# Quarterly

Children's Health Policy Centre

Vol. 2, No. 4 2008

### Addressing Bullying Behaviour in Children





Sticks, stones and name-calling ...

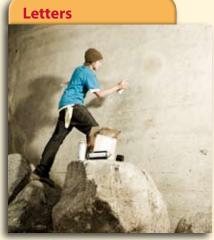


**Feature** 

I spy with my little video camera

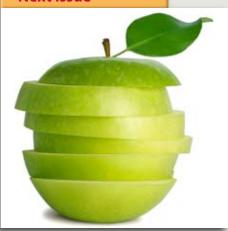


Do antibullying programs work?



Bipolar medication under the microscope

#### **Next Issue**



Our Winter 2009 issue looks at the costeffectiveness of programs for preventing mental disorders in children. Given that new health dollars are always limited, we examine which prevention investments are likely to produce the best outcomes.

#### About the Children's Health Policy Centre

As an interdisciplinary research group in the Faculty of Health Sciences at Simon Fraser University, we aim to connect research and policy to improve children's social and emotional well-being, or children's mental health. We advocate the following public health strategy for children's mental health: addressing the determinants of health; preventing disorders in children at risk; promoting effective treatments for children with disorders; and monitoring outcomes for all children. To learn more about our work, please see www.childhealthpolicy.sfu.ca



#### **About the Quarterly**

The *Quarterly* is a resource for policy-makers, practitioners, families and community members. Its goal is to communicate new research to inform policy and practice in children's mental health. The publication is funded by the British Columbia Ministry of Children and Family Development, and topics are chosen in consultation with policy-makers in the Ministry's Child and Youth Mental Health Branch.

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# Quarterly

#### This Issue

Overview 3

#### Sticks, stones and name-calling ...

What is bullying? How often does it occur? And why does it so often go unrecognized? We answer the most commonly asked questions about this troubling form of aggression.

Feature

#### I spy with my little video camera

Join us for a look at the secret life of bullying — thanks to an ethnically diverse group of elementary students from Toronto who agreed to be videotaped while wearing wireless microphones.

Review 9

#### Do antibullying programs work?

Children need environments free from fear and intimidation. The research evidence is clear that adults can intervene to help end bullying.

Letters 15

#### Bipolar medication under the microscope

A reader asks about the long-term effects of medication to treat bipolar disorder. If you have a question or comment, please be sure to contact us by email or by regular post.

References 17

We provide all references cited in this edition of the *Quarterly*.

Links to Past Issues 20

#### How to Cite the Quarterly

We encourage you to share the *Quarterly* with others and we welcome its use as a reference (for example, in preparing educational materials for parents or community groups). Please cite this issue as follows:

Schwartz, C., Barican, J., Waddell, C., Harrison, E., Nightingale L., & Gray-Grant, D. (2008). Addressing bullying behaviour in children (fall issue). *Children's Mental Health Research Quarterly*, 2(4), 1–20 Vancouver, BC: Children's Health Policy Centre, Faculty of Health Sciences, Simon Fraser University.

#### Sticks, stones and name-calling ...

- When her Grade 6 teacher announced the assigned groups for the recycling project, a familiar feeling of dread overcame Sukkie.
   She knew that working with Ruby meant facing name-calling or being ignored altogether.
- Jamal used to be the first child out the door at recess, loving the freedom of running and playing. However, after repeatedly being pushed by Tyler on the playground, Jamal began to avoid leaving the classroom.
- Tears rolled down Tiffany's face when she realized the nasty postings about her online had hit the offline world. She was devastated after seeing the same cruel words that had appeared on her computer screen now scrawled across her locker in permanent marker.



Canada ranked 10th to 19th highest out of 39 nations for rates of bullying others and 20th to 24th for being bullied.

#### What is bullying?

Sukkie, Jamal and Tiffany share the experience of being bullied. Bullying, which has a variety of definitions, is distinguished from other forms of aggression by its three defining characteristics. Bullying involves *repeated negative actions* meant to inflict harm in a relationship where there is a *power imbalance* between the aggressor(s) and the victim. The power

imbalance can arise from differences in physical size and strength or differences in social advantage, such as being popular or having support from other children.<sup>2, 3</sup> It can also arise from knowing others' vulnerabilities.<sup>3</sup>

Bullying, furthermore, may be *direct* or *indirect*. Direct bullying involves open attacks on a child, such as physical assaults, threats or teasing.<sup>4</sup> Indirect bullying involves attempts to harm a child's social position by acts including exclusion and gossip.<sup>5</sup> Indirect bullying is often harder to detect than direct bullying.<sup>5</sup>

#### The bully revealed

The Olweus Bullying Questionnaire<sup>1</sup> is one of the most frequently used bullying measures. It uses the following definition of bullying:

We say a student is being bullied when another student, or several other students:

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

When we talk about bullying, these things happen repeatedly, and it is difficult for the student being bullied to defend himself or herself. We also call it bullying when a student is teased repeatedly in a mean and hurtful way. But we don't call it bullying when the teasing is done in a friendly and playful way. Also, it is not bullying when two students of about the same strength or power argue or fight.

Reprinted with permission of <u>Dan Olweus</u>, The Olweus Bullying Questionnaire, Hazelden Publishing, © 2007.

