studies have focused on the health risks associated with current episodes of bullying, more research is being done on the long term effects of peer victimization. Bogart, Elliott, Klein, Tortolero, Mrug, Peskin, Davies, Schink, and Schuster (2015) conducted a longitudinal study looking at whether or not being victimized was connected to reports of long lasting mental, emotional, and physical health problems. Participants started the study in grade five and completed a follow-up in grade seven and again in grade ten. A total of 4,297 students along with their parents completed all three portions of the study. The participants and their parents completed computerized self-interviews from the comfort of their

homes. The questions focused on bullying and victimization, psychosocial and physical health, symptoms of depression, and self-worth. Parents provided information on household income, education level, marital status, and other demographic information that the authors used as covariates (Bogart et al., 2015). Across all three phases of the study, bullying was found to be connected to reports of worse physical and psychosocial health, symptoms of depression, and feelings of self-worth. The results indicated that while being bullied during the present was a stronger predictor of poor health, previous experience with bullying predicted worse health ratings in the present after taking any present experiences of bullying into account (Bogart et al., 2015). From elementary school to high school, it appears as though negative health issues can remain even once bullying has stopped.

Not only has research shown that bullying effects can last throughout school, but other studies have found that negative health effects can be reported even into adulthood. For example, Allison and colleagues (2009) collected data from the South Australian Health Omnibus Survey through an interview given to individuals older than 15 years of age. The researchers gathered data that was from participants 18 years old or higher and were no longer in school. The total number of individuals who met this criterion was 2,833. The participants were asked to complete a self-report based on their experiences with bullying when they were in school previously as well as answer a questionnaire focusing on physical and mental health concerns that the participants would be experiencing at the time of the study. A total of 18.7% of the sample recalled being bullied when they were in school. When the group of victims was compared to the group that did not recall being bullied the victims were found to have significantly poorer outcomes in the following areas: bodily pain, physical health, general health, vitality, social

function, emotional and mental health (Allison et al., 2009). With one of five adults reporting incidents of bullying through this study and showing an increase in risk of developing emotional and psychosomatic disorders, the results further support the notion that bullying can have serious lingering effects. The participants who described themselves as victims of bullying reported higher levels of symptoms associated with anxiety and depression (Allison et al., 2009).

With that in mind, bullying not only impacts children and adolescents while it is happening, but these incidents also have the potential to affect the victim's life later on. Therefore, protective factors have been important for researchers in the area of bullying, given that if bullying behaviours cannot be stopped, only decreased, there need to be ways to assist students who are dealing with bullying so that they can live healthy lives. One protective factor that has been studied for adverse life events, such as bullying, is resilience.

Resilience

Resilience is a concept that has been the focus of much research for many decades (Luthar, Cicchetti, & Becker, 2000). The main idea behind resilience is that while individuals may be exposed to adverse or stressful events throughout their lives, they are still able to face those challenging experiences and move forward in a positive manner (Rutter, 1987; Luthar et al, 2000; Ungar, 2008).

Given that resilience is described as having both internal and external factors (Garmezy, 1993; Fergus & Zimmerman, 2005) it is not to be seen as solely a fixed personality trait as previously believed (Ungar, 2008). Ungar (2013) describes resilience as an interaction between an individual and his/her environment with the main point being that resilience should be seen as a process that a person will go through to limit poor outcomes. Therefore, resilience should be

defined as not only an innate capacity but a process whereby individuals can search for resources given by external sources close to them such as family, teachers, community members and then successfully obtain the resources being offered and use them to their advantage (Ungar, 2008).

For a person to be described as resilient they must first face an adverse event (Rutter, 1987) and then display a lack of psychopathology or development of mental disorder while continuing to show appropriate development and achievement levels in multiple domains of their lives socially, academically, and on an individual level (Everall et al., 2006).

Studies have found that children who were rated high in resilience also displayed lower levels of depression than children low in resilience (Hjemdal et al., 2007). Resiliency has also been reported to play a role in coping with the negative effects of being bullied (Plaskon, 2011). Ultimately, given the current body of research conducted on resiliency and bullying it seems as though being highly resilient may help victimized students to buffer against the detrimental effects of bullying.

History of resilience. Werner and Smith (1982) began looking at resilience in a group of children from before they were born (prenatal) until they reached early adulthood. This longitudinal study was conducted on the island of Kauia in Hawaii and had a total of 698 participants. In the beginning, the focus of the study was on the potential risk factors that can lead an individual to develop developmental disabilities. From there the study shifted focus onto how different influences in a person's life can cause enough of an impact to lead to health concerns that are detrimental to a child or adolescent's well-being and functioning (Werner & Smith, 1982). The primary intent of the study was to see if risks that arose during pregnancy and early life could affect people by the time they reached adulthood.

Participants were all selected during the same year through a door to door survey looking at demographics, and if a female was pregnant in the household, she was provided with a form that would allow for her to participate in the study if she chose to do so. All mothers that decided to participate were assessed by their physician for possible risks that could be a concern for a newborn child; these assessments also continued through the child's life until the study was finished. The assessments ranged from home visits at age one to pediatric and psychological exams at year two, and a follow-up at age ten and again at age eighteen (Werner & Smith, 1982). Based on these multiple assessments approximately one-third of the study participants were found to be at risk and long term mental, and educational services were required to assist those particular individuals.

Even though, the children who participated in this longitudinal study came from families living in poverty, those who were eventually deemed to show resilience had specific traits that stood out consistently throughout the sample. Based on the assessments conducted during the infancy phases, children who appeared to demonstrate resilience spent more time with their primary caregiver and received a considerable amount of attention from these caregivers. They were often described as having an easygoing temperament and being actively engaged in activities in their day to day life. Good social interactions between the infant and others were also noted (Werner, 2005)

Throughout toddlerhood, the resilient children continued to demonstrate positive social interactions with individuals they not only knew but with unfamiliar individuals when compared to non-resilient toddlers. The resilient toddlers displayed more success with communication, a higher frequency of moving around and alertness, playing with others, and development of skills

allowing for them to cope with situations on their own (Werner & Smith, 1982; Werner, 2005). Poor familial relationships and lack of support were recorded for children who later developed behavioural issues.

Once at the stage of childhood, being independent and competent were terms used by mothers to describe children who were resilient at age ten. As adolescents, the teens from the study who were said to be showing signs of resilience even in the face of adversities had grown into mature and responsible individuals. Lastly, by adulthood they were more likely to have a positive view of their family members, recalled school being an enjoyable time in their lives, displayed high levels of self-esteem and strived to better themselves (Werner & Smith, 1982).

Factors found outside of the individuals within this study that appeared to influence resilience were things like growing up in a smaller household, forming positive relationships, mothers had regularly been employed, structure such as rules and values were apparent within the home, and the participants and their families had access to services for health, education, and social means (Werner & Smith, 1982; Werner, 2005).

Evidently, particular characteristics appear not only within the individual such as competence, intelligence, and a good temperament (Werner, 1995), but also externally through the assistance of caregivers, and other adults in a child or adolescent's life such as siblings and grandparents (Werner & Smith, 1995; Werner, 2005). The individuals in the study reached adulthood and were successful in obtaining jobs, settling down with a significant other, displayed dedication to their education and ultimately did not fall into the potential traps set up early in life for these individuals (Werner, 2005).

Another study that paved the way for research on resilience was conducted by Garmezy, Masten, and Tellegen (1984). Project Competence looked at risk and protective factors, competence levels, and possible development of psychopathology. The project was specifically focused on children whose parents were diagnosed with schizophrenia. The study spanned twenty years and involved two hundred children that were subject to interviews (parents and children), measures of stress and competence along with other measures looking at the child's attributes. Measures were completed by not only the parents and children but by teachers and peers as well. The children who were exposed to stressors during this study, yet showed personal qualities associated with being emotionally or mentally strong and being competent were not affected as much as those with low competency levels and emotional/ mental strength. Based on the reports from peers and teachers which were found to be the more accurate reports, it was important to note that a child with a higher level of intelligence based on testing were better equipped to handle adversity and significant stressors compared to those in the study with lower intelligence levels. Being disruptive and having behavioural problems, was associated with increased reports of stress for those students (Garmezy et al., 1984).

These are two studies that have been involved in paving the way for research on resilience as it changed from trying to find out what might lead to psychopathology and maladjustment but to factors that may prevent it as not all individuals who were expected to develop psychopathology did (Garmezy et al., 1984; Werner & Smith, 1982; Werner, 2005). Instead, they were able to take life's stressors and negative events in stride and push forward in a positive manner (Luthar & Zigler, 1991).

Protective and risk factors. The shift in resilience research led to differentiating between vulnerability and resilience. On the opposing side of resilience is the theory of vulnerability, whereby when someone is exposed to possible risk factors they are more likely to face maladaptive behaviour or maldevelopment (Garmezy, 1993). Vulnerability can be seen as the opposite of resilience as resilience is seen as the ability to adapt even in the face of adverse like events and stressors (Garmezy, 1993). These two ends of the spectrum are also linked to risk and protective factors. Risk factors are what can result in someone being less resilient and protective factors can assist a person in successfully overcoming adversity (Garmezy, 1993).

Protective factors are believed to help promote resilience in times of significant stressors (Luthar & Zigler, 1991). More specifically these factors assist people in moving away from being vulnerable and towards favorable outcomes (Luthar, 2000). Three broad protective factors that have guided research in regards to protective factors associated with resilience are the individual, their families, and the community or external resources (Luthar & Zigler, 1991; Everall et al., 2006).

At the individual level several traits are associated with positive adjustment such as one's locus of control (Luther et al., 2000), level of intelligence (Everall et al., 2006; Garmezy et al., 1984), self-esteem (Dumont & Provost, 1999), and being a socially competent person (Luthar., 1991).

At the familial level being supported by one's family members (Bowes et al., 2010; Dumont & Provost, 1999) and having feelings of being cared for by a parental figure (Rutter, 1987) leads individuals to be more likely to be resilient in a time of need.

Lastly on a larger scale, the community or other external sources can help to foster resilience through relationships and the availability of activities around the community that the child or adolescent can be involved in (Engle et al., 1996).

Provided that a person has a wide range of protective factors available to them, they are more likely to overcome adversity and stressors with a better outcome than people exposed to risk factors and limited protective factors (Garmezy, 1993; Luthar & Zigler, 1991).

Social Support

One of the key factors used to describe resilience is the influence of social support (Ungar, 2008; Dumont & Provost, 1998; Garmezy, 1993). Malecki and Demaray (2003) describe social support as “an individual’s perceptions of general support or specific supportive behaviours (available and acted on) from people in their social network which enhances their functioning [...]” (p. 2).

The definition of social support has been challenged by researchers as many different operational definitions have frequently been used based on interpretations of the meaning by multiple researchers (Tardy, 1985). The literature has often looked at social support as a global aspect instead of evaluating social support as being made up of several different sources (Winemiller, Mitchell, Sutliff, & Cline, 1993). As individuals have social networks that are made up of multiple people, and not all people may aid the individual in a time of need, it became clear that a multifaceted definition would be more effective for evaluating social support (Winemiller et al., 1993). Tardy (1985) has developed five concepts that should be used to ensure that the definition of social support can be more consistently defined throughout the literature. It is believed that social support is not just something that a person might receive when it is needed,

but that individuals can also in turn offer social support to others. Next, when considering the availability of possible support systems it is important to think of not only whether or not the support is available, but whether or not it will actually be used (Tardy, 1985). He also makes note that researchers need to understand if they intend on evaluating or describing social support in their study. For a researcher to evaluate social support, they would be required to focus on the overall level of satisfaction with the support. Whereas if researchers are looking to describe social support they are simply looking to provide a definition of what social support is. The fourth concept Tardy (1985) considered to be key for the definition of social support is that it will not always be offered in the same manner, it is very dependent on the situation the individual is facing. The support that one may require in one situation may differ from a previous situation or a future situation; therefore, various forms of social support are necessary. The fifth and final concept involves the idea that a person must have a network of people whom they can approach and receive social support from in times of need. One's network can consist of family members, friends, others from the community such as neighbours and teachers and more as mentioned by Tardy (1985).

Forms of Social Support

House (1981) categorized four main types of social support that are said to be perceived by individuals when they are in need of support from friends, family, teachers, and peers (Malecki & Demaray, 2003). The four types of social support are emotional, informational, appraisal, and instrumental (Tardy, 1985). House (1981) describes emotional support as receiving empathy from someone who the individual trusts and believes they care for them. Informational support means being provided with advice during times of adverse life events that will,

hopefully, guide the person to be able to help themselves (House, 1981). Instrumental support is the utilization of behaviours that are viewed to be helpful to the person seeking the support and can also be concrete or tangible materials, such as loaning someone money. The last of the four categories, appraisal support, which is thought of as feedback being given as support (House, 1981). Depending on the type of support needed studies have found that certain people in an individual's life can offer one or more of the forms of support.

The Social Support Theory

When looking at social support and its potential effect on bullying and victimization it is important to note that social support has been said to play a role in one's health and well-being (Cohen, Gottlieb, Underwood, 2000 p.10). For bullying, it appears as though social support can be a possible protective factor for victims (Bowes et al., 2010; Aresenault et al., 2009). The premise that social support can act as a protective factor has been described within Cohen and colleagues' (2000) social support theory. The social support theory states that having support can help to buffer against the negative health effects stress may have on an individual. The theory also indicates that support acts to reduce deleterious effects in two different ways (Cohen et al., 2000). The first method is described through the main-effect model. This model is based on the expectation that social support is beneficial to everyone; even when there is no adverse event evident in the person's life (Cohen et al., 2000). The second model is known as the stress-buffering model, which states that social support will only be beneficial to people who are currently expressing some form of stressor in their life at that particular moment (Cohen et al., 2000). Social support is said to be effective if offered directly from one person to another (Cohen

et al., 2000). Based on current literature the findings as to what model of social support best fits with bullying have been found to be inconsistent (Galand & Hospel, 2012).

Support for the Main Effect Model. Herrero, Estevez, and Musitu (2006) did a study with 973 students between the ages of 11-16 years old to look at the role that parents and teachers may play in psychological distress for adolescents. Participants completed self-report measures on deviant behaviour at school, experiences of peer victimization, their perception of communication with parents/guardians and perceived stress. Teachers were asked to rate the relationship they had with the students who participated in the study. The results from the participants and the teachers' reports indicated that being a victim of bullying was not linked to reported relationships with adults. These results supported the main-effect model, by indicating that regardless of being victimized or not, having support from a parent or guardian did not offer any relief from mental health issues (Herreo, Estevez, Musitu, 2006).

