# Quarterly FALL 2021 VOL. 15, NO. 4

### **Childhood bullying: Time to stop**

**OVERVIEW** 

Bullying: The basics and beyond

REVIEW



# Quarterly

VOL. 15, NO. 4 2021



#### About the **Quarterly**

We summarize the best available research evidence on a variety of children's mental health topics, using systematic review and synthesis methods adapted from the <u>Cochrane Collaboration</u> and <u>Evidence-Based Mental Health</u>. We aim to connect research and policy to improve children's mental health. The BC Ministry of Children and Family Development funds the <u>Quarterly</u>.

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

We are an interdisciplinary research group in the Faculty of Health Sciences at Simon Fraser University. We focus on improving social and emotional well-being for all children, and on the public policies needed to reach these goals.

To learn more about our work, please see <u>childhealthpolicy.ca</u>.

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# SFU FACULTY OF HEALTH SCIENCES

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#### Helping children with obsessive-compulsive disorder

About 2,000 children in BC have OCD. We examine treatments for this disorder with the goal of helping all young people flourish.

#### **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:

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We celebrate the Indigenous Peoples whose traditional lands
Ouarterly team members live and work on.

## Bullying: The basics and beyond

hat counts as bullying? Most definitions agree that bullying involves aggression both intentional and repetitive, occurring in situations where there is a power imbalance between individuals. <sup>1-2</sup> This definition recognizes that bullying can take various forms, including physical, verbal and social. This definition also acknowledges that



aged 12 to 19 years, 53% reported

experiencing at least one form of bullying

in the past year.

proximity can vary, from bullying in person to bullying online.

Regardless of definition, there is no question about the seriousness of childhood bullying, since bullying has led to children dying by suicide.<sup>3</sup> Even if the consequences are not as dire, being victimized in childhood has been causally linked with subsequent mental health problems, including anxiety, depression and suicidality.<sup>4</sup> As well, longitudinal studies have demonstrated continuing mental health challenges for victims of childhood bullying into middle age.<sup>5</sup> As a result, there is a collective

Among BC students

ethical imperative to understand and stop childhood bullying.

#### A worldwide perspective on bullying

To stop childhood bullying, it helps to first understand the extent of the problem. A recent meta-analysis derived estimates by combining results from 80 studies across multiple countries. These studies included youth ages 12 to 18 and inquired about both in-person bullying and cyberbullying. Among these youth, 34.5% reported perpetrating in-person by

bullying and cyberbullying.<sup>6</sup> Among these youth, 34.5% reported perpetrating in-person bullying and 15.5% reported perpetrating cyberbullying. Meanwhile, 36.0% reported being victims of in-person bullying and 15.2% reported being victims of cyberbullying.<sup>6</sup> While rates of in-person bullying were slightly more than double those of cyberbullying, the two types were strongly correlated, leading the study's authors to conclude that in-person bullying and cyberbullying were in essence just different ways of enacting similar behaviours.

#### Moving closer to home: Canadian children's experiences

Data also exist on Canadian children's experiences with bullying. Specifically, a group of researchers asked roughly 1,000 young people — who were representative of the populations from all 10 provinces — about being victimized. Among participating youth ages 10 to 17, 26.2% reported being bullied at least once in the past month, with most reporting both in-person and online experiences. The researchers also examined whether demographic variables were related to bullying experiences. They found that age, gender, country of birth, language, and area of residence (rural versus urban) had no significant impact on victimization rates. <sup>1</sup>

Bullying experiences have also been documented for youth closer to home. Among BC students aged 12 to 19 years, 53% reported experiencing at least one of three forms of bullying in the past year.<sup>7</sup> This included 39% having been socially excluded on purpose, 38% being teased to the point of feeling bad or extremely uncomfortable, and 8% being physically bullied. As well, 4% of students reported missing school due to bullying in the past month.<sup>7</sup> Many of the same bullying experiences were documented among Métis students

in BC.8 Specifically, 41% were socially excluded on purpose, 47% were teased to the point of feeling bad or extremely uncomfortable, and 13% were physically bullied.8

#### What puts children at risk?

Beside knowing its prevalence, understanding risk factors is an important step in efforts to stop bullying. To this end, researchers have examined risk factors for both engaging in bullying and being bullied. One particularly robust meta-analysis incorporated 153 studies that included children from kindergarten to Grade 12.9 Researchers began by classifying children's experiences with bullying into three categories: perpetrator only, victim only, and both perpetrator and victim. Table 1 details the risk factors identified for each category. Despite needing more research to determine causation, these risk factors nevertheless provide a helpful starting point for informing understanding.

