

Parental knowledge of child-reported bully-victim and sexual harassment problems in seven Canadian schools: Implications for policy and program development.

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Finally, more than 2,500 different students completed surveys and provided important narratives related to their experiences during the 2003 – 2004 school year. They have made a significant and valuable contribution to Canadian research and interventions in the area of school safety.

We thank you all.

#### **ABSTRACT**

This paper reports on the involvement of parents in addressing the self reported bully-victim and sexual harassment problems of their children at school. The findings are based upon data from a large, multi-school Canadian study investigating bully-victim problems, sexual harassment and racial discrimination in grades four – twelve. In this 2005 Canadian Public Health Association study, 562 parent surveys were matched with child surveys to allow for comparison of parent-child perceptions of peer relationship problems. One hundred and forty-two school staff also participated.

One out of five students reported that they rarely or only sometimes felt safe at school. Forty-five percent of students in the study experienced bully-victim problems, sexual harassment or racial discrimination at least once during a four week period, including 10% who were involved as perpetrators and/or victims on a weekly basis. Forty percent of students were not directly involved in these peer relationship problems yet were affected because they saw or heard these incidents. Only 15% of the students reported that they were not involved in any way in these incidents.

Very few parents of bullies reported having any knowledge of their child's harmful behaviour, and just over one-half of the victims had a parent who knew about it. Parents were least likely to know about their child's involvement in sexual harassment. In general, parents had very little understanding of when and where harmful incidents were taking place at school. School administrators and teachers in this study reported that they did not have the resources nor the authority to hold parents of bullies accountable.

These findings build upon previous research which suggests that children's perceptions of peer relationship problems differ greatly from those of adults. Adults cannot rely solely on their own perceptions to address peer relationship problems at school. Communication between parents and their children in this study was problematic. The knowledge of teachers about harmful peer interactions was no better. They did not see nor hear the vast majority of harmful peer interactions at school reported by their students. These seven schools did not routinely engage parents in an effective way to address peer relationship problems. When parents are not meaningfully involved in school efforts to deal with bully-victim problems, program impact will be limited. Programs should promote healthier interpersonal relations using a cognitive-behavioural approach. Parent education and training should be a key element of this strategy.

#### LITERATURE REVIEW

Bullying, sexual harassment and racial discrimination are major public health problems in Canada's elementary, middle and high schools. Below, the reader will find a brief overview of prevalence and characteristics of students involved, a review of related parenting practices, and a summary of the research on parent involvement in school programs.

The needs of students involved in frequent and long-term aggression and/or victimization are generally much higher and complex compared to those involved infrequently. For this reason, rates are classified as *weekly* (one or more times per week) and *monthly* (once or twice per month). Furthermore, there are three distinct groups of students involved in these behaviours: bullies, victims, and bully-victims. Studies suggest that roughly six percent of students report bullying others weekly, eight percent report that they are victimized weekly, and one percent report that they are both victimized and bully others weekly (about 1/6 of bullies and victims).

## **Bullying**

#### **Physical Bullying**

Ten - fifteen percent of students admit to being involved in weekly physical bullying, either as bullies, victims, or victim-bullies. This form of bullying peaks in grades six – eight, and gradually declines thereafter. Boys are almost twice as likely compared to girls to report frequent physical bullying, while both genders are equally likely to report frequent victimization. An additional 25-30% of students are involved in monthly physical bullying. Gender and age patterns are consistent for self-reported bullying, although many more boys than girls say that they are victimized on a monthly basis.<sup>3</sup>

#### Verbal Bullving

Roughly 10 - 15% of students report involvement in weekly verbal bullying. Approximately twice as many students report being victimized compared to being aggressors. There are no significant gender differences in this type of bullying.<sup>4</sup>

#### **Social Bullying**

Students who engage in social bullying are not likely to get caught because their harmful intentions are masked. Girls are more likely than boys to be both bullies and victims. In Canada, approximately 15% of grade six – ten girls are involved in weekly social bullying as victims, bullies, or victim-bullies. Twenty-five – thirty percent report involvement on a monthly basis. Another recent study in the U.K. found that 46% of primary students reported experiencing this form of bullying several times in the past six months; 10% reported that they had socially bullied others several times in the last six months. The rates for frequent social bullying were 1% bullies, 38% victims, and 6% bully/victims.

#### **Electronic Bullying**

There are no reliable data on weekly and monthly rates of this form of bullying. Available statistics indicate that text messages (sent through cellular phones) are the most commonly used method. In one small Canadian study of 233 students in grades nine - twelve in an Ontario rural school board, 34% reported having bullied someone at least once in this way during the school year and 39% reported being the victim of electronic bullying at least once. Instant messaging

and e-mail were the main methods. Few participants reported weekly involvement and there were no significant gender differences.

A survey conducted by the National Children's Home in the UK reported that of 856 children and adolescents (aged eleven – nineteen years) surveyed, 4% had been the victims of electronic mail bullying, 16% were victimized by text messaging, and 7% reported being the victim of chat room bullying in the 2004 school year.<sup>9</sup>

#### **Sexual Harassment**

Same-and cross-gender harassment begins as early as grade six and is associated with pubertal development and involvement in mixed-gender peer groups. Girls are at least twice as likely to report experiencing sexual harassment as boys. Girls are also more likely to have sex unwillingly and be pressured to have sex against their will. In a national U.S. survey, 12.5 percent of young women in grades 9 – 12 reported being forced to have sexual intercourse. Girls report more serious and negative impacts on their school performance and mental health. A study on Canadian middle schools found that boys were significantly more likely to report perpetrating harassment compared to girls.

## **Homophobic Harassment**

Homophobic harassment is an understudied and frequently overlooked form of sexual harassment in Canadian schools. However, evidence suggests that it is pervasive in elementary, middle and high schools. Sexual minority youth (gay, lesbian, bisexual) and questioning youth (individuals who experience uncertainty about their sexual orientation) report more experiences of victimization by bullying, sexual harassment and physical abuse than heterosexual adolescents. It is common for boys to use homophobic harassment against other boys in school settings, beginning in early adolescence. The Gay, Lesbian and Straight Education Network's 2003 National School Climate Survey on 887 middle and high-school sexual minority students in 48 American states and the District of Columbia found that 84% were verbally harassed because of their sexual orientation. The vast majority said that faculty never or rarely intervened when they were present for these incidents. The vast majority said that faculty never or rarely intervened when

#### **Racial Discrimination**

Data from the 2001-2002 World Health Organization Healthy Behaviour in School-aged Children survey on 7,235 Canadian youth aged ten – sixteen years indicates that racial/religious discrimination was the least prevalent form of victimization (compared to bullying and sexual harassment) and increased with student's age among males. 1999 U.S. data indicate that 13% of all American students reported that they had been called a hate-related word or name (by racial-ethnic group, results ranged from a low of 12% for Hispanic students to a high of 17% for black students), and 36% reported seeing hate-related graffiti at school.<sup>18</sup>

#### The Role of Parents

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. Family violence, ineffective parenting, parent-child conflict and sibling conflict are correlated with the development of aggression in boys and girls.<sup>19</sup>

Parental modelling of aggression and antisocial behaviour promotes the development of hostile attitudes and orientations in children. Caregivers who use bullying and aggression to resolve conflict at home are more likely to have children who are involved in peer relationship problems.<sup>20</sup> Parents who rely on punitive practices contribute directly to the development of aggressive behaviour in their children. Frequent parental conflict can result in emotional insecurity in a child, which can be a factor in the development of emotional problems and aggression.<sup>21</sup> Early parental mismanagement of children's behaviour (failure to get children to comply with limits and rules) can be a contributing factor in the development of bullying behaviour. Ongoing, inappropriate parental demands, children's noncompliance, and children's avoidance of parental demands through aggression can result in a coercive family process.<sup>22</sup>

Children with strong bonds to their parents have better mental and physical health.<sup>23</sup> Most parents play a significant role in the development of their child's competency and resiliency against involvement in peer relationship problems. Children who have involved and caring parents (and/or other adult caregivers) usually develop the required skills for self-regulation of attention, emotion, and behavior. Long-term engagement of these adults promotes the development of good cognitive skills and intellectual functioning. 24 These young people are highly unlikely to experience bully-victim problems and harassment.

The development of peer relationship problems 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. A student's attitudes and beliefs are adaptations to their social conditions, and mediate the impact of these conditions on their individual behaviour. Children have different social, psychological, and familial experiences. They face different risks and resiliency <sup>25</sup> varies tremendously. It is through resilience that the combination of societal level, institutional, and individual factors to which young people are exposed result in positive and negative outcomes. The key is the ability of individuals, families, schools, and communities to mitigate the risk factors. <sup>26</sup>

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.<sup>27</sup> 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 characterised 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.<sup>28</sup> These researchers also found that self-reported high conflict with parents by both boys and girls was correlated with parental reports of childhood aggression (physical aggression: 0.17 girls, 0.23 boys, p. < 0.001; indirect aggression: 0.13 girls, 0.10 boys, p. < 0.001).

Wendy Craig and her colleagues 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.<sup>29</sup> 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.<sup>30</sup> 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.<sup>31</sup>

Family demographics (education of parents, structure, income) have an indirect effect on bullying and victimization through family socialization practices. <sup>32</sup> Research shows the incidence of bullying behavior has a higher likelihood of occurring in single-parent families who have a low education. <sup>33</sup> Family stress (low SES, unemployment, poverty, being young parent) can contribute to parent-child relations which are hostile and punishment practices which are inconsistent and harsh. These demographic factors can heighten parents' antisocial tendencies, resulting in harsh and inconsistent discipline practices.