Support for the Stress-Buffering Model. On the other hand, Martin and Huebener (2007) found support for the stress-buffering model. A total of 571 participants from grades 6-8 completed self-report scales looking at victimization, their level of satisfaction with their lives, and their positive and negative affect levels. Using the data collected from the self-reports the researchers found that social support was shown to increase life satisfaction and positive affect for the individual's exposed to bullying. Therefore, social support was reported to be a protective factor for those individuals who were exposed to a current stressor compared to the individuals who did not report a stressor in their life at the time of the study (Martin & Huebener, 2007). Studies done by other researchers have also found inconsistent results with some studies

supporting the main-effect model (Baldry, 2004; Galand & Hospel, 2012) and others supporting the stress-buffering model (Demaray, Malecki, & Delong 2006; Rigby, 2000)

Family as a Social Support Network

One common group that is often studied when looking at social support is an individual's family. The family may be seen as a key support system for children as they spend the majority of their time early in life with their caregivers. By having a strong support system within the home, children can cope better with challenging situations (Bowes et al., 2010). More specifically children who have or perceive that they have the support are better able to cope successfully with the negative experiences of being bullied (Arsenault et al., 2009, Rethon et al., 2011). For example, Arsenault and colleagues (2009) reviewed current empirical studies to determine if victimization could result in a negative impact on mental health and whether or not these health concerns should be the forefront of bullying prevention programs. Families stood out as an important support group for those experiencing victimization and therefore, it was suggested that family members could play a key role in intervention and prevention strategies (Arsenault et al., 2009). More specifically, they pointed out that parents can assist students with coping with stress related to being bullied, as well as using positive parenting skills, such as showing warmth and fostering supportive relationships with their children (Arsenault et al., 2009). Other research has found that social support is not only beneficial for coping with negative experiences linked to victimization but to decreases in emotional and behaviour problems (Yeung & Leadbeater, 2010). Bilsky et al. (2013) found that children who had higher levels of support from parents/guardians showed lower levels of depression. Moderate, not high levels of social support were found to play a protective role by Rethon and colleagues (2011).

More specifically, Rothern et al. (2011) reported that too little or too much social support would stop serving a beneficial role for victims. This indicated that a balance is necessary; with too little support the individual has no one to assist them with their needs but too much support can be overbearing and leave the person less likely to want to deal with the issues at hand themselves (Rothern et al., 2011). This research provides further insight into the effects of social support and the idea that while it can be beneficial, it may come from different sources depending on the individual's age, and that there needs to be a balance for it to be effective.

Furthermore, Yeung and Leadbeater (2010) conducted a two-year long study with 580 adolescents to evaluate the role that emotional support from adults can play on the negative effects of victimization. Participants completed an individual interview at their home or another place of their choice. The interview questions focused on self-reports of peer victimization, parental emotional support, teacher emotional support, and emotional and behaviour problems. This interview was conducted twice over the two-year period of the study (Yeung & Leadbetter, 2010). The results indicated that high levels of perceived support from fathers was associated with lower levels of emotional and behavioural problems across the two-year period of the study, and mother's emotional support was found to moderate the effects of physical bullying and emotional maladjustment at the second interview stage (Yeung & Leadbeater, 2010). These results show that parental support is important and in certain situations a father or a mother's role may be more influential.

Bilsky et al. (2013) conducted a longitudinal study involving 1,888 participants that looked at the influence of parental support on being victimized and potential symptoms of depression as a result. The study found that having support from parents when dealing with

bullying helps to decrease symptoms of depression and individuals ranked as having high levels of depressive symptoms in turn reported lower levels of support from their parents (Bilksy et al., 2013).

In addition to the idea that parental support can act as a protective factor or buffer against victimization is whether or not children and adolescents believe parental support is important to them when it is needed. For instance, Demaray and Malecki (2003) investigated not only the perceived frequency of social support for bullied individuals but also the importance of perceiving such support. A package with a bullying questionnaire and the Child and Adolescent Social Support Scale was completed by 515 students in grades 6-8. Overall, the individuals who were not involved in bullying had the highest level of perceived social support compared to other bully status groups (bully, victim, and bully-victim). When looking at perceived support from parents, victims of bullying did not recognize less support than the comparison group (Demaray & Malecki, 2003). Out of support from one's family, teachers, peers, friends and other personnel at school; having support from parents was perceived to be very important to those who have been dealing with bullies (Demaray & Malecki, 2003). Therefore, having support from parents when necessary is valued by children and adolescents and ultimately can be beneficial to their health and well-being.

Not only is support important but it can be effective in combatting the negative outcomes associated with bullying regardless of the specific type of bullying their child is exposed to (Wang, Iannotti & Nansel, 2009). One familial factor that can have a positive impact on relieving the negative emotional and behavioural consequences of bullying are having a positive atmosphere within the home where there is warmth from the parents, especially the mother, and

from other family members such as siblings (Bowes et al., 2010; Bowes, Maughan, Ball, Shakoor, Ouellet-Morin, Caspi, Moffit, & Arseneault, 2013).

Social Support from Teachers and School Personnel

As children grow up, they begin to spend more time outside the home and in school. Therefore, while parents and family members were the sole support system, that begins to change and expand to people involved in the child's education; such as teachers and other school personnel (Davidson & Demaray, 2007; Yeung & Leadbeater, 2010; Frisén et al., 2012). Davidson and Demaray (2007) looked at the possible relationship between social support and being a victim of bullying, as well as potential externalizing and internalizing distress that can arise. A total of 355 middle school students filled out three questionnaires: the Child and Adolescent Social Support Scale, the Bully-Victim Scale, and the Bully Victimization Distress Scale. For males in this particular study, teacher support appeared to act as a buffer against internalizing distress (Davidson & Demaray, 2007). Along with support from teachers, males found school social support to be helpful when dealing with occurrences of victimization, whereas, females teacher support was not as helpful as parental support (Davidson & Demaray, 2007). If the individual who was being bullied perceived a higher level of support from teachers, classmates, and school personnel then they were less likely to report concerns with internalizing distress, whereas, those who did not perceive high levels of support from teachers, classmates or school personnel reported more concerns surrounding issues with internalizing distress (Davidson & Demaray, 2007).

Interestingly, for individuals who reported being victims of bullying, it was stated that teachers' emotional support was linked to lower levels of emotional and behavioural issues even

when compared to family support from mothers and fathers (Yeung & Leadbeater, 2010). Specifically, the support from teachers decreased negative outcomes when the bullying was relational in nature, with victims who did not perceive high levels of support from their teachers had higher levels of emotional and behavioural problems in comparison to the individuals who were victimized but had high levels of support from their teachers (Yeung & Leadbetter, 2010). It was suggested in the study that given the role of the teacher within a school setting, they are often the first adult to hear about a bullying incident and are around adolescents for a significant amount of time during the school year (Yeung & Leadbeater, 2010).

Another study by Frisé et al., (2012) involved 273 participants who were 18 at the time of the study and had previously been bullied. The participants completed a survey online that evaluated previous experience as a victim and what they believe stopped the bullying. Of the 273 original participants recruited, 255 responded as to why they thought the bullying had stopped in their given situation. Overall the participants reported the most frequent reason for why the bullying had stopped was that school personnel stepped in and effectively addressed the situation between the victim and the bully. These results indicate that while not everyone agreed that this was the best solution it was provided by 25% of the participants in the open-ended question asking them how the bullying had eventually stopped. This information provides some support for the idea that teachers and others within the school environment that stepped in to assist students who were dealing with bullying had a chance of stopping it. Support from these individuals can, therefore, be important to some students dealing with peer victimization. Support from teachers has also been said to buffer against health issues related to bullying specifically if a victim is exposed to relational bullying (Yeung & Leadbeater, 2010).

Paired with the support from the previous literature that teacher support may be advantageous for victims is the study by Johnson (2008). He found that if teachers took the time to listen to their students, provided the students with a positive atmosphere, and took an interest in all of their students on an individual level then in turn their students felt supported. Ultimately if a child feels that they have sufficient support not only within their families but at school they tend to display less overall distress when they encounter bullying (Davidson & Demaray 2007; Marsh, Evans, Weisel, 2009). Therefore, support is not only sought by family members but also by individuals outside the family unit.

Social Support from Friends and Peers

Another group that may provide support to an individual faced with bullying in the school environment is peers and friends. These individuals can potentially spend a majority of their days during the school year together all the way through their educational career up to high school or longer. One study done by Rethon et al. (2011) looked at the possibility of support from friends being an effective buffer against mental health concerns and negative academic outcomes. Based on self-reports from 11-14 year old participants, information on bullying, depression and social support were gathered alongside levels of educational achievement. Two years after the self-reports were completed the researchers were able to evaluate if social support from friends was more of a buffer from bullying than if the support was received from family members. The researchers found that having friends led to lower chances of being bullied in the first place but if an individual was exposed to bullying yet perceived that they had social support it seemed to act as protection from achieving poorly in the school setting (Rethon et al., 2011).

In Canada, a study conducted by Hodges, Boivin, Vitaro, and Bukoski (1999) looked at 533 participants in grades four and five to see if having a best friend proved to be beneficial for victimized students. Participants completed questionnaires looking at loneliness and victimization while teachers also filled out a behaviour questionnaire that looked at internalizing and externalizing behaviour problems. The results showed that having a best friend predicted a decrease in peer victimization over a period of a year, even the perception of friendship appeared to decrease the likelihood of bullying being reported. Overall, while perceiving friends helps to decrease slightly the odds of being victimized, having a best friend is helpful for victims as a possible protective factor (Hodges et al., 1991). If victims perceive high levels of social support from friends there appears to be a decrease in victimization a year later (Kendrick, Jutengen, & Stattin, 2012) which supports the results found by Hodges et al (1999). A critical piece of information linked to the decrease in victimization may, in fact, be the quality of the relationship, as friends may influence the victim by defending them while also being able to offer them help when the bullying does occur (Kendrick et al., 2012). Perceiving that one has a strong peer group may act as an effective buffer against victimization (Holt & Espelage, 2007).

Having these relationships may be a crucial factor in assisting victims in fostering and protecting their overall health and well-being. Students who have reported being a victim and did not believe that they had social support appeared to be at greater risk of developing health concerns than those who perceived that they had the necessary support (Rigby, 2000). This information can also be helpful for the development of prevention and intervention programs.

It is also important to mention a current gap in the literature regarding social support for those who are victims of bullying. At this time there is a vast amount of research involving

parents, teachers, peers, and friends and how these groups may play a role in protecting against the damaging effects of bullying (Malecki & Demaray, 2003). However, very little research has been conducted with the focus being on other potential support systems in the community. Research is lacking on community factors and social support such as churches, places of employment for adolescents, community groups, and even health services (Engle, Castle, Menon, 1996).

It is clear that social support may be a key factor in decreasing the negative effects bullying can have on victims. Bullying happens to a number of students within the education setting each year, and it has become crucial for school boards and schools to take the information provided by the literature on bullying and protective factors and utilize it to assist students in need. Social support from a wide range of networks is becoming an integral part of reducing reports of bullying through the development and implementation of prevention and intervention programs.

Prevention and Intervention Programs

As bullying continues to be a concern, more focus has been put into developing prevention and intervention programs for schools to utilize (Craig & Pepler, 2007; Bryn, 2011). Dan Olweus, a pioneer in the world of bullying research, has even developed a bullying prevention program that can be used by schools if they see fit (Olweus & Limber, 2010). Through programs such as the Olweus Bullying Prevention Program, it appears as though while bullying is still prevalent in schools it can be shown to decrease if school-wide efforts are being made (Olweus & Limber, 2010).

In 1983, the Ministry of Education in Norway launched a nationwide anti-bullying campaign after it was reported that three adolescent boys had committed suicide as a result of being victimized by peers (Olweus, 1993). The Olweus Bullying Prevention Program (OBPP) was developed as part of the campaign to assist with reducing ongoing bullying reports, as well as decreasing the likelihood of bullying occurring in the future (Olweus & Limber, 2010). The program was also developed with the intent of creating more positive peer relationships and making the school environment a place where students could function better (Olweus, 1993). Intervention and prevention strategies originally focused on three separate levels: the individual, the classroom, and the school as a whole. At the individual level the program involves conversations between the victim and bully, discussing the incidents with parents/guardians, getting assistance from students not involved in the situation, and if that does not help, changing of class or even schools was a suggested option for the victim or bully (Olweus, 1993). The classroom level involves all students within a class and focuses on developing class anti-bullying rules, class meetings, role playing activities, and cooperative learning (Olweus, 1993). Lastly, at the school level there must be better supervision during recess and lunch periods, meetings for staff and parents, teacher groups and parent circles (Olweus, 1993). Since the program was utilized in the United States a fourth component was added which involves the community (Limber, 2011) This additional level involved adding a few community members to the committee that ensures the program content is being implemented within the schools (Limber, 2010). The community members were to try and find support systems outside of the school setting that could be utilized by sharing with others about the prevention and intervention strategies of the program (Limber, 2010). The Olweus Bullying Prevention Program has been

reported to lead to a 50% reduction in bullying incidents over a two-year period. With better results occurring after the second year compared to the first year, this suggests that programs do not begin working immediately and take time and effort to develop within a school setting (Olweus, 1993).

The Olweus Bullying Prevention Program showed great promise after the rate of bullying incidents were reported to decrease significantly based on the research done in Norway (Limber, 2010). With several more follow-up studies to be conducted in Norway after the first programs positive results, with results indicating that the program continued to be effective in reducing the self-reports of being bullied five years later (Olweus & Limber, 2010). Based on the positive results found in Norway for the Olweus Bullying Prevention Program, school-based programs were implemented in the United States to see how effective the program could be (Olweus & Limber, 2010). There were several studies conducted all over the United States, in South Carolina, Philadelphia, Washington, California, and Pennsylvania (Limber, 2010). Other programs that were developed based on the Olweus Bullying Prevention Program have also been implemented in Belgium, Canada, Germany, and the United Kingdom (Limber, 2010). Ultimately, the studies reported mixed results, with the reduction rates not being as high in comparison to the original program (Limber, 2010).