#### Table 1: Risk Factors for Bullying 9

#### Being a bully only (all moderate risk factors)

- Living in communities experiencing challenges (e.g., high crime rates)
- Having peers who encourage negative behaviour
- · Having other behaviour challenges (e.g., defiance and disruptiveness)
- · Having challenges in thinking about others (e.g., difficulties with empathy and perspective-taking)
- · Having academic challenges (e.g., poor school achievement)

#### Being bullied only (all moderate risk factors)

- · Having lower social status among peers (e.g., frequently being rejected by other children)
- · Possessing limited social skills
- Experiencing emotional problems (e.g., excessive worries or sadness)

#### Both being a bully and being bullied

#### Moderate risk factors

- Having lower social status among peers
- · Possessing limited social skills
- · Having challenges in thinking about others
- Having other behaviour challenges
- Having emotional problems
- · Having academic challenges
- · Being a part of a family experiencing challenges (e.g., high levels of conflict)
- Attending schools with a "poor climate" (e.g., students perceive unfair treatment)

#### Large risk factors

- · Having peers who encourage negative behaviour
- · Having a negative view of oneself

#### What protects children?

Beyond identifying risk factors, it is crucial to identify what can protect children from both bullying others and being bullied. The research is more sparse in this area. But a meta-analysis that included 19 studies of youth aged 11 to 18 years did identify one protective factor: older age reduced the risk of perpetrating bullying. <sup>2</sup> (This meta-analysis did not identify any protective factors in relation to being bullied.)

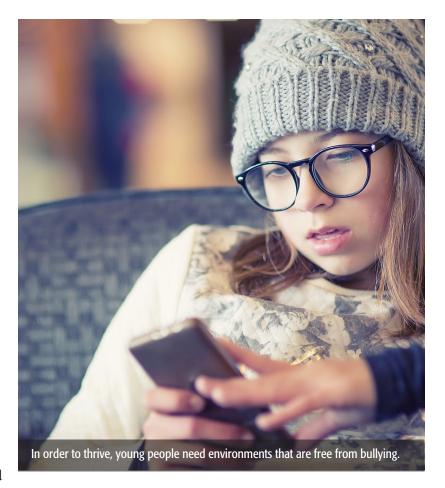
#### Moving from understanding to intervening

Beyond understanding the problem, to stop bullying, it is crucial to know which interventions are most effective. To inform policy and practice, the <u>Review article</u> that follows presents recent evaluations of eight antibullying programs.

# Building better antibullying programs

ore than a decade ago, the *Quarterly* team conducted a systematic review of antibullying programs. In the ensuing years, many new programs have been developed and evaluated — including a number targeting cyberbullying. We therefore conducted a new systematic review to highlight the best recent research evidence.

To ensure high-quality evaluations, we required studies to use <u>randomized</u> <u>controlled trial</u> (RCT) methods. We identified RCTs by hand-searching relevant systematic reviews and by conducting new searches covering publications from 2008 (the last search date for our previous systematic review) to 2021. We also reviewed



our past *Quarterly* issue on bullying to identify RCTs that met current inclusion criteria. We accepted only those studies conducted in high-income countries to ensure applicability to policy and practice in Canada. (The <u>Methods section</u> provides details on our search strategy and inclusion criteria.)

After retrieving and assessing 46 studies, we accepted eight RCTs evaluating eight interventions. Six evaluated school-based programs — five delivered in individual classrooms and one delivered school wide. 10-15 Although four of these programs aimed to prevent bullying in general, 10-12, 14 one classroom program and the whole-school program focused exclusively on cyberbullying. 13, 15 We also accepted two RCTs evaluating two clinic-based interventions, both assessing types of family therapy. 16-17 The eight interventions were delivered to children ranging in age from five to 16 years.

