Public Safety Canada | Sécurité publique Canada

NATIONAL CRIME PREVENTION CENTRE

Building the Evidence – **BULLYING PREVENTION** 2008-BP-01

BULLYING PREVENTION: NATURE AND EXTENT OF BULLYING IN CANADA

What is Bullying?

Bullying is characterized by acts of intentional harm, repeated over-time, in a relationship where an imbalance of power exists. It includes physical actions (punching, kicking, biting), verbal actions (threats, name calling, insults, racial or sexual comments), and social exclusion[1] (spreading rumours, ignoring, gossiping, excluding) (Pepler & Craig, 2000; Ma, Stewin & Mah, 2001). Boys tend to be more likely to bully and be bullied, usually in the form of a physical attack and exhibition of aggressive behaviour. Alternatively, girls appear to be more prone to indirect bullying in the form of social isolation, slandering and the spreading of rumours (Marcel T. Van der Wal, et al., 2003).

What are the Connections between Bullying, Delinquency and Crime?

Delinquent behaviour is far more common in children who bully other children. Self-report delinquency studies reveal that almost 40% of boys who frequently bully report delinquent behaviour compared to about 5% of boys who never or infrequently bully. For girls who bully frequently, close to 31% report delinquency compared to 3% of girls who never or infrequently bully (Marcel T. Van der Wal, et al., 2003). Research also reveals that children who bully are 37% more likely than those who do not bully to commit offences as adults (Olweus et al., 1999). Similarly, children who bully may later suffer psychological problems, such as externalizing behaviours[2], aggressive tendencies, and occasional symptoms of depression (Pepler & Craig, 2000; Harris, Petrie, & Willoughby, 2002).

The implications of bullying can also be very serious for many victims. For example, male victims of bullying are five times more likely to be depressed and girls are over three times more likely to be depressed than their male and female classmates (Kaltiala-Heino et al., 1999; Hawker & Boulton, 2000). Male and female victims of bullying are more likely to exhibit symptoms of suicide (Kaltiala-Heino et al., 1999). Moreover, research suggests that the effects of bullying do not disappear with time. For example, the Journal of the American Medical Association reports that "individuals formerly bullied were found to have higher levels of depression and poorer self-esteem at the age of 23, despite the fact that, as adults, they were no more harassed or socially isolated than comparison adults" (Olweus, 1994, as cited in Fox et al., 2003: 8).

Bullying behaviour during childhood is closely associated with future anti-social behaviour in adolescence and adulthood. Children who bully may turn into adolescents who sexually harass, become involved in delinquent or gang-related behaviours, or engage in date violence. As adults, these same individuals may display harassment in the workplace or may commit spousal, child, or senior abuse (Craig & Pepler, 2007). The prevention of bullying behaviour in children and youth is an important factor for reducing the likelihood of future criminal activity.

What are the Risk Factors Associated with Bullying?

Significant individual risk factors for bullying behaviour include persistent negative attitudes and early aggressive behaviour (National Crime Prevention Strategy, 2004; Craig & Pepler, 2007). Some risk factors for bullying are also risk factors for general delinquency, such as truancy, aggressive behaviour and a lack of respect for authority figures. Some risk factors are more frequent in children who bully, and they include trouble concentrating in class and a lack of empathy and compassion for others[3] (B.C. Ministry of Education, n.d.).

Canada

Gender differences also exist between the risk factors associated with bullying behaviour. For girls, bullying behaviour is closely linked to abuse suffered in the home, whereas bullying behaviour in boys is closely linked to involvement with anti-social or delinquent peers and behaviour. This explains why harm committed by girls is usually masked and difficult to detect in the social forms of bullying, while bullying behaviour exhibited by boys is primarily physical and visible to others.

How Frequent is Bullying?

In Canada, studies suggest that roughly 6% of students[4] aged 12 to 19, report bullying others on a weekly basis, 8% report that they are victims of bullying weekly, and 1% report that they are both victimized and bully others on a weekly basis (Volk, Craig, Boyce and King, 2003; Rivers and Smith, 1994; Haynie et. al., 2001). Bullying surveys also indicate that many more boys than girls report being victims of bullying and almost all boys named male peers as the aggressors (Totten, Quigley and Morgan, 2004). A recent self report survey on delinquency among Toronto youth indicates that 16% of youths in grades 7 to 9 had been bullied on more than 12 occasions during the year prior to the survey (Statistics Canada, 2007).

