Bullying, School Exclusion And Literacy

Canadian Public Health Association

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Discussion Paper

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Acknowledgements

Executive Summary

This discussion paper explores four hypotheses related to the potential correlation between the variables of bullying, literacy and school engagement in the Canadian youth population. Literature reviews, data base searches, and interviews with experts were undertaken to accomplish this objective. An action plan for further research is proposed. This paper is followed by another CPHA project which identifies best practices for anti-bullying programs, develops outcome tools for testing in four Canadian sites, and analyzes data from these sites.

The four hypotheses explored in this discussion paper are:

1. Student level of school engagement (bonding) is related to emotional, behavioural and educational outcomes. Students with strong school engagement are expected to experience fewer emotional and behavioural problems and have better educational outcomes compared to students with weak levels of engagement.
2. Victims of persistent bullying are more likely to suffer psychological harm and social exclusion compared to non-victims. The reduced mental health of frequently victimized students adversely affects learning outcomes, resulting in an increased likelihood of low literacy skills and drop out.
3. Bullies are more likely than non-bullies to be suspended or expelled for their behaviour. These forms of discipline exclude bullies from school and contribute to literacy problems.
4. If teaching methods focus on specific cognitive difficulties and the multiple literacies and intelligences of students at risk of school exclusion, these students will develop increased feelings of school membership and support.

Bullying is a multi-dimensional construct and occurs when one experiences repeated attacks, over time, by one or more individuals who systematically abuse their power. It often takes place in the presence of others and for the most part is motivated by the need for social status or the need to dominate. Physical and verbal forms of bullying most often come to the attention of school authorities. However, the social manipulation and social exclusion of victims, although not as easily detected, is equally harmful and likely more prevalent.

School engagement refers to the extent to which students participate in academic and non-academic school activities, identify with school and accept school values. School engagement is best conceptualized on a continuum, ranging from high engagement to exclusion.

Literacy refers to the ability to read and understand written materials, to apply this knowledge, and to communicate this information by speaking and writing. There are multiple literacies. People routinely engage in literacy activities and participate in and create their own literacy cultures in complex ways. If teaching methods are broadened to include the multiple literacies, it will increase school engagement, especially for students affected by high risk factors in their environments. Approximately ten percent of Canadian youth have low literacy skills based upon the results of international literacy tests.

The psychological damage that chronic bullying can cause for student victims includes internalizing behavioural problems such as depression and social anxiety. Many

otherwise well-adjusted students develop symptoms of internalizing problems following long-term exposure to bullying behaviour. We suggest that the social environment of the school may be a contributing factor in the development of student mental health problems. At the very least, exposure to bullying behaviour at school is likely to exacerbate problems among students already pre-disposed to emotional difficulties. Lower literacy levels and poor academic achievement among victimized students are attributed to their elevated symptoms of anxiety and depression. Studies have found that social anxiety and depression among children interfere with learning at school (e.g., socially anxious children are less likely to participate in classroom discussions or perform in front of their peers). Some studies have found reduced mental health as a factor that mediates the relationship between victimization and poor literacy or academic achievement. It is likely that the social anxiety caused by persistent bullying contributes to learning difficulties in victims. For those victims with learning disabilities (LD), pre-existing cognitive difficulties can be exacerbated by anxiety and depression brought on by bullying.

The relationship between bullying, school engagement and literacy is affected by individual, family, peer group, school and community environments. The development of adolescent problem behaviour is best understood by using a social ecological model. Many factors from these different environments interact to determine the different levels of readiness and aptitude for literacy, school engagement and interpersonal skills. Within these environments, children's resilience to negative experiences determines their ability to achieve positive outcomes in literacy, school engagement and positive personal relationships. Resilience is the ability of individuals living in adverse conditions to achieve positive outcomes. It is important to recognize that diverse outcomes can be expected for young people living in similar negative life situations. The key is the ability of individuals, families, schools and communities to provide protective factors, which mitigate risk factors.

Depending upon a child's resiliency and protective factors, the effects of similar bullying episodes can range from mild to severe. With few protective factors, bullies and victims can experience serious disruptions in school achievement and engagement – both of which are correlated with low literacy skills. The best intervention and prevention programs, therefore, target individual change in the environment in which the behavioural problems develop.

A 'schools as communities' perspective is used as a framework for understanding variation in levels of student bonding to school. Students exposed to favourable school culture (marked by a warm and caring social atmosphere, positive student behavioural norms, a strong school emphasis on academics, and a strong school emphasis on learning goals focussed on mastery and understanding of curriculum material) will develop a strong personal sense of school membership based on feelings of support and acceptance and belonging from classmates and teachers. Feelings of membership in turn are expected to improve academic and behavioural functioning and overall mental health both directly and indirectly through enhancements in self-esteem. These students are likely to make a positive contribution to the school climate and develop strong literacy skills.

Children with emotional and behavioural disorders are most likely to have a low sense of school engagement. Emotionally supportive schools, which are critical for high-

risk students, have lower levels of violent behaviour than schools that do not provide emotional support. The school acts as a buffer against the lack of emotional support in the family environment. Pushing these children to succeed in the absence of emotionally supportive teachers will not produce positive results. School engagement can act as a protective factor, serving to buffer children from early-onset aggression, negative peers and environmental risks. By excluding students from school life, suspensions and expulsions increase the risk of low literacy and recurring offending behaviors.

Zero tolerance policies for bullying behaviours are pre-determined consequences without reference to the intensity, longevity or context of student actions. Although there is a lack of data on the rate and impact of expulsions and suspensions in Canada, studies in other countries have documented devastating consequences. The findings include:

significant increases in the number and duration of suspensions and expulsions;
visible/ethnic minorities, low-income and special needs students are over-represented in disciplinary measures;
increases in school dropout rates (and accompanying low reading, numeracy and employability skills);
denial of legislated right to education;
criminalization of behaviors commonly attributed to mental health factors.

Many bullying behaviors which were previously addressed in social or mental health fields are at risk of being treated by the justice field and being criminalized.

The risk factors for children who experience bullying, low literacy and school exclusion are comparable. They usually have a history of conduct problems at a very young age, such as hyperactivity, impulsiveness, aggression, oppositional and defiant behaviour, deficits in interpreting social cues, and poor social skills. These behaviors are enabled and sustained in the different environments of family, peer, school and neighbourhoods.

Key components of the recommended action plan include:
further investigation on the relationship between multiple literacies and student bonding to school;
develop and pilot a multiple literacies curriculum based on best practices;
further research on early and late onset bullying to better inform anti-bullying interventions. If we can identify those who are early-onset bullies, constructive intervention at an early age is possible. This research will also help develop family and school cultures that prevent late-onset bullying;
further research to investigate whether reduced mental health is a mediating factor in the relationship between victimization and poor literacy or academic achievement;
work with the Council of Ministers of Education to collect basic data on the incidence, rate and nature of expulsions and suspensions;
work with the Council of Ministers of Education to collect basic data on the demographic characteristics of students excluded from school;
work with Statistics Canada to modify bullying and victimization questions in the NLSCY to better capture the nature and extent of bullying experiences.

Introduction

i.   What is Bullying?

Bullying occurs when a student experiences repeated attacks, over time, by one or more other students who systematically abuse their power. Bullying is a social activity (it almost always takes place in the presence of others) and for the most part is motivated by the need for social status or the need to dominate. The harmful intentions of boys and girls are expressed differently in bullying behaviours. Girls are more likely to mask their harmful intentions. Bullying behaviour is a multi-dimensional construct and is characterized by:

♦ aggressive behaviour or intentional 'harmdoing';
♦ repetitive, coercive acts over time without provocation; and
♦ interpersonal relationships where the victim is powerless to resist and the bully derives status and gratification.

Direct bullying is an open attack on a victim. These attacks can be physical, verbal, sexual or racial in nature:

♦ physical attacks: hostile gesturing, hitting, kicking, pushing, holding, choking;
♦ verbal attacks or harassment: name calling, threatening, taunting, degrading, malicious teasing, sexual harassment, racial slurs, homophobic put-downs.

Indirect bullying is more subtle and more difficult to detect. It includes non-physical forms of aggression aimed at controlling social situations:

♦ social isolation, intentional exclusion, ostracizing, manipulating friendship relationships;
♦ rumour spreading, slandering, obscene gestures, silent treatment.[1]

Many more students are verbally harassed, teased and socially excluded at school on a frequent basis compared to the number that are actually physically threatened or attacked. The former can be just as psychologically damaging as the latter (if not more).

ii.   What is Literacy?

Literacy refers to the ability to read and understand written materials (books, mathematical charts, reports), to apply this knowledge (for solving problems, assessing situations and making decisions), and to communicate this information by speaking and writing.[2] Traditionally, a person was said to be 'illiterate' if they did not achieve a certain literacy threshold – to be able to read and write at the grade eight level, for example. This grade eight threshold defined literacy well into the 1970s. Since then, however, the definition and measurement of literacy has been guided by two fundamental tenets: social and multiple. Elizabeth Sloat maintains that language learning is largely a social act – we are socialized into various language patterns and usages in early childhood.[3] How adults talk to infants, and what they talk about, teaches children language knowledge. Adults

teach children what and how to talk about various issues, ideas, and concepts. We learn about traditions and values, how to eat, and how to behave in this way.

The start of school is a major transition for children. At this time, there are very definite language patterns and usages ascribed to the school environment, what some researchers call the language of 'doing school'. A major element at the K-2 grades is storytelling. Children get read to and are encouraged to tell their own stories frequently. This is easy for those who had experience with stories when they were younger, but challenging for those who did not have the same foundation in place by the time they started school. This serves as an example of the social and contextual nature of language: children who are read to at home and who have parents who talk with them and play language games arrive at school with a good understanding of the language requirements needed to do well in school. School represents one of the first major social contexts in which children must learn the language-using patterns of a specific social environment.