Victims of bullying come from similar family situations compared to those of bullies. Family demographics and socialization practices are again indirectly related to being bullied at school. Victims have experiences of insecure attachment, over protective parents, maltreatment, and negative family interactions. They 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.<sup>34</sup> At school, they react to bullies with high anxiety, an emotional response favourable to their continued victimization.<sup>35</sup>

## Adult Response to Peer Relationship Problems at School

Adults are often unaware of bully-victim problems and parents rarely discuss these issues with their children.<sup>36</sup> Student surveys reveal that a low percentage of students believe that adults will help. Students feel that adult intervention is infrequent and ineffective, and that telling adults will only bring more harassment from bullies. They report that teachers seldom or never talk to their classes about bullying.<sup>37</sup> In one study, 25% of teachers reported that there was nothing wrong with bullying or putdowns and consequently intervened in only 4% of bullying incidents.<sup>38</sup> In a survey of students in fourteen Massachusetts schools, over 30% reported that adults did little or nothing to help.<sup>39</sup> Students often feel that adult intervention is infrequent, unhelpful and fear that telling adults will only bring more harassment from bullies.<sup>40</sup> A recent study demonstrated that there is a wide gulf between parent and child perceptions of problems at home. Children's perceptions of family functioning differed among bullies, victims, victim-bullies, and noninvolved children (for example, bullies reported less family cohesion and greater use of punishment). Parents did not perceive any of the family problems reported by the children (particularly by the bullies).

These findings point to the necessity of educating and training caregivers on the development of open and trusting relationships with their children. Parents need support to understand the differences between their own and their children's perceptions of peer relationship problems. If parents can't see nor hear what their children experience, they can't effectively address the harmful consequences of harassment and bullying. Parental involvement is an essential aspect in the delivery of quality, evidence-based anti-bullying and harassment programs. Families need more support to identify and address the needs of their children who are involved in peer relationship problems at school. 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.

## **Evaluations of School-based Programs with a Parent Component**

There have been a handful of major evaluation studies of school-based anti-bullying programs outside of Canada. Each study is briefly described below in terms of program components, methods, design, and outcomes.

#### The Texas study (Expect Respect), U.S.A. (Sanchez et al., 2002)

Pre-test, post-test control group design (random group assignment) with students in fifth grade in six intervention and six control schools (N = 1,109; average age 11 years). Measures included self-report surveys at three time intervals and gender-specific focus groups for students and their teachers. The intervention included classroom education, policy and procedure development, parent education, staff training (including bus drivers), and support services. Teachers learned about bullying and sexual harassment research and interventions, classroom management techniques, and incorporated prevention education into curriculum (12 weekly lessons). Through the use of role plays, class discussions and written assignments, students learned general knowledge and were taught basic skills. Parents were provided with seminars and newsletters on bully, victim and sexual harassment problems, and were taught about general facts, how to effectively respond, and where to find community resources. Individual and group counseling and community resources were available at school. There was a significant attrition rate, with only 60% of children completing all three self-report surveys. Although there was an increased reporting of bullying and students reported that they were more likely to intervene in bullying incidents, there was no significant increase in student knowledge of bullying.

# The Norwegian study, evaluated in the May 1983 – May 1985 Bergen sample (Olweus, 1991, 1993)

Cross-lagged design (time-lagged with different groups beginning the intervention at different times) with eight and twenty month post-intervention assessments on forty-two primary and secondary schools with 11-14 year-olds (N=2,500). At the school level, there were bully/victim conferences, increased supervision, improved playgrounds, distribution of 32-page bully booklets, and regular feedback meetings. Teachers were trained and participated in the development of positive school climate and praising pro-social behaviour of students. The focus in the classroom was on cooperative learning, common positive activities, role playing, class rules and discussions, and bully/victim reading resources. At the peer level, students were trained to support victims. Serious talks were held with bullies, victims and their parents. Persistent bullies had to change classes or schools. Parents were provided with a four-page bully/victim package and encouraged to participate in parent circles. Measures included student

questionnaires and teacher ratings as described in Olweus' Bullying Prevention Program (BPP). Students reported approximately 50% reduction in bullying, along with decrease in other antisocial behaviour. It is noteworthy that Olweus' dramatic outcomes have not been replicated in other sites using the Norwegian model. Control groups were not used and no data regarding levels of significance have been provided. When percentages and scores were transformed into Z-scores (non-significant programs effects Z<1.96), self-reported victimization (intervention group Z=11.51) and bullying (intervention group Z=10.17) were large, as well as reductions in anti-social behaviour (Z=4.44).<sup>44</sup>

#### The Norwegian study, evaluated in the 1986 Rogaland sample (Roland, 1989, 1993)

Pre-test, post-test design (no control groups) with retesting after three years on thirty-seven primary and secondary schools using the BPP (n = approximately 7,000 students). Evidently, there was unequal implementation of the Norwegian model between schools. Teachers were trained to focus on positive rapport with students, work closely with parents, have talks with bullies, develop pro-social norms and common goals in the classroom, and develop awareness and skills in bystanders. Measures included student questionnaires and teacher interviews focused on degree of program implementation. Increases in bullying and victimization were reported over time (larger effects for boys compared to girls), although better outcomes were reported in schools with full program implementation. When converted to Z-scores, interventions had a non-significant effect on self-reported victimization and bullying.<sup>45</sup>

## The Schleswig-Holstein, Germany Study (Hanewinkel and Knaack, 1997)

This uncontrolled study used 10,600 students in grades 3 – 12 in 37 primary and secondary schools (3,180 primary students completed pre/post-testing; 7,420 secondary students completed pre/post-testing). Schools with age-equivalent subject groups (age cohort design with adjacent cohorts) were compared and Olweus' Bullying Prevention Program was followed. At the broad school level, increased supervision and reorganization of playgrounds were optional components. Teachers participated in a bully/victim conference day and a violence prevention training day. In the classroom, they established class rules against violence, integrated violence prevention into the curriculum, and had ongoing group discussions. Intensive discussions between staff, parents and bullies/victims took place at the individual level. Parents were also offered instructional and discussion groups on bully/victim problems. No statistically significant reductions in victimization or bullying were reported two years following the intervention, although decreases in frequency were reported.

#### The 1999 – 2001 Peaceful Schools Study, Topeka, Kansas, U.S.A. (Tremlow et al., 2001)

This controlled study with non-random group assignment used two matched primary school pairs, including 542 students in grades one – five (intervention = 235, control = 307). School components included school-wide posters and positive reinforcement for not fighting, and a 'gentle warrior' program. Teachers were encouraged to participate to the greatest extent possible. Parents were actively engaged through the provision of bully/victim information and workshops on family power struggles. In the classroom, there were bully, victim and bystander discussions and high school peer mentors were used. Post-testing for student victimization self-reports occurred two years after completion. Teacher ratings took place 12 weeks following the intervention. Program effects were not statistically significant, although the authors reported

significant increases in academic achievement for students, dramatic decline in discipline referrals, teachers reporting less victimization, and increased student empathy for victims.

## The South Carolina, U.S.A. Study (Melton et al., 1998)

This controlled study with random group assignment used 6,388 grade four – eight students in six matched pairs of school districts (control and intervention groups were equal). Eleven intervention and 28 control schools were used in the first year of the study. Olweus' Bullying Prevention Program was followed. At the broad school level, intervention schools implemented a violence prevention program based upon increased supervision, bullying rules, pro-social reinforcement, and violence prevention committees. In the classroom, teachers incorporated into the curriculum violence prevention lesson plans, bullying videos, role plays and activities, and weekly discussions. Parents were engaged through the provision of bullying and program pamphlets, parent-teacher events, and meetings with parents of victims. Bullies were punished, victims were protected and offered social skills training, and chronic victims and bullies were referred for counseling to school counselors. At seven-month follow-up, there were relative reductions in self-reported bullying, delinquency, vandalism, school misbehaviour and punishment for school-related misbehaviour for intervention schools (Z=6.75 average for intervention school self-reported victimization).

## The Florence, Italy Study (Ciucci and Smorti, 1998)

In this controlled study with random group assignment, six matched middle school pairs were used including 487 students in grades one – three (intervention group = 243, control group = 244). At the broader school level, policies on bullying were developed. There were open meetings with parents, and teachers were offered training workshops on the implementation of group problem-solving techniques in the classroom. Video-taping supported class dialogue on problem-solving. Results were disappointing. Post-testing completed at ten months in each of the three school years produced non-significant program effects in levels of self-reported bullying and victimization. In fact, significant negative results were reported by students regarding teacher intervention in bullying episodes.