#### Classroom lessons going beyond the core curriculum

Among the five classroom-based programs, Roots of Empathy included Canadian students in kindergarten and Grades 4 and 8.<sup>10</sup> While content varied depending on children's ages, the program aimed to reduce bullying, aggression and violence in general. Certified instructors delivered the 27-session program over one school year. It included

review found five interventions that reduced at least one form of bullying.

Our systematic

students observing parent-infant interactions to learn about social inclusion; reading emotional cues; and communicating thoughts and feelings. Roots of Empathy was evaluated in 17 intervention and 10 control schools.<sup>10</sup>

The program Youth Matters began when American students were in Grade 4 and lasted two school years. As well as aiming to reduce bullying and other forms of aggression, the program addressed tobacco use. Curriculum specialists delivered the 40-session program, which included teaching self-control, social competence, emotional awareness, communication skills and problem-solving. The program was evaluated in 14 intervention and 14 control schools. 11, 18

The classroom program Bullies and Dolls included Italian students in Grades 6 through 9.<sup>12</sup> Beyond aiming to reduce bullying, the program also addressed student violence in the school and family violence in the home. Program videos and booklets provided information on the consequences of bullying and of children witnessing intimate partner violence, including how violence can be learned. Students completed the program in three sessions over three weeks. The program was evaluated in two middle schools and one high school, with each having both intervention and control classrooms.<sup>12</sup>

A fourth classroom program, Media Heroes, involved German students in Grades 7 through 10. <sup>13</sup> Media Heroes aimed to reduce cyberbullying as well as reduce health concerns such as headaches, stomach aches and sleep problems — issues linked to cyberbullying. Classroom teachers received eight hours of training and then delivered the program, which included teaching online safety strategies, providing information on the effects of cyberbullying, and encouraging empathy toward cyberbullying victims. Two versions were evaluated: one with 10 sessions delivered over 10 weeks, and one with four sessions delivered over one day. As well as the components noted above, the 10-session version involved students preparing a short workshop for their

parents on lessons they had learned. The program was evaluated in five secondary schools, each with both intervention and control classrooms.<sup>13</sup>

Schools are excellent venues for reaching large numbers of children with antibullying programs.

The fifth classroom-based program, Incremental Theory of Personality Intervention (ITPI), included Spanish students in Grades 8 through 10.<sup>14</sup> ITPI focused on reducing bullying by teaching students that personality can change. The self-directed intervention had students read an article about changing brain pathways; write an explanation and read other students' explanations of how the brain changes; and describe feeling isolated

or rejected and then write about how they would help another student in the same situation. Students took approximately one hour to complete the intervention. The program was evaluated in 10 secondary schools, with students randomized to either intervention or control groups within the same classroom. Control students completed similar exercises on the brain and how it adapts to high school.<sup>14</sup>

#### School-wide anti-cyberbullying efforts

Cyber Friendly Schools, a whole-school intervention, began when Australian students were in Grade 8 and lasted two school years. The program aimed to reduce cyberbullying using a variety of components for students, parents, teachers and school support team members. Student leaders received 20 hours of training equipping them to spearhead activities on the positive use of technology. Student leaders also reviewed relevant school policies, taught staff about students' technology use, raised students' awareness of their online rights and responsibilities, and delivered cyberbullying prevention training to student leaders and parents. Teachers received six hours of training to support them in teaching online social skills. Meanwhile, school support teams received 12 hours of training on assessing and improving school antibullying policies and practices. Schools also provided parents with online resources to build their skills and confidence in assisting children to safely navigate cyber environments. The program was evaluated in 35 high schools (19 intervention and 16 control). Table 2 summarizes the six school-based programs.

Intervention	Approach	Sample size	Grade* (country)			
Classroom delivery						
Roots of Empathy 10	27 sessions focused on reading emotional cues + communicating thoughts + feelings over 1 school year	760	Kindergarten, 4 + 8 (Canada)			
Youth Matters <sup>11</sup>	40 sessions focused on self-control, social competence, emotional awareness, communication + problem-solving over 2 school years	1,063	4 (United State			
Bullies and Dolls 12	3 sessions focused on consequences of bullying and of children witnessing intimate partner violence over 3 weeks	239	6–9 (Italy)			
Media Heroes <sup>13</sup>	10 sessions focused on online safety, the effects of cyberbullying + empathy for cyberbullying victims over 10 weeks**	897	7–10 (Germany)			
Incremental Theory of Personality Intervention (ITPI) 14	1 session focused on brain malleability + helping isolated students over 1 day	858	8 – 10 (Spain)			
Whole-school delivery						
Cyber Friendly Schools 15	Multi-component intervention involving promoting of positive technology use, cyberbullying prevention training + updating of school policies + practices over two school years	3,382	8 (Australia)			