#### How often does bullying occur?

Reported rates of bullying vary dramatically depending on how bullying is defined, the length of time it is measured and the age of children surveyed. Large differences have also been found between countries. A survey by the World Health Organization noted consistently high rates of bullying among adolescents from Lithuania, Latvia and Estonia and low rates in northern European countries such as Sweden. Canada ranked 10th to 19th highest out of 39 nations for rates of bullying others and 20th to 24th for rates of being bullied.

Although many children occasionally bully, only a small proportion (about 10%) engage in frequent bullying over an extended time.<sup>7</sup> The following table details rates of bullying experienced by Canadian schoolchildren from three large-scale surveys.

Although many children occasionally bully, only a small proportion engage in frequent bullying over an extended time.

**Table 1: Prevalence of bullying in Canadian schools** 

Child Characteristics			Bullying Rates			
Age	Location	Number	Period measured	Bullying others	Being bullied	
6–13*	Kingston and Toronto <sup>2</sup>	4,743	Past 6 six weeks	1 or 2 times: 30% > 1 or 2 times: 6%	1 or 2 times: 38% > 1 or 2 times: 15%	
10-11	Canada-wide <sup>8</sup>	2,798	Unspecified**	Not assessed	Never: 68% Rarely: 21% Sometimes: 7% Most of the time: 3% All the time: 1%	
11–15	Canada-wide <sup>6</sup>	5,787	Past couple of months	At least once: 34%–40%† At least twice: 5%–13%†	At least once: 28%–44%† At least twice: 9%–21%†	

<sup>\*</sup> Study reported children's grades, which were used to calculate approximate ages.

With the use of technologies such as the Internet, bullying is no longer limited by proximity. The new phenomenon known as cyberbullying has been found to be a common experience. Rates among Canadian students from Grades 7 to 9 have ranged from 15% to 25% for bullying others and 25% to 57% for being bullied.<sup>9, 10</sup>

#### Does bullying change over time?

Most researchers have found that bullying declines as children get older, with bullying peaking around Grade 6.<sup>11, 12</sup> Within this general trend, four distinct trajectories have been identified. A seven-year study of Canadian children found the following:

<sup>\*\*</sup> Study surveyed children twice (1994–95 and again in 1996–97). Report rates are totalled over the two measurement periods.

<sup>†</sup> Because the survey provided separate data by ages, ranges provided are for the entire sample across ages.

- 10% of children consistently engage in high levels of bullying
- 13% participate in moderate levels during their mid-childhood, with almost no bullying at the end of high school
- 35% engage in consistently moderate levels of bullying
- 42% of children almost never bully others<sup>7</sup>

Developmental changes have an impact on agerelated declines in bullying. Younger children may be particularly vulnerable to bullying because of their limited social skills.<sup>11</sup> As children mature, they gain greater social understanding, increased capacity for empathy and less tolerance for aggression.<sup>13</sup> Peer group norms also typically shift to reject bullying.<sup>7</sup>

# BULLY

Bullying involves repeated negative actions meant to inflict harm in a relationship where there is a power imbalance.

#### Sugar and spice vs. puppy dogs' tails

Most research has found that boys engage in bullying significantly more often than girls regardless of developmental period.<sup>7, 13–21</sup> This pattern is consistent across cultures, with boys being significantly more likely to bully others in almost all countries assessed. When children bully, they typically target same-sex peers,<sup>21</sup> with boys being less likely than girls to bully a victim of the opposite sex.<sup>13, 20</sup>

There are also noticeable differences in the types of bullying that girls and boys engage in. Boys' bullying is characterized by more physical aggression, while girls' bullying is more indirect and likely to involve exclusion.<sup>22, 23</sup>

Gender differences in victimization are more equivocal. Some studies have found more male victims  $^{5, 6, 11, 17}$  while others have found no difference.  $^{14, 16, 18, 19, 21}$ 

#### If we know it's a problem, why does it continue?

Many factors have an impact on bullying. Individual child characteristics have been identified, such as high anger and low empathy among children who bully<sup>24</sup> and limited assertiveness skills among children who are bullied.<sup>25</sup> However, these factors alone do not explain the occurrence of bullying. Adults also significantly influence bullying.<sup>7</sup> When adults fail to intervene in bullying, they teach children that they condone it. When parents use harsh punishment or adults engage in violence themselves, they teach children to use power and aggression in relationships.<sup>7</sup>

When children who engage in bullying are identified early and are provided with consistent adult supervision, support and monitoring, future aggression can be prevented.

#### The costs of failing to intervene

When bullying occurs, children pay a significant price. Children who are bullied are at risk for impaired social development,<sup>3</sup> mental and physical illnesses,<sup>23</sup> suicide<sup>26</sup> and school absenteeism.<sup>27</sup> Children who bully others frequently suffer from high rates of mental disorders<sup>24</sup> and from learning problems.<sup>28</sup> Long term, these children are at risk for criminal activity involvement<sup>29</sup> and employment instability.<sup>30</sup> They also have an increased likelihood for ongoing violence, as bullying in childhood often transforms into other aggressive behaviours later in life, including dating violence.<sup>13</sup> Additionally, even witnessing bullying can cause suffering, as it often leads to children feeling distress and discomfort.<sup>16</sup>

There are also financial costs to bullying. Health problems, low academic achievement and criminal behaviours result in added costs to the health care, educational and justice systems.<sup>3</sup>

#### How can we create healthy environments for kids?

Bullying is a problem that can be stopped when adults — at the family, school or community level — intervene appropriately. When children who engage in bullying are identified early and are provided with consistent adult supervision, support and monitoring,<sup>5</sup> future aggression can be prevented.<sup>13</sup> Children not directly involved in bullying can be taught responses to stop it and can learn attitudes that will help prevent it. School staff can create environments where bullying is regarded as unacceptable by all. Every adult can also model non-aggressive solutions to conflict so children are free from violence in their homes, schools and communities.