Another program found in the literature that is mentioned in comparison to the Olweus Bullying Prevention Program is the KiVa program by Christina Salmivalli and her colleagues. KiVa is an acronym for “Kiusaamisen Vastaa” which means “against bullying” in Finnish (Hutchings & Clarkson, 2015). The program was developed as a whole school program for students between the ages of 7 to 15 (Hutchings & Clarkson, 2015). This program offers training,

resources, class lessons, online activities, and parental advice and support based on the idea that bystanders can play a key role in the decrease of bullying incidents (Hutchings & Clarkson, 2015). With three separate units suitable for different age groups, the lessons are done twice a month. Key concepts of the lessons are about being part of a team, learning about emotions, acceptable group interactions, and dealing with group pressures (Hutchings & Clarkson, 2015). A wide range of activities are utilized to make the lessons more engaging and hands on for students such as discussions, role playing scenarios, games, group work, and classroom activities. There also is a website available for parents (Hutchings & Clarkson, 2015). Between 2012-2013, fourteen schools in Wales evaluated the KiVa program within several schools. The participants were aged 9-11 years old. The staff all received a one day training session from the program creator (Hutchings & Clarkson, 2015). The bullying questionnaire was an internet based self-report using some questions found on the Revised Olweus Bully/ Victim Questionnaire (Olweus, 1996), that was filled out pre and post-program implementation. Based on the pre-/post test results there was a significant reduction in victimization and bullying behaviours (Hutchings & Clarkson, 2015). The teachers also assessed the program and described it as easy to implement and to engage 75-100 percent of the students.

Multiple other programs have been developed with the hopes of successfully decreasing the percentage of bullying being reported. In the United States programs such as “Stop Bullying Now” have been developed after the results from research continued to show the deleterious effects bullying can have on those involved (Bryn, 2011). This program was developed by the United States Department of Health and Human Services Health Resources and Services Administration as a nationwide anti-bullying campaign (Bryn, 2011). The target group for this

campaign was 9-13 year olds as well as parents/ guardians. It began in 2001 with the intention to raise awareness, prevent and reduce bullying, and identify interventions that could be helpful for victims (Bryn, 2011). This prevention strategy was set up as a website that anyone could access to gain information on what they can do to assist with decreasing bullying (Bryn, 2011). This initiative has found to be effective in building connections with community-based partners to raise awareness and deal with bullying behaviours. Key community-based partners include education sectors, health and safety, law enforcement, and mental health (Bryn, 2011). This campaign has continued for over a decade, and Bryn (2011) reports that it helps to empower youth to step up and stop bullying.

In Canada, a program known as Promoting Relationships and Eliminating Violence (PREV-net) has been developed to assist with the research and planning of prevention and intervention strategies, as well as creating assessment tools, and policies with and for a wide range of groups within the community (Craig & Pepler, 2007). Crucial to this program is the change from lackluster strategies to evidence-based research being key for the development of prevention and intervention programs. The Canadian government has partnered with education systems and other community programs with the intention to continue to find research-based ways to decrease bullying and battle against the effects it has on victims health and well-being (Craig & Pepler, 2007).

Pepler, Craig, Ziegler, and Charach (1997) have also looked at the intervention plans being utilized in Toronto, Ontario. This program was developed before it became a provincially mandated requirement from the Ministry of Education to create and implement prevention and intervention programs in every school in the province. The program involved multiple levels

such as parents, teachers and school personnel, and students. Mainly it was formed as a pilot study to mirror intervention programs used in Norway (Pepler et al., 1997). At the school level, there was a conference that was offered to provide extensive information on what bullying and victimization may entail for teaching staff. Supervision was also increased during lunch and recess periods, and rules regarding appropriate behaviour were discussed and posted for students. Parents were informed of the pilot study through meetings and a newsletter in the hopes that they would discuss bullying with their children and be aware of the warning signs of potential victimization. In the classroom teachers were asked to try and incorporate bullying information into learning when possible, through skits, lessons, and even classroom discussions. The bullies and victims were to be talked to together and independently, as well as with parents/guardians. Based on these strategies being implemented over eighteen months, with four separate schools taking part in the pilot study for grades from kindergarten to grade eight (n= 1,041) the researchers found a thirty percent decrease in reports of bullying. This pilot study was just the beginning of prevention and intervention programs making their way into the school system in Ontario. Now with the implementation of prevention and intervention programs in every school in Ontario, the pilot from Toronto can be seen as a blueprint for the more recent programs. Changes have been made, but similarities can be seen.

In Ontario, The Accepting Schools Act (Bill 13) was passed in 2012 with the purpose being to amend the previous Education Act and to further support the idea of building school environments that are inclusive for all students, and more importantly safe (Ontario, 2013d). Bullying is address under Bill 13 as it is considered an inappropriate behaviour that is not to be accepted within the confines of school (Ontario, 2013d). Bill 13 lays out several expectations for

school boards and schools to uphold such as implementing policies with special focus on prevention and intervention programs for peer victimization, appropriate consequences for bullies such as suspension or expulsion when necessary, and training for teachers as well as other school personnel on a yearly basis (Ontario, 2013d).

Correspondingly, the policy/program set out by the Ontario Ministry of Education (2012a) as part of Bill 13, Accepting Schools Act is known as memorandum no. 144 - Bullying Prevention and Intervention. Currently, the ongoing purpose of this policy is to give school boards in Ontario guidelines on how to update their previous policies on bullying if they are not up to par for prevention and intervention programs focusing on bullying. The changes must be in line with the Education Act and ensure that all students have an equal opportunity to learn in an environment that is safe and fosters their development. The key to this policy is the idea of a positive school environment that is said to be an approach involving teachers, students, parents, and now the community as a whole. Memorandum no. 144 states that early intervention is necessary to assist in reducing incidents of bullying and decreasing the negative impact bullying can have on health and well-being for children and adolescents. With the appropriate support, those involved in bullying, as a bully, victim, or bully-victim must receive assistance in learning how to act in social situations and gain the fundamental skills for interacting with others. If support is provided then, the belief is that the overall exposure to bullying will show a decline within schools. The policy/program no. 144 requires all school boards to have a set plan in place that is to be utilized by all schools in their district (Ministry of Education, 2012). These plans are established with the help from students, school personnel, parents, volunteers, school council as well as the community. This extensive process must be reviewed a minimum of every two years.

Evidence-informed practices are what must be used in the development of the program, not just strategies implemented by individuals because they believe they will be effective (Ontario, 2012).

Rationale for the Current Study and Hypotheses

The purpose of this study was to examine the influence social support might have on decreasing the number of health concerns reported by victims of bullying in grades seven and eight. Given the wide range of research done on social support, there have been mixed findings with regards to what support systems are capable of buffering against the negative health outcomes. Some studies have found that parents are more beneficial (Arsenault et al., 2009; Demaray & Malecki, 2003), while others have found teachers (Yeung & Leadbeater, 2010) or peers and friends (Rothon et al., 2011; Hodges et al., 1999) have a greater impact than other support groups. There is also a lack of research done looking at how others from the community such as coaches, babysitters, or neighbours may play a role in offering social support to victimized children or adolescents (Engle et al., 1996). This study looked at parents, teachers, peers, and friends as a majority of previous studies have in addition to also focusing on community members to see if there is any potential impact being made by these social support networks.

Past research suggests that having support from parents helps to alleviate symptoms of depression (Bilsky et al., 2013). Social support was also reported to act as a buffer against internalizing distress in those who reported being victimized (Davidson & Remarry, 2007). Victims who had low levels of social support showed an increase in mental health concerns compared to non victims (Stadler et al., 2010). In the current study, it was hypothesized that

having support or perceiving support from social systems such as parents, teachers, classmates, close friend(s), school personnel, and people within the community would act as a buffer against health concerns previously linked to being exposed to bullying. More specifically, it was predicted that victims who perceived that they had high levels of social support would report lower levels of health concerns compared to those not-involved, which supports the stress-buffering model developed by Cohen et al. (2000).

Resilience is a concept that consists of two factors: internal and external factors (Garmezy, 1993; Fergus & Zimmerman, 2005). Internal factors focus on the individual and possible traits that would be beneficial in times of high stress such as coping skills and competence (Zimmerman & Fergus, 2005). External factors include receiving assistance from social systems such as family, friends, teachers, and other members of the community (Ungar, 2008). Social support systems, therefore, appear to play an important part in the development of one's level of resilience. This study looked at whether or not resilience and social support are positively and strongly correlated with one another as the most commonly used definition of resilience includes social support as being key. It was hypothesized that perceived social support and resilience would be highly and positively correlated with one another.

Lastly, the victims and those not involved participants were compared against one another to see if differences were consistent with the previous studies regarding level of health concerns for each group, level of overall social support being perceived, and their level of resilience.

Houbre et al. (2006) conducted a study looking at the different health concerns linked to bullying whether they were involved as a victim, bully-victim, or bully. They found that bully-

victims had the highest mean scores for physical health concerns, with victims reporting the next highest mean scores and bullies in third place for mean scores on physical health concerns. Those not involved in bullying showed the lowest number of health concerns in comparison to all other groups (Houbre et al., 2006). When comparing levels of perceived social support between bully status groups previous research found that individuals who were not involved in bullying perceived higher levels of social support in comparison to those involved in bullying (Holt & Espelage, 2007). Bullies also did not differ from those not involved with regards to their perception of support, especially from peers (Holt & Espelage, 2007; Demaray & Malecki, 2003). This purpose of this study was to replicate the previous findings regarding health concerns for the victimized group. The last hypothesis to be evaluated within this study was that students who were not involved in bullying and bullies would display higher levels of perceived social support, resilience, and lower levels of health concerns than victims and bully-victims.

Method

Participants

A total of 112 individuals participated in this research study. Participation was voluntary for all students involved in the study. There were more female participants (n= 66) than male participants (n= 46) who completed the study. Fifty-eight of the participants were grade seven students and the remaining fifty-three participants were grade eight students (1 participant did not indicate their grade). The majority of participants were recruited from the Rainbow District School Board (RDSB) in Sudbury, Ontario (n= 74) with participation from four schools. The remaining participants were recruited from the Near North District School Board (NDSB) in North Bay, Ontario (n=38) from a single school.

Materials

Bullying Questionnaire. Two questions were used to categorize participants as either a bully, victim, bully-victim, or not-involved. Questions were on a likert scale of five ranging from “I have not been bullied/not bullied another person” to “It happens several times a week”. For scoring purposes, to be categorized as a victim, participants had to respond by indicating that they had been bullied two to three times a month or more (3 to 5 points on the likert scale). To be categorized as a bully, participants had to respond by indicating that they have bullied another person two to three times a month or more (3 to 5 points on the likert scale). A participant was categorized as a bully-victim if they responded that they were bullied two to three times a month or more and were also bullying another person two to three times a week or more (3 to 5 points on the likert scale for both questions). Lastly, those who indicated that they were not bullied more than two to three times a month or more and did not bully others two to three times a

month or more were given the classification of being not involved (less than 3 points on the likert scale on both questions). The cutoff of being bullied or bullying two to three times a month has been reported as effective to indicate students who are involved in incidents of bullying on a regular basis and those who may be involved in such incidents on rare occasions (Solberg & Olweus, 2003).

The two questions utilized in this study were modified from the Revised Bully Victim Questionnaire by Olweus (Olweus, 1996). This measure is a self-report scale that can be completed by children and adolescents with specific focus on bullying and being victimized. With a total of 36 questions the questionnaire provides feedback on the participant's bully status, forms of bullying, exposure to bullying and more. The Olweus Bully Victim Questionnaire begins with a definition of bullying to reiterate the three core elements of bullying (a power imbalance, intentional and aggressive behaviour, and a behaviour that occurs on multiple occasions) (Olweus, 1996). Nansel et al. (2004) and Totura et al. (2009) used the same two questions from the Revised Olweus Bully Victim Questionnaire (1996) to categorize their participants by bully status. The two questions used in the present study are considered to be the global items from the Olweus Bully Victim Questionnaire (Solberg & Olweus, 2003). The validity and reliability of these two questions in differentiating bully status has been reported as good and the cutoffs used were deemed appropriate (Solberg & Olweus, 2003).

Social Support. Social support was measured using the Child and Adolescent Social Support Scale (CASSS) developed by Malecki, Demaray and Elliott (2000) The CASSS consists of five subscales used to measure perceived social support for children and adolescents in grades 3 to 12. The five subscales consist of 12 items plus the additional sub scale made a total of 72

items for this questionnaire. The subscales are broken up into parent, teacher, classmate, people in my school, and close friend and community member(s). Each of the items represent one of the four types of social support (emotional, informational, appraisal, and instrumental) with a total of three questions per subscale representing each type of social support (Tardy, 1985). “My teacher cares about me” is a emotion focused question, “my parents give good advice” is an informational question, for instrument an example is “my close friend helps me when I need it” and “ my classmates nicely tell me when I make mistakes is considered to be appraisal. Items are also broken down into two areas; frequency and importance. Frequency is a measure of how often they perceive they have social support. The frequency portion is a six point likert scale ranging from 1 (never) to 6 (always).

For the purpose of this study, an additional subscale was added to allow for responses focusing on members of the community. This subscale is identical to the questions being asked in the subscale for people in my school. This was done to ensure that the four forms of social support (House, 1981) were measured. A qualitative question was also added to the CASSS questionnaire asking participants to identify how they knew the community member(s) they were thinking of when answering the people in my community subscale. (See Appendix A for additional scale).

The CASSS has been found to have sound psychometric properties. Reliability test-retest after an 8-10 week period was 0.58 to 0.74 for frequency and 0.45 to 0.65 for importance (Malecki et al., 2004). Total frequency which is the main focus of this study was found to be 0.75- 0.78 after 8 to 10 weeks. Cronbach’s alpha of 0.88 to 0.98 for data from middle school samples (Malecki et al, 2004). Validity for the CASSS has been made available through

correlations to other published measures of social support. 0.56 with the Social Support Scale for Children-total score, 0.55 with the Social Support Appraisals Scale total score (Malecki et al, 2004).

Resilience. Resilience was measured using the Child and Youth Resilience Measure - Youth Version (CYRM) by Ungar and Liebenberg (2013). The CYRM measures resources such as individual, relational, community and cultural components that are available to individuals that may help to boost resilience levels. The CYRM is a 12 item measure of resilience. This measure has three subscales: individual (personal skills, peer support, social skills), Relationship with primary caregiver (psychological caregiving), and context (educational, cultural). The version used in this study has a likert scale of 3 ranging from no (1) to sometimes (3) .

With respect to the measures psychometric properties; the 12 item version of the measure has been found to be reliable and valid in measuring resilience processes (Liebenberg, Ungar, & Leblance, 2012). Reliability has been found to be satisfactory; 0.75.