- ***Physical bullying:*** Research conducted in Canada, Europe and the United States has shown that roughly 10 to 15 percent of students aged 11 to 15 admitted being involved in weekly physical bullying (Craig and Yossi, 2004; Sourander, Helstela, Helenius and Piha, 2000; Duncan, 1999). Physical bullying peaks in grades 6-8, and gradually declines thereafter. More specifically, this research suggests that boys were twice as likely to report frequent bullying than girls, while both genders reported an equal frequency of victimization (Canadian Public Health Association Safe School Study, 2003a). An additional 25-30% of students reported involvement in monthly physical bullying, and unlike the findings associated with weekly bullying behaviours, more boys than girls reported being victimized on a monthly basis (CPHS, 2003).
- ***Verbal bullying:*** 10-15% of all students reported involvement in weekly verbal bullying. Approximately twice as many students reported being victims of verbal bullying than engaging in verbal bullying themselves. No significant differences between girls and boys were found in this type of bullying (Solberg and Olweus, 2003).
- ***Social bullying:*** Students who engage in social bullying are not likely to get caught. Instead, their harmful intentions are masked because the consequences cannot always be seen or heard. In one Canadian study, 41% of all students in grades 4 to 7 reported that they were victims of bullying and/or bullied others monthly. 7% of these students said they were victims of social bullying on a weekly basis, and 2% reported that they bullied other students socially on a weekly basis. Girls are more likely than boys to bully socially and to be victims of this form of bullying (Totten, Quigley and Morgan, 2004).

What Works to Prevent Bullying?

Several promising practices and model programs have been designed to prevent and reduce bullying. These include:

- **Bully-Proofing Your School (BPYS)**

  Developed in 1994 by several educators in the Cherry Creek School District of Colorado, the BPYS program offers a systemic approach for the entire school to work together to reduce bullying problems. The program seeks to isolate and alter the environmental factors in schools that allow bullying to occur. To accomplish this, BPYS encourages elementary and middle school students to care about the safety of their school and as a result, participate in the establishment and maintenance of a safe school environment for everyone. Specially, the BPYS program includes an assessment of the problem, special training for staff, the development of school-wide policies, the development of activities to enhance protective skills and strategies for dealing with bullying behaviours, and the development of an improved school climate. An evaluation of BPYS, which consisted of annual participant surveys over four years, found reductions[5] in bullying behaviour and a corresponding increase in students' perceptions of safety over the course of four years (**http://www.bullyingresources.org/stopbullyingnow/indexAdult.asp?Area=ProgramResources&programID=52**).

- **Olweus Bullying Prevention Program**

  The Olweus Bullying Prevention Program is a comprehensive, school-wide program designed for use in elementary, middle, or junior high schools. It was developed in Colorado in 1993 by Dan Olweus, a leader in research and intervention work in the area of bullying and victimization problems among school children and youth. As a Blueprints Model Program[6], the Olweus Program has been evaluated several times and has been implemented in more than one dozen countries at the school-wide, classroom and individual levels. It includes activities such as an assessment of the nature and prevalence of bullying, the formation of a Bullying Prevention Coordinating Committee to coordinate all aspects of the school's program, increased supervision of students at the known "hot spots" for bullying, the establishment and enforcement of class rules against bullying, and interventions with children identified as bullies and victims. The program has resulted in a substantial reduction of 50% or more in the reported incidents of bullying and victimization,

Cat. No.: PS4-42/20-2008
ISBN: 978-0-662-05586-0

a significant reduction in students' reports of general anti-social behaviour, such as vandalism, fighting, theft and truancy. There is also evidence of significant improvements in the "social climate" of the class, as reflected in students' reports of improved order and discipline, more positive social relationships, and a more positive attitude toward schoolwork and school (Centre for the Study and Prevention of Violence, 2006).