# Promoting healthy relationships

A national strategy to prevent and reduce bullying in Canada has come to fruition through the creation of the Promoting Relationships and Eliminating Violence Network (PREVNet). This national network was developed because many activities undertaken to stop bullying lacked an empirical foundation, rigorous evaluations and a strategy for coordination and dissemination. PREVNet promotes healthy relationships for children and youth using education and training, assessment, prevention and intervention, and policy and advocacy. Its website, www.prevnet.ca, contains helpful resources for parents, practitioners and policy-makers.

#### **Feature**

# I spy with my little video camera

ost empirical knowledge of bullying comes from surveys of children reporting on their personal experiences. Canadian researchers have added to our understanding by using technology to capture the sights and sounds of bullying from a child's perspective. Unparalleled access to life in the classroom and in the schoolyard occurred when an ethnically diverse group of elementary students from Toronto agreed to be videotaped while wearing wireless microphones.

Footage revealed that bullying occurred frequently inside and outside of schools, as indicated in the table below.



Bullying is less frequent in schools where teachers stress the importance of preventing it.

**Table 2: Bullying rates in Canadian elementary schools** 

Setting	Bullying					Children	
	Number of episodes per hour	Average duration in seconds (range)	Acts Verbal	Physical	Both	Number	Gender
Classroom⁵	2.4	26 (2–227)	53%	30%	17%	28	71% male
Schoolyard <sup>31</sup>	4.5	34 (2–448)	42%	NR	NR	34	71% male
Schoolyard <sup>20</sup>	6.5	38 (2–446)	50%	29%	21%	65	74% male
Schoolyard <sup>32</sup>	NR	79 (7–720)	NR	NR	NR	120	50% male

NR Not Reported.

#### A picture plus a thousand words

By recording the bullying, critical information was learned about how children and adults respond to witnessing it. Although most bullying episodes had only one bully (90%) and one victim (92%),<sup>20</sup> the vast majority (between 85%<sup>20</sup> and 88%<sup>33</sup>) of instances involved additional children.<sup>20</sup> As well, the more children witnessing the bullying, the longer the bullying lasted.<sup>32</sup>

In most episodes (81%), children witnessing the bullying responded in a way that reinforced it, such as joining in the aggression<sup>20</sup> or watching it without responding to help the victim.<sup>34</sup> Children rarely (between 11%<sup>34</sup> and 19%<sup>33</sup> of episodes) intervened in the bullying. When they did, they were significantly more likely to address the bully than the victim.<sup>33</sup> In most instances (57%) when other children intervened, they were able to effectively stop the bullying within 10 seconds.<sup>33</sup> The effectiveness of children's responses was significantly related to duration, with longer responses being

The more children witnessing the bullying, the longer the bullying lasted.

less effective than briefer ones.<sup>33</sup> Children typically first tried to intervene in a socially appropriate way and resorted to using aggression, such as name-calling and pushing, if not successful.<sup>33</sup>

#### What isn't seen isn't acted upon

It is important to note that school staff failed to intervene in most bullying instances. In the classroom, teachers intervened in 18% of bullying episodes.<sup>5</sup> In the schoolyard, rates of staff intervention ranged from 4%<sup>20</sup> to 15%.<sup>31</sup> The low rate of intervention was likely due, in part, to staff being unaware that bullying was occurring. When teachers and schoolyard supervisors were in "close proximity" to bullying, their intervention rates increased to 37%<sup>5</sup> and 25%,<sup>20</sup> respectively. When teachers were assessed as being aware of the bullying, their intervention rate jumped to 73%.<sup>5</sup>

Bullying is a common occurrence in schools. Although frequently witnessed by other children, in most instances, peers do not or cannot respond in ways that stop it. This may occur for a variety of reasons, including children not knowing how to effectively intervene or children fearing reprisals if they do. When teachers are conscious of bullying, they act to stop it in most situations. However, their lack of awareness of *most* instances results in children continuing to suffer from bullying.

From video image to viable intervention

Bullying takes place in a social context. Schools characterized by high conflict, disorganization and low levels of supervision are likely to experience higher rates of bullying.<sup>15</sup> In contrast, bullying is less frequent in schools where teachers stress the importance of preventing it<sup>18</sup> and where children view their school as trusting, fair and pleasant.<sup>15</sup>

Adults are responsible for creating school environments that minimize the likelihood of bullying. The first step in achieving this is to recognize that bullying is a problem and increase adults' awareness of it. Next, adults must consistently take action to prevent bullying and intervene when it does occur. This consistent response increases children's trust in adults' ability to solve this problem. Adults must also teach children appropriate skills to stop bullying when they witness it. There are school-wide programs that effectively alter the school environment to reduce bullying. (See the Review article for our systematic review of antibullying interventions.) If our goal is to create schools that support children's development and learning, implementing these types of interventions is vital.

The low rate of intervention was likely due, in part, to staff being unaware that bullying was occurring.

#### Do antibullying programs work?

Bullying has long been a concern both within and outside of schools. The first nationwide antibullying program began in Norway in the 1980s following the suicides of two boys who were repeatedly bullied at school.<sup>25</sup> Since that time, antibullying interventions have been launched in numerous countries, including Canada, Australia, Ireland, Switzerland and Spain.<sup>35</sup> To provide the best available evidence on the impact of such programs, we identified the highest-quality research on antibullying interventions for this review.