Behaviour Assessment of System for Children- Second Edition. Health concerns of both the physical and mental/emotional nature were measured using the Behaviour Assessment System for Children- 2nd Edition (BASC-2) developed by Reynolds and Kamphaus (2004). This assessment tool looks at adaptive and clinical aspects of participants behaviour and personality. The self report of personality was the specific resource used in this study. Based on the age range of participants invited to complete the study, the adolescent version developed for ages 12-21 was administered. This measure has 176 items used to evaluate participants behaviours and emotions. The BASC-2 has several subscales that are linked to physical and mental/emotional

health, and were evaluated in this thesis study such as anxiety, depression, sense of inadequacy, somatization, attention problems, hyperactivity, and self-esteem. The first 69 questions are true or false, the remaining questions are on a likert scale of 4 ranging from never to almost always.

The reliability for the self report of personality for the BASC-2 is broken down based on composite scales and individual scales. Internal consistency is measured based on coefficient alphas. Coefficients are further broken down based on age groups (8-11, 12-14, 15-18, and 18-25years of age) and gender for both the general norm sample and clinical norm sample. Internalizing problems composite and the Emotional Symptoms Index for the general norm sample were in the mid 0.90s. School Problems, Inattention/Hyperactivity and Personal Adjustment composites are reported to be in the mid to high 0.80s (Reynolds & Kamphaus, 2004). For individual scales, Attention to School, Atypicality, Social Stress, Anxiety, and Depression have values above 0.80 (Reynolds & Kamphaus, 2004). The remaining individual scales are slightly lower in the high 0.70s to low 0.80s (Reynolds & Kamphaus, 2004). Test-Retest Reliability was done between 13 to 66 days for all participants. For the composite scores the reliability ranges in the upper 0.70s to low 0.80s (Reynolds & Kamphaus, 2004). For the individual scales have a median test-retest reliability 0.71 for children, 0.75 for adolescents, and 0.84 for college level individuals (Reynolds & Kamphaus, 2004).

Validity for the BASC-2 was analyzed through scale intercorrelations, factor analysis and comparisons to other behavioural measures. These three analyses provided evidence that validity is high for this questionnaire. It was correlated with the the Achenbach System of Empirically Based Assessment (ASEBA) Youth Self-Report Form by Achenbach and Rescoria (2001) and the Conners-Wells' Adolescent Self-Report Scale (Conners, 1997). For further

information regarding the psychometrics behind the BASC-2, see the BASC-2 manual by Reynolds and Kamphaus (2004).

Procedure

The Laurentian University Research Ethics Board reviewed this masters thesis to ensure that the Tri-Council Policy was met regarding ethical research practices with human participants (See Appendix B). Approval was then granted by the superintendent and Educational Research Council the to seek volunteers from within the two school boards. Principals within both school boards were next to be approached after clearance was given from the school boards in Sudbury and North Bay. Next the researcher and the teacher set up a date when the study would be completed by the students at the teachers earliest convenience. A consent form was sent home with any students interested in being a part of the study (See Appendix C). The consent form discussed the purpose of the study, the risks and benefits, withdrawal process, what the participant would be required to do, and contact information of the lead researcher, supervisor, and ethics officer. Consent forms were required to be returned before or by the specified date set with each teacher and the researcher to complete the study. The consent forms were collected on the day of the study and assent forms were then provided to each student who received parental/guardian consent. All consent forms from parents/guardians were kept in a locked box to ensure confidentiality. Only the researcher, faculty supervisor and committee members had access to the materials. The assent form was read aloud to review the study expectations with the students interested in participating (See Appendix D). The assent form told students the purpose of the study, what they would be doing if they were to participate, additional resources available to them, and contact information of the researcher and faculty supervisor. Students were then given

time to sign the bottom of the assent form confirming that they would like to complete the study or not. Copies were taken of the assent form and the original was returned to the students who participated to keep for their records. Students who consented to voluntarily be a part of the study listened to a brief presentation on what bullying is, the forms of bullying, and how they might be involved in bullying (See Appendix E). Next they were provided with the questionnaire booklet to be completed independently. The researcher informed all students to carefully read each page, as there were four separate questionnaires within the booklet. If students had any questions they were asked to get the researcher's attention and they would assist them immediately. The participants were reminded not to include their name on the booklet so as to keep their information confidential. Students were asked to answer the questions as honestly as possible and to the best of their ability. The administration took approximately 45 minutes for all the participants to complete the entire questionnaire booklet. Participants were allowed to take as much time as necessary to complete the study. Upon completion, the students were asked to hand in their questionnaire booklets to the researcher who placed them into a lockable box. Students were asked to take their assent forms with them before heading back to class to ensure that they had a record of their participation.

Design and Data Analysis

Data analysis was conducted using SPSS Statistics version 23.0. In two cases, missing data was left blank (case 10 for grade and case 14 for social support for people in the

community). Nonparametric tests were utilized when assumptions of normality were not met during the analysis of the data in this study. The data was assessed for outliers by transforming variables into z-scores. Any score that had a z score beyond +/-3 were removed from the data file. Case 1 had a z score of 3.19 for hyperactivity, Case 10 and case 29 had z-scores of 3.18 for social support from close friend(s). Lastly case 53 had a z-score of -3.65 for social support from teachers and was therefore removed.

A new variable was created to only contain cases for victims and the not-involved participants. The new variable was renamed “new bully”. The total number of participants in the sample was 112, for this new variable the total number of participants was 109 (2 cases were removed for being categorized as a bully, and 1 case for being a bully-victim). These particular cases were not included in the new variable because not enough participants from the study were categorized as bullies or bully-victims based on the self-reports. Therefore, these two bully status groups could not be effectively compared to the victim and not involved groups due to their small sizes.

Results

This study focused on perceived social support as a potential buffer against negative health concerns linked to bullying and the influence bullying may have on victims with respect to health concerns, level of perceived social support, and level of resilience. Resilience and social support were evaluated for possible correlational relationship. Lastly, the influence that bullying may have on victims with respect to health concerns, level of perceived social support, and level of resilience was investigated.

Characteristics of the sample

With regards to bully status, 91 participants (81.3%) of the sample indicated that they were not involved in bully incidents, while 18 participants (16.1%) were categorized as victims, and 2 (1.8%) were reported to be bullies. One (0.9%) student was categorized as a bully-victim

By gender, females made up 59.3% of the not-involved group, 0% of the bully or bully-victim group, and 66.6% of the victim group. Males made up 40.6% of the not-involved group, 33.3% of the victim group, 100% of the bully group and 100% of the bully-victim group.

Next, the composition of the bully status was examined to assess whether the groups differed across sex and grade. A chi-square analysis indicated there was no statistically significant association between gender and bully status, $\chi^2(3) = 4.756, p = .191$.

For bully status by grade, grade 7 students made up 52% of the not-involved group, 0% of the bully group, 61.1% of the victim group, and 0% of the bully-victim group. The grade eight students in the sample made up 47.2% of the not-involved group, 100% of the bully group, 38.8% of the victim group, and 100% of the bully-victim group. A chi-square test for association

was conducted between grade and bully status. There were no statistically significant associations between grade and bully status, $\chi^2(3) = 3.848, p = .278$.

Social Support as a Moderator for Health Concerns

To test the first hypothesis that social support levels would moderate the relationship between bully status and overall health concerns, a hierarchical multiple regression analysis was conducted. The overall health score was comprised of the following health subscales from the BASC-2 questionnaire: social stress, anxiety, depression, somatization, attention problems, hyperactivity, and internalizing problems.

Before proceeding with the hierarchical multiple regression the assumptions of linearity, independence of residuals, multicollinearity, homoscedasticity, normality and outliers, and leverage were evaluated. Several analyses were conducted to evaluate the assumptions mentioned above. A scatterplot indicated a linear relationship between the dependent variable, health concerns, and the moderator; social support based on the independent variable; bully status. Therefore, the assumption of linearity was met. Next, there was independence of residuals, as assessed by a Durbin Watson statistic of 1.82, followed by the assumption of multicollinearity which was evaluated by conducting a Pearson correlation for all three variables. Overall health concerns had a 0.34 correlation to bully status and a -0.63 correlation to overall social support. Bully status and social support had a correlation of -0.22. None of the variables were found to have a correlation above 0.70, and therefore the assumption of multicollinearity appeared to be satisfied. To further confirm that this assumption of multicollinearity was not violated the tolerance value was evaluated. The tolerance level was 0.95, and therefore indicates that the assumption of multicollinearity was not violated. No outliers beyond 3 standard

deviations were found, and there were no leverage points above 0.2 (range of leverage points for data was 0.74 to 0.00). Furthermore, no influential points were found as evaluated by Cook's Distance, as the range was 0.14 to 0.00, with no values above 1 present. To test for normality, the studentized residuals were compared across bully status. The residuals were normally distributed as assessed by visual inspection of both a histogram and a normal P-P plot. The Shapiro Wilk's test indicated that the studentized residuals were normally distributed for the not-involved group ($p = 0.15$) and the victims group ($p = 0.65$). In summary, all assumptions were met for evaluating a moderator through a hierarchical regression analysis.

In the first step of the analysis, two variables were included: bully status and overall level of perceived social support. These variables accounted for a significant amount of variance in overall health concerns, $R^2 = 0.44$ $F(2,106) = 41.41, p < .001$. Therefore, 44% of the variance in the overall model is due to the predictors (bully status, social support and the interaction between bully status and social support). To avoid any potential of high multicollinearity with the interaction term, the variables were centered and an interaction term between bully status group and overall perceived social support was created (Aiken & West, 1991).

Next the interaction term between bully status level and overall perceived social support was added to the regression model, which did not account for a significant proportion of the variance in total health concerns, $\Delta R^2 = 0.001$, $\Delta F(1,105) = .91, p = 0.66$, $b = .04$, $t(105) = .437$, $p = .66$. Examination of the interaction plot showed that there was no buffering effect of overall perceived social support based on bully status against health concerns.

Given that there was no statistically significant moderator effect of overall perceived social support, as evidenced by the addition of the interaction term explaining 0% of the total

variance. As such, the interaction term was dropped from the model. The new model revealed that there were significant main effects for bully status and overall perceived social support within. For bully status, $b = 1.50$, $t(106) = 2.86$, $p = .0051$, therefore, victims had a statistically higher total health concerns than not involved individuals. For overall perceived social support, $b = -0.03$, $t(106) = -7.82$, $p < .001$ indicating a significantly negative relationship between overall perceived social support and total health concerns.

Correlational Analysis of Social Support and Resilience

To assess the relationship between perceived social support and resilience a Spearman rank correlation was utilized. There were no outliers and the relationship appeared to be linear. Given that the assumption of normality was violated, the Spearman rank correlation coefficient was used to analyze hypothesis 2. There was a moderate to strong positive correlation between overall perceived social support and level of resilience, $r_s(110) = 0.61$, $p < .001$

Health, Social Support, and Resilience Scores by Bully Status

The third hypothesis predicted that there would be differences in perceived level of social support, level of resilience, and number of health concerns reported between bully group and not involved group compared to the victim group and bully-victim group. Specifically, it was predicated that the bullies and the not-involved group would have higher levels of perceived social support and resilience, and would have fewer health concerns compared to victims and bully-victims. Due to the low number of participants that met the requirements to be categorized as a bully and a bully-victim, only the victim group and the not-involved group could be compared.

Assumptions of normality, homogeneity of variance, and outliers were assessed with the intention of conducting independent sample t tests to evaluate this hypothesis. Several of the variables did not meet the assumption of normality or homogeneity of variance. Therefore, the Mann Whitney U test was conducted to evaluate the differences between victim group and the not involved group for social support, health, and resilience scores. Distributions of the scores for victim group and the not-involved group were not similar, as assessed by visual inspection, therefore the mean ranks were compared between the victim group and the not involved group for each dependent variable (see Table 1).

The first dependent variables to be analyzed looked at social support from individual social support groups and then overall social support. Social support from parents ($U = 666, z = -1.249, p = .212$), teachers ($U = 639.5, z = -1.407, p = .160$), close friends ($U = 728, z = -0.316, p = 0.752$), and people in the community ($U = 778.5, z = -0.260, p = .795$) were found to be not statistically significantly different from each other based on mean rank scores. However, social support from classmates ($U = 497.5, z = -2.625, p = .009$), and school personnel ($U = 439.5, z = -3.099, p = .002$) were found to be statistically significantly different, with the not involved group having higher mean rank scores in both cases when compared to the victim group. The last social support score to be compared was the overall social support which was a combination of all individual social support groups. The overall social support scores for victims and not involved were statistically significantly different, $U = 577.5, z = -1.971, p = .049$. For overall social support scores the not involved group had a higher mean rank score compared to the victim group.

The next dependent variable to be analyzed for differences between the victim group and the not involved group was resilience. The resilience scores for victims and not-involved were statistically significantly different, $U = 450, z = -3.024, p = .002$. More specifically, the not involved group had a higher mean rank score for resilience when compared to the victim group. The last grouping of dependent variables focused on physical and mental health concerns, with individual health concerns being compared, as well as total health concerns. Social stress ($U = 356, z = -3.784, p < .001$), anxiety ($U = 505.5, z = -2.561, p = .010$), depression ($U = 449.5, z = -3.024, p = .002$), internalizing ($U = 358.5, z = -3.762, p < .001$), and attention ($U = 512.5, z = -2.506, p = .012$) scores were all found to be statistically significantly different for the victim group and the not involved group when mean rank scores were compared. In every case, the victims group had higher mean rank scores in comparison to the not involved group. Two of the individual health scores were found to not be statistically significantly different for the victims group and the not involved group. Hyperactivity scores ($U = 689.5, z = -1.058, p = .290$) and somatization scores ($U = 371.5, z = -4.440, p < .001$) were the two health scores that were not significantly different across bully status groups. Lastly, total health scores for victims and not-involved were statistically significantly different, $U = 348, z = -4.65, p < .001$. Consistent with the individual health scores, the victim group reported higher total health scores compared to the not involved group when assessing mean rank scores.