- **The Fourth R curriculum**

  The Fourth R curriculum encourages a comprehensive school-wide approach to preventing violence/bullying and promoting healthy relationships. The Fourth R grew out of the Youth Relationships Project (YRP), a dating violence prevention program that was developed for youth with family backgrounds of maltreatment and violence. The Fourth R approach takes into consideration the presence of new difficulties in the lives of adolescents. Indeed, the program emphasizes the importance of the right 'type' of intervention during one's adolescence, as it is during this period of time that problems with bullying/violence, substance use and high risk sexual behaviours first appear. Consequently, effective intervention at this stage of life must consider the unique context and challenges that are present in adolescence. Therefore, the harm-reduction/health promotion model used by the Fourth R curriculum is more successful for adolescents than the traditional forms of intervention that require the complete absence of high risk behaviour.

  The program has been implemented in a number of Ontario schools since 2001 and is currently being evaluated in a randomized controlled trial[7] in the Thames Valley District School Board in Southwestern Ontario. Preliminary results indicate that students who had participated in the Fourth R program were more than twice as likely to use negotiation when faced with pressure tactics to engage in high risk behaviours than students who had not participated in the program (Strategies for Healthy Young Relationships, 2006). These findings suggest that the program is effective in preventing or reducing bullying behaviour by providing potential bullies and victims with the appropriate techniques to reduce their involvement in such high risk behaviours. *The Fourth R curriculum* has been recommended by Curriculum Services Canada to support the Ontario Curriculum in Grade 9 and 10 Health and Physical Education.

- **Together We Light the Way (TWLTW)**

  TWLTW is a comprehensive program that aims to create safe and caring learning communities by bringing together municipal officials, business leaders, and members of community groups to work in partnership with the school staff, students, and parents. The project is focused on increasing the eight protective factors for preventing bullying behaviour. These protective factors include: school success; academic achievement; self-awareness; safe, secure and nurturing environments; healthy lifestyles; positive family and school relationships; respectful and caring relationships; and connections to caring adults. This project, sponsored by the Durham District School Board in Whitby, Ontario was funded by the National Crime Prevention Centre from 1999 through 2002. The funding was provided to test the model in four Ontario pilot schools, across three school boards, in urban and rural communities. TWLTW consisted of several programs tackling topics such as respect, community engagement, healthy living, parental involvement, and the decision-making skills needed to make wise choices. The project provided training for principals, teachers, and other members of the school community on how to implement these programs throughout the school curriculum. TWLTW was thoroughly evaluated by participants and stakeholders over the course of the project's implementation. After three years of operation, the project resulted in a decrease of more than 60% in the number of bullying incidents in three of the four schools[8]. Additionally, principals, teachers, and parents interviewed for the evaluation spoke positively about the newfound "culture of respect" that had developed and remained around the school as a result of the program's implementation. The evaluation also noted challenges to the successful implementation of the project, such as staff and student turnover within the schools. As a result of the program's success, TWLTW was approved by the Ontario Ministry of Education to be used in the Ontario Teacher Recertification Process, thereby increasing its use and impact across the province (National Crime Prevention Strategy, 2007).

- **Success in Stages[9]**

  This project targets middle school students in an effort to provide individual guidance for bullies, victims and those who witness bullying. The program is CD-based and is completed by students in three 30-minute sessions. It is based on the Stages of Change - five stages that many people pass through as they adopt new behaviours - and grounded in the proven-effective Transtheoretical Model of Behaviour Change.[10] The program elements consist of a student survey, online school reports, classroom lessons that support the program. A key additional element is individual treatment sessions with children who have been bullied or are at risk of being bullied, children who have bullied or are at risk of bullying their peers, and children who passively witness bullying at school. A between groups comparison evaluation was performed on the program trials that were implemented in a number of middle schools in 2003. The result of the evaluation, which included a comparison between program participants and a control group, concluded that

Success by Stages was found to reduce bullying behaviour by 30% (**http://www.bullyingresources.org/stopbullyingnow/indexAdult.asp?Area=ProgramResources&programID=89**).