Elizabeth Sloat notes that schooling helps students become effective communicators in a range of language-using contexts and teaches them how language works and is used.[4] Students must be taught the cognitive and social tools they need to assess any language-using situation they might be in (analyze the context of the communication, analyze the audience for their communication, understand the purpose for their communication, and select appropriately from a wide range of possible rhetorical strategies – tone, voice, style, concepts, format) in order to respond to it appropriately – whether that be in talk, writing, or some other representational form. As we mature, we enhance our language-using repertoire to become more literacy-able in a wider range of social contexts – where we work, how we interact with friends, the sports and hobbies in which we develop an interest. Each of these contexts has its own language-using practices, concepts to which are tied language patterns and meanings.

Language use and meaning are therefore context-specific. It is specific to the social contexts wherein the language is used and understood, and to which socially defined meanings are attached. People routinely engage in literacy activities and participate in and create their own literacy cultures in complex ways. Nearly all cultures have verbal and non-verbal forms of communication that would be understood only within that culture. Shirley Brice Heath has spent years analyzing the acquisition of literacy as a cultural practice and investigating how cultures of orality impact school-based literacy competence. Her longitudinal research meticulously examines how language and cognition develop in different socialization settings in which young people learn the uses, structures and values of their languages.[5] The research of David Barton and Mary Hamilton on local and situated literacies in the U.K. supports these concepts as well.[6]

We thus perceive literacy as multiple and social. Douglas Willms argues that the definitions in the International Adult Literacy Survey (IALS) and the Programme for International Student Assessment (PISA) embrace the multiple forms of literacy associated with different cultures.[7] These major studies define and test for a series of literacy patterns that are the more common types of literacy most people need to know and to be able to use: prose, document, and quantitative. Most people need to have access to these three types of language functions, and the test items were adapted in content to each country participating in the study. The IALS/PISA definition maintains that there are measurable skills and knowledge that are common across cultures, and these have

proven to be related to meaningful outcomes in every country studied. The definition is therefore "life-outcome linked". Defining literacy in such a way distances this concept from curriculum-based definitions to a definition that is more closely linked to real-world activities.[8]

iii.   What is School Engagement/Exclusion?

School engagement "refers to the extent to which students participate in academic and non-academic school activities, identify with the school, and accept school values."[9] School engagement is best conceptualized on a continuum, ranging from high engagement (student has strong sense of acceptance and belonging at school from teachers and peers, is involved in extracurricular activities) to exclusion. The term 'school exclusion' encompasses a variety of school and student actions that result in low academic engagement. For students, these include frequent absenteeism, dropping out, and failure. For schools, these include pre-determined consequences for students engaged in violence and drug/alcohol use at school, such as suspension and expulsion. Although there is considerable variation in the definitions of 'zero tolerance', the common element is prescribed sanctions for identified harmful student behaviours, without reference to the intensity, longevity, or context of these actions. These policies have resulted in large increases in the number of suspended and expelled students in many countries, including Canada.[10]

The far-reaching detrimental consequences of school exclusion are being addressed in several countries. Suspended and excluded students are highly likely to become involved in crime, violence and drugs, and to experience academic failure. Literacy can be profoundly affected by exclusion. Schools and communities are arguably less safe when students are not fully engaged in school. Increased street crime in the school neighbourhood following suspension and expulsion has been discovered in several countries.[11]

The Bullying – School Exclusion – Literacy Link

A key hypothesis of this paper is that high levels of school engagement (or attachment) are inversely related to bullying and low literacy. Young students who enjoy school and have high rates of participation in academic and extracurricular activities are likely to develop strong literacy skills and make positive contributions to the school climate. Students with low levels of school engagement are most likely to be involved in bullying and experience literacy problems. School engagement can act as a protective factor, serving to buffer children from early onset aggression, negative peers, and environmental risks. Suspensions and expulsions, by excluding students from school life, contribute to illiteracy and offending behaviour. Other researchers have come to similar conclusions.[12]

We hypothesize that lower literacy levels and poor academic achievement among victimized students can be attributed to their elevated symptoms of anxiety and depression. Studies have found that social anxiety and depression among children interfere with learning at school (e.g., socially anxious children are less likely to participate in classroom discussions or perform in front of their peers). Some studies have

found reduced mental health as a factor that mediates the relationship between victimization and poor literacy or academic achievement.

The relationships between bullying, literacy and school exclusion are extraordinarily complex. Many mediating variables are likely at play, reciprocally interacting and building on each other. Overlapping sub-groups of children are involved; one cannot separate out subgroups of bullies and victims, those with low literacy skills, and students with low school bonding. Some quantitative studies have attempted to identify causal relationships in this area, suggesting that aggressive behaviour in children is a consequence of poor grades and school failure (the reaction to school failure/frustration hypothesis). The majority of studies, however, incorporate multiple variables in the investigation of childhood aggression (i.e., school achievement, peer relations, family relations, psychological traits). This latter body of work has found early-onset childhood aggression to be a precursor to poor grades.[13] We assume that early-onset bullying may likewise be correlated with low achievement, although there is a dearth of research in this area.

A handful of studies have explored the bullying – school engagement link. Cycle One National Longitudinal Survey on Children and Youth (NLSCY) data support a positive correlation between low levels of school attachment and experiences of bullying and aggression in twelve- and thirteen-year-old Canadian children. Jane Sprott and her colleagues analyzed 1996/1997 NLSCY data on bullying and delinquency, and found a relationship between youths' self-reported involvement in aggressive behaviours and perceived academic ability and aspirations.[14] Twelve- and thirteen-year-old students who reported less commitment to school were more likely to be involved in aggressive behaviour. Children who reported disliking school, who placed minimal importance on grades, who said they were doing poorly, and who did not value their academic futures were more likely to be involved in aggression. Whereas 18% of children who reported not liking school at all (n = 900) were involved in high levels of aggression, only 5% of children who said that they liked school a lot (n = 320) were involved in these behaviours.[15] Compared to children who did not skip classes (n = 1760), those twelve- and thirteen-year-olds who did (n = 63) were almost four times as likely to be involved in aggressive acts (10% versus 39%). In this same study, children who reported that their teachers treated them unfairly were more likely to be involved in acts of aggression.[16]

A recent Ontario study by the Centre for Addiction and Mental Health (CAMH) found comparable data on school attachment on a representative sample of 4,211 students in grades seven to OAC (formerly grade thirteen, now termed 'Ontario Academic Curriculum').[17] In their 2001 Ontario Student Drug Use Survey (OSDUS), one fifth of Ontario students (19.8%) reported that they did not like school very much or at all. Three quarters of students (75%) said that their teachers were excellent, and four fifths (80%) reported that their courses were challenging. Females were more likely than males to rate their teachers as excellent, as were grades seven, eight, and thirteen students. Students reporting low school bonding were most likely to report mental health and behavioural problems.

A growing body of research outside of Canada on the long-term impact of school exclusion ('zero tolerance' policies) has documented the devastating consequences: huge increases in the number and duration of suspensions and expulsions; significant over-representation of visible/ethnic minorities, low-income, and special needs students

involved in disciplinary measures; large increases in school dropout rates (and accompanying low literacy and employability skills of many of these youth); denial of legislated right to education; and criminalization of many behaviours which previously were addressed outside of the justice system in school settings.[18]

A Social Ecological Perspective

We argue that the development of adolescent problem behaviour is best understood within the context of environmental conditions. Robert Felner and his colleagues were among the first to advocate for an ecological approach through addressing risk and protective factors at individual and environmental levels. Family, peer group, school and community are key overlapping variables within this framework. Children have different social, psychological, and familial experiences. They face different risks and resiliency varies tremendously. The playing field is far from level. Resilience is the ability of individuals living in adverse conditions to achieve positive outcomes.[19] It is through resilience that the combination of societal level, institutional, and individual factors[20] to which young people are exposed result in positive and negative outcomes. It is important to recognize that diverse outcomes can be expected for young people living in similar negative life situations. The key is the ability of individuals, families, schools, and communities to mitigate the risk factors.

The best intervention and prevention programs therefore intervene at the social context in which behavioural problems develop, while at the same time targetting individual change.[21] Within this perspective, a student's attitudes and beliefs are viewed as adaptations to their social conditions, and mediate the impact of these conditions on their individual behaviour. Readers wanting a more complete discussion on risk and protective factors should see Kraemer et al. (1997) and Masten and Coatsworth (1998).

Using this perspective, Debra Pepler and Farrokh Sedighdeilami examined the biological and social risk factors related to the development of aggressive problems and the psychosocial difficulties associated with high levels of aggression in ten- and eleven-year-old Canadian girls (NLSCY Cycle One; n = 1,641 boys and 1,583 girls).[22] They found that aggressive girls had more problems in the biological, family context, peer context, and psychosocial domains compared to non-aggressive girls. When the problems of aggressive girls and boys were compared across these domains, there was marked similarity. Compared to the psychosocial profiles of non-aggressive peers, aggressive Canadian children had elevated levels of emotional, self-concept, behavioural problems, and academic problems. In the biological domain, aggressive children had more hyperactivity and inattention problems. The families of aggressive children were characterized by elevated levels of ineffective parenting, family violence, and conflictual relations. Finally, these children had elevated levels of conflict, victimization, and associations with deviant friends compared to non-aggressive children in this same study.[23]

Figure 1 situates bullying/victimization, school exclusion, and literacy within the social context of family, peer group, school, and community conditions. As noted previously, the relationships between these variables are extraordinarily complex. Many mediating factors are likely at play, reciprocally interacting and building on each other.