#### Out of schools and into clinics to address bullying

Both of the RCTs on clinical interventions evaluated a type of family therapy. Integrative Family Therapy focused on Germany families with teenage boys who had perpetrated bullying for at least six months. <sup>16</sup> The therapy aimed to encourage family communication and change family interactions that could be contributing to the boys' behaviour. Two therapists delivered the 18-session intervention to each family over six months. Control families received a "placebo" program of the same duration that included reviewing daily routines and psychological well-being. <sup>16</sup>

Brief Strategic Family Therapy also focused on German families, in this case with teenage girls who had perpetrated bullying for at least six months.<sup>17</sup> The goal was to improve girls' behaviour by fostering family communications and problem-solving, and by helping parents support each other to provide clear rules, consequences and supervision. Therapists and therapists-in-training delivered the 12-session intervention to each family over three months. Control families received a "placebo" program of the same duration that included reviewing family members' feelings and daily routines.<sup>17</sup> Table 3 summarizes these therapy approaches.

Table 3: Clinic-Based Antibullying Intervention Studies				
Intervention	Approach	Sample size	Ages (country)	
Integrative Family Therapy 16	18 sessions focused on family communication + family interactions over 6 months	44	14–16 yrs (Germany)	
Brief Strategic Family Therapy 17	12 sessions focused on family communication, problem- solving + parental provision of supervision over 3 months	40	15 yrs (Germany)	

#### Focusing on behaviour outcomes

Given the purpose of this review, we limited our reporting of program outcomes to bullying perpetration and victimization as well as engagement in pro-social behaviours. Time frames for assessing bullying differed across studies, including past month, <sup>19</sup> two months, <sup>13</sup> three months, <sup>12</sup> six months, <sup>14</sup> school term <sup>15</sup> and unspecified. <sup>10, 16–17</sup>

#### How well did the school-based interventions work?

Roots of Empathy resulted in <u>statistically significant</u> reductions in children perpetrating physical bullying compared to controls, according to teacher reports on one measure at three-year follow-up. However, the <u>effect size</u> for this outcome was small (<u>Cohen's d = 0.06</u>). As well, the program made no impact on self-reported perpetration of physical aggression for students in Grades 4 and 8. (Kindergarten children did not complete self-report measures.) There were also no differences in either teacher- or self-reported indirect aggression, which included behaviours such as trying to get others to dislike a person. But Roots of Empathy children did show significantly more engagement in pro-social behaviours, including comforting an upset peer or offering to help a peer who was experiencing difficulty. The effect size for this positive outcome was small, for both teacher-reported (d = 0.12) and self-reported ratings (d = 0.08). (The sidebar describes implementing Roots of Empathy in Indigenous communities.)

# **Roots of Empathy in Indigenous communities**

ore than 165,000 BC students have participated in Roots of Empathy.<sup>20</sup> And the program's reach continues to grow. Many First Nations, Inuit and Métis communities in BC and throughout Canada have been delivering the program. Roots of Empathy also garnered noteworthy support from the Assembly of First Nations. In 2008, this organization endorsed a resolution supporting the program, citing its compatibility with traditional First Nations teachings and world views.<sup>21</sup>

Youth Matters did not significantly reduce the frequency of bullying perpetration or victimization for program participants compared to controls at one-year follow-up.<sup>19</sup> However, the program did lead to some positive outcomes based on classifying students into four categories (victim, perpetrator, both victim and perpetrator, no bullying). Specifically, after a year, significantly more program participants compared to controls had shifted from being a victim to experiencing no bullying, and from being both victim and perpetrator to being neither.<sup>18</sup> However, Youth Matters did not significantly shift the proportion of children classified as perpetrators at follow-up.<sup>18</sup>