#### Canada

Canada remains far behind the demonstrated successes of other countries in the rigorous evaluation of anti-bullying programs and systematic implementation of evidence-based interventions. Instead, the Canadian experience largely consists of a hodge-podge of 'safe-school' programs. Standards for anti-bullying program effectiveness are only now being developed. The most comprehensive study was conducted by Debra Pepler and her colleagues in an evaluation of Olweus' program in four Toronto primary schools (N = 898) with students aged 8 – 14 years. The program components were at the school, classroom, parent, and individual levels. At the school level, there was policy development, increased supervision, and playground improvement. Teacher training was provided in the form of bully/victim conferences, and teachers were encouraged in the classroom to use learning circles, mentoring, and work on bully/victim learning themes. Students were trained to intervene in bullying incidents. Serious talks were held with bullies and their parents, victims were supported and taught social skills, and victim's parents were taught to support their child. Student questionnaires pre-intervention and 18 months post-intervention were used to measure outcomes. No control groups were used. Although they found small reductions in the reported rate of victimization over the preceding

five days, elevated rates of bullying others more than once or twice per term were also discovered. The authors argue that peer intervention, when it takes place, is effective in stopping bullying: bullying ceased within ten seconds in 57% of cases in the Toronto study. However, peers only intervened in a small minority of incidents. There was no significant increase in students' reports of peers almost always intervening at any of the schools; instead, these rates decreased at each school.<sup>47</sup>

#### **METHODS**

## **Survey Instruments**

A number of methods were used to inform the survey tools. Recent reviews of evidence-based crime prevention in schools were examined, <sup>48</sup> and major studies on school-based anti-bullying and harassment programs were reviewed. <sup>49</sup> Interviews were conducted with Canadian experts in academia and anti-bullying intervention programs. Based upon this work, it was decided to modify existing self-report tools for students and school administrators, and develop new tools for parents and school staff. The latter two surveys, although never utilized previously, were based on the same instruments upon which the student and administrator surveys were founded.

- Two student surveys were developed (CPHA Safe School Survey for Grades 4 7; CPHA Safe School Survey for Grades 8 12), 50 based upon the West Vancouver School District's Safe School Surveys and the WHO Health Behaviour in School-aged Children survey questions relating to school culture and bullying. 52 The key difference between the grades four seven and grades eight twelve surveys is in the length (the younger survey is shorter) and the manner in which sexual harassment and racial discrimination are explored. The definitions, response scales and procedures are identical for both surveys, thereby permitting a merging of the two data sets on most questions. The added length of the older survey is due to additional questions on the multidimensional nature of sexual harassment and racial discrimination. The WHO questions have been utilized with hundreds of thousands of students across the world, and the West Vancouver surveys with approximately 4,000 students. It was decided to exclude students under the grade four level due to the considerable problems around reliability and validity documented in previous investigations.
- A school administrator survey was developed (CPHA Administrator Anti-Bullying/Harassment Program Survey),<sup>53</sup> based upon David Smith and colleagues' Anti-Bullying Program Survey<sup>54</sup> and the West Vancouver School District's Safe School Survey.
- A parent survey was created (CPHA Safe School Survey for Parents)<sup>55</sup>, based upon the same two instruments utilized for the development of the student surveys.
- A school staff survey was created (CPHA Anti-Bullying/Harassment Program Survey for Teachers/Other Adults in the School),<sup>56</sup> based upon the same surveys utilized for the development of the student and administrator surveys.

#### **Definitions**

In all surveys, the following definitions of harassment, bullying, and racial discrimination were utilized.

#### Harassment

To harass someone is to bother, make fun of, trouble or attack them, and this is done repeatedly. Harassment can take many forms, some of which are criminal offenses. Someone who harasses wants to hurt the other person (it's not an accident), and does or says the same things over and over again. There are three main types of harassment:

- Bullying
- Sexual Harassment
- Racial Discrimination

#### **Bullying**

Bullying occurs when a student experiences repeated attacks, over time, by one or more other students who systematically abuse their power. There are many ways to bully someone. A bully wants to hurt the other person (it's not an accident). A bully does or says the same things over and over again. Bullying is about using power over another person. There are four main kinds of bullying.

• Physical: - Hitting, shoving, kicking, spitting, beating up on others

- Damaging or stealing another person's property

• Verbal: - Name-calling, mocking, hurtful teasing

- Humiliating or threatening someone

- Making people do things they don't want to do

• Social: - Excluding others from the group

- Spreading gossip or rumours about others

- Making others look foolish

- Making sure others do not spend time with a certain person

• Electronic: - Using computer, e-mail, phone or cellular phone text messages to:

- Threaten or hurt someone's feelings

- Single out, embarrass or make someone look bad

- Spread rumours or reveal secrets about someone

#### **Sexual Harassment**

Sexual harassment is any unwanted and unwelcome behaviour about sex or gender that interferes with a person's life and makes him/her feel uncomfortable even if the harasser says s/he was only joking. It is not about behaviours a person likes or wants from a peer (e.g., wanted kissing, touching, flirting between a boyfriend/girlfriend).

#### **Racial Discrimination**

Discrimination occurs when people are seen as different and/or treated differently because of their racial or ethnic background. Examples include racist names, treating someone as inferior or second-rate, leaving someone out or blaming problems on them because of their religion, skin color, or country of origin.

## **Qualitative Interviews and Narratives**

A series of in-depth interviews were conducted with the seven school administrators, selected teachers at each school who acted as champions of the project, and a small number of students. These interviews took place during 2003 - 2004, both in-person and by telephone. Interviews were audio-taped and then transcribed. Additional qualitative data was gathered from written narratives provided by many students, parents, teachers and administrators on the survey forms. Three hundred students, 275 parents and 70 teachers provided qualitative data in this method. Data were coded and sorted by grade, gender and school into various themes.

#### **Ethics and Consent**

A research advisory committee guided the development of survey tools, methodology, and data analysis for this study.<sup>57</sup> Ethical approval was granted by the Youth Services Bureau Research and Ethics Committee in 2002. Due to concerns related to anonymity and safety, a rigorous set of procedures was put in place to ensure that no harm was done to participants.

Previous studies have documented how anti-bullying initiatives can do more harm than good if not delivered as intended and in the absence of a supportive school culture and committed staff team. For this reason, only those schools which demonstrated significant commitment and achievements in these areas were accepted into the project.

In order to preserve the confidentiality and address safety concerns of respondents, schools had to provide written agreement to abide by the procedures and protocols for survey administration and student follow up.<sup>58</sup> Included in these procedures were various options for students and parents to access school and community resources to address any needs which surfaced in the surveys. One hundred and five students requested follow-up support from the schools, and many parents participated in information sessions held at the schools following the release of data to each individual school.

In addition, considerable staff resources were allotted by each school to ensure that students understood the key concepts and survey questions, and that class behaviour was appropriate during survey completion. In all instances, individual schools administered the survey to all students, at the same time, during the first two periods of a selected morning during the data collection week. A minimum of two school staff were present during survey completion. The student's home-room teacher explained the concepts, walked respondents through the survey question by question, and ensured that all procedures were followed correctly. A second school staff circulated amongst the students, responding to individual questions and concerns.

School administrators were provided with two options for gaining the informed consent of study participants: an active consent process, which required parental/guardian signature for their child's participation on a CPHA form; or a passive consent process, whereby the school board and specific school administered the surveys as part of their ongoing safe school initiative and parents were advised by the principal to only contact the school if they did not want their child to participate. The passive consent process required a letter signed by the school board superintendent and chair attesting to the fact that the research project had been approved by them.

## **Sample Selection and Characteristics**

#### **School Selection**

Due to financial constraints, the study was only able to incorporate seven schools in the project. Efforts were made to reflect the geographic, ethno-racial, and language diversity of the Canadian student population in the study sample. As well, the project sought to capture a range of school experiences in the implementation of programs: those without any formalized anti-bullying program, those planning to implement a program, and schools where comprehensive programs had been in place for at least two years.

In January 2003, a request for candidates was sent out to school boards across the country via the Canadian Teacher's Federation and the Canadian Association of Principals. A search was also conducted for schools where whole-school anti-bullying programs had been in place for two years or more, followed up with 50 interviews with Canadian experts in the field. Schools were selected based upon the following criteria: level of administrator, staff and parent support for the project; capacity to address the needs of victims, perpetrators and other individuals in the school community; written approval of school superintendent and chair of school board; and commitment of administrators to follow the ethical and methodological protocols of the study. Individual interviews were conducted with administrators and teacher representatives of each school which passed an initial screening by CPHA. It is important to acknowledge that the data are biased as a result of this selection process.

Three schools were in small-size cities with 25,000 – 50,000 residents, two schools were in larger cities with 600,000 or more residents, one school was in a rural community with under 1,500 residents, and one school was located in a small town with just under 25,000 residents. The schools were located in Manitoba, Quebec, British Columbia, New Brunswick, and Ontario. Three sites had been running a school-wide anti-bullying program for one year or more; three schools were developing a program; and one school did not have any anti-bullying program components in place.

#### Sample Recruitment and Participation Rates

Eighty-two percent of all enrolled students in the seven schools participated in the study. The student data for each of the seven schools are considered to be representative for each respective school. The participation rate of parents was approximately 35%. Seventy-five percent of teachers completed surveys, with rates ranging from 40% - 94% across schools.

#### **General Sample characteristics**

The combined sample was 2,782 individuals: 730 grades four – seven students; 1,346 grades eight – twelve students; 562 parents (coded to match their child's survey); 137 school staff; and seven school principals. Approximately one-third of the student participants had a parent who completed a survey.