Figure 1: Social Ecological Model of Bullying, School Exclusion and Literacy

Neighbourhood Factors

Family, School & Peer Factors

Family
-child maltreatment related to poor intellectual and academic outcomes, personality disorders , IQ, reading ability
-educational achievement, literacy of parents key predictor of child's motivation to succeed at school
-caregivers with minimal skills cannot model positive literacy values and behaviours to children
-demographics, socialization practices are important
-ineffective parenting, harsh discipline practices
-conflictual relations

Racism
-immigrants, ethnic/ visible minorities, First Nations have high rates poverty, unemploy-ment, illiteracy, maltreatment, violence, health problems
-elevated rates of school exclusion/ placement in special education settings

School Climate/Culture
-school culture can contribute to student mental health problems
-lack of supervision, inconsistent enforcement of rules
-indifferent/pro-bullying attitudes: teachers, students; lack of emotionally supportive relations
-transient student population
-low SES of classroom

CHILDREN/YOUTH with LOW SCHOOL ENGAGEMENT
-low resilience and protection from multitude of risks
-weaker academic, behavioural and emotional outcomes
-victims suffer psychological harm: anxiety, depression contribute to lower achievement and literacy
-physical bullies get excluded from school by suspensions, expulsions, passing on to justice system
-absenteeism, dropping out, early grade repetition

Peer Group
-peers with positive attitudes re. violence can enable and sustain bullying
-outsider, defender roles (girls)
-reinforcer, assistant roles (boys)

Poverty
-low social capital, few social networks and ties
-community disorgan-ization, high population turnover
-neighbourhood crime, drug selling

Individual Factors
-shy, withdrawn children more likely victims
-conduct problems (hyperactivity, impulsivity, and aggression, oppositional and defiant behaviour) linked to bullying
-many bullies have deficits in social information processing and social skills: poor coping skills and frequent frustration
- learning disabilities often co-exist with emotional and behavioural disorders

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Discussion Paper

Experiences of Bullying in Canadian Children and Youth

i.   How Much Bullying and Victimization is there?
Incidence in Canada and Other Countries

Research in many countries suggests that approximately 15% of students admit to being involved in bullying, either as bullies, victims, or victim-bullies. Due to variation in the measures of bullying, time frame investigated, and knowledge level of respondents in these surveys, comparison of rates between countries is difficult.[24] In Canada, NLSCY Cycle 3 cross-sectional data (see Table 1, Appendix A) reveal that of 14,819 four to eleven year-olds, about 10% were identified by their parents as bullies (the question asks if a child is cruel, bullies and is mean to others, with the choice of 'never', 'sometimes' and 'often'). Throughout the different age groups a higher percentage of boys than girls manifested bullying behaviour, with rates ranging from a low of 10.3% (age five years; n = 3338) to a high of 15.5% (age four years; n = 935). In comparison, the rates for girls ranged from 5.6% (age ten years; n = 555) to 11.9% (age four years; n = 915).

The 2001 OSDUS (n = 4,211)[25] found that one quarter (24.6%) of students reported being bullied at school since the start of the school year. Bullying was defined as 'when one or more people tease, hurt or upset a weaker person on purpose'. More males than females said that they were victims (26.9% and 22.3% respectively), and the incidence ranged from 34.8% of seventh graders (n = 750) to 11.2% of twelfth graders (n = 388). Large differences were found among the public health regions of Ontario, with Toronto students least likely to report victimization (13.7% of 545 students) and South-Western students most likely to say that they were bullied (38.6% of 1,529 students).

In this same study, roughly one third (31.8%) of students said that they had bullied someone at school, with males reporting a much higher incidence than females (40% compared to 24%). Students in the eighth grade were most likely to report bullying (47.7%; n = 691) and thirteenth graders were least likely (18.3%; n = 313). South-Western and Central-Eastern students were most likely to bully, with Toronto students again being the least likely to report that they had bullied (approximately 40% and 18%, respectively).[26]

Data from other countries are comparable. For example, a 1998 survey on a representative sample of 6,338 students from grades four to six students in rural South Carolina found that 23 % reported victimization and 20 % admitted to bullying other students at least several times over three months.[27] Fifteen percent of a nationally representative sample of 150,000 Scandinavian students (grades one to nine) reported involvement in bullying over a period of three to five months. Nine percent reported victimization, 7% admitted to bullying, and 1.5% indicated that they were victim-bullies. Of these students, 5% were involved in bullying at least once a week.[28] Approximately 17% of a nationally representative sample of 38,000 Australian students aged seven to seventeen years reported bullying by peers each week.[29] A 1997-98 study of health behaviour among school-aged children in 27 countries found weekly rates of bullying

behaviour among thirteen-year-old students ranging from a low of 1.2% (Sweden [1,357 grade eight students] and England [2,222 grade eight students]) to a high of 9.7% (Latvia). The weekly bullying rate in Canada was 7.3% (n = 2,308 grade eight students) in this same study.[30] An English study reported that 9% of a convenience sample of 3,500 students in 25 schools admitted to sexual bullying.[31]

The problem of bullying, however, is much more widespread than those children who are directly involved as aggressors and victims. Debra Pepler and Wendy Craig, using Ontario data, argue that peers are present in 85% of bullying incidents on the playground and in the classroom.[32] From a social learning perspective, powerful negative messages can be conveyed about the benefits of aggressive behaviour.

Many incidence studies of bullying are gender-biased; measures utilized still tend to focus on verbal and physical aggression. Although some studies have incorporated good definitions and measures of indirect aggression and social exclusion, their usage is far from comprehensive. For example, the NLSCY measures indirect aggression with items such as: trying to get others to dislike someone, becoming friends with another as revenge, saying bad things behind someone's back, telling others to avoid being friends with someone, and telling someone's secrets to another (scoring ranges from 1 = never or not true to 3 = often or very true). However, respondents are not asked if they do these acts repeatedly to the same victim.

ii.   Who is Involved? Victims, Bullies, and Victim-Bullies

Characteristics of Child and Adolescent Bullies: Nationally representative surveys of students in Norway, Finland and Australia provide excellent data on bullies. Bullies have been described as physically strong (boys), relationally aggressive (females), controlling, non-empathetic, impulsive, and dominant. They experience problems conforming to rules and have a low frustration tolerance. They have a positive self-image and attitudes supporting instrumental violence and social manipulation, and believe that problems are best solved using aggressive methods and social exclusion. Bullies have more power than their victims (in terms of their gender, physical size, social status, level of physical and intellectual ability, age, ethnic origin, sexual orientation), and use social situations to establish power (advanced theory of mind). School achievement declines over time.[33]

Age trends are evident in bullying behaviour. Bullies usually victimize other children in the same grade, although age is sometimes used as a way to gain power for the bully. The youngest and weakest students in a school are the most likely to be exposed to bullying.[34] Bullying behaviour begins in elementary school, is most prevalent in grades six to eight, and continues into high school, although not at the middle school rate.

Gender plays a crucial role in bullying as well. Overall, more boys than girls report being bullied, yet a large proportion of girls report that they are primarily bullied by boys.[35] Boys are responsible for the most violent forms of physical bullying, whereas girls are most likely to engage in verbal abuse and social ostracism.[36] Although some researchers argue that boys are three times more likely to bully than girls, when both direct and indirect forms of bullying are accounted for, the gender differences are not as

large.[37] It is interesting that female bullies do not see social ostracism as a form of bullying.[38] This likely accounts for the large number of research findings pointing to boys being over-represented as both bullies and victims.

However, it is difficult to compare the incidence and impact of male and female bullying. The styles and strategies of boy and girl bullies vary considerably, and the intensity and impact of their actions are hardly comparable. Needless to say, the effects of direct and indirect bullying can both be severe over the long term, and one cannot assume that physical injuries are more harmful than repetitive psychological humiliation and social manipulation.

It is likely that familial and peer group experiences are different for girls compared to boys. The processes involved in the development of their aggressive behaviours require careful examination. The major agents of socialization in society include the family, school, peer group, media, religion, and recreation. These agents all contribute to complex cultural messages regarding the appropriateness of gendered behaviour during childhood and adolescence. In general, masculinity is associated with power, independence, aggression, dominance, and heterosexuality. Femininity is related to dependence, nurturance, passivity, serving others, and maintenance of social relationships.[39] Female aggression is contrary with the gender role expectations for girls. Consequently, they are more likely than boys to develop non-physical forms of aggression for reasons related to social acceptability. Arguably, family dynamics play a larger role in the development of aggressive behaviour for girls.[40] Girls spend disproportionately more time playing at home compared to boys.[41]

Christina Salmivalli, Kirsti Lagerspetz and Kaj Bjorkqvist have conducted extensive research into aggressive social relations of Finnish girls and boys.[42] In a series of studies, they found that girls were more likely than boys to use relational aggression. They hypothesize that when a child uses social manipulation, it is unlikely that s/he will be caught. In this sense, the harmful intentions of boys and girls can be expressed differently. Forms of relational aggression mask harmful intentions. There is some level of skill required in relational aggression. This likely explains why very young girls consistently have lower levels of aggression compared to boys of the same age. Proponents of the stage theory of development argue that young children who lack verbal skills rely primarily on physical aggression. With the development of verbal and social skills, more sophisticated forms of aggression are possible. Social intelligence (the ability to make accurate observations of the social world and use this knowledge to control social situations) is correlated with indirect aggression.[43] For example, in a study of 526 ten to fourteen year-old Finnish students, the correlation between social intelligence and indirect aggression was 0.42 ($p < 0.001$ with physical and verbal aggression controlled), and non-existent or negative with verbal aggression (- 0.04) and physical aggression (-0.09; $p < 0.05$).

Characteristics of Victims: Studies by Dan Olweus and David Perry and colleagues[44] have identified two primary types of victims: passive/submissive and provocative (although Perry termed these groups low-aggressive and high-aggressive victims, his classification is very similar to that of Olweus). Olweus conducted detailed interviews with parents of victimized boys. Passive/submissive victims comprise 65-75% of all victims, and are characterized by physical weakness (boys), difficulty asserting

themselves among peers, anxiety, low self-esteem, insecurity, psychological sensitivity, and cautiousness. These researchers argue that victims are often isolated and rejected by peers at school. Boys in this group are often over-protected by parents, yet have close and positive relations with them. Provocative victims share similar characteristics with the passive/submissive group, yet have been identified as hot-tempered, hyperactive, tension-creating, generally offensive, restless, aggressive, and defensive.[45]

It is very difficult to profile victims, and we do not want to engage in victim-blaming. While socially anxious and depressed youth may in some sense 'invite' attack from aggressive bullies (i.e., their vulnerability makes them a prime target), many otherwise well-adjusted students develop symptoms of internalizing problems following long-term exposure to bullying behaviour. Children who are shy and withdrawn are more likely targets, but these traits are not strongly correlated with parents' behaviours, and there is a great deal of variation within families in these traits.