For Bullies and Dolls, outcomes varied based on the grade participants were in when they took the program.<sup>12</sup> At four-

month follow-up, significantly fewer Grade 8 and 9 intervention students reported being victims compared to controls. <sup>12</sup> In contrast, significantly *more* Grade 6 and 7 intervention students reported being victims compared to controls. These younger students also engaged in significantly more bullying perpetration relative to controls, while perpetration rates did not differ for older students. <sup>12</sup>

Media Heroes was tested separately for the four- and 10-session versions — and differences were found. <sup>13</sup> Although four sessions did not make a substantial impact, 10 sessions did, significantly reducing cyberbullying perpetration for intervention children compared to controls at six-month follow-up, with a moderate effect size (d = 0.58). <sup>13</sup>

ITPI proved not to be effective at reducing bullying. The frequency of cyberbullying and other bullying — both perpetration and victimization — did not significantly differ for program participants compared with controls at one-year follow-up.<sup>14</sup>

Finally, Cyber Friendly Schools, the only whole-school program, did not have a meaningful impact on cyberbullying.<sup>15</sup> At one-year follow-up, there were no differences between program participants and controls

regarding the frequency of either perpetration or victimization.<sup>15</sup> Table 4 summarizes the outcomes for all six school-based interventions.

Intervention	Follow-up	Outcomes	
Classroom delivery			
Roots of Empathy 10	3 years	<ul> <li>→ Physical bullying perpetration (1 of 2)</li> <li>NS Indirect aggression (2 of 2)</li> <li>↑ Pro-social behaviours</li> </ul>	
Youth Matters 18-19	1 year	NS Bullying perpetration frequency NS Bullying victimization frequency NS Classification from perpetrator to uning ↑ Classification from victim to uninvolved ↑ Classification from both perpetrator +	d in bullying*
Bullies and Dolls <sup>12</sup>	4 months	Grade 6–7 students  ↑ Any bullying perpetration  ↑ Any bullying victimization	Grade 8–9 students NS Any bullying perpetration
Media Heroes 13	6 months	10-session version  ↓ Cyberbullying perpetration frequency	4-session version NS Cyberbullying perpetration frequency
Incremental Theory of Personality Intervention (ITPI) 14	1 year	NS Bullying perpetration frequency NS Cyberbullying perpetration frequency NS Bullying victimization frequency NS Cyberbullying victimization frequency	
Whole-school deliver	ry		
Cyber Friendly Schools 15	1 year	NS Cyberbullying perpetration frequency NS Cyberbullying victimization frequency	
<ul> <li>✓ Statistically significant reductions for intervention group compared with control group.</li> <li>NS No significant difference between intervention and control group.</li> <li>* Study authors classified each student as being either a perpetrator, victim, both victim + perpetrator or uninvolved in bullying at the end of the program and at one-year follow-up.</li> <li>↑ Statistically significant increases for intervention group compared with control group.</li> </ul>			

#### Does involving families help?

In regard to the clinical interventions, Integrative Family Therapy reduced boys' bullying perpetration.<sup>16</sup> Specifically, by one year follow-up, significantly fewer program boys continued to engage in bullying (31.8%) compared to controls (95.5%).<sup>16</sup>

But Brief Strategic Family Therapy was less successful.<sup>17</sup> At one-year follow-up, 50.0% of girls who participated in this type of family therapy continued to engage in bullying compared to 85.0% of controls — a difference that was not statistically significant.<sup>17</sup> Table 5 summarizes the outcomes for these two therapeutic interventions.

Table 5: Clinic-Based Antibullying Intervention Outcomes					
Intervention	Follow-up	Outcomes			
Integrative Family Therapy <sup>16</sup>	1 year	→ Any bullying perpetration			
Brief Strategic Family Therapy 17	1 year	NS Any bullying perpetration			
<ul> <li>✓ Statistically significant reductions for intervention group compared to control group.</li> <li>NS No significant difference between intervention and control group.</li> </ul>					

#### Implications for practice and policy

Our systematic review found five interventions that reduced at least one form of bullying, albeit with only modest effects for some interventions. Four of these programs were delivered in classrooms and showed success from the early years to adolescence: Youth Matters (elementary schools); Roots of Empathy (elementary and middle schools); Bullies and Dolls (secondary but not middle schools); and Media Heroes (middle and secondary schools). One clinical intervention — Integrative Family Therapy — was also effective at reducing bullying by teenage boys. These findings suggest several implications for practice and policy.