# Our systematic method for selecting research

We used systematic methods adapted from the journal *Evidence-Based Mental Health*. <sup>36</sup> We limited our search to randomized-controlled trials (RCTs) published in peer-reviewed journals. Although RCTs are not the only form of useful knowledge, they are the gold standard in evaluating intervention effectiveness.

To identify studies, we first applied the following search strategy:



Programs were more successful at reducing rates of bullying perpetration than rates of victimization.

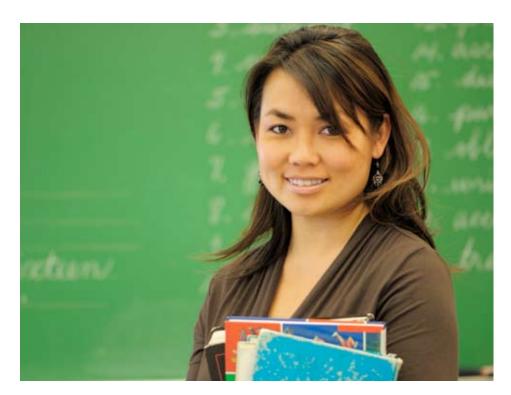
Sources	The databases Medline, PsycINFO, CINAHL, CENTRAL & ERIC
Search Terms	Bully (including bullies, antibullying & anti-bullying)
Limits	<ul> <li>English-language articles published in 1998 through 2008</li> <li>Child participants aged 0–18 years</li> </ul>

Next, we applied the following criteria to ensure we included only the highest-quality studies:

- Clear descriptions of child characteristics, settings and interventions
- Intervention aimed at bullying
- Random assignment of children to intervention and control groups at outset
- Maximum dropout rates of 20% at post-test
- At least one bullying outcome measure
- Levels of statistical significance reported at post-test for all outcomes/ groups

Because no assessed study would have met all of <u>our usual inclusion</u> <u>criteria</u>, we eliminated three for this review. We did not require studies to report outcomes at three-month follow-up because multi-level, whole-school

Schools making the greatest efforts in implementing antibullying programs have the best results.



Beyond reducing bullying, many programs produced other positive outcomes, including improvements in quality of life and interpersonal interactions.

interventions typically do not have a predetermined end point. Requiring a follow-up period would have eliminated these types of interventions from this review. Additionally, because bullying is often hidden from adults, we did not require bullying outcome measures from two sources. We also did not require the reporting of validity and reliability data for bullying measures, as all of the studies we included used measures with good face validity (i.e., items were clearly relevant to bullying, including children reporting on bullying experiences generally or by specific acts). Two different team members assessed each retrieved study to ensure accuracy.

#### A global perspective on antibullying interventions

Of 36 articles retrieved for assessment, eight RCTs (described in 10 articles) met our criteria. Two RCTs evaluated multi-level, whole-school programs; <sup>37, 38</sup> three evaluated classroom-based programs; <sup>25, 39–41</sup> and three evaluated two types of family therapy. <sup>42–44</sup> Of the five targeted interventions, four were targeted to children who engaged in bullying. <sup>41–44</sup> The other targeted program included children disliked by peers, victimized by bullies or who experienced social anxiety. <sup>39</sup> Of the three universal interventions — those directed at entire student populations — two were whole-school programs <sup>37, 38</sup> and one was a classroom-based program. <sup>25</sup>

Children need environments free from the fear and intimidation that bullying creates.

Table 3: Antibullying programs assessed

Program			Children
Title, description and aim	Content	Level	Age range
		Duration	Gender
		Number*	Country
Behavioural Program:41	20 60-minute group sessions using a token	Targeted	12–16
Classroom-based behavioural program to reduce bullying	economy, modelling, role-playing and homework	10 weeks	100% male
		Intervention: 18 Control: 36	South Africa
Brief Strategic Family Therapy: 43	12 100-minute family sessions using	Targeted	15
Clinic-based family intervention to reduce anger, improve behaviour and improve	joining, identifying strengths and restructuring maladaptive interactions	3 months	100% female
health-related quality of life	,,	Intervention: 20 Control: 20	Germany
Brief Strategic Family Therapy: 44	12 100-minute family sessions using	Targeted	14–15
Clinic-based family intervention to reduce anger, improve behaviour and improve	techniques targeted at repetitive patterns of family interactions	3 months	100% male
health-related quality of life	orialis, interactions	Intervention: 36 Control: 36	Germany
<b>Bullies and Dolls:</b> 25 Classroom-based educational program to reduce violence and aggression	3 180-minute interactive classroom lessons using role-playing, group discussion, focus groups, videos and a	Universal	11–15
		3 weeks	50% male
	booklet	Intervention: 131 Control: 106	Italy
Gatehouse Project: 37,45	20** 45-minute classroom lessons using	Universal	13–14
Whole-school, multi-level, primary prevention program to promote	discussion groups and collaboration; staff training/support†; implementing health	3 years	47% male
emotional and behavioural well-being	team and antibullying policies	Intervention: 1,335 Control: 1,343	Australia
Integrative Family Therapy: 42	17 90-minute family sessions using	Targeted	14–16
Clinic-based family intervention to reduce anger, improve behaviour and improve	systematic, psychodynamic, Gestalt behavioural and psychodrama	6 months	100% male
health-related quality of life	techniques	Intervention: 22 Control: 22	Germany
S. S. Grin: <sup>39</sup>	8 50- to 60-minute group sessions using	Targeted	7–10
Classroom-based social skills program to reinforce pro-social attitudes and	didactic instruction, modelling and role- playing	2 months	51% male
behaviour	,,,,,,,,	Intervention: 198 Control: 217	United States
Steps to Respect:38	10 60-minute classroom lessons using	Universal	8–11
Whole-school, multi-level intervention to reduce bullying	direct instruction, discussion and skills practice; staff training‡; parent	1 year	51% male
	information and school-wide guide	Intervention: 549 Control: 577	United States

<sup>\*</sup> Reported sample sizes are at point of randomization with the exception of *Bullies and Dolls*, which only reported post-attrition sample size.