Characteristics of Victim-bullies: Victimized children in this last group are identifiable by their bullying of weaker students while at the same time being bullied themselves. In many cases, those children who experience the most serious victimization also commit severe forms of bullying.[46] Studies indicate that from 3% to 66% of children involved in bullying report that they are both victims and bullies.[47] For example, in a survey of 4,263 Maryland middle school students (comparison control group = 1,879), Denise Haynie and her colleagues (2001) reported that among the 301 students who reported bullying three or more times over the past year, 159 (53%) also reported being victimized three or more times. Of the 1,257 frequently victimized students (three or more times), 805 (64%) reported never bullying. Ever bullying someone was correlated with ever being victimized ($\chi2$ = 125.13, p = 0.001).

iii.   Risk Factors: Individual, Family, School, Peers, Community

Individual

Children are born with different sets of abilities and potential as a result of bio-physiological factors. In the preschool years, children with difficult temperaments, early onset aggression, anti-social behaviour and social difficulties are at high risk for serious and violent offending trajectories. Without comprehensive early intervention to address risk and protective factors, these children will likely grow into the 5% of all adolescents who are responsible for committing over half of all serious youth crime.[48]

Bullies usually have a history of conduct problems at a very young age (hyperactivity, impulsivity, aggression, oppositional and defiant behaviour). Deficits in social information processing and social skills can lead to poor coping skills and frequent frustration. These children often misinterpret social cues, mistakenly assign hostile intent to others, have poor impulse control, low frustration tolerance, limited insights into the feelings of others, and lack alternative responses to stress. All of these factors are correlated with bullying behaviour.

It is estimated that 30% of Canadian boys and 22% of Canadian girls aged four to eleven years have symptoms of one or more emotional or behavioural disorders; 3% are socially impaired by their problems (NLSCY Cycle One sample of 16,038 children).[49]

Fewer than 20% of these children get help for their problems.[50] Canadian children aged twelve and thirteen years who report negative self-images, higher levels of hyperactivity, and depression are more likely to report involvement in aggressive behaviour (NLSCY Cycle 2).[51] These youth, along with students experiencing emotional/behavioural disorders (EBD) are disproportionately over-represented in the population excluded from school and in the young offender population.[52]

Learning disabled (LD) twelve- and thirteen-year-old children in the NLSCY Cycle Two were almost twice as likely as children without disabilities to report high levels of aggressive behaviour (21% of 96 children versus 11% of 1,859 children).[53] Many report being bullied, at a significantly higher rate than their non-LD peers.[54] Learning disabilities are "congenital or acquired neurological conditions that can affect all aspects of intellectual, social and emotional functioning."[55] Roughly 10 to 12% of all children have traits of cognitive deficits and learning disabilities. Ten percent of all children receive remedial schooling (special education); 5% are learning disabled.[56] Dyslexia is a common LD which causes difficulties in processing language-based information – reading, writing and spelling. Learning disabilities are often associated with emotional and behavioural disorders. Attention deficit hyperactivity disorder (ADHD) is a co-occurring psychiatric disorder. ADHD children consistently display excessive inattention, hyperactivity, and/or impulsivity (among other behaviours) over the long term.

Children and youth with all types of LD struggle academically, which often starts a cycle of feeling different and being teased, ostracized and picked on by peers. Many children and youth with LD (particularly those with nonverbal LDs, which impact coordination, perception, organization and social perception/interaction) behave in ways that may irritate and annoy peers, adding to their social difficulties. For this reason, they are more likely to be victim-bullies than straight-out bullies. However, for those with a profile of language processing problems (both in expression and comprehension) coupled with impulsivity and aggression, bullying is a more likely outcome.

As resources dwindle in the education sector, there are far fewer specialized, segregated classrooms for LD students. The current trend is for full integration of these students into mainstream classrooms. It is not clear if this trend is impacting on the involvement of these students in bullying and victimization. In one study, connectedness to parents and school was identified as most strongly associated with diminished emotional distress, suicide attempts and violence involvement among adolescents with LD.[57]

NLSCY Cycle Three cross-sectional data on bullying indicate that the relationship between bullying behaviour of children and parental level of education (person most knowledgeable, usually mothers) is weak (see Table 2, Appendix A). When mean reading and math scores by gender of child and bullying behaviour are compared, both reading and math scores for bullies were lower (about ten points on the scaled scores) than for non-bullies (see Table 3, Appendix). Although the mean differences were statistically significant according to the t-test results, this could be mainly due to the large sample size of the data; the effect size might be rather negligible.[58] Debra Pepler and Wendy Craig also analyzed data from their Ontario studies on bullying (n = 4,000). They did not find support for a relationship between poor reading/math scores and experiences of bullying/victimization.[59]

Many adolescent risky behaviours (including aggression, smoking, drug and alcohol use, criminal activity) have an age-prevalence curve that climbs quite rapidly at age 10-11, peaks around 15-16 years, and then falls rather slowly from 16-25 years. Data from Dan Olweus' Norway survey support this pattern, with the peak in bullying behaviour being in grades six to eight. However, there is not sufficient evidence from NLSCY studies to construct an age-prevalence curve. Cycle Three data suggest that bullying is most prevalent in the preschool years. This sample is limited due to its small size (less than 1,500) and the vague definition of bullying utilized.

Family

In the vast majority of cases, the seeds of bullying behaviour and victimization are planted at home. Individual characteristics can interact with family factors to increase the likelihood that a child will bully or be victimized. Children with strong bonds to their parents have better mental and physical health.[60] Family demographics (education of parents, structure, income) have an indirect effect on bullying and victimization through family socialization practices.[61] Research shows the incidence of bullying behavior has a higher likelihood of occurring in single-parent families who have a low education.[62] Family stress (low SES, unemployment, poverty, being a young parent) contributes to parent-child relations that are hostile and punishment practices that are inconsistent and harsh. These demographic factors can heighten parents' antisocial tendencies, resulting in harsh and inconsistent discipline practices. Parental modeling of aggression and antisocial behaviour promotes the development of hostile attitudes and orientations in children.

Family violence, ineffective parenting, parent-child conflict and sibling conflict are correlated with the development of aggression in boys and girls.[63] In the NLSCY, parenting practice variables include four factors: positive parenting; hostile/ineffective parenting; consistent parenting; and aversive parenting.[64] Debra Pepler and Farrokh Sedighdeilami (1998) found that self-reported high conflict with parents by both boys and girls was correlated with parental reports of childhood aggression (n = 1,641 boys, 1,583 girls; physical aggression: 0.17 girls, 0.23 boys, $p < 0.001$; indirect aggression: 0.13 girls, 0.10 boys, $p < 0.001$).[65] Frequent parental conflict can result in emotional insecurity in a child, which can be a factor in the development of emotional problems and aggression.[66]

Wendy Craig and her colleagues,[67] using Cycle One NLSCY parent report data (n = 5,662 boys and 5,646 girls aged four to eleven years) argue that there are two processes at work in the families of bullies. Their bullying and victimization model was estimated with LISREL 8, using weighted least squares estimation. Parents inadvertently reinforce child aggression by inadequately reinforcing pro-social behaviour. These parents do not model compliance and constructive problem solving. Instead, they support the aggressive and coercive behaviour of their children. Bullies, therefore, are likely to have primarily negative and hostile interactions with their siblings and parents. The second process relates to the harsh and inconsistent punishment practices of parents. Parents of bullies usually do not punish many problematic behaviours, and use overly harsh and punitive discipline with other behaviours. In so doing, parents model aggressive and antisocial problem-solving techniques.[68] Craig and her colleagues argue that family demographics and family socialization processes have an indirect effect on bullying and victimization. They are influenced by the age and sex of the children.[69]

Victims of bullying come from similar family situations. Family demographics and socialization practices are again indirectly related to being bullied at school. These children have experiences of insecure attachment, over-protective parents, maltreatment, and negative family interactions. Victims of bullying are more likely than non-victims to also be victims of parental emotional and physical abuse, and are more likely to be victims of sexual assault.[70] At school, they react to bullies with high anxiety, an emotional response favourable to their continued victimization.[71]

As Figure 1 outlines, child maltreatment is a significant risk factor for poor intellectual and academic outcomes. These outcomes include reduced academic ability and attainment, neurological impairment, and language development. Victims of child abuse and neglect are more likely than non-victims to have personality disorders, impaired psycho-social development and impaired empathic responses. Child maltreatment is also a significant predictor of IQ and reading ability scores from kindergarten through grade twelve.

Generally, the literature on the relationships between parenting and children's bullying behaviour has been predominantly cross-sectional. It does not allow for the possibility that parenting style is affected by children's behaviour, rather than vice-versa. NLSCY data analysis has not been longitudinal to date.

Peers

Peer group problems can interact with and feed off individual and family risk factors. Evidence suggests that most student peer networks are organized around hobbies, interests, and other activities shared by friends. Positive peer relations are strong protective factors for many students. Positive social support is related to lower rates of depression and anxiety.[72] Yet, in a series of Toronto naturalistic observation studies, peers were present in 85% of bullying incidents on the playground and in the classroom.[73] Similarity in roles played in bullying situations is a common activity that brings peers together. Bullies do have friends at school, although not as many as non-bullies. Their peers tend to be other students who play supportive or active roles in bullying behaviour. Overall, these young people are rejected by most other students. In the same vein, victims of bullying have networks with other victims and students not involved in bullying. However, victims have much smaller peer groups than bullies, especially male victims.[74]

Researchers who have studied bullying in the social context of peer group processes argue that peers play a significant role in enabling and sustaining bullying.[75] Studies in Canadian and Finnish elementary schools indicate that girls are most likely to take on outsider (not usually present) or defender (supports victim) roles in direct forms of bullying, whereas boys are usually reinforcers (join to watch, laugh) or assistants (join in or assist the bully) of the bully.[76] Boys therefore tend to take on more aggressive bystander roles, whereas girls appear to be more pro-social. Although this supports gender role socialization theory, it must be remembered that few if any comprehensive studies have been conducted on the roles of bystanders in *indirect* forms of bullying. We would expect that female peers might have an increased tendency to take on supportive or active roles with indirect bullies compared to their roles in direct forms of bullying.