Emerging Consensus: Whole-School Approach

There is an emerging consensus among the bullying prevention literature that the 'whole-school' approach is an effective and lasting approach to prevent bullying in schools. The 'whole-school' approach includes the creation and adoption of an anti-bullying policy and anti-bullying initiatives. The 'whole-school' policy that guides this approach outlines the roles, responsibilities and procedures for staff, a code of conduct for students as well as the consequences for bullying and improvements in the way bullying incidents are addressed. Generally, successful 'whole-school' preventive responses must exhibit the following key principles:

- **Strong teacher and adult leadership and strong student-teacher bonding:** Students who have a strong attachment to school, experience fewer emotional and behavioural problems and have better educational outcomes. Students who have a stronger attachment to school develop increased feelings of security and acceptance within the school. These outcomes lead to improved academic and behavioural functioning and increased literary skills (Canadian Public Health Association, 2003b). Furthermore, individuals with a strong sense of membership within the school achieve higher grades, experience fewer feelings of depression, have a lower rate of substance use, and have lower truancy (Canadian Public Health Association, 2003b). Indeed, when bullying takes place and is not addressed by school staff due to a lack of parental or teacher involvement, students are more likely to report feeling unhappy and unsafe.
- **Clear and consistent behavioural norms:** The use of positive and negative consequences shape a student's behaviour. Problematic behaviours are decreased when they are consistently identified and swiftly reprimanded. For example, by teaching young people how to identify dysfunctional thoughts and the consequences that follow, they will learn to replace them with more realistic and positive thoughts that provide them with greater rewards.
- **Adult awareness and involvement:** Adults in the student's life (both at home and at school) must become fully aware of the extent of the bullying/victimization problems in the school. When parents are strongly engaged in preventative responses to bullying and victimization, there is a greater likelihood that these problem behaviours will be reduced. Involvement ensures that adults will have the information they need to take consistent and appropriate action when responding to bullying.
- **Effective (focused and intense) supervision:** Coordinated supervision of students before/after school and during recess and lunch will provide an opportunity to identify and quickly eliminate any bullying and victimization problems during those interactive times. Also, for such supervision to be effective it must be focused on known problem areas or 'hot spots' where bullying and victimization frequently occurs.
- **Involvement of multiple stakeholders:** A bullying prevention coordination group with representation from teachers, school administrators, guidance counsellors, school mental health professionals, parents, and students allows for ongoing planning and problem solving. Each group provides an expertise on an issue related to the root causes of the problem. This interaction fosters innovative approaches, a shared network or resources and significant opportunities to disseminate information to a larger audience.
- **Involvement of youth in program development and delivery:** If students themselves are not actively and meaningfully engaged in all stages of the prevention approach, it will be unlikely to succeed. By involving students as partners in the whole-school approach, the coordination group can mobilize the student population in the creation of a positive peer culture. Youth involvement also creates a mechanism that ensures that the program will be relevant to students and that the message of the program is communicated in a meaningful way. Some methods that incorporate successful student involvement include: regular class meetings to discuss varied aspects of bullying and other anti-social behaviours; the development of and adherence to class rules; activities focused on understanding the harm caused to bullying victims; and the inclusion of students in the development and implementation of additional strategies to combat bullying.
- **Target multiple risk and protective factors:** Research shows that risk factors at the individual, family, peer group, school and community level must be addressed. Preventative responses to bullying and victimization must address more than one level of risk factors to effectively prevent and reduce bullying and victimization as there is no single cause for bullying. Children who are bullies or are victims of bullying are affected by several risk factors simultaneously. For instance, individually focused programs, situational deterrents, zero tolerance policies and school expulsion are not very effective on their own (Second International Conference on Violence in School, 2003; Shaw, 2001; Fox et al, 2003; Mayencourt, Locke & McMahon, 2003).

- **Focus on early, long-term intervention:** Commitment to the initiatives must be beyond a few months or a year (Pepler, Craig, Ziegler & Charach, 1994). Students who bully generally develop their behaviour problems over a long period of time and in many contexts. Therefore, interventions to change these behavioural patterns must be delivered over a long period of time so as to continually emphasize the anti-bullying message (Gottfredson et al., 2002; Sampson, 2002).
- **Be gender and age specific and focus on social skills:** As children mature, they are exposed to different risk factors and face different scenarios. As such, interventions need to be gender and age specific and include components designed to build social skills such as interpersonal skills, assertiveness, empathy and conflict resolution (Lumsden, 2002).