Students: Gender, grade distribution and ethno-racial origins for the matched and unmatched samples were virtually identical. Both samples had approximately equal numbers of boys and girls. The participation rate was consistent across grades, although just over one-half (51%) were in grades seven and eight. Eight-eight percent of students in both matched and unmatched samples reported that they had lived in Canada for all their life, and 12% said that it was difficult for them to read and write in English. Seventy-nine percent indicated that English was the first language they had learned to speak and 9% cited French. The sample was reflective of the ethno-racial origins of the Canadian population. In both samples, 56% identified as Caucasian, 15% reported that they were of mixed race (primarily African-Caucasian, Latino-Caucasian, and Asian-Caucasian) and 17% said that they belonged to another racial group (predominantly South Asian, Asian, Latin American and African/Caribbean). Twelve percent identified as First Nations, Inuit or Métis. The matched and unmatched samples are representative of the sexual orientation status of Canadian youth in the general population: 3%

identified as gay, lesbian or bisexual; 4% reported that they were questioning their orientation; and 93% said they were heterosexual.

Parents: Seventy-nine percent were mothers, 18% fathers, and 3% reported that they were another guardian. Almost all reported that they read and wrote easily in English, and 81% stated that they had lived in Canada for all their life. Seventy-seven percent identified as Caucasian, 15% said they were an ethnic or racial minority (predominantly South Asian, Asian, Latin American and African/Caribbean) and 8% reported that they were First Nations, Inuit or Métis.

School Staff: Eighty-eight percent were teachers, six percent indicated that they were a guidance counselor, social worker, behavioural technician, and seven percent fit in the category of 'other' (administrative assistant, noon hour monitor, bus driver, etc). Fourteen percent reported that they had been at their school for less than twelve months, 26% said that they had been at the school between one-two years, and 60% indicated that they had been at their school for three years or more. The gender composition was 65% female and 35% male.

#### **FINDINGS**

Chi square and Cramer's Phi<sup>62</sup> tests were run to determine criteria for statistical significance and strength of association between variables such as gender, grade level, race, and victimization by and/or perpetration of bullying, sexual harassment and racial discrimination. Kappa tests were run on coded parental and child reports to determine the proportion of agreements after chance was excluded. The student-reported prevalence rates are comparable to other major studies in Canada and elsewhere. Both weekly and monthly rates are presented here. Parent and teacher findings follow.

## **Physical bullying**

Approximately one-third of students in the matched sample said they were involved as victims and/or bullies in physical bullying monthly, and one in twenty reported that they were involved as victims and/or aggressors weekly. This form of bullying was highest amongst boys in grades six and seven, and gradually declined thereafter. Sixty-nine percent of students did not bully and also were not bullied physically. Thirty-one percent were victimized and/or engaged in physical bullying once or more during the four-week period: 13% were bullied but did not take part in bullying others; 9% bullied others but were not bullied themselves; and 8% were bullied and they also bullied others. The data suggest that there is a positive and strong association between being a victim and perpetrator of physical bullying (\_\_ = 150.99, p<0.0001; Cramer's Phi = 0.292).

Three percent of the students reported victimization by physical bullying weekly, and boys were significantly more likely to be victimized than girls ( $\underline{\phantom{0}} = 8.62$ , p<0.0033; Cramer's Phi = 0.0693). Boys and girls were equally likely to have reported that they engaged in physically bullying others every week (2%).

## Verbal bullying

One in nine students reported weekly victimization by verbal bullying and one in nineteen admitted to bullying others verbally every week. No significant gender differences were found. Thirty-nine percent of students did not bully and also were not bullied verbally. Sixty-one percent of students were victimized and/or engaged in verbal bullying once or more during the four-week period. Twenty-eight percent were bullied and they also bullied others, 20% were victims only, and 13% were bullies only. The data suggest that there is a positive association between victimization and bullying in this area (\_ = 192.85, p<0.0001; Cramer's Phi = 0.3273). Twelve percent of students reported weekly victimization by verbal bullying; boys were equally likely to be victimized compared to girls. Six percent admitted to bullying others verbally every week (there were no gender differences).

#### **Social bullying**

Forty-one percent of students reported that they were victims and/or bullies monthly, seven percent said they victimized weekly, and two percent reported that they bullied other students socially every week. Building upon previous research in this area, girls were more likely than boys to be both bullies and victims.<sup>64</sup>

#### **Electronic bullying**

Thirteen percent of students reported they were victims and/or bullies monthly. Five percent were victims only, 3% were bully-victims, and 5% were bullies only. There was a positive association between victimization and bullying ( $\underline{\phantom{0}} = 207.61$ , p<0.0001; Cramer's Phi = 0.3437). Two percent of all students said that they were electronically bullied weekly and two percent admitted to bullying others electronically every week. No gender differences were apparent, and high school students were most likely to be involved.

Only 25% of parents were aware of their child's self-reported bullying behaviour (the proportion of agreements after chance has been excluded was 17% (kappa = 0.169, p< .0005). Of the parents who had knowledge that their child was a bully, they were most likely to know about his/her physical bullying (kappa = 0.173, p< .0005) and least likely to know about his/her social bullying (kappa = 0.121, p< .0005).

Only 56% of parents said they knew about their child's self-reported victimization by bullying during this 4-week period (the proportion of agreements after chance has been excluded was 32% (kappa = 0.319, p< .0005). Of these parents who knew that their child was victimized, they were most likely to be aware of verbal (kappa = 0.321, p< .0005) and social victimization (kappa = 0.257, p< .0005).

Surprisingly, there was no significant difference between parental level of knowledge of their child's engagement in weekly compared to monthly bullying. We expected to find that parents would be more aware of their child's frequent involvement in peer relationship problems at school. Yet, parent reports revealed a complete lack of knowledge regarding their child's frequent bullying behaviour. Only one percent of parents of students who reported *weekly* involvement in physically bullying had knowledge of this; none had knowledge of frequent social, electronic or verbal bullying engaged in by their children. Knowledge of *monthly* bullying ranged from two – eight percent, depending on the form. Differences here were not statistically significant. Similar patterns emerged for weekly and monthly victimization: parental knowledge ranged from one – seven percent for weekly victimization, and from five – twenty percent for monthly victimization.

#### Racist behaviour

Eighteen percent of grade eight - twelve students reported they had called other students racist names monthly and five percent had done this weekly. Ten percent of grade four - twelve students said that they had been called racist names monthly, and five percent were victimized weekly in this way.

There was inter-school variation in levels of racist behaviour and victimization. In part, this can be explained by the degree of ethno-racial diversity in each of the seven schools. In one school, ten percent of students reported that they called other students racist names weekly, and just under one-third said that they did this monthly. In another school, one out of every four admitted to doing this monthly, and one of five said they were victimized by this form of racism. Although both schools had roughly equal proportions of ethno-racial minority students, the latter had one primary minority group, whereas the former had greater diversity in the student population.

It is interesting that almost all of the parents of these students denied their child was involved in racist behaviour: only two percent had knowledge of this. Parents who identified as First Nations or being a member of a racial minority were five times more likely to have knowledge of their child's self-reported victimization by racist comments at school compared to Caucasian parents. Overall, four percent of parents had knowledge of their child's victimization in this area. There were no significant differences between the Caucasian and minority parents regarding awareness of their child having called other students racist names. Some of these parents provided narratives on the surveys describing how specific ethnic and racial minorities were the cause of problems in the school. A Caucasian mother of grade seven boy summed it up this way: "The (minority groups) ARE the worst to bully students – they have a BAD attitude."

#### Homophobic harassment

Ten percent of students reported that they had been called homophobic names weekly. Many more boys than girls reported victimization, and almost all boys named male peers as the aggressors. Whereas 14% of boys were affected, 6% of girls were victimized in this way. Tests of significance reveal a positive association between gender and homophobic harassment victimization and perpetration. Boys had a higher rate of victimization by and engagement in homophobic behaviour ( $\underline{\phantom{a}} = 23.32$ , p<0.0001; Cramer's Phi = 0.1657). When asked who insulted them, 71% of boys said that other boys were responsible, whereas only 7% reported that girls harassed them in this way. On the other hand, girls indicated that boys and other girls were equally likely to have had harassed them in this way. The association between gender and perpetration was positive and moderate in strength ( $\underline{\phantom{a}} = 47.7$ , p<0.0001; Cramer's Phi = 0.4046). Twenty-five percent of students were victimized monthly.

Parental knowledge of their child's involvement in homophobic harassment at school was extremely low. Only 16% reported that they were aware of their child's victimization, and none of the parents of students who reported that they had harassed others in this way were aware of this

#### Sexual harassment

Eight percent of grades 8 – 12 students reported that someone at school had made an unwelcome or crude comment about their body weekly (there were no significant gender differences). In a majority of these incidents (75%), boys were identified as the aggressors of both male and female victims. Most victims reported that the harassment was collective, involving two or more aggressors. Parental knowledge of their child's self-reported victimization by verbal sexual harassment was very low. Only three percent of parents had knowledge of monthly victimization, and just one percent had knowledge of weekly victimization.

In total, twenty-eight percent of students reported that they had been victimized by unwanted sexual touching, grabbing or pinching at school at least once in the 4-week period: twelve percent reported that this had happened weekly and sixteen percent said that this had happened monthly. Only four percent of parent-respondents indicated that they were aware of this. Five percent of student said that they had been forced to do something sexual (not including kissing) at school once or more during the four weeks (there were no significant gender differences). These alleged incidents could be classified as sexual assault under the Criminal Code of Canada.

A grade twelve girl who reported being the victim of unwanted sexual contact wrote the following words on her survey: "I think the biggest problem for me is sexual degradation. I wear sweaters and big clothes - still the guys stare in an unrespectful/sexual manner. Personally I find it degrading and I think most men need to be taught respect." Not one parent indicated awareness of their child's victimization by sexual assault at school.