School Climate and Culture

The playground and the classroom are the most common areas for bullying. Although national data are not available for Canada, national rates in Norway (65% playground – 38% classroom) and the U.S. (26% and 29% respectively) indicate that a large proportion of all bullying in schools takes place in these areas.[77] Recently, electronic forms of bullying (text messages on cellular phones, internet chat rooms) have been documented in some countries.

School factors can interact with individual, family, and peer group risk factors to increase the likelihood of bullying and victimization. It is important to differentiate between the concepts of *school climate* and *school culture*. School *climate* refers to the tangible environmental characteristics of a school. These include: organizational size, school governance (public and separate boards, involvement of parents on legislated committees), school resources and appearance, and the demographic and socio-economic status of students and teachers.[78] For the most part, climate factors are very difficult to change. For example, a concentration of poor children in the same class increases the vulnerability of all students in the class, as does a transient student population.[79]

On the other hand, there is good evidence that positive changes in school *culture* can result in significant improvement in student outcomes. Renato Taguiri has defined organizational culture as "norms, values and meaning systems" held by members of an organization.[80] Researchers have applied this term to schools, denoting the set of beliefs and norms shared by students and staff.[81] An important element of school culture is school membership: student perceptions about acceptance and belonging at school.

CAMH recently conducted an important study on school culture in Ontario (n = 2,400 grade nine students). Using the schools as communities perspective (see Figure 2), David DeWit and his colleagues found that positive family and peer group characteristics operated alongside school culture as consistent predictors of strong student sense of school membership and academic and behavioural functioning (structural equation models were used). The beneficial results of school culture on student behaviour were achieved primarily in an indirect manner by increasing sense of school membership. Key findings included:

♦ Although roughly two thirds of students reported a strong personal sense of school membership and positive school culture ratings, between ten and fifteen percent said that they were alienated from school life and rated school culture unfavourably.

♦ Females, younger students, and students from stable family backgrounds (socially supportive family members, close parental monitoring, strong parental interest) had the highest personal ratings of school membership, as did those reporting post-secondary maternal education and active involvement in structured community activities outside of school.

♦ Students with a strong sense of membership reported less frequent use of substances, lower thrill-seeking behaviour, fewer incidents of in-school victimization, fewer disciplinary referrals, lower truancy, better grades, and fewer symptoms of depression, anxiety, and externalizing behaviour problems.

♦ Trusting and respectful student relations, strong school emphasis on task-focussed learning goals with minimal emphasis on ability-focussed learning

goal structures, strong school emphasis on academic pursuits, and positive student body behavioural norms were uniquely related to elevated feelings of membership and decreased academic and behavioural problems.

The 2001 OSDUS (representative sample of 4,211 students) found that the vast majority of Ontario students reported feeling close to people at their school (87.8%) and being part of their school (85%). Females were more likely than males to report feeling attached to school, as were eleventh and twelfth graders. Just over 1% reported that they had no friends, and 4.1% said that they had no one to talk to about their problems. Frequent school transitions were also correlated with poor learning and behavioural outcomes.[82]

Along similar lines, Jane Sprott examined the quality of student-teacher relations and school conformity to task learning goal structures. [83] Using Cycle Two and Three NLSCY data to examine the effect of school culture on student behaviour (n = 1,311 10-13 year-olds), she categorized schools into two groups: those who were primarily focussed on instrumental tasks and student achievement (academically oriented schools); and those schools with a primary focus on emotional support for students. Sprott discovered that after controlling for various risks, an emotionally supportive classroom at time one (when the participants were aged 10-13 years) was related to lower levels of violent behaviour at time two (two years later at ages 12-15 years). She theorizes that emotionally supportive schools are critical for high-risk children; the school acts as a buffer against the lack of emotional support in the home. She argues that pushing these children to succeed academically, in the absence of emotionally supportive teachers, will not produce positive results.
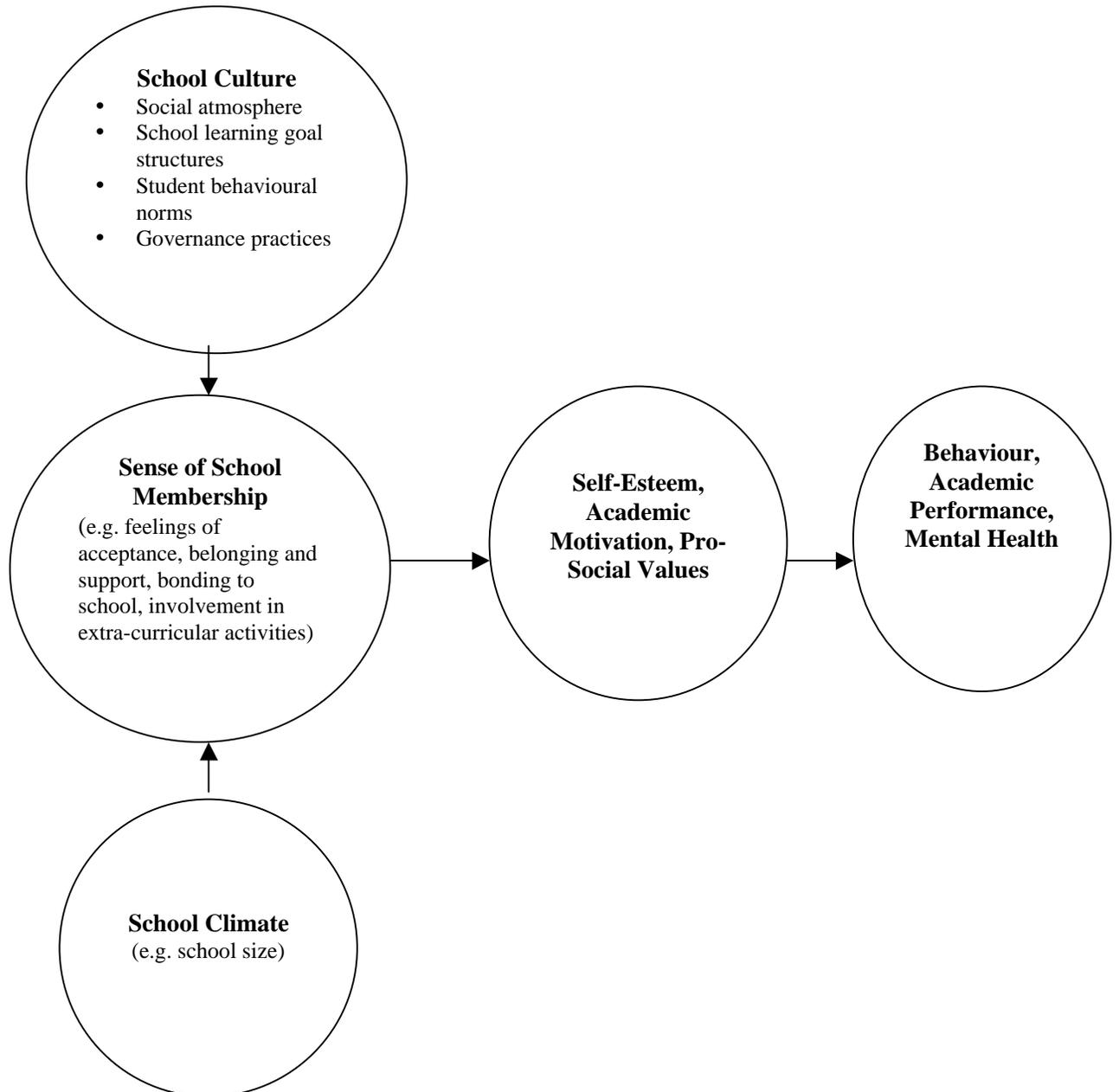
Many studies have shown that school safety and student mental health are closely related. The presence of aggressive students in the same or slightly higher grade, lack of supervision during breaks and time before and after school, indifferent or pro-bullying attitudes of teachers and students, and uneven, inconsistent application of rules contribute to an unsafe school environment.[84] A small minority of students in the OSDUS said they were worried about being harmed or threatened at school (12.5%). Female students were more likely than males to report feeling unsafe at school, as were those students in the younger grades. Poor mental health increases with perceptions of an unsafe school environment. Students who report feeling unsafe at school have lower self-esteem compared to those students who say that they are safe at school. [85] Low self-worth is associated with poor physical and mental health outcomes and poor school and personal achievement.[86] The 2001 OSDUS found that roughly one in ten students (9.2%) said that they had low self-esteem.

David DeWit suggests that supervised extra-curricular activities at school (especially sports) may provide bullies an opportunity to physically or psychologically victimize and intimidate other students without fear of punishment from school officials. While several studies have linked involvement in these activities to positive outcomes (e.g., strong academic achievement), others have found no relationship and in some instances a *worsening* of student behavioural problems. "Expanded extra-curricular activities also places more students in close contact with one another, and therefore the potential exists for heightened conflict", writes DeWit.[87] Wayne Welsh discovered a positive relationship between level of student participation in extra-curricular activities at

school and several harmful behavioural outcomes.[88] This is the 'close proximity' explanation. Victor Battistich and his colleagues suggest that extra-curricular activities may be harmful to some students if such activities place too much emphasis on competition and social comparison, factors that undermine the principles of unity, equality, and shared values inherent in the 'Schools as Communities' perspective.[89]

The 'Schools as Communities' framework suggests that students exposed to favourable school culture (marked by a warm and caring social atmosphere, positive student behavioural norms, a strong school emphasis on academics, and a strong school emphasis on learning goals focussed on mastery and understanding of curriculum material) will develop a strong personal sense of school membership based on feelings of support and acceptance and belonging from classmates and teachers. Feelings of membership in turn are expected to improve academic and behavioural functioning and overall mental health both directly and indirectly through enhancements in self-esteem.