Overall, support from all levels is needed to help children and youth who bully to understand the implications of their behaviour, the importance of interacting respectfully with others and to find ways of achieving power and status through positive leadership. It is also clear that children who are bullied need protection from bullying and support in developing confidence and positive relationships (Pepler and Craig, 2007).

As a good bullying prevention approach, the whole-school method can be applied in all types of communities including high risk communities[11]. Successful whole school anti-bullying approaches are premised on the notion that bullying behaviour can be identified and redirected into a more prosocial direction through a systematic restructuring of the school's social environment.

Additional Resources

- Australian Institute of Criminology. *Bullying and victimization in schools: a restorative justice approach.* **www.aic.gov.au/publications/tandi/ti219.pdf**
- Bullying.org: **www.bullying.org**
- Canada Safety Council. *School Bullies*. **www.safety-council.org/info/child/bullies.html**.
- Canadian Initiative for the Prevention of Bullying: **www.prevnet.ca**
- Canadian Public Health Association. *Assessment Toolkit for Bullying, Harassment and Peer Relations at School*. **http://acsp.cpha.ca/antibullying/english/backinfo/Assessment_Toolkit.pdf**.
- Concerned Children's Advertisers: **http://www.cca-kids.ca/**
- National Clearinghouse on Family Violence: **http://www.phac-aspc.gc.ca/ncfv-cnivf/familyviolence/index.html**.
- Peaceful Schools International: **www.peacefulschoolsinternational.org**
- Public Safety Canada. National Crime Prevention Centre. NCPC Publications: Building the Evidence. **www.publicsafety.gc.ca/prg/cp/ncpc_pubs-eng.aspx**
- SafeCanada.ca. *Bullying Prevention:* **www.safecanada.ca/link_e.asp?category=28&topic=166**
- Stop Bullying Now!: **http://stopbullyingnow.hrsa.gov/index.asp**

For more information please contact the National Crime Prevention Centre (NCPC) at 1-877-302-6272, or visit our website at: ***www.PublicSafety.gc.ca/NCPC***.

If you wish to register for the NCPC mailing list to receive information from the Centre please visit the subscription page at: ***www.PublicSafety.gc.ca/prg/cp/mailinglist/subscribe-en.aspx***.

References

Alberta Children's Services. (n.d). *About Bullying: What is it*. Retrieved November 29, 2007, from http://www.b-free.ca/home.html.

B.C. Ministry of Education. (n.d). *Live Violence Free – Students Who Bully*. Retrieved October 2, 2007, from http://www.bced.gov.bc.ca/live_vf/bulliies.htm

Canadian Public Health Association. *Safe School Study*. (2003a). http://acsp.cpha.ca/antibullying/english/backinfo/Safe_School_Study_Final.pdf.

Canadian Public Health Association. (2003b). *Bullying, School Exclusion, and Literacy*. Retrieved January 4, 2008, from http://acsp.cpha.ca/antibullying/english/backinfo/CPHA_Discussion_Paper-PDF.pdf

Centre for the Study and Prevention of Violence. (2006). *Blueprints Model Programs Fact Sheet: Olweus Bullying Prevention Program*. Retrieved November 29, 2007, from http://www.colorado.edu/cspv/publications/factsheets/blueprints/pdf/FS-BPM09.pdf

Craig, Wendy M., Debra Pepler & Rona Atlas. (2000). "Observations of Bullying in the Playground and in the Classroom." *School Psychology International*: vol. 21(1): 22-36.

Craig, Wendy M., Ray DeV. Peters & Roman Konarski. (1998). "Bullying and Victimization among Canadian School Children" *The Working Paper Series* for the Applied Research Branch, Human Resources Development Canada (Hull, QC: October, 1998).

Craig, Wendy M. & J. Yossi. (2004). "Bullying and fighting: results from World Health Organization Health and Behaviour Survey of School Aged Children". *International Report from World Health Organization*.