<sup>\*\* 20</sup> was the median lesson number for first year (with one school not using the curriculum in year 1). Lesson number and hours in subsequent years were not reported.

<sup>† 40</sup> hours per year.

<sup>‡ 2</sup> sessions plus manual.

#### Which interventions showed success?

All the family therapy interventions were successful in reducing bullying, whereas school-based programs produced mixed results (see Table 4). There was no clear pattern of success among the school interventions based on program level (targeted versus universal), comprehensiveness (single-classroom component versus multi-level, whole-school program), duration or participant age. Programs were more successful at reducing rates of bullying perpetration<sup>38, 42–44</sup> than rates of victimization.<sup>25</sup>

**Table 4: Bullying outcomes by program** 

	Number of Significant* Bullying Outcomes		
Program	At post-test	At follow-up	
<b>Behavioural Program:</b> 41 Targeted <b>classroom-based</b> behavioural program to reduce bullying	0 of 2 bullying others	0 of 2 at 1 month	
Brief Strategic Family Therapy: 43 Targeted clinic-based family intervention to reduce anger, improve behaviour and improve health-related quality of life	1 of 1 bullying others	0 of 1 at 12 months	
Brief Strategic Family Therapy: 44 Targeted clinic-based family intervention to reduce anger, improve behaviour and improved health-related quality of life	1 of 1 bullying others	NA	
<b>Bullies and Dolls:</b> Universal <b>classroom-based</b> educational program to reduce violence and aggression	NA	2 of 2 being bullied** at 4 months 0 of 2 bullying others	
Gatehouse Project: 37,45 Universal whole-school, multi-level, primary prevention program to promote emotional and behavioural well-being	0 of 1 being bullied	NA	
Integrative Family Therapy: 42 Targeted clinic-based family intervention to reduce anger, improve behaviour and improve health-related quality of life	1 of 1 bullying others	1 of 1 at 12 months	
<b>S. S. Grin:</b> <sup>39</sup> Targeted <b>classroom-based</b> social skills program to reinforce pro-social attitudes and behaviour	0 of 2 being bullied 0 of 1 bullying others	0 of 2 at 12 months 0 of 1	
Steps to Respect: 38 Universal whole-school, multi-level intervention to reduce bullying	0 of 2 being bullied 1 of 3 bullying others 1 of 1 adult responsiveness 2 of 3 bullying attitudes 0 of 1 encouraging bullying	NA	

#### NA Not assessed

- \* Significant improvements defined as  $p \le .05$ .
- \*\* Significant for older students (third year of middle school or first year of high school) but not younger students (first or second year of middle school).

There were four successful interventions (two family therapy, one classroom-based and one whole-school, multi-level intervention):

- Brief Strategic Family Therapy<sup>43, 44</sup>
- Integrative Family Therapy 42
- Bullies and Dolls<sup>25</sup>
- Steps to Respect<sup>38</sup>

All four interventions produced significant reductions on at least one bullying measure. Three studies also provided follow-up data. *Integrative Family Therapy*<sup>42</sup> (at one-year follow-up) and *Bullies and Dolls*<sup>25</sup> (at four-month follow-up) remained effective in reducing bullying. Although 50% of the adolescent girls who participated in *Brief Strategic Family Therapy* continued to not engage in bullying at one-year follow-up (compared to 15% in the control group), the difference was not large enough to reach statistical significance.

#### Achieving gains beyond bullying reduction

Beyond reducing bullying, many programs produced other positive outcomes including reductions in anger and risky behaviours along with improvements in quality of life and interpersonal interactions (see Table 5).

**Table 5: Additional positive outcomes by program** 

Brief Strategic Family Therapy <sup>43,44</sup>	Integrative Family Therapy <sup>42</sup>	S. S. Grin <sup>39,40</sup>	Steps to Respect <sup>38</sup>
Anger↓ Cortisol secretion levels↓ Health-related life quality↑ Interpersonal problems↓ Risky behaviours*↓	Anger↓ Health-related life quality↑ Interpersonal problems↓ Risky behaviours*↓	Aggression↓ Anxiety symptoms↓ Depressive symptoms↓ Leadership skills↑ Peer relationships↑ Positive expectations↑ Positive self-perceptions↑	Interaction skills ↑

<sup>\*</sup> Including drug use, smoking, binge drinking, excessive media use, sex without condom, sex while using drugs/alcohol and sexual disinhibition.

The three interventions that failed to reduce bullying — *Behavioural Program*, *Gatehouse Project* and *S.S. Grin* — were all school based. Many factors likely played a role in their lack of success in this domain. Two of the three schools using the *Behavioural Program* were set in violence-ridden communities in South Africa. The violence experienced in these schools was extreme, including sexual assaults and stabbings. The authors acknowledged the need to address larger issues of poverty and community violence. When children's basic security and safety is not ensured, much more than antibullying programs is obviously needed.