Table 1

Mean Rank Scores for Mann Whitney U Test

	Victim Group (Mean and Stan- dard Deviation)	Victim Group (Mean Rank)	Not Involved Group (Mean and Standard Deviation)	Not involved Group (Mean Rank)
Social Support- Parents	<i>M</i> = 46.65 <i>SD</i> = 16.33	46.50	<i>M</i> = 52.15 <i>SD</i> =12.13	56.68
Social Support- Teachers	<i>M</i> = 50.18 <i>SD</i> = 15.20	45.03	<i>M</i> = 54.67 <i>SD</i> = 11.22	56.39
Social Support- Classmates	<i>M</i> = 37.71 <i>SD</i> = 12.16	37.14	<i>M</i> = 45.70 <i>SD</i> = 11.42	58.53
Social Support- Close Friends	<i>M</i> = 54.06 <i>SD</i> = 16.16	51.82	<i>M</i> = 56.95 <i>SD</i> = 11.49	54.41
Social Support- School Personnel	<i>M</i> = 31.88 <i>SD</i> = 14.20	33.92	<i>M</i> = 43.06 <i>SD</i> = 12.49	59.17
Social Support- People in the Community	<i>M</i> = 42.53 <i>SD</i> = 16.01	52.75	<i>M</i> = 43.55 <i>SD</i> = 15.06	54.85
Overall Social Support	<i>M</i> = 263 <i>SD</i> =61.78	41.58	<i>M</i> = 294.68 <i>SD</i> = 55.64	57.65
Resilience	<i>M</i> = 27.59 <i>SD</i> = 3.95	34.50	<i>M</i> = 30.69 <i>SD</i> = 3.65	59.05
Social Stress	<i>M</i> = 65.24 <i>SD</i> = 16.07	80.72	<i>M</i> = 49.95 <i>SD</i> = 11.06	49.91
Anxiety	<i>M</i> = 63.82 <i>SD</i> =14.53	80.72	<i>M</i> = 53.13 <i>SD</i> = 11.75	51.55
Depression	<i>M</i> = 63.71 <i>SD</i> = 15.56	75.53	<i>M</i> = 49.25 <i>SD</i> = 10.78	50.94
Somatization	<i>M</i> = 59.71 <i>SD</i> = 16.94	63.33	<i>M</i> = 52.26 <i>SD</i> = 11.16	53.35
Attention	<i>M</i> = 57.82 <i>SD</i> = 12.04	72.03	<i>M</i> = 50.26 <i>SD</i> = 11.00	51.63
Hyperactivity	<i>M</i> = 55.94 <i>SD</i> = 13.05	62.19	<i>M</i> = 52.34 <i>SD</i> = 9.17	53.58
Internalizing Composite	<i>M</i> = 66.50 <i>SD</i> = 15.39	80.58	<i>M</i> = 51.09 <i>SD</i> =12.33	49.94
Total Health Concerns	<i>M</i> = 2.06 <i>SD</i> = 1.74	81.17	<i>M</i> = 0.47 <i>SD</i> =1.05	49.82

**Mean Rank = ranking of each dependent variable score according to size, then the overall average was taken for victims and for the not involve group to be compared to each other.*

Community Members Qualitative Question

Lastly, a qualitative question was added to the Child and Adolescent Social Support Scale for exploratory purposes. The question was asked at the end of the subscale *People in My Community* for the Child and Adolescent Social Support Scale and it asked participants to “please tell us how you know this community member or members (examples: a coach, a babysitter, volunteer from Big Brother or Big Sister). Some participants left this section blank and others provided one or more examples of community members they know. A total of 132 responses were provided by the participants.

Even though no hypothesis was made to predict the outcome of this specific question, there appears to be a strong indication that in this age group of 12-14 year olds coaches/instructors and sport teams/extra curricular activities offer an opportunity for perceived social support from people outside of the commonly discussed social support networks. Coaches/Instructors was provided 33 times as a source of perceived social support from participants, making it the most commonly reported source for grade seven and eight students within the present sample. Being a part of a sports team or extra curricular activities was also reported 15 times as a source of perceived social support, however, participants did not specify if they felt the social support came from other children and adolescents or from the adults running the teams/ programs. The combination of coaches/instructors and sports teams/extracurriculars makes up a total of 48 responses (36%) that were provided as participants could give multiple responses if they came to mind while completing the *People in my Community* subscale. The remaining responses were not knowing anyone in the community (27 responses) to other family members (including siblings, 21 responses), through babysitting (3 responses), friends of their

families (10 responses), neighbours (11 responses), friends (9 responses), and other sources (3 responses). With coaches/instructors and sports/extra curricular making up 41% of the responses it appears to be a popular source of social support that comes to mind for 12-14 year olds.

To begin, an independent sample t-test was conducted to evaluate whether or not there was a significant difference in perceived social support from people in the community for participants who wrote down an individual compared to participants who left the question blank or indicated that they did not know anyone in their community. All assumptions were met: normality, homogeneity of variance, and no outliers were found. The results of the t-test indicated that having the perception of support from a specific community member ($M = 43.52$ $SD = 15.16$) compared to those who did not know a community member or could think of one who offered them support ($M = 36$ $SD = 18.06$) increased the participants perception of support from people in the community at a significant level, $t(110) = -2.165$, $p = 0.03$.

Next, another independent sample t-test was conducted to assess whether or not those students who perceived social support from coaches/instructors and sports teams/extra curricular activities showed higher levels of perceived social support from community members compared to those who indicated that they did not know anyone or listed other individuals as a resource they could use when in need of support. It is important to note that some students reported several sources of social support, therefore, for the exploratory purposes of this analysis participants were coded "1" if they offered coaches/instructors and/or sports/extra curricular activities regardless of if they offered other sources of perceived social support on top of the two options mentioned above. Only those students who responded with no community members or did not indicate a coach/instructor or sports team/extra curricular activity were given the code

“0”. The results indicated that while it appears to be a frequently reported source of social support for a large group of participants the difference is not significant between not knowing a community member and knowing one from extra curricular activities and sports, $t(110) = -1.877$, $p = .06$.

Lastly, an one-way analysis of variance was run to evaluate if there was a significant difference in level of perceived social support from community members based on the number of individuals list by participants. Students who left the question blank or said they did not know a community member were coded “0”, students who gave one person were coded “1”, students who listed two individuals were inputted as “2”, and the last group was coded 3 for the participants that wrote down three or more examples of individuals they know in their community that came to mind during this subscale. All assumptions required to proceed with an independent sample t-test were met. The number of individuals that a student listed for this qualitative question did not result in any significant differences for the level of perceived social support from people in the community, $F(3, 108) = 1.817$, $p = .14$.

In sum, the exploratory question focusing on people in the community as a potential social support to students was valuable to this study. It shed light on the fact that there appears to be potential for community members to offer social support to students in grades seven and eight. However, having multiple individuals to confide in may not be any more beneficial than having a single person stand out from the community as a social support group. Even though there was a large number of participants who reported coaches/instructors and extra curricular activities as a source of social support, when this group was compared to participants who did not report having community members as a social support network the results were

nonsignificant. The nonsignificant result might indicate that while it is a common group of individuals for a student in grade seven and eight to be exposed to, coaches/instructors and sports teams/extra curricular activities do not appear to promote social support any more than the other groups mentioned.

Discussion

The current study was designed to add to the literature focusing on bullying and health concerns. More specifically, this study focused on the potential link between the social support systems of those involved in incidents of bullying (bully, victim, and bully-victim) and not involved in these incidents in connection to health concerns of both a mental/emotional and physical nature. Secondly, the study evaluated whether or not social support buffered against the negative health effects commonly reported by victims compared to those categorized as non-victims. Lastly, a lot of literature has focused on social support as a protective factor against the negative outcomes of bullying and how social support is considered to be a function of being resilient in the face of an adverse life event or stressor, such as being bullied (Luthar, 2003; Rutter, 1999; Fergus & Zimmerman, 2005). Therefore, this study assessed how correlated social support and resilience are to one another as these two concepts are regularly discussed together in previous literature.

Prevalence Rates of Bullies and Bully-Victims

The prevalence of bullying in this study differed from previous studies on two categories: bullies and bully victims. Only 2 out of 112 participants were categorized as bullies (0.02 %) based on their responses to the bullying self-report questionnaire. For bully-victims, only a single participant met the requirements of being both a bully and a victim making up 0.01 % of the sample. Compared to other studies that show prevalence rates of bullies of 4.3% or 13% and bully victims rates of 6.3% or 10.2% (Nansel et al., 2001; Wolke et al., 2001b), this sample had a very low representation of these two bully statuses. The low prevalence rates did not allow for further study of the bully-victim group, which has been considered the most negatively impacted

group out of those involved in bullying (Houbre et al., 2006;). The lack of bullies and bully-victims could be influenced by three potential issues: the first being that prevention and intervention strategies are being implemented in the tested schools, which strongly support the notion that bullying is not appropriate behaviour and bullies will face consequences if caught. With that in mind, perhaps even though participants were told that their participation would be kept anonymous and their parents, teachers, and peers would not see their answers, students were still reluctant to answer the question on being a bully to ensure that no one found out that he or she was engaging in an inappropriate behaviour. The second possibility is more focused on the victims of bullying and the possibility that some individuals perceive certain situations as bullying even though other students would not see the same situations as bullying (Fekkes, 2006; Rigby, 2008). The presentation that was given before the questionnaire period was designed to decrease the chance of participants incorrectly classifying their experiences as victimization, as the guidelines for bullying were made clear. The guidelines for bullying were also repeated on the first page of the questionnaire to instill further the difference between bullying and other events. Regardless of the precautions taken in this study it is possible that either of the concepts listed above played a role in the limited reports of bullies and bully-victim prevalence rates. Lastly, it may be possible that with the Ministry of Education releasing a policy focusing on safe schools and decreasing incidents of bullying and harassment, school boards have been vigilant in utilizing strategies that have been effective in decreasing the occurrence of bullying. One example of such an activity is bullying awareness and prevention week, which occurs yearly November 14-20th, is used to create a greater awareness for what is considered bullying and the impact it can have on the school as a whole (Ontario, 2012a). Schools in Ontario also have

access to School Sample Surveys through the Ministry of Education that can be completed by students to evaluate the school environment and determine the effectiveness of ongoing programs, such as the School Climate Survey (Ontario, 2013d). These are only two examples of the tools being implemented in school boards, taken alongside other lessons or school strategies the likelihood of a student engaging in bullying could be declining. This possibility is further supported by the decrease in the range of reported victimization from King et al.(1996) to Currie et al.'s (2012) reports based on the Health Behaviour in School-Aged Children Study. With prevalence rates in 1993/1994 being 20-39% (King et al., 1996) and 8-17% in 2009/2010 (Currie et al., 2012).

Prevalence Rates for Victims

A total of 16.1% of the sample were categorized as victims. In comparison to previous results of prevalence rates for victims this study falls in the middle range based on what is commonly reported. For prevalence rates for victims in Canada, the present study falls within the range presented in the Health Behaviour in School-Aged Children survey collected by Currie et al., (2012). Within the Health Behaviour in School-Aged Children study, the results indicated that for Canadian students between the ages of 11-15 years old, victimization occurred for 8-17% of the students who participated in the survey. The current study just falls within the upper limit of this previously reported range for the prevalence rate of being victimized. Other studies conducted outside of Canada have reported prevalence rates below and above this study's result, with 5-6% (Kaltiala- Heino et al., 2000), 10.6% (Nansel et al., 2001) showing lower prevalence rates and Wolke et al., (2001b) reporting a higher prevalence rate of victimization with 24% of their sample meeting the victim criteria. Given that this study was conducted in Northern

Ontario, the rates are within the same range as a prior study's range from Canada, the results therefore support the Health Behaviour in School-Age Children study results. The prevalence rates found in this study support the use of the two questions utilized to categorize participants based on bully status, as it appears to follow a stringent definition of what bullying is. Also, it is possible that incidents of bullying have declined since Currie et al. (2012) reported the findings of the Health Behaviour in School-Age Children Study completed in 2009/2010. In summary, ongoing assessments should be implemented to analyze prevalence rates of bullying and victimization to evaluate if bullying is decreasing or if there is a difference in a bully's perception of their behaviour compared to a victim's perception of experiences they are linking to being bullied.

Prevalence Rates Based on Gender and Age

A common comparison made in the literature on bullying is the differing prevalence rates of bullying and victimization between girls and boys. Boys often report a higher occurrence of bullying and being bullied (Nansel et al., 2001, Tatura, MacKinnon-Lewis, Gesten, Gadd, Divine, Dunham, & Kamboukos, 2009; Yang et al., 2006; Gini, 2008; Currie et al., 2012). The results of the present study indicated that females made up 66.6% of the victim group and males made up 33.3% of the victim group. The two participants categorized as bullies were both males, however, even though males made up 100% of the bully group a chi-square analysis of association indicated that there is no significant difference between females and males for bully status. The results found in this study are not the first to find discrepancies between males and female victimization rates previously reported. Some studies have indicated that based on their

samples girls were more likely to be victims in comparison to boys, as reported in this study (Houbre et al., 2006; Vaillancourt et al., 2010).

Similar to prior reports on rates of bullying based on grade level, the grade seven participants made up a higher percentage of the victim's group in comparison to the grade eight participants, however, the chi-square analysis of association indicated that the difference was not significant. The grade 8 group also made up the bully and bully-victim groups for this study based on self-reports. Olweus (1993) stated that rates of victimization rates continue to decline as grade level increases, while the rate of being a bully increased in upper grades compared to the lower grades. The present study shows further support for Olweus's shift in bullying behaviours based on the self-reports of students in grades 7 and 8.

Community Members as a Potential Social Support Network

The current study was conducted with the intention of expanding on the present literature base focusing on social support as a protective factor against stressors such as bullying. For this reason, in addition to the most common social support networks (parents, teachers, and friends) being evaluated, this study included another potentially beneficial support group by including people within the community such as coaches, babysitters, neighbours, and family friends. Everall et al. (2006) reported that research on community members as a source of support for individuals was limited. Furthermore, prevention and intervention programs that have been reported as being successful tools in decreasing reports of exposure to bullying utilized support from multiple social groups (Bradshaw, 2015; Olweus & Limber, 2010). Therefore, it was important to include community members in the current study based on the lack of information

in previous reports, yet programs suggest that outside support groups are important for prevention and intervention programs to be successful.

The qualitative component of the study offered some insight into the potential importance of social support networks outside of a student's family and school during grades seven and eight. The participants in the study offered a list of a wide range of individuals who came to mind when they thought of people in the community after answering the *people in the community* subscale for the Child and Adolescent Social Support Scale. Only 27 out of 112 participants indicated that they did not know a community member in this capacity. Otherwise students offered other family members such as aunts, uncles, cousins, and their siblings as sources of support. Outside of family members participants mentioned coaches/instructors and individuals (no specification as to whether they meant friends or adults) from sports and extra curricular activities, family friends, neighbours, friends from outside of school, people they met through volunteer work or babysitting, and a few other sources as well (children's aid worker for instance). The participants were not limited to offering one community member and had the opportunity to list as many as they could think of, which offered more examples from some students compared to none from others.