- *Reach children across a range of ages.* The effective antibullying interventions we identified can be delivered in elementary, middle and secondary schools. So programs can start early and be offered across a range of ages, which means they will reach more children to prevent the harms that come with bullying.
- Invest in reducing all forms of bullying. Most of the programs we reviewed aimed to reduce faceto-face bullying. But one program — the 10-session version of Media Heroes — effectively reduced cyberbullying. Efforts to reduce cyberbullying could be modelled on this successful program and evaluated for effectiveness in BC.
- Ensure adequate program duration. Two unsuccessful programs stood out for being particularly brief. Both ITPI and the four-session version of Media Heroes were delivered over one day. In contrast, the five successful programs ranged in length from three weeks to two school years. So interventions should mirror these longer durations.
- Watch for unintended consequences. Bullies and Dolls led to very different outcomes based on the grades students were in. While the program reduced victimization for students in Grades 8 and 9, it increased both victimization and perpetration for students in Grades 6 and 7. So this program caused harm for younger students and should not be used with them. As well, these findings illustrate the importance of always monitoring outcomes to ensure that program benefits outweigh harms. Evaluating programs in BC is particularly important when programs have been developed and tested elsewhere, and when there are no replication RCTs.
- Recognize that some children and families can benefit from the help of a mental health practitioner. Schools are excellent venues for reaching large numbers of children with antibullying programs. But some young people may need the support of a practitioner to address bullying and other aggressive behaviours. The clinic-based Integrative Family Therapy may be a helpful option for teenage boys who bully others.

Adults play crucial roles in creating and sustaining the environments that help children flourish and keep them safe. These roles include striving to ensure that homes, schools and communities are free of bullying in all its forms, for all children. This review points to promising programs to help achieve this goal, reaching children in schools and reaching children in family settings. Although more evaluations are needed, these promising programs are nevertheless a place to start taking action — showing young people how much they matter.

e use systematic review methods adapted from the *Cochrane Collaboration* and *Evidence-Based* Mental Health. We build quality assessment into our inclusion criteria to ensure that we report on the best available research evidence, requiring that intervention studies use randomized controlled trial (RCT) evaluation methods and meet additional quality indicators. For this review, we searched for RCTs on interventions aimed to reduce bullying in childhood. Table 6 outlines our database search strategy.

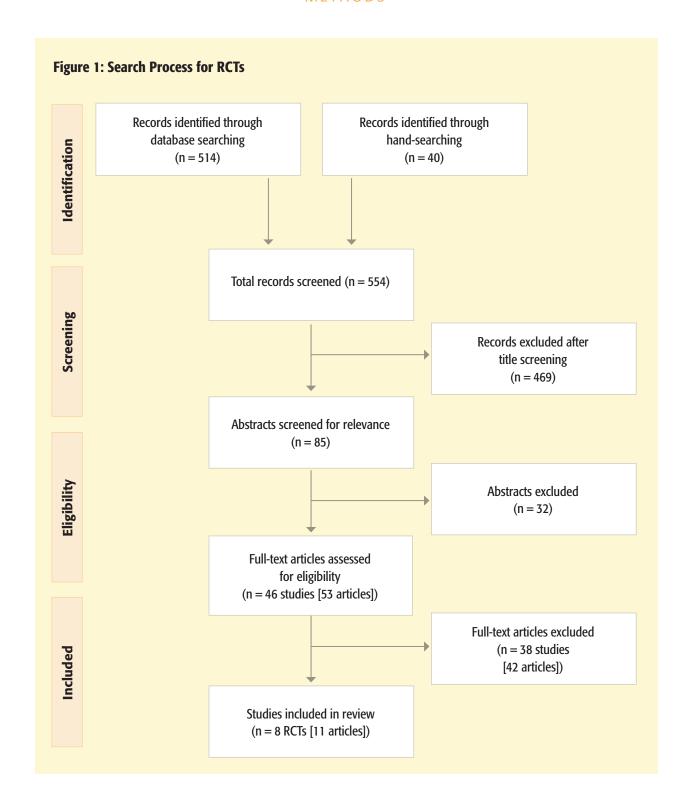
Table 6: Search Strategy		
Systematic Reviews		
Sources	Campbell Systematic Reviews, Cochrane Database of Systematic Reviews, Medline, PsycINFO and Google Scholar	
Search Terms	Bullying	
Limits	<ul> <li>Peer-reviewed articles published in English from database inception to 2021</li> <li>Pertaining to children aged 18 years or younger</li> <li>Systematic review or meta-analysis methods used</li> </ul>	
Original Studies		
Sources	CINAHL, ERIC, Medline and PsycINFO	
Search Terms*	Bullying, antibullying, peer abuse, abuse, aggression, harassment, perpetrator, victim, victimization, peer violence or violence and intervention, curriculum, prevention, program, resilience, school climate, therapy, treatment, trial or school-based	
Limits	<ul> <li>Peer-reviewed articles published in English through mid-May 2021**</li> <li>Pertaining to children aged 18 years or younger</li> <li>RCT methods used</li> </ul>	
<ul> <li>Search terms were adapted from identified systematic reviews on school antibullying programs. To capture non-school-based interventions, we expanded our search for original studies using similar terms but excluding school-based or classroom as keywords.</li> <li>Updated searches were conducted building on the identified systematic reviews and previous Quarterly issue on bullying, which had search dates spanning from database inception to 2020 and from 1998 to 2008, respectively.</li> </ul>		