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

Fox, J.A., D. Elliot, R.G. Kerlikowske, S. A. Newman & W. Christeson. (2003) *Bullying Prevention Is Crime Prevention*. A report by Fight Crime: Invest in Kids. Retrieved from: http://www.fightcrime.org/reports/BullyingReport.pdf

Gottfredson, D. C., D. B. Wilson & S. Skroban Najaka. (2002). "School based Crime Prevention". In Sherman, Lawrence W. et al. (Eds.) *Evidence-based crime prevention*. New York: Routledge, pp. 56-164.

Harris, S., G. Petrie & W. Willoughby. (2002). "Bullying among 9th graders: An exploratory study". *NASSP Bulletin*, 86, 1630.

Hawker, D. S. J. & M.J. Boulton. (2000). "Twenty years' research on peer victimization and psychological maladjustment: A meta-analysis review of cross-sectional studies". *Journal of Child Psychology and Psychiatry*, 41(4): 441-445.

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

Kaltiala-Heino, R., M. Rimpela, M. Marttunen, A. Rimpela, & P. Rantanen. (1999). "Bullying, depression, and suicidal ideation in Finnish adolescent: School survey". *British Medical Journal*, Retrieved from: http://bmj.com/cgi/reprint/319/7206/348.pdf.

Lumsden, L. (2002). Preventing bullying. ERIC Clearinghouse on Educational Management. Online: http://www.ericdigests.org/2003-1/bullying.htm

Ma, Xin, Len L. Stewin, & Deveda Mah. (2001). "Bullying in school: nature, effects and remedies". *Research Papers in Education*, 16(3): 247-270.

Mayencourt, L., Locke, B. & McMahon, W. (2003). *Facing our Fears - Accepting Responsibility: Report of the Safe Schools Task Force. Bullying, Harassment and Intimidation in BC Schools*. Available at: http://mla.governmentcaucus.bc.ca/media/SSTF%20REPORT%20Final%20-%20June%2011%202003.pdf

National Crime Prevention Strategy. (2004). *Risk Factors and Protective Factors Fact Sheet*. Ottawa: National Crime Prevention Centre. Available at: http://ww4.ps-sp.gc.ca/en/library/publications/fact_sheets/cmp/risk.html.

National Crime Prevention Strategy. (2007). *Together We Light the Way*. Building the Evidence: Evaluation Summaries. Ottawa: National Crime Prevention Centre. Available at: http://www.publicsafety.gc.ca/prg/cp/bldngevd/2007-es-08-eng.aspx.

Olweus, D., S. Limber & S.F. Mihalic. (1999). *Blueprints for Violence Prevention, Book Nine: Bullying Prevention Program*. Boulder, CO: Center for the Study and Prevention of Violence.

Pepler, D., & Wendy Craig. (2007). *Binoculars on bullying: a new solution to protect and connect children*. York University and the Hospital for Sick Children and Dr. Wendy Craig, Queen's University. Retrieved at: http://www.voicesforchildren.ca/report-Feb2007-1.htm.

Pepler, D., P. Smith & K. Rigby. (2004). Looking back and looking forward: implications for making interventions work effectively. In Peter Smith, Debra Pepler and Ken Rigby (Eds.) *Bullying in Schools: How Successful Can Interventions Be?* United Kingdom: University Press, pp. 307-324.

Pepler, D.J., W.M. Craig, S. Ziegler & A. Charach. (1994). "Bullying: A Community Problem". *Canadian Journal of Community Mental Health*, 13, 95-110.

Prochaska J.O. and W.F. Velicer. (1997). "The transtheroetical model of health behavior change". *American Journal of Health Promotion*, 12: 38-48.

Rivers, I. & P. K. Smith. (1994). "Types of bullying behavior and their correlates". *Aggressive Behavior*, 20: 359-368.

Sampson, R. (2002). *Bullying in Schools: Problem-Oriented Guides for Police*. Series No. 12. U.S. Department of Justice, Office of Community Oriented Policing Services. Available at: http://www.cops.usdoj.gov/files/ric/Publications/e07063414-guide.pdf.

Second International Conference on Violence in School. Research, Best Practices, and Teacher Training. Quebec City: Canada. May, 2003.

Shaw, M. (2001). *Promoting Safety in Schools: International Experiences and Action*. International Centre for the Prevention of Crime.

Smith, P. (2000). *Bullying: Don't Suffer in Silence – an anti-bullying pack for schools*. Department for Education and Skills: United Kingdom.