There was a very strong association between gender and sexual harassment ( $\underline{\phantom{a}}$  = 167.61, p<0.0001; Cramer's Phi = 0.7425). Of the male victims of unwanted sexual contact, 12% said that other boys were responsible, 84% reported that girls harassed them, and 3% reported that both boys and girls harassed them. On the other hand, 10% of the female victims said that other girls were the aggressors, 78% said that boys had harassed them in this way, and twelve percent said that both girls and boys had done this. These data are consistent with the findings of other investigations of peer to peer sexual harassment in Canadian<sup>65</sup> and American<sup>66</sup> schools.

There was a positive association between gender and level of empathy for victims of sexual harassment. While almost all female respondents said that they wanted sexual harassment against students to stop once an incident began (when they witnessed an incident), just over one-half of boys said the same (\_\_ = 96.69, p<0.0001; Cramer's Phi = 0.2844). Similarly, whereas almost all girls reported that the sexual harassment of students bothered them a great deal of the time, this was true for only one-half of the boys (\_\_ = 103.07, p<0.0001; Cramer's Phi = 0.2938). A grade eight boy summed it up this way: "A lot of girls ask for sexual harassment by the way they dress, if they didn't want the comments they should wear clothes that cover's their bodies."

#### Student reporting and intervening

Fifteen percent of the students in both the matched and unmatched samples who were victimized reported that they told an adult at school about it; 26% told a parent; and 28% reported that they told a friend. Having a parent who participated in the study was not related to student reporting rates. Forty-five percent said that when they *witnessed* a recent bullying incident, they told another student about it. Girls were much more likely compared to boys, no matter what age, to report having told adults and/or peers about incidents of bullying they had witnessed. Forty-three percent of boys said they ignored the last incident they saw or heard, compared to only 26% of girls. The association between being female and telling someone about the last bullying incident witnessed was statistically significant (\_\_ = 63.45, p<0.0001, Cramer's Phi = 0.1848). Of the total sample, more girls than boys told parents, siblings, adults at school, or other students. Girls were much more likely compared to boys, no matter what age, to report having told adults and/or peers about incidents of bullying they had witnessed. Forty-three percent of boys said they ignored the last incident they saw or heard, compared to only 26% of girls.

One-third of students reported that they didn't intervene the last time they saw or heard another student being bullied, and only one-quarter said that they helped the victim at the time of the incident. Most respondents said that the reason they didn't intervene was because they were afraid or threatened, or simply did not care. Just under one-half of all male students reported that they ignored the last incident they witnessed or heard about, compared to only one-quarter of girls. These findings are supported by previous Canadian studies in this area. Training boys to intervene and support victims is a key challenge for these seven schools.

#### Location and time

Parent reports of where and when peer relationship problems occurred did not match the reports of their children. A majority of parents said that they simply did not know where or at what time of the day their children were most at risk. For example, a top-ranked area where students reported problems most often occurred was outdoors around the school. Yet, only 17% of parents said these incidents happened most often here, and 24% reported that they did not know. By comparison, 85% of students reported that bullying most often happened outdoors. Whereas 14% of parents said that bullying happened often in hallways, 79% of students reported that it happened here often. These parents said that their child was most at risk for bullying during breaks (24%), after school and between classes (approximately 15% for both). On the contrary, students reported that bullying and harassment happened most often during breaks (89%) and after school (77%). Perhaps the most surprising difference in perceptions was in the classroom: just under 20% of parents reported that these forms of harmful behaviours happened in the class, yet 60% of students said this was a primary location for victimization.

#### Teacher knowledge

Seventy-five percent of teachers reported that bullying was a serious problem among students at their school, 42% said racial discrimination was a serious problem, and 50% indicated that sexual harassment was a serious problem. Sixty-four percent said that these problems were no greater at their school compared to other schools in Canada. Only one-half said that the amount of time and resources committed in their school was sufficient to effectively deal with these problems. A large majority of teachers reported that they felt safe in their school (86%).

Teacher reports of where and when incidents happened did not match those of their students. The top ranked areas where teachers reported per relationship problems most often occurred were: hallways (75% of respondents reported that these behaviours most often happened here; the remainder said it sometimes or rarely took place here), outdoor areas around the school (60%), and gym change rooms (50%). Just under \_ of teachers said that bullying, harassment, and discrimination happened most often on the way to and from school and in the lunch/eating area. On the contrary, students in the matched sample reported that these problems happened *least* before school and most often after school and during breaks. This raises the possibility that teachers may be supervising in the wrong places and at the wrong times of the day. Finally, many students reported that the classroom was a primary location for perpetration and victimization; teachers, on the other hand, said that this was just about the safest place in the school. Whereas 60% of grades eight – twelve and 40% of grades four – seven respondents rated the classroom as a location where bullying, harassment and discrimination most often happened, only 20% of teachers reported that this was the case.

School personnel identified two forms of bullying which were very challenging to detect and address effectively: social and electronic forms. Most teachers said that they did not have the knowledge nor skills to intervene effectively in instances of social bullying. Teachers and administrators reported that they had poor information on electronic bullying and were ill-equipped to intervene effectively. A central problem identified by teachers and administrators was that certain forms of electronic bullying originated outside of school (chat lines, email), yet the impact was carried over into the school and very often was connected to social exclusion and manipulation of friendships by students.

Fifty percent of the teacher respondents reported that they were not aware of any services in their own school to address the needs of bullies and victims, despite the fact that three of the seven schools had specific programs in place. This may be related to the fact that one-third of the teachers had been working in their job for less than twelve months. Forty percent of teachers said they didn't know if group counseling services were available for perpetrators or victims, and 16% did not know if their school offered individual counseling.

#### **CONCLUSION AND IMPLICATIONS**

Findings from this study suggest that adults cannot rely on their perceptions alone to address peer relationship problems. In most cases, students and adults have widely different accounts on the nature, context and incidence of bully-victim, harassment and discrimination problems. If adults do not see nor hear the problems that children experience at school, any efforts to address these issues will have limited impact. Most incidents take place off the radar of school personnel, so parents are not likely to receive reports from the school. Children are unlikely to tell their parents about serious peer problems, particularly if they are the aggressors.

Students do not face the same degree of risk for involvement in harmful peer behaviours. Age and gender of students, along with severity and frequency of involvement are key factors which must be addressed when developing programs. One size, therefore, does not fit the needs of all children. In general, there are two levels of intensity for any effective whole-school program: a *general* program, which is effective for the roughly 40% of students who are not directly involved in bullying, harassment and racial discrimination yet are affected because they see or hear these incidents. Students who occasionally experience these incidents as victims and/or aggressors (45%) also benefit from this low intensity program. However, roughly15% of students are involved as perpetrators and/or victims on a weekly basis. These students will likely not benefit from general programming alone; in addition, they need *individualized* and intensive interventions over the long term. Parental engagement in interventions with high risk students is critical. Unfortunately, the vast majority knows nothing about these issues, nor can they count on schools to communicate with them on problems they have no knowledge of.

Teachers in this study had very different perceptions compared to their students regarding the incidence, nature and location of these problems. Most reported that school resources were inadequate and many were not even aware of their school's anti-bullying programming. Respondents indicated that social and electronic forms of bullying were particularly hard to deal with, due to a lack of knowledge and resources. Ongoing training is required to help teachers identify and intervene appropriately in these situations.

Many studies have found that the best anti-bullying and harassment curricula will not result in a decrease in victimization or harm perpetration in a school unless students are given regular opportunities to practice in real-life situations. Role playing and social action activities are good examples of how teachers can facilitate the translation of new knowledge on bullying and victimization into actual behavioural changes in the classroom. A cognitive-behavioural (CB) approach is an effective way for teachers and school-based counsellors to promote positive change in high need students. CB intervention focuses on decreasing problematic behaviours (aggression, impulsivity) and increasing positive behaviours (such as social skills, problem solving). Instruction which focuses on behaviour or cognitions alone is not effective with these students. A cognitive-behavioural approach is rooted in the belief that thoughts, feelings and actions are connected. Behaviour is linked to thinking and beliefs, which are based upon experiences. Therefore, both the experience and interpretation of the experience can be altered.

Increasing school awareness and sensitivity through training, incidence surveys, and posting of clear definitions and consequences of harmful behaviour is not enough to make a significant dent in peer relationship problems. Schools are nested in broader communities and students belong to

families. It is therefore essential to engage parents and guardians in meaningful ways in antibullying, harassment and discrimination programs. Quality programs intervene at the social context in which behavioural problems develop, while at the same time targeting individual change. From this systemic perspective, changes in perpetration and victimization are dependent on simultaneous changes in the awareness and responsiveness of school staff and parents.

Parent components of anti-bullying interventions used by some schools in this study were not fully implemented. Program fidelity concerns (is the intervention implemented as intended?) have been raised in many evaluation studies. Often, the degree and quality of implementation depends on the leadership of school administrators. It has been demonstrated that program effect is contingent on, among other variables, teacher commitment and school culture.<sup>72</sup>

Across the seven schools, policies and practices on involving parents in addressing peer problems were uneven. School Seven had a policy against teachers contacting parents; this was left up to the two administrators. Parent-teacher interviews were the only occasion teachers had to see parents face-to-face. School Three encouraged teachers to have regular contact with parents, although provided no standardized guidelines for addressing victimization and aggression. School One provided parent workshops on bully-victim problems, literature, and required parents of involved children to have serious discussions with teachers and administrators. Not one of the seven schools provided outreach to homes where parents were unwilling or unable to attend. Typically, these are the parents of students most frequently involved in harmful peer relations. Administrators reported that outreach services used to be provided by school social workers or mental health workers, but had been cut over the past decade due to financial constraints.