The most commonly reported source of social support came from coaches/instructors at 33 responses. Sports/ extra curricular activities was mentioned 15 times so taken together students aged 12-14 years old appear to be engaged in activities outside of school whether its sports, girl guides, or cadets that they perceived as a social support network. Babysitting and volunteering were much smaller responses given which might simply be an indication that these events are not common for this age group and are not important sources of social support for

these students. While siblings are not considered people in the community it was a common answer provided, this may have occurred because the CASSS has a subscale that is specific to parents but does not ask about siblings, who may play a large role in a child and adolescent's life.

The people in the community was an additional subscale that mirrored the questions of the school personnel subscale. Based on the analyses that were run students who were exposed to individuals who could be perceived as offering social support within the community reported higher levels of perceived social support compared to those who indicated that they did not know anyone in their community. This could indicate that for this age group, having a broader support system that includes people from the community might in fact offer these students another source of support if they need it.

While coaches/instructors and individuals from sports/ extra curricular activities appeared to stand out as a key network because it was the most commonly reported source, there was no difference in levels of perceived social support from these community members for students compared to students who did not have a community member offering support. Given that this group of participants may be highly engaged in activities outside of school, there are many other factors that may make the students feel as though they would not obtain social support from those individuals if they needed it at this point in their lives. For instance, perhaps there are few instances where a child or adolescent in this sample felt that they needed a coach/ instructor to support them, or that parents, friends from school were the first lines of help and were successful leading the student to not have to approach their coach/instructors.

Lastly, the study found that it did not matter if a student reported no social support networks in the community or if they had 1-3+ people written down as known from their

community, there were not significant differences in their perception of social support. This is an interesting finding as there appears to be a significant difference in perceived social support levels if a student listed someone for the question compared to those who didn't list someone, however the level of social support did not shift or become greater as the number of people who offered social support increased from 0 to 3 or more. This may signify that it is not about quantity but quality when it comes to additional sources of social support. The increase in perceived social support comes from students being able to list someone compared to not having that extra person or network in their corner if they ever needed to utilize it.

As this portion of the study was exploratory and conducted to offer more light on a network of individuals often not included in studies assessing social support, the results appear to support the notion that community members are an additional social support group could have an impact on a student. More research is certainly required to invest these ideas further.

The Role of Social Support

Throughout the literature on social support and victimization there have been inconsistent findings for whether or not social support works as a buffer against health concerns for victims compared to not involved individuals (Galand & Hospel, 2012). The inconsistency in previous studies stems from Cohen, Gottlieb and Underwood's (2000) two models of social support; the main effect model versus the stress-buffering model. Several studies have found support for the main-effect model stating that social support has a positive effect on one's well-being regardless of being exposed to a stressful live event (Herreo et al., 2006; Baldry, 2004; Galand & Hospel, 2012). Other studies (Martin & Huebener, 2007; Demaray, Malecki & Delong, 2006; Rigby, 2000) have reported support for the stress-buffering hypothesis in which social support only

benefits those exposed to an adverse life, and is not beneficial for individuals not exposed to the stressor. The first hypothesis predicted that victims with high levels of social support would have lower levels of health concerns compared to participants categorized as not involved in incidents of bullying, which supports the notion of the stress-buffering model (Cohen et al., 2000). The results of the present study did not support this hypothesis, indicating that social support was not a significant buffer for victimized individuals compared to not involved participants. The nonsignificant interaction between bully status (victims versus not involved) and social support offers more backing to the main-effect model and not the stress-buffering hypothesis as predicted, therefore, indicating that social support may be beneficial for everyone and not just those being victimized. Given that the results indicated a main effect of social support, higher levels of social support were linked to a decrease in total health concerns regardless of being a victim or a non-victim. One explanation for this finding may be that having support from one's social support networks is beneficial to the individual's well-being regardless of being a victim of bullying or not. This explanation is consistent with the main effect theory by Cohen et al. (2000). This information is important when looking at intervention and prevention programs within the school system because social support can be an important tool for all students, but it also appears to be helpful for victims of bullying to some extent and should not be ignored as many bullied individual's report issues with making friends and socializing with classmates (Nansel et al., 2001). By encouraging the use of social support systems within the classrooms, victims will be on the receiving end of the benefits along with other students.

One concern reported in other studies along with this study is that bully status had a significant main effect as well, showing that victims of bullying reported higher total health

concerns scores compared to those categorized as not involved in bullying based on the completed self-reports; therefore bullying has been said to be linked to a decrease in overall health for victimized individuals. Even though the predicted hypothesis was disconfirmed, the information is still relevant for bully prevention and intervention strategies. The challenge of assisting students with dealing with the negative effects of bullying is still occurring in schools that are utilizing prevention and intervention strategies based on the guidelines set out by the Ministry of Education in Ontario. Therefore, prevention and intervention programs may be moving in the right direction but still need some improvement, as Olweus and Limber (2010) mention that a program must involve complete restructuring of the school environment and not just a few adjustments to be successful.

Based on the results of the first hypothesis, bullying programs such as Olweus Bullying Prevention Program (Olweus, 1993) and KiVa (Hutchings & Clarkson, 2015) that do not solely focus on victim but on the individual's involved in the bullying (bully, victim, bully-victim), but also on teachers, other school personnel, parents, and community members may be appropriate prevention and intervention programs to implement in school boards. These programs have been described as taking time to implement and become effective and entail the restructuring of the current school environment.(Olweus & Limber, 2010; Hutchings & Clarkson, 2015). The findings of this current study show that social support may be related to fewer health concerns, and is, therefore, beneficial for all students and not just the victims of peer victimization. Therefore, offering programs that support all students can go a long way to decreasing not only incidents of bullying but also the negative health concerns for victims. Effective strategies include the involvement of parents, more supervision during lunch and recess, training for

teachers, and cooperative learning (Ttofi & Farrington, 2011; Olweus, 1993). Programs that are developed to be long lasting and provide more extensive training for staff and activities for students at the classroom and individual level have been reported to be more effective for decreasing and preventing future incidents of bullying (Ttofi & Farrington, 2011).

Social Support and the Link to Resilience

The second hypothesis predicted that social support and resilience would be strongly and positively correlated. The results of the present study indicated that there is a moderately positive significant relationship between social support and resilience. Therefore, the results partially supported the hypothesis for a significantly strong positive relationship between social support and resilience. These results might be indicative of social support and resilience being correlated based on the Child and Adolescent Social Support Scale and Child and Youth Resilience Measure self-report questionnaires, but that the self-report measures do not measure the same concept. This correlational relationship could be taken as a good indicator that social support may be key to an individual's level of resilience but that other factors are also involved though it is important to note that correlation does not imply causation in this instance. Multiple factors that have been said to foster resilience have also been linked to social support (Brooks, 1994; Everall et al., 2006). Additionally, there could be multiple factors linked to social support, such as a sense of belonging that may influence the amount of resiliency one develops and, therefore, social support alone is not a determining factor of resilience (Bozak, 2014). Ultimately, high levels of social support based on the Child and Adolescent Social Support Scale may not mean that a person will be seen as resilient, as discussed by Dumont and Provost (1999). Social support may promote resilience by working in conjunction with several other factors, or other

factors might be reducing the level of social support one perceives (i.e., stress) (Dumont & Provost, 1999). Furthermore, resources that are social in nature did not depend on just existing, individuals need to be able to ask for support and then receive it (Everall et al., 2006). In conclusion, based on the current studies results, participants who perceive higher levels of overall social support also report higher levels of resilience, but it is important to note that other unforeseen influences may be impacting this relationship. Ultimately, these results support the previously stated notion that for an individual to be resilient, internal and external factors will play a role (Everall et al., 2006).

Differences in Health, Social Support and Resilience by Bully Status

The final hypothesis predicted that bullies and non victims would report higher levels of social support, higher levels of resilience and have lower levels of health concerns compared to victims and bully-victims. Due to the lack of participants categorized as bullies or bully-victims, only the victim and not involved group were compared. The results from the current study showed that the victim group had lower scores across all social support subscales compared to the not involved group. A total of three of the social support networks assessed in the self-reports were found to be significantly different between the two groups based on bully status. In all three cases where social support scores were found to be significantly different, the not involved group reported higher scores for perceived social support, while the victims had lower scores based on their perception of receiving support. Social support ratings for classmates, school personnel, and overall social support were significantly different between victims and the non victims. This study shows partially consistent results to the study conducted by Demaray and Malecki (2003) when comparisons of perceived social support from several networks were made for victimized

individuals and non victims. Similar to the Demaray and Malecki (2003) study, the not involved group reported significantly higher levels of perceived social support for overall social support, school personnel, and classmates. The authors also reported nonsignificant results for perceived social support from parents, which is consistent with a study conducted by Haynie et al. (2001) and the current study. One possible interpretation is that current prevention and intervention programs promote the idea of students who are not involved in bullying stepping in to stop incidents of bullying occurring. This concept may allow students who are victimized to develop friendships and therefore, feel supported by those individuals. Friendships can also develop outside of school allowing for victimized children and adolescents to find friends outside their grade who may offer the necessary support they need. It is not required for students to have several friends, but a close friend or two may be sufficient for support. When looking at the difference in perceived supports from classmates between the two groups it is possible that the victims are on the receiving end of the bullying incidents and that they feel a lack of support from their peers who could be bullying them or potential bystanders to the victimization when it occurs. The lack of support perceived by victims further supports the idea that for interventions to be successful, there needs to be a consistent expectation of showcasing a zero tolerance for bullying behaviours to inform students that bullying is not an appropriate way to interact with other children and adolescents.

The additional subscale for people in the community was added to the Child and Adolescent Social Support Scale to look at a possible social network that has often been ignored in previous literature. For this study, people in the community represented a broad network of individuals that students could have regular contact with and therefore, it was considered to

potentially have protective value like other social networks. Based on the self-reports there was no significant difference between the victims and the not-involved group for perceived social support from individuals in their community. Following the main effect model that was supported by this study's results instead of the stress-buffering model, it could be plausible to think that the individuals who have social support for community members regardless of bully status are more likely to show an increase in their overall wellbeing. Individuals such as coaches, babysitters, and neighbours should not be ignored for the influence they might have on children and adolescent's well-being. Therefore, future studies should look further into this social network to evaluate the differences between individuals who perceive this specific support compared to individuals who state they do not have this social network to offer such support. While there appears to be no difference between victimized students and non victims, taken with the results of the additional qualitative question mentioned previously, there appears to be a difference for students who were able to envision someone in the community who could offer them support compared to those individuals who could not come up with anyone in the community to fit into this additional social support network. Tardy (1985) mentioned community, professionals, and neighbours as social networks alongside family, close friends, and co-workers. This study appears to have merely touched on the possibility that social support from multiple networks may be important and further investigation is necessary to decide how they can impact the lives of children and adolescents.

Perhaps one of the most interesting differences between the groups for scores of social support was from the school personnel category. The significant result for school personnel provides interesting insights into potential adjustments that could be beneficial to victims when

looking at prevention and intervention strategies. Frisén et al. (2012) described the most frequent reason for bullying to stop as reported by victims, was having school personnel step in and effectively address the incidents. However, the significantly higher level of perceived social support from school personnel for the not involved group based on self reports indicated that this key support system does not appear to be perceived as available to the victims.

Often teachers and school personnel are the first to know about incidents of bullying and might be seen as the first line of defence for assisting with the occurrence. For “whole school” intervention programs to be effective all adults at the school level must be aware of any incidents of bullying occurring, and be willing to assist the students who are in need (Olweus, 1993). Therefore, in addition to teachers, parents and peers, school personnel such as administrators, secretaries, and any other individual working within the school setting who may be in regular contact with students should be considered for training opportunities. It is one thing to say that a school is actively engaging in the whole school approach, but it is a process that takes time to implement and serious involvement from multiple networks in a student’s life. In addition, the most effective prevention and intervention strategies have instilled support from teachers, peers, and school personnel (Demaray, Malecki, Delong, 2007). Currently, the results of this study show an association between victims not feeling supported by these people they may see on a regular basis and who could make a difference if they offered support to these students on a regular basis.

Between the victim group and the not-involved group, resilience scores were higher based on the Child and Youth Resilience Measure self-reports for the not involved individuals compared to the victim group. A small effect size was found when evaluating the difference

between victims and not involved individuals on level of resilience. Therefore, the significant difference in scores suggests that those students who are not exposed to the adverse event of being bullied have a greater perception of having resources available to them that can assist in boosting their level of resilience (Liebenberg & Ungar, 2013). Given that high levels of resilience have been linked to fewer health concerns (Hjemdal et al. 2007; Plaskon, 2011; Everall et al., 2006), it appears important to foster skills connected to resiliency for those being victimized. Newman (2002) suggested that shifting focus from attempting to eliminate threats such as bullying that impact an individual's well-being to teaching students to develop the ability to deal with and manage risks associated with stressors is crucial. He indicated that this adjustment in program practices would offer more beneficial results as students are more prepared to use effective coping strategies when they are necessary (Newman, 2002). Bullying is not a new phenomenon, and while current programs work to decrease the occurrence of being victimized, bullying will remain a threat to students for the foreseeable future. Therefore, the education system has yet to be successful in removing the threat of bullying and should consider incorporating resiliency building strategies into prevention and intervention programs. Resiliency boosting strategies such as assisting students in finding ways to strengthen their social networks and promote effective ways to address emotions and feelings (Everall et al., 2006) and stress management (Polan, Sieving & McMorris, 2013) could be beneficial for the whole school community as there are multiple adverse life events and stressors that can occur. Strategies that focus on building resilience would be potentially even more beneficial for victims of bullying, as they report significantly lower levels of resiliency compared to non-victims.

The final portion of the study focused on the health concern score differences between victims and not involved students. The Behaviour Assessment System for Children, Second Edition was used to evaluate the difference in scores for several mental/emotional health concerns and physical health problems. For the purpose of this study, social stress, anxiety, depression, somatization, attention, and hyperactivity were assessed and a total health concern score was calculated. The victim group and not involved group were compared to each other to investigate differences in scores across all health concerns. The results of the study are similar to prior studies, with victims reporting higher scores on all health concerns evaluated using the Behaviour Assessment System for Children self-report questionnaire. The victim group had higher mean rank scores for all health concerns analyzed with a total of 5 out of 7 of the scores (social stress, anxiety, depression, attention, and total health) being significantly higher than the non victim groups scores. Consistent with multiple studies, the results of the present study are consistent with the exception of the somatization scores and hyperactivity scores. Physical health concerns have been found to be significantly higher for victims in comparison to non victims across several studies (Houbre et al., 2006; Hoel et al., 2004; Wolke et al., 2001a; Allison et al., 2009). Previous literature reports higher rates of physical symptoms such as headaches, colds, nausea, and dizziness as issues linked to victimization (Wolke et al., 2001a; Houbre et al., 2006; Knack, Gomez, & Jensen-Campbell, 2011). However, based on the BASC-2, this study did not find physical symptoms to be significantly different between groups. Gini (2008) described victims being more hyperactive in comparison to not-involved individuals which differs from the nonsignificant results found in this current study.