Solberg, M. & 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 & 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.

Strategies for Healthy Young Relationships. (2006). Fourth R: Comprehensive school-based prevention. http://www.thefourthr.ca/.

Statistics Canada. (2007). "Youth Self-Reported Delinquency, Toronto, 2006". *Juristat*, (27): 6. Ottawa: Canadian Centre for Justice Statistics, Statistics Canada.

Totten, M., P. Quigley & M. Morgan. (2004). *CPHA Safe School Survey for Students in Grades 4-7*. Ottawa: Canadian Public Health Association and Department of Justice Canada. http://acsp.cpha.ca/antibullying/english/surveys/4-7_survey.html

Van der Wal, M. F., C. A. M. de Wit & R. A. Hirasing. (2003). "Psychosocial Health among Young Victims and Offenders of Direct and Indirect Bullying". *Pediatrics*, 111: 1312-1317.

Volk, A., W. Craig, W. Boyce & 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.

Notes

1 The term 'social exclusion' is the term used in the bullying literature and refers to the indirect actions of a bully resulting in intentional and repeated harm done to the victim of lesser power. It usually takes the form of spreading of rumours, isolation from peer groups, gossiping, ridiculing, extorting or stealing money and possessions (Pepler & Craig, 2000; Ma, Stewin & Mah, 2001; Alberta Children's Services, n.d).

2 In the research literature (Pepler & Craig, 2000; Harris, Petrie, & Willoughby, 2002; National Clearinghouse on Family Violence, 2002), behaviour problems that are manifested in children's outward behaviour are called externalizing behaviours. Specifically, the term refers to the child negatively acting out on the external environment, which often consists of disruptive, hyperactive, and aggressive behaviours.

3 Although risk factors such as trouble concentrating in class and a lack of empathy and compassion for others tend to be consistently found for bullies, it is possible for these risk factors to also be found among delinquents. It should be noted, however, that these risk factors are more significant when dealing with bullying than with general delinquency.

4 This percentage corresponds to 390 students of a sample of 6500. The study, conducted by Volk, Craig, Boyce and King (2003), attempted to obtain prevalence rates of bullying and victimization from a large, representative sample of youth across Canada.

5 The original published findings do not specify the exact reductions in bullying behaviour, nor do they indicate the specific increase in student perceptions of safety. The original report is referenced as Epstein, L., Plog, A.E., & Porter, W. (2002). Bully-Proofing Your School: Results from a Four-Year Intervention. *The Report on Emotional and Behavioral Disorders in Youth* 2(3), pp. 55-56, 73-77.

6 Blueprints Model Programs are violence prevention programs that are selected based on a strict set of criteria from a review of over 600 projects. The criteria that the program must demonstrate before it can be included as one of Blueprints Model Programs includes evidence of a deterrent effect with a strong research design, sustained effects, multiple site replications, an analysis of mediating facts and a cost benefit analysis. For more information on Blueprints Model Programs, please visit **http://www.colorado.edu/cspv/blueprints/index.html**.

7 A randomized control trial is a form of evaluation that allows researchers to test the effects of a certain intervention in isolation of other factors that may contribute the project's overall effect. For this type of experiment, project participants and a control group of non-project participants are selected at random and their results are compared. For more information on randomized control trials, please see Evidence-Based Crime Prevention: Scientific Basis, Trends and Implications for Canada, by Brandon Welsh at **http://www.publicsafety.gc.ca/prg/cp/ebcp-eng.aspx**.

8 No reports are available for the fourth school as it withdrew part way through the project.

9 For more information on Success in Stages, please visit **http://www.channing-bete.com/**. Training kits and manuals can be purchased from this site in order to have a deeper understanding of the program and its results.

10 The Transtheoretical Model of Behaviour Change is a stage model of behaviour change which proposes that change occurs in a non-linear process. Specifically, this model views behaviour change to be the result of rational decision making and individual motivation, and as such depending on one's motivation they may both advance and regress through the various stages of behaviour change (Prochaska & Velicer, 1997).

11 It should be noted that the success of the whole school approach in high risk communities is limited as rigorous evaluations of such contexts have not been performed.