Parents can be successfully taught to change coercive patterns of interaction by reinforcing and supporting pro-social behaviour of their children in the home. Parent training programs teach developmentally appropriate parenting skills and ways to deal with young children who display antisocial behaviors. Parents are taught to identify, define, and observe problematic behaviours of their own and their children. They are then taught how to use behavioural techniques through observation, practice and review. For example, problematic behaviours can be ignored and "timed-out". Alternatives to physical punishment can be used, such as the withdrawal of privileges. These caregivers must learn to support their children's positive behavior and model appropriate interpersonal interactions. Parents should play a central role in the development of a positive sense of self-worth in their children. Children should know how to manage their aggression and control their impulses at an early age. There are several quality programs and workbooks available to help caretakers develop positive parenting skills, as well as to help families deal with children who display aggressive and violent behaviors.74

This prevention work must start before high-risk children begin school. Public health nurses, family doctors and other community-based health professionals must do a better job at supporting at-risk parents to develop adequate nurturing and supervision, appropriate discipline practices, and modeling of positive social behaviors. Early intervention should focus on social and cognitive skills training and problem-solving techniques. School program effects will not be

maintained if students are living in families where violence, aggression and harsh discipline are commonplace.

It is time to acknowledge that peer relationship problems are significant public health concerns in Canadian schools. In this study, bully-victim problems, sexual harassment and racial discrimination were serious and widespread in all schools. Adopting a cognitive-behavioural approach to address these issues can build the capacity of parents, schools and communities. Development of parenting capacity can reduce the risk factors associated with victimization and aggression. Promotion of healthy interpersonal interactions is best learned and delivered when it flows from a neighbourhood infrastructure like a school, and permeates individuals' daily routines and thinking about healthy relationships.

#### **SOURCES**

American Association of University Women. (1993). *Hostile Hallways: Bullying, Teasing and Sexual Harassment in School*. Washington, DC: American Association of University Women Educational Foundation.

American Association of University Women. (2001). *Hostile Hallways: The AAUW Survey on Sexual Harassment in America's Schools*. Washington, DC: American Association of University Women Educational Foundation.

Baker, L. and S. Scarth (2002). *Cognitive Behavioural Approaches to Treating Children and Adolescents with Conduct Disorder*. Toronto: Children's Mental Health Ontario. http://www.cmho.org/pdf\_files/CD\_W3\_Full\_Document.pdf

Banks, R. (1997). *Bullying in schools*. ERIC Clearinghouse on Elementary and Early Childhood Education Report No. EDO-PS-97-170.

Berkey, L. B. Keyes, and J. Longhurst. (2001). Bullying-proofing: What one district learned about improving school climate. *Reclaiming Children and Youth*, 9 (4): 224-228

Bjorkqvist, K., K. Lagerspetz, and A. Kaukiainen (1992). Do girls manipulate and boys fight? Developmental trends in regard to direct and indirect aggression. *Aggressive Behavior 18*: 117-127.

Bonds, M. and S. Stoker. (2000). Bully-proof your school. Longmont, CO: Sopris West.

Boyce, W., M. Doherty, C. Fortin and D. MacKinnon (2003). *Canadian Youth, Sexual Health and HIV/AIDS Study*. Council of Ministers of Education, Canada

Catalano, R., M. Arthur, D. Hawkins, L. Berglund and J. Olson (1998). Comprehensive community-and school-based interventions to prevent anti-social behavior. In Loeber, R. and D. Farrington, (Eds.) *Serious and Violent Juvenile Offenders: Risk Factors and Successful Interventions*. Thousand Oaks, CA: Sage Publications, Inc.

Centers for Disease Control and Prevention (CDC) (2004). Youth risk behavior surveillance, 2004. In CDC Surveillance Summaries. MMWR (No. SS-2)

Charach, A., D. Pepler, and S. Ziegler (1995). Bullying at school--a Canadian perspective: A survey of problems and suggestions for intervention. *Education Canada*, *35*(1), 12-18.

Christophersen, E. (1988). *Little People: Guidelines for Commonsense Child Rearing (3<sup>rd</sup> Edition)*. Kansas City, MO: Westport Publishers.

Cirillo, K., B. Pruitt, B. Colwell, P. Kingery, R. Hurley and D. Ballard (1998). School violence: Prevalence and intervention strategies for at-risk adolescents. *Adolescence*, *33*: 319-330.

Cohn, A. and A. Canter (2002) What schools and parents can do. *National Mental Health & Education Center*. Sept 6, 2002 Available at: <a href="https://www.naspcenter.org/factsheets/bullying\_fs.html">www.naspcenter.org/factsheets/bullying\_fs.html</a>

Craig, W. and D. Pepler (2003). Identifying and targeting risk for involvement in bullying and victimization. *Canadian Journal of Psychiatry*, 48: 577–582

Craig, W., R. DeV. Peters, and R. Konarski (1988). *Bullying and Victimization Among Canadian School Children*. Ottawa: Applied Research Branch, Strategic Policy, Human Resources Development Canada.

Craig W. and H. Yossi (2004). *Bullying and fighting: results from World Health Organization Health and Behavior Survey of school aged children. International Report for World Health Organization.* 

Davies, P. and E. Cummings, (1994). 'Marital conflict and child adjustment: An emotional security hypothesis.' Psychological Bulletin, 116: 387-411.

Dekovic, M. 1999. 'Risk and protective factors in the development of problem behavior during adolescence.' *Journal of Youth and Adolescence*, 28(6): 667 - 685.

Dishion, T., J. McCord and F. Poulin (1999). 'When interventions harm: Peer groups and problem behavior.' *American Psychologist*, *54*: 755-764.

Duncan, R. (1999). 'Peer and sibling aggression: An investigation of intra- and extra-familial bullying.' *Journal of Interpersonal Violence, 14(8)*: 871-886.

Elsea, M. and P. Smith (1998). The long-term effectiveness on anti-bullying work in primary schools. *Educational Research*, 40: 203-218.

Espelage, D. and S. Swearer. (2003). Research on school bullying and victimization: What have we learned and where do we go from here? *School Psychology Review*, 32,(3): 365-83.

Felner, R., M. Silverman and R. Adix (1991). 'Prevention of substance abuse and related disorders in childhood and adolescence: A developmentally based, comprehensive ecological approach.' *Family and Community Health, 14(3)*: 12-22.

Forehand, R., and N. Long (1981). Parenting the Strong-willed Child. Chicago: Contemporary Books. Goldstein, A., B. Glick, and W. Carthan (1989). *The Prosocial Gang: Aggression Replacement Training*. Thousand Oaks, CA: Sage.

Gottfredson, D., D. Wilson, and S. Skroban Najaka (2002). School-based crime prevention. In L. Sherman, D. Farrington, B. Welsh and D. MacKenzie (Eds), *Evidence-Based Crime Prevention*. New York: Routledge: 56-164.

Greenberg M, C. Domitrovich, and B. Bumbarger (1999). *Preventing Mental Disorders in School-Age Children: A Review of the Effectiveness of Prevention Programs*. Rockville, MD: US Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Mental Health Services, National Institutes of Health, National Institute of Mental Health. Available at: http://www.psu.edu/dept/prevetnion/CMHS.html.

Gutman, L. and C. Midgley (2000). The role of protective factors in supporting the academic achievement of poor African American students during the middle school transition. *Journal of Youth and Adolescence 29(2):* 223-248.

Hawker, D. and M. Boulton (2000). Twenty years research on peer victimization and psychosocial maladjustment: A meta-analytic review of cross-sectional studies. *Journal of Child Psychiatry and Psychology, 41*: 441-455

Hawkins, D., T. Herronkohl, D. Farrington, D. Brewer, R. Catalano and T. Harachi (1998). A review of predictors of youth violence. In Loeber, R. and D. Farrington, (Eds.) *Serious and Violent Juvenile Offenders: Risk Factors and Successful Interventions.* Thousand Oaks, CA: Sage Publications, Inc.

Haynie, D. et al. (2001). Bullies, victims, and bully/victims: Distinct groups of at-risk youth. *Journal of Early Adolescence*, 21(1): 29-49.

Howard, S., J. Dryden, and B. Johnson (1999). Childhood resilience: Review and critique of the literature. *Oxford Review of Education 25(3)*: 307-323.

Hymel, S., A. White, and I. Ishiyama (2003). WVSD Safe School Survey. Vancouver: West Vancouver School District.

Jerome, L. and A. Segal (2003). Bullying by internet. *Journal of the American Academy of Child and Adolescent Psychiatry*, 42 (7), 751.

Kazdin, A (1997). Parent management training: Evidence, outcomes and issues. *Journal of the American Academy of Child and Adolescent Psychiatry*, *36*: 1349-1356.

Kazdin, A. and J. Weisz (1998). Identifying and developing empirically supported child and adolescent treatments. *Journal of Consulting and Clinical Psychology*, 66: 19-36.

Kopels, S. and D. Dupper (1999). School-based peer sexual harassment. *Child Welfare, LXXVIII(4)*: 435-460.