Figure 2: Schools as Communities Framework

School Culture
Social atmosphere
School learning goal
structures
Student behavioural
norms
Governance practices

**Sense of School
Membership**
(e.g. feelings of
acceptance, belonging and
support, bonding to
school, involvement in
extra-curricular activities)

**Self-Esteem,
Academic
Motivation, Pro-
Social Values**

**Behaviour,
Academic
Performance,
Mental Health**

School Climate
(e.g. school size)

Reproduced, with permission, from DeWit et al, 2002: 7.

Community

Community factors can interact with the other risk factors discussed here to heighten the likelihood of bullying and victimization. As Figure 1 portrays, neighbourhoods characterized by high-density housing, disorganization, high population turnover, high crime rates and unemployment tend to have low social capital. Local infrastructures to promote inclusion and participation in community activities are scarce. There are usually few social networks and ties, with a disproportionate number of single-parent families and individuals experiencing mental or physical health problems. Immigrants, ethnic and visible minorities, and First Nations people make up a disproportionate share of many social housing communities.

Socio-economic status (SES) is a key indicator of poverty. SES, broadly speaking, is measured through an individual's level of education, income, and occupational status. Access to power, prestige and wealth is unequal in Canada. Douglas Willms has adopted a gradient perspective in his study of the relationships among children's educational and health outcomes and SES. Socioeconomic gradients differ in terms of their level, slope and strength.[90] Low SES children and youth tend to be more vulnerable compared to higher SES individuals. They do less well at school, are not as likely to complete high school, and experience less labour market success compared to children and youth from more affluent families. However, the negative effects of poverty can be overcome with a positive family environment (good parenting skills, stable family unit, good mental health). In fact, roughly two thirds of children from low SES families have average or above average cognitive and behavioural outcomes.[91] The adverse consequences of poverty for the remaining one third of children are compounded by parents who use coercive styles, low bonding, and mental health problems. The *depth* of poverty (how far families fall below the low income cut-off, and for how long) is an important determinant of vulnerability: children who are very poor, for long periods of time, have poor cognitive and behavioural outcomes.[92]

iv)   Consequences of Bullying and Victimization

The consequences of bullying and victimization are complex, and vary for victims and bullies. Depending upon a given child's resiliency and protective factors, effects of the same bullying episode can range from mild to severe. Both victims and bullies can experience serious disruptions in school achievement and engagement – both of which are correlated with low literacy skills. School failure has a strong correlation with bullying and victimization.[93] Bullies usually externalize problems and victims usually internalize problems.[94]

Effects on Victims

The psychological damage that bullying can cause for student victims includes internalizing behavioural problems such as depression and social anxiety. Many otherwise well-adjusted students develop symptoms of internalizing problems following long-term exposure to bullying behaviour. At the very least, exposure to bullying behaviour at school is likely to exacerbate problems among students already pre-disposed to emotional difficulties. It is common for victims to experience low self-esteem, loneliness, and insecurity. A large proportion have difficulties making friends and

maintaining social relationships. Many report blaming themselves and thinking that they are worthless. Depression and suicidal ideation can result, and suicide attempts (and in rare cases completions) have been found in many studies.

In David DeWit's study, approximately 45 % of the 2,400 grade 9 students surveyed reported symptoms of physiological depression in the previous week (e.g., sluggishness, difficulty sleeping, poor appetite, and attention problems). Between 20 and 25 % of all students reported frequently occurring symptoms of social anxiety. School engagement is directly affected; victims are likely to experience learning disruptions and refuse to attend school (due to fear of ongoing harm). [95] In this same study, about one in every three students reported that they did not feel included in school activities; 10% did not feel accepted; and 18% felt like they did not belong. Some studies have found that experiences of victimization at school are causally antecedent to the onset of mental health problems among children and adolescents.

In adulthood, victims are at elevated risk of suffering from low self-esteem, depression and other mental illnesses (such as schizophrenia and in rare cases suicide) and experiencing ongoing victimization in interpersonal relationships. Overall, victims tend to suffer more diverse problems compared to bullies. Given that anxiety and depression are not readily identifiable, victims also have a greater likelihood of suffering in silence. [96]

Effects on Bullies

Bullies are more likely than non-bullies to be involved in antisocial and delinquent activities, including: drug and alcohol use, fighting, vandalism, shoplifting, gang activity, truancy, school drop out, and being suspended and expelled. Like victims, many report feeling lonely and having trouble making friends.   Persistent bullying can have life-long negative impacts.[97] In a longitudinal Norwegian study of three cohorts of boys (n = 900; control group used [boys who were neither bullies nor victims]), Dan Olweus found that bullies in grades six to nine (1973) were four times as likely compared to non-bullies to be convicted of crimes at age twenty-four. Physical bullies were at elevated risk of engaging in serious violence at ages 15-25 years. Only 10% of non-bullies had three or more convictions, compared with 35-40% of bullies. Sixty percent who bullied in grades six to nine had been convicted of at least one crime by age twenty-four.[98] Canada's first national study on youth homicide found that victimization by and perpetration of serious bullying was a key factor in the childhood of nineteen adolescents convicted of homicide and murder. All of these youth had serious learning disabilities, and their level of literacy was very low – on average at a grade four level when they committed the murders.[99] Unfortunately, no rigorous studies have been conducted on the adult criminal behaviour of girl bullies.

Effects on School Culture

The social environment of the school is a contributing factor in the development of student psychopathology. In schools where bullying takes place, students are likely to report feeling unhappy and unsafe at school. When bullying is not addressed by school staff, many children are exposed to repeated incidents, increasing the likelihood that they will view aggressive behaviour as acceptable and rewarding.[100]

Literacy Skills of Canadian Youth

i.   How Do Canadian Students Perform on Literacy Tests?

Two major OECD studies provide data on the performance of young Canadians in this area: the 1995 International Adult Literacy Survey (IALS) on 16-25 year-olds, and the 2000 Programme for International Student Assessment (PISA) study on 15 year-olds. Both surveys covered three domains of literacy with representative samples in OECD countries. In the IALS, approximately 10% of Canadian participants scored at Level One (the lowest level) and an additional 25% scored at Level Two. In the PISA study, Canadian students ranked second in reading, sixth in mathematics and fifth in science among 32 countries. Seventeen percent of Canadian students scored in the top level of the reading test, compared to the OECD average of 10%. Thirty-three percent of Canadian students scored within the next highest reading category. Seven percent scored in the lowest level (they were not capable of basic reading), and almost 3% scored below level one (they had serious difficulties understanding even the simplest written material). The average scores of students in Newfoundland, Prince Edward Island, Nova Scotia and New Brunswick were significantly below the Canadian average in reading, mathematics and science. Alberta students performed the best, whereas those in New Brunswick had the poorest performance, although still at or above the middle of the international range. Both studies found that roughly 10% of Canadian youth have serious literacy problems.

ii)   Literacy Risk Factors

Literacy is a key indicator of social capital and determinant of health and social inclusion. Individuals with higher levels of literacy are much more likely to enjoy a better quality of life, have healthy lifestyles, and experience lower rates of disease. Highly literate Canadians are also likely to have well-paying jobs and to report high levels of social embeddedness in their communities.[101] Differences in levels of literacy are directly related to an individual's socio-economic status (SES).[102] Youth who scored at levels one and two of the 1995 IALS were more likely to be unemployed or to find employment in lower paying jobs compared to the remaining 65% of Canadian youth with higher levels of literacy.[103]

The social ecological model, outlined in Figure 1, situates bullying, school exclusion, and literacy within the social context of family, peer group, school, and community conditions. One of the best predictors of children's cognitive and behavioural outcomes for the early and elementary school years is mother's level of education. In turn, key predictors of high school completion are cognitive ability and prior academic achievement.[104] Children with a higher level of school readiness in kindergarten and grade one score higher on reading and math tests in the early grades. The level of a child's school readiness is predicted by many factors, including parental SES, infant stimulation and reading in the home, innate cognitive ability, and emotional/behavioural problems. Parental literacy skills are highly correlated with a child's motivation to succeed. Caregivers with minimal skills cannot model positive literacy values and behaviours to children. An intergenerational transmission of illiteracy

can result when parents pass on to their children attitudes and skills that keep them in this cycle.

In all participating countries in the PISA study, students from higher socio-economic backgrounds performed better than those from lower. Students in Canada from the 25% of families with the lowest SES scored above the average for all students in OECD member countries. Canadian students from the wealthiest quarter of families scored an average 568 on reading, math and science. The poorest quarter of Canadian students scored an average of 503 (the overall average for all countries was 500). This was not the case for most other countries. The wealthiest U.S. students averaged 554, while the poorest averaged 466.

Although SES had the biggest influence on student performance in the 2000 PISA, family structure also played a role. Students from two-parent families did better than those from single-parent families in seven of fourteen countries surveyed, including Canada. Parental attitudes toward academics was also found to be a key variable; students with a home environment that stimulated learning did better than all other students in all countries. Students with parents who took them to a variety of cultural events and who discussed current affairs outperformed other students in all countries. As well, students who enjoyed reading, borrowed books from a library and had high career aspirations did better than other students.