Consistent with other studies, depression scores were significantly higher for victims in comparison to the not-involved group based on self-reports (Fekkes, 2006; Turner et al., 2013; Klomek et al., 2007). While this particular study shows similar results to previous studies, the method of self-report questionnaires did not control for prior levels of depression. Therefore, as indicated by Fekkes (2006), students may be more likely to be bullied if they were depressed or anxious prior to the bullying incidents and they may also perceive experiences as bullying that others would not. These two statements cannot be discounted based on the present studies results and should be considered for proceeding studies on bullying and depression.

Furthermore, multiple studies have reported that victimized individuals have reported higher levels of anxiety in comparison to non victims (Craig, 1998; Yang et al., 2006). The results of the present study support previous literature with increased levels of anxiety being reported by bullied students. The present study compared anxiety across genders and found that girls reported higher levels of anxiety compared to boys (See Appendix H for results), which supports what many studies have made note of; that anxiety may be an increased concern for females (Ng & Tsang, 2008; Yang et al., 2006). Anxiety can range in severity and type, which is important to consider when offering assistance to individuals as different techniques may work and others may not. Anxiety can be so severe that it leads to poor attendance and in turn can negatively impact academics (Rigby, 2003). Anxiety is considered an internalizing problem and the Behaviour Assessment System for Children, second edition combined anxiety with atypicality, locus of control, social stress, depression, sense of inadequacy, and somatization scores into one overarching concept to be evaluated known as internalizing symptoms. The results of this study found that internalizing symptoms were significantly higher for victims

compared to the not involved group. Once again these results are consonant with other studies done for bullying and mental health concerns. Holt and Espelage (2007) found that victims, along with bullies and bully victims had significantly more internalizing problems compared to non victims. Putting individuals who are victimized at greater risk of developing internalizing problems, such as anxiety and depression as noted by the current studies results as potential risk factors. Attention problem scores were also found to be higher for the victim group compared to the not involved group.

Lastly, social stress scores were also significantly higher for the victim group. These results are similar to the results reported by Nansel et al. (2001), who suggested that victims not only experience poorer adjustment than non victims, but they also report poorer relationships with classmates, higher levels of loneliness, and found the process of making friends to be more challenging. Similar to depression, social stress has been considered a risk factor of being bullied, as well as a potential outcome (Nansel et al., 2001; Hoover, Oliver, & Hazler, 2003). The current study only indicates a possible relationship between victimization and social stress. Therefore, the results cannot determine whether or not social stress is a health concern that may increase vulnerability of being bullied or if it occurs as a result of being victimized. Future studies need to put special focus on prior presence of health problems before bullying occurs through longitudinal studies to better understand what health problems occur prior to and preceding bullying incidents, as that will allow for further adjustments to be made to programs assisting victims of bullying versus students dealing with mental health concerns.

For health concerns, the overall score was also found to be statically significant, with the victims having a higher score compared to the non-victim group. Provided that the bullied

individuals had multiple health scores significantly greater than the not-involved group it is not surprising to find the overall rating is higher for the victim group overall. This total score supports the current concern that bullying is linked to more health concerns and that prevention and intervention programs need to find ways to successfully address such issues. Overall the consistent results for the lack of perceived social support, lower levels of resilience, and increased health concerns commonly addressed in the literature on bullying further supports the movement to finding effective prevention and intervention strategies to decrease the occurrence of bullying, but to also assist with the negative implications on a victim's mental and emotional health.

Clinical Implications

Alongside the results of previous literature focusing on bullying, the present study supports the importance of continuing to develop effective prevention and intervention strategies to assist the victims. The results indicate that there is a potential relationship between health concerns and being victimized, as well as perceiving lower levels of social support from multiple networks in a child and adolescent's life, and lower levels of resilience. The current study also shows a correlational relationship between social support and resilience. Everall et al. (2006) stated that social support is a key component to healing from a stressful life event and therefore is important to building levels of resilience. Ultimately, programs that are being implemented in schools should evaluate how effective the current programs are at fostering social supports for victims and other students. By focusing on social support systems, there is potential for resilience to be increased.

Limitations and Future Research

Even though the study set out to evaluate all bully status groups, there were not enough participants that met the criteria of being categorized as a bully or bully victim. This limited the potential results that could be gathered from the data collected, and therefore, two key groups could not be analyzed even though previous research has indicated that they are two groups that should not be ignored when looking at bullying incidents, especially not the bully-victims (Lindenberg et al., 2005; Haynie et al., 2001). Bully-victims may be at an even greater risk for physical and mental/emotional health concerns as they are exposed to bullying in a more extensive manner than those who are just a bully or a victim (Yang & Salmivalli, 2013; Haynie et al., 2001). Therefore, future studies should consider focusing on bully-victims in comparison to other bully groups for social support, resilience, and health concerns. Other studies have also reported a large variation in the prevalence rates of bully-victims when self-reports are used (Yang & Salmivalli, 2013; Solberg, Olweus, & Endersen, 2007) so it would be beneficial to use a more multifaceted approach and use self-reports and peer reports. This information would be valuable for creating effective prevention and intervention programs where more intensive strategies may be required to assist these individuals.

Furthermore, the study used four self-report questionnaires which poses some limitations regarding the overall accuracy of the results, as all responses were based on the individual's own perception. Future studies should address issues of gathering data with self-reports by attempting to use other methods along with self-reports, such as peer nominations, parent and teacher reports, and observations. A more multifaceted study could offer a greater insight into student's perceptions of bullying events and how others close to the child or adolescent perceive the

events. There were no manipulations conducted in this study as the participants only completed a self-report questionnaire booklet, therefore the data gathered is cross-sectional and correlational, so the direction of the relationships cannot be determined or causation. Therefore, while the results may point to a relationship between some factors, the study cannot say that the relationship occurred based on the concepts analyzed in this study or whether or not other concepts come into play. The study also cannot say that bullying causes health concerns, lower social support and resilience but that there appears to be an association between these variables.

Due to the unavailability of normative data it was challenging to make comparisons between the present sample and a representative sample of the population. This information is extremely valuable when drawing conclusions for a study and limited the results provided in this master's thesis. The developers of the CASSS and CYRM are in the process of obtaining a representative sample which will be beneficial for future studies. The Olweus Bully Victim Questionnaire is currently only available through Hazelden Publishing after submitting questionnaires for scanning by their company, however if this data has been collected it should be more easily accessible to the public as it will promote the use of the questionnaire and allow for deeper conclusions to be drawn based on the samples results. Normative data is critical for research and should be available and accessible.

The current study has similar results to other studies that focus on the health concerns linked to bullying. Therefore, it would be beneficial to conduct longitudinal studies to investigate whether or not the health concerns are a contributing factor to being victimized or if they are a result of being bullied. Another area of research that should be expanded on for prevention and intervention program purposes is looking further into community members as possible social

support networks. This support network is described as being important as a source of support for victimized individuals, however there is very limited research available on the topic to date. The present study only offers a small window into this potential support group. As Engle et al., (1996) mentioned previously that there is a lack of research on community factors and social support such as churches, places of employment for adolescents, community groups, and even health services and in two decades not much has changed in this area of research. This information can better assist with the development of future programs to deal with health concerns arising before bullying occurs or teaching effective coping strategies to decrease the negative health concerns, if they are found to be due to bullying.

Nevertheless, this study has several strengths, notably this study offered more insight into community members so as social support network which was lacking in the literature, the findings indicated that while social support and resilience appear to be related to one another, students who are victimized showed lower levels of perceived social support and resilience compared to the not involved participants. This is valuable information to consider when reviewing prevention and intervention programs and the importance of ensuring that students can get necessary support from the individuals they encounter on a regular basis. The reiteration that victims experience more health concerns based on self-reports indicates that as a community, schools could benefit from forming relationships with health care professionals to assist with identifying students who are being victimized and addressing potential health concerns early on so that they do not continue to develop as the child or adolescent becomes an adult.

Conclusion

In sum, the present study has much to offer school boards when looking at the current prevention and intervention programs as well as the current body of literature focusing on bullying. Current programs that are being implemented may be positively impacting the school environment and beginning to decrease the likelihood of bullying incidents occurring, based on the small number of participants who were categorized as bullies and the percentage of victims reported in this study compared to the literature focusing on prevalence rates in Canada. Frequent evaluation of the school climate can assist with monitoring these changes and making adjustments when necessary.

The Ontario Ministry of Education (2013c) previously released a document outlining the key elements of prevention and intervention plans and stated that increasing awareness and education, having support from staff, parents, and the community were and would continue to be imperative to the whole school approach. The results of the current study further support this document, especially the notion of social support being an important part of effective prevention and intervention programs. The programs implemented within the education system should encourage the development of healthy social support groups and how to access these supports when necessary. Victims of bullying perceived less social support from school personnel, classmates, overall social support, and indicated lower scores for resilience compared to the non victim group. These results are backed up by previous studies and offer more insight into areas of growth when developing bullying prevention and intervention programs. Bullying is not a problem that has a quick solution and will take time and serious effort from multiple support networks in children and adolescent's lives.

Additionally, the victims reported higher scores for social stress, anxiety, depression, internalizing symptoms, attention, and total health concerns. These health concerns may play a greater role in the individual's overall well-being and should be taken seriously as stated in the literature. This is one of the few studies to evaluate people in the community as a potential social support system for students who are bullied. It appears as though there is potential for community members to be an important network for children and adolescents regardless of being victimized, but more research is required to expand on the significance of quantity of networks versus quality for children and adolescents. This present study adds to the previous literature supporting the main-effect model by Cohen et al., (2000) indicating that social support may have a positive impact on well-being for everyone and not just those individual's who are dealing with a significant stressor.

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APPENDIX A
Additional Scale for Child and Adolescent Social Support Scale

People in My Community				How Often?						Important?			
E	I	A	I		Never	Almost Never	Some of the Time	Most of the Time	Almost Always	Always	Not Important	Important	Very Important
				People in My Community									
				61. ...care about me.	1	2	3	4	5	6	1	2	3
				62. ...understand me.	1	2	3	4	5	6	1	2	3
				63. ...listen to me when I need to talk	1	2	3	4	5	6	1	2	3
				64. ...give me good advice	1	2	3	4	5	6	1	2	3
				65. ...help me solve my problems by giving me information.	1	2	3	4	5	6	1	2	3
				66. ...explain things that I don't understand.	1	2	3	4	5	6	1	2	3
				67. ...tell me how well I do on tasks.	1	2	3	4	5	6	1	2	3
				68. ...tell me I did a good job when I've done something well.	1	2	3	4	5	6	1	2	3
				69. ...nicely tell me when I make mistakes.	1	2	3	4	5	6	1	2	3
				70. ...take time to help me decide things.	1	2	3	4	5	6	1	2	3
				71. ...spend time with me when I need help.	1	2	3	4	5	6	1	2	3
				72. ...make sure I have the things I need for school.	1	2	3	4	5	6	1	2	3

73. Please tell us how you know this community member or members
 (Examples: a coach, a babysitter, volunteer from Big Brother or Big Sister):

APPENDIX B
LAURENTIAN UNIVERSITY ETHICS APPROVAL

APPROVAL FOR CONDUCTING RESEARCH INVOLVING HUMAN SUBJECTS

Research Ethics Board – Laurentian University

This letter confirms that the research project identified below has successfully passed the ethics review by the Laurentian University Research Ethics Board (REB). Your ethics approval date, other milestone dates, and any special conditions for your project are indicated below.

TYPE OF APPROVAL / New / Modifications to project / Time extension

**Name of Principal Investigator
and school/department**

Devon Morrow/Elizabeth Levin supervisor/Psychology

Title of Project

Peer Victimization in Northern Ontario: The influence of Perceived Social Support on Health and Resilience

REB file number

2014-07-09

Date of original approval of project

Sept 29, 2014

Date of approval of project modifications or extension (*if applicable*)

Final/Interim report due on:

(You may request an extension)

Sept 29, 2015

Conditions placed on project

During the course of your research, no deviations from, or changes to, the protocol, recruitment or consent forms may be initiated without prior written approval from the REB. If you wish to modify your research project, please refer to the Research Ethics website to complete the appropriate REB form.

All projects must submit a report to REB at least once per year. If involvement with human participants continues for longer than one year (e.g. you have not completed the objectives of the study and have not yet terminated contact with the participants, except for feedback of final results to participants), you must request an extension using the appropriate LU REB form. In all cases, please ensure that your research complies with Tri-Council Policy Statement (TCPS). Also please quote your REB file number on all future correspondence with the REB office.

Congratulations and best wishes in conducting your research.

Rosanna Langer, PHD, Chair, *Laurentian University Research Ethics Board*

Appendix C
Consent Form Sent Home to Parents

Consent for Child to Participate in Research Study:
Peer Victimization in Northern Ontario: The Influence of Social Support on Health and Resilience

Your child has been invited to join a research study. In this research study we are investigating whether or not social support from people in a child's life such as parents, teachers, peers, friends, and other community members can act as a buffer against the negative health concerns that victims of bullying have reported. We will also be looking at how related social support is to resilience. Lastly, we intend to compare victims of bullying to bullies and students not involved in bullying to see if there are any significant differences in their perceived level of social support, level of resilience, and the number of health concerns reported.

Your child will be asked to listen to a short presentation on bullying and then complete four questionnaires. We believe this will take him/her less than an hour to complete.

This study has the following risks:

- Your child may read a question in the questionnaire booklet and remember a past event that happened to them and feel similar emotions to what they felt that previous day.

This study has the

following benefits:

- Your child will be provided with up to date information on bullying
- The results will provide more information on social support, health risks, and levels of resilience for victims and bullies.
- This information can be used in conjunction with prevention and intervention programs.

All information provided in this study will remain anonymous. The information collected from this study will be stored on an external hard drive in a safety deposit box for a total of three years.

Participation in this study is voluntary. Your child has the right not to participate or to leave the study at any time. Deciding not to participate or choosing to leave the study will not result in any penalty or consequences.

Contact Devon Morrow through email at dmorrow@laurentian.ca if you have questions about the study. You may also reach her supervisor Dr. Levin through email at elevin@laurentian.ca or by phone 705-675-1151 ext. 4242.