Kosciw, J. (2004). The 2003 National School Climate Survey: The School-Related Experiences of Our Nation's Lesbian, Gay, Bisexual and Transgender Youth. New York, NY: Gay, Lesbian and Straight Education

Lagerspetz, K., K. Bjorkqvist, and T. Peltonen (1988). Is indirect aggression typical of females? Gender differences in aggressiveness in 11-to 12-year-old children. *Aggressive Behavior*. 14: 403-414.

Lawson, H. (2002). Strengthening democracy by expanding the boundaries of school reform and developing caring school communities for children, youth, and their families. In W. Sailor (Ed.), *Whole-school success and inclusive education: Building partnerships for learning, achievement, and accountability.* New York: Teachers College Press: vii-xii.

Lawson, H. (2001). Reformulating the school violence problem: Implications for research, policy, and practice. International Conference on School Violence, Paris, France.

Lawson, H. and K. Briar-Lawson. (2001). Family-supportive community schools: Thirteen strategies. In P. Senge, N. Cambron-McCabe, et. al., (Eds.), *Schools that learn*. New York: Doubleday Currency: 534-536.

Lipsey, M. and J. Derzon (1999). Predictors of violent of serious delinquency in adolescence and early adulthood: A synthesis of longitudinal research. In R. Loeber and D. Farrington, (Eds.) *Serious and Violent Juvenile Offenders: Risk Factors and Successful Interventions.* Thousand Oaks, CA: Sage Publications, Inc.

Luthar, S., D. Cicchetti and B. Becker (2000). The construct of resilience: A critical evaluation and guidelines for future work. *Child Development* 72(3): 543-562.

Masten A. and J. Coatsworth (1998). The development of competence in favorable and unfavorable environments. *Am Psychologist*. 53:205-220.

Mathias, B. and M. French (1996). 40 Ways to Raise a Non-racist Child. New York: Harper Perennial. McCreary Center Society (1999). Healthy Connections: Listening to BC Youth. Highlights from the Adolescent Health Survey II. Burnaby, BC: The McCreary Center Society.

McMaster L, J. Connolly, D. Pepler and W. Craig (2002). Peer to peer sexual harassment among early adolescents. *Development and Psychopathology, 14*:91–105.

- Mihalic S. (2001). *Blueprints for Violence Prevention*. Washington, D.C.: U.S. Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention. http://www.ncjrs.org/pdffiles1/ojjdp/187079.pdf
- Mullin-Rindler, N. (2003) *Findings from the Massachusetts Bullying Prevention Initiative*. Unpublished. National Children's Home. (2005). Putting U in the picture. Mobile Bullying Survey 2005. Available at: http://www.nch.org.uk/uploads/documents/Mobile bullying %20report.pdf
- Olweus, D. (1993). *Victimization by peers: Antecedents and long-term consequences*. In K. Rubin and J. Asendorf (eds.), *Social withdrawal, inhibition & shyness in childhood*. Hillside, NJ: Erlbaum.
- Olweus, D. (1994). *Bullying at school: What we know and what we can do*. Oxford, UK: Blackwell Publishers.
- Olweus, D., S. Limber and S. Mihalic (2002). *Blueprints for Violence Prevention, Book Nine: Bullying Prevention Program.* Boulder, CO: Center for the Study and Prevention of Violence.
  - Patterson, G. (1982). Coercive Family Process. Eugene, OR: Castalia.
  - Patterson, G., J. Reid and T. Dishion, (1992). Antisocial Boys. Eugene Oregon: Castilia Publishing.
- Pepler, D., W. Craig, P. O'Connell, R. Atlas and A. Charach (2003). Making a difference in bullying: Evaluation of a systemic school-based program in Canada. In P. Smith and K. Rigby (Eds), *Bullying in Schools: How Successful can Interventions Be?* Cambridge, UK: Cambridge University Press.
- Pepler D., W. Craig and S. Hymel (2002). *A National Strategy on Bullying: Making Canada Safer for Children and Youth*. Ottawa: National Crime Prevention Centre, Department of Justice.
- Pepler, D. and F. Sedighdeilami (1998). *Aggressive Girls in Canada*. Ottawa: Applied Research Branch, Strategic Policy, Human Resources Development Canada.
- Posey, R., S. Wong, R. Catalano, J. Hawkins, L. Dusenbury, and P. Chappell (2000). *Communities That Care Prevention Strategies: A Research Guide to What Works*. Seattle, WA: Developmental Research and Programs, Inc.
- Poulin, F., T. Dishion, and B. Burraston (2001). 3-year introgenic effects associated with aggregating high-risk adolescents in cognitive-behavioral preventive interventions. *Applied Development Science*, *5*(4): 214-225.
- Rigby, K and D. Bagshaw, (2001). The prevalence and hurtfulness of acts of aggression from peers experienced by Australian male and female adolescents at school. *Children Australia*, 26: 36-41.
- Rivers, I. and P. Smith (1994). Types of bullying behavior and their correlates. *Aggressive Behavior*, 20: 359-368.
- Roland, E. and D. Galloway (2002). Classroom influences on bullying. *Educational Research*, 44 (3):299-312
- Salmivalli, C., A. Kaukiainen, and K. Lagerspetz (1998). Aggression in the social relations of school-aged girls and boys. In P. Slee & K. Rigby (Eds.). *Children's Peer Relations*. London: Routledge: 60-75.
- Schaefer, C. and H. Millman (1982). *How to Help Children with Common Problems*.\_New York: New American Library.
- Sharp, S, .D. Thomson, and T. Arora (2000). How long before it hurts? An investigation into long-term bullying. *School Psychology International*, *21*: 37-46.
- Smith, D., B. Cousins, and R. Stewart (2003). *Anti-Bullying Program Survey*. Ottawa: University of Ottawa.
- Smith, D., B. Schneider, P. Smith and K. Ananiadu (2003). The effectiveness of whole-school antibullying programs: A synthesis of evaluation research. Unpublished paper.
- Smith, P., K. Ananiadou, and H. Cowie (2003). 'Interventions to reduce school bullying.' *Canadian Journal of Psychiatry*, 48: 591–599.
- Smokowski P., A. Reynolds, and N. Brezruczko (1999). Resilience and protective factors in adolescence: An autobiographical perspective from disadvantaged youth. *Journal of School Psychology* 37(4): 425-448.
- Solberg, M. and D. Olweus (2003). Prevalence estimation of school bullying with the Olweus Bully/Victim Questionnaire. *Aggressive Behavior*, 29:239–268.
- Sourander, A., L. Helstela, H. Helenius, and J. Piha. (2000). Persistence of bullying from childhood to adolescence A longitudinal 8-year follow-up study. *Child Abuse and Neglect*, *24*(7): 873-881.
- Statistics Canada (2003). *Ethnic Diversity Survey: Portrait of a Multicultural Society (89-593-XIE)*. Ottawa: Ministry of Industry.
- Stevens, V., I. De Bourdeaudhuij, and P. Van Oost. (2002). Relationship of the family environment to children's involvement in bully/victim problems at school. *Journal of Youth and Adolescence*, 31, (6): 419-428.

Stys, Y. (2004). *Beyond the Schoolyard: Examining Electronic Bullying Among Canadian Youth. Master's Thesis.* Ottawa: Carleton University.

Thorne, B. (1999). Gender Play: Girls and Boys in School. New Brunswick, NJ: Rutgers University Press

Thornton T., C. Craft, L. Dahlberg, B. Lynch, and K. Baer K, eds (2000). *Best Practices of Youth Violence Prevention: a sourcebook for community action*. Atlanta: Division of Violence Prevention, National Center for Injury Prevention and Control, Centers for Disease Control and Prevention.

Totten, M. (2000). Guys, Gangs and Girlfriend Abuse. Peterborough, ON: Broadview Press.

Totten, M., P. Quigley and M. Morgan (2004). *CPHA Safe School Study*. Ottawa: Canadian Public Health Association and Department of Justice Canada.

Totten, M., P. Quigley and M. Morgan (2005). Assessment Toolkit for Bullying, Harassment and Peer Relations at School. Ottawa: Canadian Public Health Association and Department of Justice Canada.

Totten, M. and P. Quigley (2002). MOVE (Mind Over Violence Everywhere). Ottawa Canadian Public Health Association.

Underwood, M. (2003). Social Aggression in Girls. New York: Guilford Press.

US Department of Health and Human Services (2001). *Youth Violence: A Report of the Surgeon General*. Rockville, MD: US Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Injury Prevention and Control; Substance Abuse and Mental Health Services Administration, Center for Mental Health Services; National Institutes of Health, National Institute of Mental Health.

Volk, A., W. Craig, W. Boyce and M. King (2003). Adolescent Risk Correlates of Bullying and Different Types of Victimization. *Poster presented at the World Congress on Child and Youth Health, Vancouver, May 2003* 

Voydanoff, P. and B. Donnelly (1999). Multiple roles and psychological distress: The intersection of the paid worker, spouse, and parent roles with the adult child role. *Journal of Marriage and the Family, 61*: 725-738.

Webster-Stratton, C. (1999). How to promote children's social and emotional competence. Sage

Williams, T., J. Connolly, D. Pepler and W. Craig (2003) Questioning and sexual minority adolescents: High school experiences of bullying, sexual harassment and physical abuse. *Canadian Journal of Community Mental Health* 22(2).