Although bullying was an "important focus" of the *Gatehouse Project*, this primary prevention program's major aim was to increase levels of emotional well-being and reduce rates of substance use. Consequently, there may not have been enough focus on bullying to reduce its occurrence.

*S.S. Grin*, a social skills training program, was the only targeted program focused on victims of bullying (along with those disliked by peers and those with social anxiety) rather than children who bullied others. Although the program failed to reduce bullying, it was effective at increasing participants being liked by peers, reducing negative peer affiliations, and increasing self-esteem and self-efficacy. These gains were sustained, and for some variables

We need to create climates in which bullying is viewed as inappropriate and unacceptable.

even further improved, at one-year follow-up. This finding (coupled with the results from the other RCTs which found efforts at reducing bullying perpetration were more successful than efforts at reducing victimization) suggests that targeted programs may be more successful when focused on children who bully, rather than the victims.

#### How we all can make a difference

Children need environments free from the fear and intimidation that bullying creates. The research evidence is clear that adults can intervene to help end this significant problem. Within families, parents can encourage positive social behaviours by modelling non-aggressive problem-solving strategies, such as resolving conflicts through discussion. In addition to providing effective family therapy to reduce bullying, practitioners can assist by providing parent training and support to reduce aggression early on, before bullying even begins. 46

Educators also have a significant role in reducing bullying, given the number of successful school-based antibullying programs. By including all students and staff, whole-school programs have the added advantages of not stigmatizing children involved in bullying and of not indirectly encouraging aggression by bringing aggressive children together. The effort adults make in implementing these programs is critical, for numerous studies have found that schools making the greatest efforts implementing antibullying programs have the best results. Support from clinical practitioners can help in implementing such programs.

To reduce bullying, efforts to eradicate it must extend beyond individual families and schools to target factors promoting bullying at the societal level. We cannot expect a child to stop pushing on the playground when he has to live in a community where he is regularly exposed to crime, violence and poverty. Paralleling the goals of whole-school interventions, we need to create climates in which bullying is viewed as inappropriate and unacceptable. All community members — including parents, educators, practitioners and policy-makers — have a collective responsibility to create healthy environments for children.

All the family therapy interventions were successful in reducing bullying.

# Bipolar medication under the microscope

#### To the Editors:

Your review of medications used to treat childhood bipolar disorder highlighted important information about the side effects associated with their short-term use. Given that children who are prescribed these medications typically use them over extended time periods, what is known about their long-term risks?

Martha Baldwin Surrey, BC

Our original review examined five medications that were studied between three and seven weeks. To answer the question about the *long-term* risks of these medications, we conducted another systematic search for published reviews on the topic. Data was only available on the long-term effects of lithium use in children. However, we also describe below the short-term side effects of three other drugs covered in our original review, to provide additional information about the risks of medications commonly used to treat childhood bipolar disorder.

#### What we know

Lopez-Larson and Frazier<sup>48</sup> conducted a 30-year systematic review of peer-reviewed publications on lithium and anticonvulsants use in adolescents with psychiatric disorders. They found that prolonged lithium use was associated with kidney problems, including glomerulosclerosis. Another review, which included data from adults, noted that long-term lithium treatment can produce lithium toxicity, characterized by multiple symptoms including gastrointestinal, neurological and circulatory problems.<sup>49</sup> Even after a brief period of use, lithium can produce side effects. Common ones include dizziness, gastrointestinal symptoms, frequent urination, thirst, enuresis, tremor, weight gain and fatigue.<sup>48</sup> These side effects are typically mild to moderate. However, more serious side effects, such as hypothyroidism and cardiac conduction abnormalities, can occur.<sup>48</sup>

Among the anticonvulsant medications, **valproate** use is commonly associated with gastrointestinal symptoms, headaches, sedation, dizziness, increased appetite, weight gain, rash, muscle weakness and hair loss. <sup>48</sup> Rarely, thrombocytopenia, hepatic toxicity and polycystic ovaries can occur, as can damage to the pancreas. <sup>48, 49</sup>



Even after a brief period of use, lithium can produce side effects.

Use of the anticonvulsant **carbamazepine** may produce side effects. Common ones include transient leucopenia, rash, dizziness, double vision and headaches. 48 Serious side effects can include the syndrome of inappropriate antidiuretic hormone, neutropenia, agranulocytosis and anemia. 48, 49

The anticonvulsant **topiramate** can also produce a number of side effects. Common ones include cognitive disturbances (such as word-finding difficulties and poor concentration), gastrointestinal distress, sedation, decreased appetite, weight loss and paresthesia (tingling and numbness).<sup>48</sup>

#### More rigour is needed

Based on the available evidence, Lopez-Larson and Frazier concluded that "double-blind, placebo-controlled trials of lithium and anticonvulsants are greatly needed as clinical use of these agents has risen without sufficient evidence supporting their efficacy in the pediatric population."<sup>48</sup> This is consistent with our own conclusions calling for more rigorous evaluations of medications being used to treat childhood bipolar disorder. Additionally, given recent controversies regarding research funded by pharmaceutical companies, independent medication evaluations are especially needed. Any child currently being prescribed these medications needs to be carefully monitored by a qualified professional. W