Using this approach, we identified four comprehensive systematic reviews and then hand-searched their reference lists. <sup>22–25</sup> To identify additional studies, we also hand-searched the reference list from the past Quarterly issue on bullying 26 and conducted added searches using Web of Science. Following these steps, we retrieved 53 articles describing 46 studies. Two team members then independently assessed each article, applying the inclusion criteria outlined in Table 7.

#### **Table 7: Inclusion Criteria for RCTs**

- · Participants were randomly assigned to intervention and control groups (i.e., no-treatment or treatment-as-usual) at study outset
- Authors provided clear descriptions of participant characteristics, settings and interventions
- · Interventions aimed to reduce bullying
- Interventions were evaluated in settings comparable to Canada
- Attrition rates were 20% or less at final assessment and/or intention-to-treat analysis was used
- Child outcome indicators included at least one bullying measure
- Reliability and validity were documented for primary outcome measures
- Statistical significance was reported for primary outcome measures

Eight RCTs met all the inclusion criteria. Figure 1 depicts our search process, adapted from Preferred Reporting Items for Systematic Reviews and Meta-Analyses.<sup>27</sup> Data from these studies were then extracted, summarized and verified by two or more team members. Throughout our process, any differences among team members were resolved by consensus.



#### For more information on our research methods, please contact

Jen Barican, <a href="mailto:chpc\_quarterly@sfu.ca">children's Health Policy Centre</a>, Faculty of Health Sciences Simon Fraser University, Room 2435, 515 West Hastings St. Vancouver, BC V6B 5K3 ractitioners and policy-makers need good evidence about whether a given intervention works to help children. **Randomized controlled trials** (RCTs) are the gold standard for assessing whether an intervention is effective. In RCTs, children, youth or families are randomly assigned to the intervention group or to a comparison or control group. By randomizing participants — that is, by giving every young person an equal likelihood of being assigned to a given group — researchers can help ensure the only difference between the groups is the intervention. This process provides confidence that benefits are due to the intervention rather than to chance or other factors.

Then, to determine whether the intervention provides benefits, researchers analyze relevant outcomes. If an outcome is found to be **statistically significant**, it helps provide certainty the intervention was effective rather than results appearing that way due to chance. In the studies we reviewed, researchers used the typical convention of having at least 95% confidence that the observed results reflected the program's real impact. As well, some studies included in this issue assessed the importance of outcomes by evaluating the degree of difference the intervention made in the young person's life. This was achieved by calculating the **effect sizes** of outcomes, which provide a quantitative measure of the strength of the relationship between the intervention and the outcome. The interventions reported on **Cohen's d**, which can range from 0 to 2. Standard interpretations are 0.2 = small effect; 0.5 = medium effect; and 0.8 = large effect.



BC government staff can access original articles from <u>BC's Health and Human Services Library</u>. Articles marked with an asterisk (\*) include randomized controlled trial data that was featured in our Review article.

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The Children's Mental Health Research Quarterly Subject Index provides a detailed listing of topics covered in past issues, including links to information on specific programs.

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