Woods, S. and D. Wolke (2003). Does the Content of Anti-Bullying Policies Inform us About the Prevalence of Direct and Relational Bullying Behaviour in Primary Schools? *Educational Psychology*, 24(4).

Wolke D, S. Woods, L. Bloomfield, and L. Karstadt . (2000). The association between direct and relational bullying and behaviour problems among primary school children. *J Child Psychol Psychiatry* 41(8):989-1002.

World Health Organization (2004). Young People's Health in Context. HBSC International Report from the 2001/2002 Survey. Copenhagen: WHO

## **END NOTES**

- <sup>1</sup> Sharp, Thomson, and Arora, 2000; Rigby and Bagshaw, 2001; Lawson, 2001.
- <sup>2</sup> Volk, Craig, Boyce and King, 2003; Rivers and Smith, 1994; Haynie et. al., 2001
- <sup>3</sup> Craig and Yossi, 2004; Sourander, Helstela, Helenius and Piha, 2000; Duncan, 1999.
- <sup>4</sup> Solberg and Olweus, 2003
- <sup>5</sup> Salmivalli, Kaukiainen and Lagerspetz, 1998; Lagerspetz et al., 1988; Bjorkqvist et al., 1992.
- <sup>6</sup> Craig and Yossi, 2004.
- <sup>7</sup> Wolke et al., 2000; Woods and Wolke, 2003.
- <sup>8</sup> Jerome and Segal, 2003; Stys, 2004.
- <sup>9</sup> National Children's Home, 2005.
- <sup>10</sup> McMaster, Connolly, Pepler and Craig, 2002.
- <sup>11</sup> WHO, 2004; Boyce, Doherty, Fortin and MacKinnon, 2003.
- <sup>12</sup> CDC, 2004.
- <sup>13</sup> American Association of University Women, 2001, 1993; Kopels and Dupper, 1999; OSSTF, Ontario Women's Directorate and Ministry of Education and Training, 1995.
- <sup>14</sup> McMaster, Connolly, Pepler and Craig, 2002
- <sup>15</sup> McMaster, Connolly, Pepler and Craig, 2002; Williams, Connolly, Pepler and Craig, 2003; Kosciw, 2004.
- <sup>16</sup> Williams, Connolly, Pepler and Craig, 2003; Kosciw, 2004.
- <sup>17</sup> Kosciw, 2004.
- <sup>18</sup> US Departments of Education and Justice, 2000.
- <sup>19</sup> Pepler and Sedigheilami, 1998; Patterson, Reid and Dishion, 1992.
- <sup>20</sup> Espelage and Swearer, 2003.
- <sup>21</sup> Davies and Cummings, 1994.
- <sup>22</sup> Patterson, 1982.
- <sup>23</sup> McCreary Center Society, 1999.
- <sup>24</sup> Masten and Coatsworth 1998.
- <sup>25</sup> Resilience is the ability of individuals living in adverse conditions to achieve positive outcomes. See Howard et al., 1999; Luthar et al., 2000; Smokowski et al., 1999.

  <sup>26</sup> Dekovic, 1999; Gutman and Midgley, 2000; Smokowski et al., 1999; Voydanoff and Donnelly, 1999.

  <sup>27</sup> Pepler and Sedighdeilami, 1998 used NLSCY Cycle One data (n = 1,641 boys and 1,583 girls).

- <sup>29</sup> Craig, Peters and Konarski, 1998 used Cycle One NLSCY parent report data (n = 5,662 boys and 5,646 girls aged four – eleven years).
- <sup>30</sup> Ibid.
- <sup>31</sup> The authors note that the influence of negative family interactions on externalizing problems and bullying is weaker with age for boys  $\Delta$  ( $\Delta df=1$ , N=11308) = 12.75, p. < 0.001; this influence remains constant for girls  $\Delta$  $(\Delta df=2, N=11308)=0.01$ , ns. The correlation between family functioning and internalizing behaviour was stronger for ten and eleven year-old girls,  $\Delta$  ( $\Delta df=1$ , N=11308) = 9.87, p. < 0.001; there was no change for boys  $\Delta$  ( $\Delta df=2$ , N=11308) = 0.79, ns.
- <sup>32</sup>Pepler and Sedigheilami, 1998; Patterson and Dishion, 1988.
- <sup>33</sup> LeBlanc, 2001.
- <sup>34</sup> Duncan, 1999; Schwartz et al.,1998.
- <sup>35</sup> Craig, Peters and Konarski, 1998; Rigy, 1994.
- <sup>36</sup> Charach, Pepler and Craig, 1995; Olweus, 1993.
- <sup>37</sup> Charach, Pepler and Craig, 1995.
- <sup>38</sup> Cohn & Canter, 2002
- <sup>39</sup> Mullin-Rindler, 2003
- <sup>40</sup> Banks, 1997.
- <sup>41</sup> Stevens et al., 2002.
- <sup>42</sup> Berkey, Keyes and Longhurst, 2001; Stevens et. al, 2002.
- <sup>43</sup> Felner, Silverman and Adix, 1991.
- 44 Smith, Schneider, Smith and Ananiadu, 2003.
- <sup>45</sup> Ibid.
- 46 Ibid.

- <sup>47</sup> David Smith and his colleagues (2003) transformed percentages and scores reported by Pepler and colleagues into Z-scores (non-significant program effects Z<1.96). They reported negative Z values (results opposite to expected direction) for self-reported bullying (-2.32) and teacher intervention (-3.66). A positive Z-score of 2.62 was found for self-reported victimization.
- <sup>48</sup> Gottfredson, Wilson and Skroban Najaka, 2002; Hawker and Boulton, 2000; Catalano, Arthur, Hawkins, Berglund and Olson, 1999; Lipsey and Derzon, 1999; Hawkins, Herronkohl, Farrington, Brewer, Catalano and Harachi, 1999.
- <sup>49</sup> See literature review section and Totten, Quigley, Morgan, 2004f.
- <sup>50</sup> Totten, Quigley and Morgan, 2005.
- <sup>51</sup> Hymel, White and Ishiyama, 2003.
- <sup>52</sup> WHO, 2004.
- <sup>53</sup> Totten, Quigley and Morgan, 2005.
- <sup>54</sup> Smith, Cousins and Stewart, 2003.
- <sup>55</sup> Totten, Quigley and Morgan, 2005.
- <sup>56</sup> Totten, Quigley and Morgan, 2005.
- <sup>57</sup> Membership included Drs. Debra Pepler (Professor, York University Dept. Psychology) Wendy Craig (Professor, Queen's University Dept. Psychology), Shelley Hymel (Professor, University of British Columbia Dept. Psychology), and David Smith (Associate Professor, Dept. Education, University of Ottawa).
- <sup>58</sup> Totten, Quigley and Morgan, 2005.
- <sup>59</sup> See Totten, Quigley and Morgan, 2005.
- <sup>60</sup> Schools three and four had the lowest rates of parental participation (approximately 21% and 27% respectively). Data were verified to ensure that responses were comparable to the other schools. Rates ranged from 53% 62% for the remaining schools.
- <sup>61</sup> Of the total student sample, 25% were in grade seven, 26% grade eight, 14% grade nine, 16% grade ten, 6% grade four, 6% grade six, and 7% were in grades eleven/twelve.
- <sup>62</sup> Cramer's Phi is a measure of the strength of association; values range from 0 to 1, with higher values representing stronger associations. For a 2X2 table, Cramer's Phi is similar to Pearson's r. Cramer's V is used for tables with additional cells.
- <sup>63</sup> Craig and Yossi, 2004; King et al., 1999.
- <sup>64</sup> Salmivalli, Kaukiainen and Lagerspetz, 1998; Lagerspetz et al., 1988; Bjorkqvist et al., 1992.
- <sup>65</sup> Boyce, Doherty, Fortin and MacKinnon, 2003; McMaster, Connolly, Pepler and Craig, 2002; OSSTF, Ontario Women's Directorate and Ministry of Education and Training 1995.
- <sup>66</sup> AAUW, 2001, 1993
- <sup>67</sup> Cirillo et al., 1998; Totten and Quigley, 2002; Gottfredson, Wilson, and Skroban Najaka, 2002.
- <sup>68</sup> Goldstein et al., 1989: Baker and Scarth, 2002.
- <sup>69</sup> Concrete strategies such as those defined in Aggression Replacement Training (Goldstein et al., 1989) or Linda Baker and Sandra Scarth's work (2002) should be followed. These include behavioural management (using positive [rewarding or reinforcing to student] and negative [unpleasant or undesirable to student] consequences to shape a student's behaviour); modeling (changing the behaviour and social interactions a student witnesses); social problem solving (changing a student's response to problems such that a different set of consequences occurs); and cognitive restructuring and self-management (changing how a student interprets their past, current and future events).
- <sup>70</sup> Smith, Ananiadou and Cowie, 2003; Lawson, 2001, 2002; Lawson and Briar-Lawson, 2001.
- <sup>71</sup> Felner, Silverman and Adix, 1991.
- <sup>72</sup> Pepler et al., 2003; Roland, 1989, 1993.
- <sup>73</sup> Kazdin and Weisz, 1998.
- <sup>74</sup> US Department of Health and Human Services; 2001; Greenberg, Domitrovich, and Bumbarger, 1999; Thornton et al., 2000; Posey et al., 2000; Mihalic, 2001; Shaefer and Millman, 1982; Forehand and Long, 1996; Christophersen,1988.
- <sup>75</sup> Thornton, 2000; Mihalic, 2001.