Participants may also contact an official not attached to this given research team regarding possible ethical issues or complaints about the research itself. **Research Ethics Officer, Laurentian University Research Office.** Telephone: 705-675-1151 ext 3213, 2436 or toll free at 1-800-461-4030 or email: ethics@laurentian.ca

Please Sign the following page and return with your child to school for the following date: _____

As parent or legal guardian, I authorize _____ (child's name) to become a participant in the research study described in this form.

Parent or Legal Guardian's Signature

Date

Appendix D

Assent Form for Participants

Participation Form: Peer Victimization in Northern Ontario: The Influence of Social Support on Health Concerns and Resilience

Today we would like to find out more about the role of support from family, friends, people at school and in the community may play on one's health related to being bullied. Plus how this support may be linked to dealing with tough or hard times. You are being asked to join the study because bullying is a problem students may face at all grade levels; including yours.

If you agree to join this study, you will be asked to listen to a short lesson on bullying and then you will be given a book with four surveys in it for you to fill out.

While taking part in this study you may remember an event that you have gone through in the past that might make you feel how you felt during that old event. You may also feel nervous that other people may find out what you put as your answers, but we do not ask for any information that could tell us who you are.

We hope this study will help us learn more about if support from people around you can cut down the issues with health students who have been bullied report. As well as see if this support will help children be better able to handle tough events that may come up in life.

You do not have to join this study. It is up to you. You can say okay now and change your mind later. No one will be upset with you if you do not want to be in the study or if you join the study and change your mind later and stop.

If you join the study, you can ask questions at any time. Just tell the person running the study you have a question for them. Also if you have any questions about the study after it is finished please contact us or ask your parent/guardian(s) to contact us for you. You can contact us by email at: dmorrow@laurentian.ca

Some other resources are:

Kids Help Phone: 1-800-668-6868

Bully Canada: 1-877-352-4497 (this number will suggest services in your area for assistance) or www.bullyingcanada.ca

Yes, I will be in the study

No, I don't want to do this

Date: _____

Name: _____

Signature: _____

Appendix E

Bullying Presentation Outline

Bullying Presentation Outline: Information used is taken from the Policy/Program Memorandum No. 144: Bullying Prevention and intervention developed by the Ministry of Education to ensure the information lines up with expectations of school boards in Ontario.

1. What is bullying?

Bullying is a form of behaviour that is repeated over time and is considered to be aggressive towards another person or group of people. The behaviour is meant to cause another person to be hurt, fearful or upset. This harm can be done to another person's feelings, their body, self-esteem, and reputation.

This behaviour is intentional or may be unintentional (but the student should know) it will cause harm to another person

Bullying can take place with one person or many people as the bullies. Victims can also be just one person or a group of people. It also creates a negative environment at school which makes the person who is bullied afraid or nervous to be at school sometimes. It also can make it a negative place for students who are not involved in the bullying as well. There is a power imbalance between students

- this can be differences between the bully and victim such as: size, strength, age, gender, peer group, etc

2. What are the forms of bullying?

1. Physical - hitting, shoving, stealing or damaging another persons property (belongings)
2. Verbal - name calling, mocking, or making inappropriate comments about someones ethnic background, gender, etc
3. Written- writing letters to the victim or about them
4. Social- excluding others from a group or spreading gossip or rumours about them
5. Electronic (Cyberbullying)- spreading rumours and hurtful comments through the use of email, cellphones (text messaging), social media (facebook, twitter for instance)

6. How can you be involved in bullying?

- Bully - someone who is causes another person harm or to be afraid and upset
- Bully-victim - someone who causes another person harm or distress but also experiences the harm/ distress as an act of another person towards them
- Victim- someone who experiences harm or distress based on the behaviour of another person
- Not involved - not involved in bullying at this time in any way.

7. Resources for students:

- Online options (can be found on the form the student get to keep along with parent form):
 - Kids Help Phone: Toll Free: 1-800-668-68
 - Bullying Canada: www.bullyingcanada.ca or 1-877-352-4497

8. Answer any questions the students may have on the topic before moving into the questionnaires.

Appendix F

Personal Communication with Dr. Malecki Regarding CASSS Norms

Christine Malecki
To: Devon Morrow
Re: CASSS- Norming Data

December 23, 2015 at 10:28 AM

CM

We are in the middle of a norming project but we do not yet have normative information. We will email everyone on our contact list (anyone to whom we have sent the CASSS) when the project is complete, but I anticipate that not being until next summer.

Appendix G

Personal Communication with Joshua Brisson Regarding CYRM Norms

Joshua Brisson
To: Devon Morrow
RE: Norming Data for CYRM-12

Yesterday at 6:15 AM

JB

Hello Devon,

We have not published any norming data for the three point scale yet, unfortunately. We are currently working on getting this done in the new year. I can keep you updated on this front if you wish.

All the best,

Joshua Brisson
Research and Evaluation Manager,
Resilience Research Centre,
School of Social Work
Dalhousie University
6420 Coburg Road.
PO Box 15000
Halifax, NS, Canada B3H 4R2
Phone: 902-494-2969
Fax: 902-494-7728
Email: Joshua.Brisson@Dal.ca
www.resilienceresearch.org

Appendix H

Data Analysis for Gender Comparison for Anxiety

A independent sample t-test was conducted to evaluate the potential gender differences across levels of anxiety. All assumptions were met, however, a outlier was indicated for participant number 5. The test was run with the removal of the outlier and with the outlier remaining in the analysis. With the outlier removed girls ($M = 57.92$ $SD = 12.98$) reported significantly higher levels of anxiety compared to the boys ($M = 50.87$ $SD = 10.92$) in the present sample, $t(109) = 2.993$, $p < .01$. When the outlier remained in the data analysis females ($M = 57.92$ $SD = 12.98$) had significantly higher levels of anxiety compared to males ($M = 51.63$ $SD = 11.98$), $t(110) = 2.604$, $p < 0.01$.

Appendix I

Comparisons to Normative Data

CASSS Results Compared to Descriptive Data

The Child and Adolescent Social Support Scale manual (Malecki et al., 2000) reported results from a sample of mainly hispanic low-income students in middle school and a sample of high school students which consisted of mainly caucasian individuals and categorized as middle class. The manual expresses caution when interpreting the results as the data simply describes the questionnaires potential results and is not to be taken as normative data. The Child and Adolescent Social Support Scale is in the process of having normative data developed, however it was not available at the time of the current study (Dr. Christine Malecki, personal communication, December 23rd, 2015) (See Appendix F for personal communication). At the present time, the data showcased in the Child and Adolescent Social Support Scale manual (Malecki et al., 2000) is all that is available to make comparisons between the sample from this master's thesis and the population. Comparisons were made for both the middle school and high school sample in the manual and the data gathered in this study.

This study used the frequency of perceived social support for parents, teachers, close friends, classmates and school personnel, as well as adding in an additional subscale for people in the community. By adding in the fifth subscale, the present study and the data presented in the CASSS manual (Malecki et al., 2000) could not be directly compared as the new subscale added a possibility of an additional 70 points to the previous overall social support total. However, when the fifth subscale was removed the total mean was 245.29 ($SD= 49.88$) and was found to be significantly lower than the total mean score of the middle school students ($M= 272.35$

$SD= 55.20$) and significantly lower than the high school students ($M=268.19$ $SD = 44.08$). The mean frequency score found for parents was 50.89 ($SD = 13.13$) and was significantly lower than the results of the middle school sample ($M = 57.57$, $SD = 13.29$), as well as the high school sample reported in the CASSS manual. For teacher social support this study had a mean of 53.57 ($SD= 12.16$); there was no significant difference in scores when compared to the high school sample ($M= 53.90$ $SD= 10.80$). However, the middle school sample was showed significantly higher rates of perceived social support from teachers ($M = 58.03$ $SD = 12.31$). For classmates the frequency mean of 43.94 ($SD = 12.38$) was also significantly lower when compared to the manual's reported frequency mean for both the middle school group ($M = 49.36$ $SD = 14.92$) and the high school group ($M=51.90$ $SD= 10.78$). When looking at the mean and standard deviation for close friends the current study reported a mean of 56.54 ($SD = 12.53$) which was significantly lower than mean and standard deviation reported in the manual for the high school sample ($M = 60.99$ $SD = 10.06$) and the middle school sample ($M = 57.94$, $SD = 14.43$). This present study's school personnel results ($M=41.41$, $SD = 13.82$) were significantly lower than the results found in the manual for both the middle school students ($M = 48.86$, $SD = 16.43$) and the high school student sample ($M = 48.17$ $SD = 12.34$). The additional subscale added for the present study, community members had a mean of 42.63 ($SD = 15.43$). The sample in the manual included a popular range of 257- 493 students depending on the age category and subscale, whereas the present sample had a total of 112 participants.

Child and Youth Resilience Measure

The Child and Youth Resilience Measure (CYRM) has a short version with a total of 12 questions, as seen in this study and a longer version with a total of 28 questions. The 12 question

version also comes in a 3 point likert scale option or 5 point likert scale option. Currently, normative data has been gathered and published for the CYRM-12 5 point likert scale version and not for the 3 point likert scale version which was utilized for the ease of reading in this study (Joshua Brisson, personal communication, January 4th, 2016) (See Appendix G for personal communication). Therefore, the sample could not be compared to the normative sample as the overall total for perceived resilience would be much higher and offer little insight into how the sample from this study compares to the population. The normative data offered insight into three separate samples, one for youth with complex high needs, low-risk youth, and both groups combined, gathering normative samples for the 3 point likert scale instrument will be beneficial for making effective comparisons that are lacking for the present study. The mean total score for the present sample was 30.05 ($SD = 3.81$).

Behaviour Assessment System for Children Norms

The Behaviour Assessment System for Children manual (Reynolds & Kamphaus, 2004) provides an entire chapter to explain the standardization and normative data for the questionnaire used in this study to examine health concerns. First, the comparative group from the representative sample consisted of 900 participants. With 303 twelve year olds (33%), 325 thirteen year olds (36%), and 272 fourteen year olds (30%). The present study's sample was made up of 45 twelve year olds (39.5%), 56 thirteen year olds (49%) and 11 fourteen year olds (9.6%). The sample fell within the appropriate age range of 12-14 years of age to complete the self report of personality, adolescent version. The general normative sample consisted of 50% females and 50% males compared to 66% females and 46% males in the current study.

To evaluate the validity of the questionnaire the Behaviour Assessment System for Children incorporates several indexes for the researcher to review when analyzing their data. The manual for the BASC-2 provided a breakdown of the F-index and the L-index based on the representative sample. The F-index is used to indicate whether or not the participant answered questions that cast them in a negative light and the L-index indicates whether or not the participant answered the questionnaire in a manner that would allow for them to be viewed in a more positive light. The report provides three options for the indices mentioned above (acceptable, caution, and extreme caution) that are to tell the scorer if the data is okay based on the representative sample, if it should be analyzed with caution or extreme caution given the participants' responses. For the F-index, the sample had 86% in the acceptable category compared to 95.8% in the normative population, which was found to be significantly different based on a simple t-test, $t(1) = 18.55, p = 0.03$. Next, 5.3% were flagged with caution in the present study which was not found to be significantly different from the the normative population that had 3.6%, $t(1) = 5.235, p > 0.05$. Lastly 7% fell in the extreme caution category which was not significantly different compared to 0.6% of the representative sample. $t(1) = 1.187, p > .05$. For the L-index, 89.5% answered in the acceptable range and was found to be significantly lower compared to the representative samples 93.9%, $t(1) = 41.682, p = 0.01$. The sample had 7% of the participants as caution compared to 4.9% of the normative sample and was not significantly different from one another, $t(1) = 5.667, p > .05$. Finally, for extreme caution the participants in the present study made up 1.8% and the comparative sample reported 1.2% in the extreme caution category, $t(1) = 5.000, p > .05$. Overall, it appears as though the only significant difference between the normative sample and the present sample is that on both the F-index and

the L-index the present study did not have as many participants falling within the acceptable range. The representative sample for the SRP-A was 900 participants and the current study had 112 participants, therefore the results of the t-test are not based on equal sample sizes and should be interpreted accordingly.

A key portion of the results from the The BASC-2 (Reynolds & Kamphaus, 2004) indicate whether or not a participant may be at risk (T-score of 60-69) or showing clinically significant levels (T-score of 70 or higher) based on their responses for several subscales linked to maldevelopment. Given that the manual does not provide a breakdown of how the sample ranged across the T-scores, no comparisons can be made based on a crucial part of the questionnaire. Regardless, it is important to mention where the present sample fell across the continuum of T-scores outlined in the manual. A total of 6 subscales were evaluated in this study (social stress, depression, anxiety, somatization, attention, and hyperactivity). A total of 5 participants (4.5%) reported 5 scores in the T-score range of 70 or higher, 6 participants (5.4%) reported 4 scores in the clinically significant range, 4 participants (3.6%) reported 3 scores that fell in the 70 or higher range, while 8 participants (7.1%) had 2 scores in this range, and 15 participants (13.4) reported a single score in the T-score range of 70 or higher. A total of 74 participants (66%) had no scores above 70 in this sample. For the at risk t-score range (60-69) 1 participant (0.9%) had 5 subscales, 2 participants (1.8%) had 4 subscale scores in the 60-69 range, 6 participants (5.3%) had 3 at risk scores, 18 participants (15.8%) showed 2 scores in this range, while 34 participants (29.8%) reported at least one subscale score that is said to place them in the at-risk category, 51 participants (44.7%) did not have a score in the 60-69 range. The participants could have multiple t-scores ranging across the continuum, however, the results

above indicate a wide range of students in this study had “at-risk” or “clinically significant” results. Having access to the number of participants in the representative sample that fell within the two upper ranges would be helpful to gauge what might be occurring within the present sample.

Norms Unavailable for the Bullying Questions

The bullying questionnaire was developed following the Olweus Bully Victim Questionnaire (Olweus, 1993), but could be scored by hand using the same techniques as Nansel et al. (2004) and Tatura et al. (2009). Hazelden Publishing currently sells the full Olweus Bully Victim Questionnaire and offers scannable booklets that are to be mailed back to the company for scoring. The returned product is a complete report that provides general information, prevalence rates, forms, location, during, reporting, and more (Hazelden, 2007). To follow this information gathered from the questionnaires is an appendix which provides the psychometric properties (reliability and validity of the survey). In 2007, Hazelden Publishing reported that it was in the process of completing a national database which would give schools that complete the Olweus Bullying Prevention Program access to reports on how their schools compare to other schools that are also participating in the program. Based on this information, no representative sample or normative data has been released to the public at the time of this thesis to make appropriate comparisons with respect to the results gathered.