Finally, gender is an important risk factor for literacy. Girls performed significantly better than boys on reading tests in all countries in the 2000 PISA. The average score for 15-year-old Canadian females was 32 points above that of the males. Alberta boys ranked 38 points behind their female counterparts, but were still the best in Canada among boys. In Ontario, girls scored on average 548 and boys 418. Still, both genders scored at level three on a scale of one to five ("capable of solving reading tasks of moderate complexity, such as locating multiple pieces of information, making links between different parts of a text, and relating it to familiar everyday knowledge"). Forty percent of Canadian girls reported reading at least 30 minutes a day for enjoyment, compared to about 25% for boys.
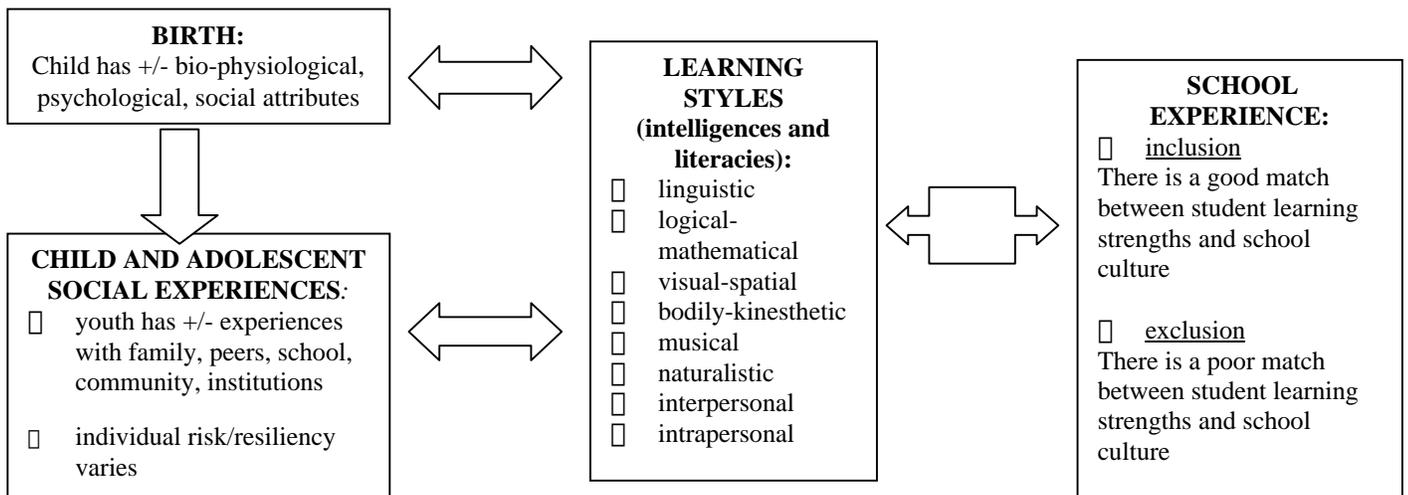
ii)   Teaching for Multiple Literacies and Intelligences

The concepts of multiple literacies and intelligences are incorporated and assessed with the literacy tests used in PISA/IALS. Multiple intelligence (MI) researchers have argued for years that students rarely process information in one style; they learn using a combination of styles, in interaction. In traditional classrooms, teachers have favoured the linguistic and logical mathematical teaching styles. Many students, especially those facing multiple risks, do not learn well using this teaching method. Their learning strengths are often not assessed or valued within the traditional school setting. Instead, many drop out or experience failure. Originally developed by Howard Gardner,[105] multiple intelligences theory identifies eight learning styles; individuals can develop skills in any of the intelligences through exposure and experience. This theory was further developed by Thomas Armstrong,[106] who referred to MI as 'Smarts'. The eight forms of intelligence are easily assessed in the classroom using a simple self-report tool.[107] Appendix B describes the eight multiple intelligences.

Figure 4 illustrates how student intelligences/literacies are contextualized within individual risk and resiliency factors. School experiences can support student inclusion

or exclusion by the degree to which multiple learning styles are incorporated into teaching practices. It is the responsibility of each teacher, whether within or outside of the school system, to understand language and communication as the vehicle for learning–history teachers therefore need to teach students how people in the world of history read, write, and talk; and explain what concepts are relevant to this knowledge domain. So too must science, math, technology, industrial arts, and English teachers teach the same things in their courses. We thus cannot talk about 'giving' students a single literacy; we are not out to abolish or replace any of their existing language practices. Literacy is comprised of multiple literacies, and our job is to augment and build upon the literacy contexts students already possess, to expand their language-using repertoire to an increasing number of social and cognitive contexts.

Figure 3: Learning Pathways to School Inclusion/Exclusion

BIRTH:
Child has +/- bio-physiological, psychological, social attributes

CHILD AND ADOLESCENT SOCIAL EXPERIENCES*:*
⇒ youth has +/- experiences with family, peers, school, community, institutions

⇒ individual risk/resiliency varies

LEARNING STYLES (intelligences and literacies):
⇒ linguistic
⇒ logical-mathematical
⇒ visual-spatial
⇒ bodily-kinesthetic
⇒ musical
⇒ naturalistic
⇒ interpersonal
⇒ intrapersonal

SCHOOL EXPERIENCE:
⇒ inclusion
There is a good match between student learning strengths and school culture

⇒ exclusion
There is a poor match between student learning strengths and school culture

Adapted, with permission, from Totten, 2003.

School Exclusion and Canadian Children and Youth

i.   How Many Suspensions and Expulsions are there?

School completion supports a healthy socialization process and development of academic and vocational interests and credentials. School also provides structured daytime activities. There are no national, provincial or territorial data on the usage of suspension and expulsion in Canadian schools. In some regions, school boards maintain data pertinent to their own jurisdiction. Good data exist in other countries. In all cases, ethnic minority students, especially boys, are disproportionately over-represented in special education placements and among those children excluded from school. In part, this is related to the fact that almost all of these children live in poverty.[108]

In the U.S., many schools are required to report on their usage of discipline, allowing for longitudinal analysis of the impact of zero-tolerance policies. One quarter of all African American students were suspended at least once over a four-year period. [109] African American boys are much more likely to be in special education placements (and assessed to have emotional disorders) compared to their white counterparts in the U.S.A.[110] The suspension rates for Miami Dade County Middle schools range from below 2% to more than 42%. [111]   African Caribbean British boys are approximately five times more likely compared to white students to be excluded from school, and are significantly over-represented in special education placements.[112] Maori students in New Zealand and Aboriginal students in Australia are much more likely to be excluded from school.[113] Ethnic minority male students in the Netherlands and Belgium are disproportionately represented in special education classes.[114] Romany children from the Czech Republic are over-represented in schools for students with emotional/behavioural disorders.[115] In England and Scotland, Gypsy Traveller children are disproportionately excluded from schools.[116]

ii.   How Many Students Drop Out?

Canada's high school dropout rate is considerably higher compared to other OECD countries.[117] The overall high school completion rate for 19-20 year-old Canadians was 81% during 1995-1998. Male youth were less likely to complete high school (78%); 84% of female youth did not drop out.[118] Rates varied by province, from a low of 79% (Quebec) to a high of 85% (PEI) during this same period of time.

Aboriginals are twice as likely to drop out of high school or not have a post-secondary diploma compared to non-Aboriginals.[119] When the educational attainment of Aboriginals is compared to Canada's non-Aboriginal population, figures are startling. In 1996, 45% of Aboriginals aged 20-29 years had less than high school; for non-Aboriginals, the rate was 17%. For the same age group, only 32% of Aboriginals had completed high school, compared to 36% of non-Aboriginals. Twenty percent of Aboriginals had completed college, compared to 28% of non-Aboriginals; and 4% of Aboriginals had completed university, compared to 19% of non-Aboriginals.

iii. Risk Factors

School exclusionary policies create an underclass of students already disadvantaged by poverty, learning disabilities, emotional/behavioural disorders, and racism. There are complex dynamics which contribute to the disproportionate over-representation of these students in the population of the suspended and expelled. The risk and protective factors related to school exclusion are comparable to those factors previously discussed relating to bullying/victimization and illiteracy (see Figure 1).

In one U.S. study, 35% of students identified with learning disabilities dropped out of high school – twice the rate of students without learning disabilities.[120] It is estimated that 30% of adults with severe literacy problems have undetected or untreated learning disabilities.[121] Many studies on the youthful offending-LD link suggest that the majority of young offenders have learning disabilities.[122]

Time away from school – whether caused by suspension/expulsion, low attendance, or dropping out negatively affects learning outcomes. These experiences contribute to low levels of literacy. The absence of school structure increases the risk that young people will become involved in crime, experience unstable housing, belong to anti-social peer groups, and abuse substances.[123] Suspended and expelled adolescents are more likely to not return to school following disciplining and are much less likely to graduate from secondary school. School problems and early school leaving are linked to labour market exclusion. In 2001, the unemployment rate for youth aged 15-24 who had not completed high school was 19.2% (162,600 youth out of 846,300 youth). The unemployment rate for high school graduates of the same age was much lower (11.6%), and for university graduates was 7.3%.[124]

Next Steps

i.   There is a dearth of Canadian quantitative research on the prevalence of all forms of bullying – direct, indirect, racial, sexual, and homophobic. Although NLSCY data are a good start, the definitions of bullying and victimization used in questions are limited. These questions are so general that it is not possible to ascertain if acts of aggression are against the same victim. This is essential in order to differentiate between assaultive and bullying behaviour. Little data are gathered on the context of the episodes: are race, ethnicity, or sexual orientation factors? Sexual bullying is not addressed. Further, without a more specific definition of indirect bullying for respondents, this important survey will continue to under-report the often-disguised acts of bullying by girls.
Recommendation: HRDC and Statistics Canada should consider modifying the definitions and measures of bullying and victimization in the NLSCY. Incorporation of some revised items contained in the Direct-Indirect Aggression Scales might be helpful.[125]

ii.   Longitudinal comparisons between cohorts in the NLSCY are difficult due to changing definitions of some key variables and low response rates of teachers. Although the cross-sectional data are excellent, it remains difficult to explore developmental or causal factors (such as those related to aggression in both boys and girls).
Recommendation: HRDC and Statistics Canada should continue their work to increase the participation rates of teachers and maintain consistency of measures. This may well require methodological adjustments for data collection processes.