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#### References

## B.C. government staff can access original articles from BC's <u>Health and Human Services Library</u>.

- 1. Olweus, D. (1996). *The revised bully/victim questionnaire*. Bergen: University of Bergen.
- 2. O'Connell, P., Sedighdeilami, F., Pepler, D., Craig, W., Connolly, J., Atlas, R., et al. (1997). *Prevalence of bullying and victimization among Canadian elementary and middle school children*. Poster session presented at the meeting of the Society for Research and Child Development, Washington, D.C.
- 3. Craig, W. M., & Pepler, D. J. (2007). Understanding bullying: From research to practice. *Canadian Psychology*, 48, 86–93.
- 4. Ferguson, C. J., San Miguel, C., Kilburn, J. C., Jr., & Sanchez, P. (2007). The effectiveness of school-based anti-bullying programs: A meta-analytic review. *Criminal Justice Review*, 32, 401–414.
- 5. Atlas, R. S., & Pepler, D. J. (1998). Observations of bullying in the classroom. *Journal of Educational Research*, 92, 86–99.
- 6. Currie, C., Gabhainn, S. N., Godeau, E., Roberts, C., Smith, R., Currie, D., et al. (Eds.). (2008). *Inequalities in young people's health: Health Behaviour in Schoolaged Children international report from the 2005/2006 survey.* Copenhagen: World Health Organization.
- 7. Pepler, D., Jiang, D., Craig, W., & Connolly, J. (2008). Developmental trajectories of bullying and associated factors. *Child Development*, 79, 325–338.
- 8. Beran, T. (2008). Stability of harassment in children: Analysis of the Canadian National Longitudinal Survey of Children and Youth data. *Journal of Psychology*, 142, 131–146.
- 9. Li, Q. (2007). New bottle but old wine: A research of cyberbullying in schools. *Computers in Human Behavior, 23, 1777–1791.*
- 10. Beran, T., & Li, T. (2005). Cyber-harassment: A study of a new method for an old behavior. *Journal of Educational Computer Research*, 32, 265–277.
- 11. Hay, D. F., Payne, A., & Chadwick, A. (2004). Peer relations in childhood. *Journal of Child Psychology and Psychiatry*, 45, 84–108.
- 12. Pellegrini, A. D., & Long, J. D. (2002). A longitudinal study of bullying, dominance, and victimization during the transition from primary school through secondary school. *British Journal of Developmental Psychology*, 20, 259–280.
- 13. Pepler, D. J., Craig, W. M., Connolly, J. A., Yuile, A., McMaster, L., & Jiang, D. (2006). A developmental perspective on bullying. *Aggressive Behavior*, 32, 376–384.
- 14. Bentley, K. M., & Li, A. K. F. (1995). Bully and victim problems in elementary schools and students' beliefs about aggression. *Canadian Journal of School Psychology*, 11, 153–165.
- 15. Williams, K. R., & Guerra, N. G. (2007). Prevalence and predictors of Internet bullying. *Journal of Adolescent Health*, 41, S14–21.
- 16. Beran, T. N., & Tutty, L. (2002). Children's reports of bullying and safety at school. *Canadian Journal of School Psychology*, 17, 1–14.
- 17. Hymel, S., Rocke-Henderson, N., & Bonanno, R. A. (2005). Moral disengagement: A framework for understanding bullying among adolescents [Special issue]. *Journal of Social Sciences*, 8, 1–11.
- 18. Charach, A., Pepler, D. J., & Ziegler, S. (1995). Bullying at school: A Canadian perspective; Survey of problems with suggestions for intervention. *Education Canada*, 35, 12–19.
- 19. Kumpulainen, K., Rasanen, E., & Puura, K. (2001). Psychiatric disorders and the use of mental health services among children involved in bullying. *Aggressive Behavior*, 27, 102–110.

- 20. Craig, W. M., & Pepler, D. J. (1997). Observations of bullying and victimization in the school yard. *Canadian Journal of School Psychology*, 13, 41–60.
- 21. Veenstra, R., Lindenberg, S., Zijlstra, B. J. H., De Winter, A. F., Verhulst, F. C., & Ormel, J. (2007). The dyadic nature of bullying and victimization: Testing a dual-perspective theory. *Child Development*, 78, 1843–1854.
- 22. Coyle, J. P. (2005). Preventing and reducing violence by at-risk adolescents: Common elements of empirically researched programs. *Journal of Evidence-Based Social Work*, 2, 125–139.
- 23. Hinduja, S., & Patchin, J. W. (2008). Cyberbullying: An exploratory analysis of factors related to offending and victimization. *Deviant Behavior*, 29, 129–156.
- 24. Beran, T., & Shapiro, B. (2005). Evaluation of an anti-bullying program: Student reports of knowledge and confidence to manage bullying. *Canadian Journal of Education*, 28, 700–717.
- 25. Baldry, A. C., & Farrington, D. P. (2004). Evaluation of an intervention program for the reduction of bullying and victimization in schools. *Aggressive Behavior*, 30, 1–15.
- 26. Smith, J. D., Schneider, B. H., Smith, P. K., & Ananiadou, K. (2004). The effectiveness of whole-school antibullying programs: A synthesis of evaluation research. *School Psychology Review*, 33, 547–560.
- 27. Vreeman, R. C., & Carroll, A. E. (2007). A systematic review of school-based interventions to prevent bullying. *Archives of Pediatrics and Adolescent Medicine*, 161, 78–88.
- 28. Merrell, K. W., Gueldner, B. A., Ross, S. W., & Isava, D. M. (2008). How effective are school bullying intervention programs? A meta-analysis of intervention research. *School Psychology Quarterly*, 23, 26–42.
- 29. Patchin, J. W., & Hinduja, S. (2006). Bullies move beyond the schoolyard: A preliminary look at cyberbullying. *Youth Violence and Juvenile Justice*, 4, 148–169.
- 30. Craig, W. M., & Harel, Y. (2004). Bullying, physical fighting and victimization. In C. Currie et al. (Eds.), Young people's health context. Health Behaviour in School-aged Children (HBSC) study: International report from the 2001/2002 survey (pp. 133–144). Copenhagen: World Health Organization.
- 31. Craig, W. M., Pepler, D., & Atlas, R. (2000). Observations of bullying in the playground and in the classroom. *School Psychology International*, 21, 22–35.
- 32. O'Connell, P., Pepler, D., & Craig, W. (1999). Peer involvement in bullying: Insights and challenges for intervention. *Journal of Adolescence*, 22, 437–452.
- 33. Hawkins, D. L., Pepler, D. J., & Craig, W. M. (2001). Naturalistic observations of peer interventions in bullying. *Social Development*, *10*, 512–527.
- 34. Craig, W., & Pepler, D. J. (1995). Peer processes in bullying and victimization: An observational study. *Exceptionality Education Canada*, *5*, 81–95.
- 35. Baldry, A. C., & Farrington, D. P. (2007). Effectiveness of programs to prevent school bullying. *Victims & Offenders*, 2, 183–204.
- 36. Evidence-Based Mental Health. (2006). Purpose and procedure. *Evidence-Based Mental Health*, *9*, 30–31.
- 37. Bond, L., Patton, G., Glover, S., Carlin, J. B., Butler, H., Thomas, L., et al. (2004). The Gatehouse Project: Can a multilevel school intervention affect emotional wellbeing and health risk behaviours? *Journal of Epidemiology and Community Health*, 58, 997–1003.
- 38. Frey, K. S., Hirschstein, M. K., Snell, J. L., Edstrom, L. V., MacKenzie, E. P., & Broderick, C. J. (2005). Reducing playground bullying and supporting beliefs: An experimental trial of the Steps to Respect program. *Developmental Psychology*, 41, 479–490.
- 39. DeRosier, M. E. (2004). Building relationships and combating bullying: Effectiveness of a school-based social skills group intervention. *Journal of Clinical Child and Adolescent Psychology*, 33, 196–201.

- 40. DeRosier, M. E., & Marcus, S. R. (2005). Building friendships and combating bullying: Effectiveness of S.S. GRIN at one-year follow-up. *Journal of Clinical Child and Adolescent Psychology*, 34, 140–150.
- 41. Meyer, N., & Lesch, E. (2000). An analysis of the limitations of a behavioural programme for bullying boys from a subeconomic environment. *Southern African Journal of Child and Adolescent Mental Health*, 12, 59–69.
- 42. Nickel, M. K., Krawczyk, J., Nickel, C., Forthuber, P., Kettler, C., Leiberich, P., et al. (2005). Anger, interpersonal relationships, and health-related quality of life in bullying boys who are treated with outpatient family therapy: A randomized, prospective, controlled trial with 1 year of follow-up. *Pediatrics*, *116*, e247–254.
- 43. Nickel, M. K., Luley, J., Krawczyk, J., Nickel, C., Widermann, C., Lahmann, C., et al. (2006). Bullying girls: Changes after brief strategic family therapy: A randomized, prospective, controlled trial with one-year follow-up. *Psychotherapy and Psychosomatics*, 75, 47–55.
- 44. Nickel, M. K., Muehlbacher, M., Kaplan, P., Krawczyk, J., Buschmann, W., Kettler, C., et al. (2006). Influence of family therapy on bullying behaviour, cortisol secretion, anger, and quality of life in bullying male adolescents: A randomized, prospective, controlled study. *Canadian Journal of Psychiatry*, 51, 355–362.
- 45. Patton, G., Bond, L., Butler, H., & Glover, S. (2003). Changing schools, changing health? Design and implementation of the Gatehouse Project. *Journal of Adolescent Health*, 33, 231–239.
- 46. Olds, D. L., Henderson, C. R., Jr., Kitzman, H. J., Eckenrode, J. J., Cole, R. E., & Tatelbaum, R. C. (1999). Prenatal and infancy home visitation by nurses: Recent findings. *Future of Children*, *9*, 44–65, 190–191.
- 47. Salmivalli, C., Kaukiainen, A., & Voeten, M. (2005). Anti-bullying intervention: Implementation and outcome. *British Journal of Educational Psychology*, 75, 465–487.
- 48. Lopez-Larson, M., & Frazier, J. A. (2006). Empirical evidence for the use of lithium and anticonvulsants in children with psychiatric disorders. *Harvard Review of Psychiatry*, 14, 285–304.
- 49. Walsh, J. (1998). Psychopharmacological treatment of bipolar disorder. *Research on Social Work Practice*, *8*, 406–425.

#### **Links to Past Issues**

#### 2008/Volume 2

- 3 <u>Diagnosing and Treating Childhood Bipolar Disorder</u>
- 2 Preventing and Treating Childhood Depression
- 1 Building Children's Resilience

#### 2007/Volume 1

- 4 <u>Addressing Attention Problems in Children</u>
- 3 Children's Emotional Wellbeing
- 2 Children's Behavioural Wellbeing
- 1 Prevention of Mental Disorders