iii.   Data from other countries suggest that age of the bully is an important factor. Canadian research on early and late onset bullying is needed to better inform anti-bullying interventions. Can we identify those who are early-onset bullies, and constructively intervene? Can we develop family and school cultures which prevent late-onset bullying from happening?
Recommendation: Use data from the CPHA Anti-bullying Best Practices Project (funded by the National Crime Prevention Centre and available in June 2004) to inform this research. Follow-through with recommendations i) and ii) will address these issues.

iv.   There are no provincial, territorial or national data on the numbers of expelled and suspended students, their characteristics, the length of exclusion, schooling options during suspension or expulsion, and the reintegration process (if any). Consequently, little is known about the bullying – school exclusion relationship, nor on what forms of bullying are most likely to receive disciplinary measures. These data exist in other countries, and are needed in Canada in order to

investigate the impact of disciplinary policies and procedures. This is likely in large part due to the fact that there is no federal ministry of education in Canada. ***Recommendation: The Council of Ministers of Education (CME), along with the Canadian Association of School Principals (CAP), should consider implementing a pilot study in a large Canadian city to develop the required systems and protocols to gather data on all students excluded from school.***

v. School disciplinary policies and procedures are most likely inconsistently applied in Canada. There are excellent data from other countries indicating that this is a key variable related to the dramatic variation in exclusion rates among many schools.
    Recommendation: The CME and CAP should consider investigating the variables of school climate and culture in the same pilot study identified in recommendation iv) above. A handful of Canadian studies have been conducted on this issue. [126] A CME/CAP study could build on the strengths of these studies. The interpretation and application of disciplinary policies and procedures is a key element of school culture.

vi. Further research is needed to investigate whether reduced mental health is a mediating factor in the relationship between victimization and poor literacy or academic achievement. More research is also required to investigate what role, if any, learning disabilities play in this relationship.
    Recommendation: Relevant methodological procedures and survey questions from the Centre for Addiction and Mental Health OSDUS and School Culture studies can be adapted for investigation on these issues. A mix of qualitative and quantitative methods is required for such a study. This research could be a component of a CME/CAP study (as noted above).

vii. Basic data exist on literacy levels and school drop-out rates of Canadian youth. However, important contextual data are missing. For example, what are the literacy levels of school drop-outs? What role does experiencing bullying play in dropping out of school?
    Recommendation: Build on the HRDC Youth in Transition Survey to incorporate these questions.

viii. The relationship between multiple intelligences/literacies and student bonding to school requires further investigation. The development of Canadian curricula incorporating this approach to teaching has been very slow compared to that in other countries.
    Recommendation: The CME and CAP should consider supporting a pilot project to develop curricula and evaluate outcomes in a select number of schools. Good curricula content is available from other countries.

Appendix A
NLSCY Cycle 3 Bullying Data

Table 1: NLSCY Cycle 3 Bullying Behaviour by Age of Children

AGE OF CHILD	GENDER OF CHILD	n	BULLYING
4 Years	Female	915	11.9%
	Male	935	15.5%
	Subtotal	*1850*	*13.7%*
5 Years	Female	3198	6.5%
	Male	3338	10.3%
	Subtotal	*6536*	*8.4%*
6 Years	Female	706	8.4%
	Male	723	12.7%
	Subtotal	*1429*	*10.6%*
7 Years	Female	462	9.5%
	Male	517	13.2%
	Subtotal	*979*	*11.4%*
8 Years	Female	634	10.3%
	Male	626	12.6%
	Subtotal	*1260*	*11.4%*
9 Years	Female	430	7.2%
	Male	434	11.1%
	Subtotal	*864*	*9.1%*
10 Years	Female	555	5.6%
	Male	589	12.9%
	Subtotal	*1144*	*9.4%*
11 Years	Female	389	8.2%
	Male	368	11.7%
	Subtotal	*757*	*9.9%*
Total		**14,819**	**9.9%**

Notes:

Covered ages of children from 4 to 11 (NLSCY Cycle 3 cross-sectional primary file of the latest version released by Statistics Canada).

Bullying measurement: Question (CBECQ6JJ) which asks if a child is cruel, bullies and is mean to others, with the choice of 'never', 'sometimes', and 'often').

Estimates are based cases providing valid answers to all the variables in the models.

Table 2: NLSCY Cycle 3 Bullying Behaviour by PMK's Highest Level of Schooling Obtained and Gender of Child

GENDER OF CHILD	Highest Education Level Obtained by PMK	Bullying Behavior Never	Sometimes or Often	Weighted Total
FEMALE	Less than secondary	88.3%	11.7%	164,789
	Secondary school	92.4%	7.6%	273,677
	Beyond high school	89.4%	10.6%	392,266
	College or university degree	93.7%	6.3%	603,539
	NOT STATED	99.0%	1.0%	7452
	Subtotal	91.7%	8.3%	1,441,723
MALE	Less than secondary	86.6%	13.4%	182,172
	Secondary school	89.4%	10.6%	256,572
	Beyond high school	88.5%	11.5%	430,139
	College or university degree	88.7%	11.3%	642,689
	NOT STATED	94.2%	5.8%	5047
	Subtotal	88.5%	11.5%	1,516,619
ALL	Less than secondary	87.4%	12.6%	346,962
	Secondary school	90.9%	9.1%	530,249
	Beyond high school	88.9%	11.1%	822,406
	College or university degree	91.1%	8.9%	1,246,288
	NOT STATED	97.0%	3.0%	12,500
	Total	90.1%	9.9%	2,958,345

Notes:

Covered ages of children from 4 to 11 (NLSCY Cycle 3 cross-sectional primary file of the latest version released by Statistics Canada).

PMK: Person Most Knowledgeable about the selected child. They were, in the vast majority, mothers of the children included in the study.

Bullying measurement: Question (CBECQ6JJ) which asks if a child is cruel, bullies and is mean to others, with the choice of 'never', 'sometimes', and 'often').

Estimates are based on cases providing valid answers to all the variables in the models.

**Table 3: NLSCY Cycle 3 Comparisons of Mean Reading and
Math Scores by Gender of Child and Bullying Behaviour**

Bullying Behaviour	Gender of Child	Reading Score	Math Score
Never	Female	231.8	411.9
	Male	233.8	413.4
Yes	Female	225.1	391.3
	Male	220.7	403.6
Never	Both Female and Male	232.8*	412.6*
Yes	Both Female and Male	222.4*	398.8*
Total	Female	231.2	410.1
	Male	231.9	412.0
	Total	231.6	411.0

Notes:

Covered ages of children 7 to 11 (NLSCY Cycle 3 cross-sectional primary file).
Bullying measurement: Question (CBECQ6JJ) which asks if a child is cruel, bullies
and is mean to others, with the choice of 'never', 'sometimes', and 'often'.
Estimates were based cases providing valid answers to the variables in the models.
*Mean differences are statistically significant at the level of $p>0.001$ based on t-test
results.

Appendix B

Multiple Intelligences Description

Gardner's Terms	Armstrong's Terms	Description
bodily-kinesthetic intelligence	body smart	Learn through moving and acting things out.
interpersonal intelligence	people smart	Learn in group setting, are outgoing "people persons".
intrapersonal intelligence	self smart	Work independently and are often quiet and private.
linguistic intelligence	word smart	Learn by listening and memory; strong auditory skills.
logical-mathematical intelligence	logic smart	Abstract, conceptual thinkers who learn through strategies and puzzles.
musical intelligence	music smart	Learn through non-verbal sound and rhythm.
naturalist intelligence	naturalist smart	Learn by being outside in natural environment.
spatial intelligence	picture smart	Learn and think in pictures; see holistically.

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End Notes

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[22] Pepler and Sedighdeilami, 1998.

[23] Ibid.

[24] Estimates of the proportion of all children who are bullied range from 15% (Sourander, Helstela, Helenius and Piha, 2000) to 25% (Duncan, 1999).

[25] The OSDUS is an Ontario-wide survey of elementary (grades 7 and 8) and secondary (grades 9-OAC) school students conducted every two years by CAMH since 1977.

[26] Adlaf and Paglia, 2001.

[27] Melton et al., 1998.

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[58] NLSCY Cycle 3 Cross-sectional primary file, specialized tabulations, 2003.

[59] We asked them to do specialized cross-tabs on data from 4,000 children in their research.

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[61] Pepler and Sedigheilami, 1998; Patterson and Dishion, 1988.

[62] LeBlanc, 2001.

[63] Pepler and Sedigheilami, 1998; Patterson, Reid and Dishion, 1992.

[64] Ineffective parenting is a summary score of seven questions (for example: How often do you think the punishment you give ___ depends on your mood? How often do you feel you are having problems managing ___? Scoring ranges from 1 = never to 5 = all the time).

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[66] Craig, Peters and Konarski, 1998.

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[68] Ibid.

[69] The authors note that the influence of negative family interactions on externalizing problems and bullying is weaker with age for boys $\_\_$(df=1, N=11308) = 12.75, p. < 0.001; this influence remains constant for girls $\_\_$(df=2, N=11308) = 0.01, ns. The correlation between family functioning and internalizing behaviour was stronger for ten and eleven year-old girls, $\_\_$(df=1, N=11308) = 9.87, $p.$ < 0.001; there was no change for boys $\_\_$(df=2, N=11308) = 0.79, ns.

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[72] Cohen and Wills, 1985.

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[75] Pepler and Craig, 2000; Salmivalli, 1999; O'Connell et al., 1999.

[76] Salmivelli et al., 1998.

[77] Olweus et al., 2002.

[78] DeWit et al., 2002; Gottfredson and Gottfredson, 1985.

[79] Willms, 2002c.

[80] Taguiri, 1968.

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[98] Olweus, 1993.
[99] Kelly and Totten, 2002.
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[106] Armstrong, 1999, 2000.
[107] Baron and Baron (2000) have developed the best Canadian tool.
[108] US Department of Education, 1998b.
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[124] Statistics Canada, 2002.
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