*J*ournal of *R*ural and *C*ommunity *D*evelopment

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Citation:

Leadbeater, B. J., Sukhawathanakul, P., Smith, A., Yeung Thompson, R. S., Gladstone, E. J., & Sklar, N. (2013). Bullying and victimization in rural schools: risks, reasons, and responses. *Journal of Rural and Community Development, 8*(1), 31-47.

Publisher:
Rural Development Institute, Brandon University.

Editor:
Dr. Doug Ramsey

ISSN: 1712-8277 © Journal of Rural and Community Development
www.jrcd.ca

Bullying and Victimization in Rural Schools: Risks, Reasons, and Responses

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Abstract

Using multiple waves of large-scale administrative data sets, we compare student and parent reports of serious peer victimization in rural and urban schools in British Columbia (BC), Canada. Higher levels of risk are generally found for rural students relative to their urban counterparts. Rural parents report higher levels of serious peer victimization, while both urban and rural parents do not differ in their perceptions of school safety. Data from focus groups conducted with rural Ontario school and youth-serving agency staff, in addition to interviews with BC school staff, are used to interpret these findings. We also use the qualitative data to illuminate unique challenges and opportunities for accessing and implementing bullying prevention programs in rural schools.

Keywords: mental health promotion; school-based programs; rural urban differences; access to services

ISSN: 1712-8277 © Journal of Rural and Community Development
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1.0 Introduction

Adolescence marks the onset of many mental health concerns, requiring public health approaches that focus on the minimizing of known risks. Levels of mental health problems, in particular adolescent depression and suicide, are typically higher in rural areas (DesMeules et al., 2006; Jennissen, 1992; Laurent, 2002; Leipert & Reutter, 2005; Mitura & Bollman, 2004). Peer victimization and bullying are well-established and prevalent risk factors leading to adolescent anxiety, depression, and suicide (Hawker & Boulton, 2000). Current research (reviewed below) suggests that these causative problems may also be higher in rural settings, while access to evidence-based mental health intervention and promotion programs may be particularly limited in such areas (Boydell et al., 2006; Leadbeater, 2010). The current study compares rates of victimization and perceptions of school safety among rural and urban children, adolescents, and their parents, using two British Columbia (BC) surveys administered to large samples from 2003 to 2009. We also report on findings from focus groups and individual interviews with leaders of rural schools and youth services to illuminate reasons for bullying in rural settings, and to examine challenges faced by rural schools in accessing prevention programs.

Consistent with previous studies (Boydell et al., 2006; Poon & Saewyc, 2009) and following Statistics Canada definitions, rural and small towns are defined as areas with populations of 10,000 or less, and "living in towns and municipalities outside the commuting zone of larger urban centres" (du Plessis et al., 2001, p.1). Urban centres are defined as "'larger urban centres', which are areas that have an urban core population of 10,000 or more" (Puderer, 2009).

Growing evidence from cross-sectional studies indicates that peer victimization is more prevalent in rural Canadian samples. With a sample of 2,605 high school adolescents in Saskatchewan, Eisler and Schissel (2004) found that more students from rural areas (19 %) reported being afraid of getting hurt in school as compared to their urban peers (14%). Rural students (13%) also reported experiencing more physical victimization as compared to urban pupils (10%). There were also greater concerns among rural students with being a "victim of attack" outside of school (40%), versus lower worries among urban individuals (30%).

Studies in the United States have also found peer victimization rates to be higher for rural schools. Dulmus et al. (2004) found that 82% of students in a rural school setting experienced some form of victimization at least once in the last 3 months: more than four times the rate reported in nationally representative studies of bullying among American school children. Dulmus et al. (2006) found that 11% of students in their rural sample were identified as bully-victims, as compared to the 1-7% in similar studies focused on American urban schools. Using a nationally representative sample, Nansel et al. (2001) similarly reported that students in rural areas were 3-5% more likely than youth in suburban or urban areas to admit to having bullied their peers.

Rural and urban differences have also been reported in European samples. Wolke et al. (2001) examined rates of bullying and victimization among British and German primary school children. In both countries, children living in rural areas were more likely to be classified as victims of bullying. The prevalence of students involved in bullying in Norway's rural areas was also higher than or equal to those in larger cities (Olweus, 1993). Parents and teachers in the larger cities of Norway

also reported having to speak more often with students who were involved in bullying problems, as rural parents were less likely to address such issues.

Despite accumulating evidence that bullying and victimization are higher in rural communities, applicable Canadian research is not widespread and is limited to cross-sectional snapshots of risks reported by youth within their communities. In this study, we have updated previous research through the examination of trends in rates of peer victimization among Canadian children and youth, using large-scale administrative data sets collected from rural and urban students and parents in the province of British Columbia. Study 1 examined responses of 3rd, 4th, and 7th grade students and parents on the BC Ministry of Education's School Satisfaction Surveys, collected annually from 2004 to 2009. Study 2 examined data from 7th and 8th grade students' reports of safety and victimization on the McCreary Centre Society's BC Adolescent Health Survey (AHS), collected in 2003 and 2008. In a third study, we examined qualitative data collected in a focus group with school staff and youth service providers in Ontario, and in individual interviews with rural school staff in BC. Our goals were to illuminate reasons for bullying in rural schools; to expose perceived differences in bullying and school safety related to rural contexts; and to identify challenges and opportunities for the dissemination of evidence-based prevention programs in rural schools.

2.0 Study 1: Victimization in Elementary School From 2004 to 2009

2.1 Participants

All BC students and parents in grades 4 and 7 were invited to participate annually in the *School Satisfaction Survey* (BC-SSS), which is used to inform school policy and practices. Where there was no grade 4 class in a school, grade 3 students and their parents were also asked to complete the survey. The sample for this study consisted of students and parents from 16 rural and 25 urban BC schools who were surveyed during the winter semesters of 2004 to 2009 (data available at www.bced.gov.bc.ca/reporting/district_data_summary.php#). For grades 3/4 and 7 children, sample sizes ranged from 19,612 to 26,946 in urban settings (51% being males) and from 2,717 to 3,060 in rural settings (52% being males). For parents, sample sizes ranged from 11,355 to 28,527 in urban and 1,117 to 3,410 in rural settings. Aboriginal youth represented 10% of the urban and 25% of the rural samples.

The survey of students was administered online in both English and French. For parents, this was available in 18 languages including English. In the school safety section, students were asked: "How often do you feel safe at school?" and "At school, are you bullied, teased, or picked on?" Responses to both items were ranked on a five-point scale (*at no time, sometimes, few times, many times,* and *all of the time*). Parents were asked: "Do you think your child is safe at school?" and "Is your child bullied, teased, or picked on at school?" Responses were given on the same five-point scale. Data were available separately for children in grades 3/4 and grade 7, while parent data were combined across the grades.

2.2 Results

The percentage of students and parents who rated their experiences of school safety and peer victimization as *many times* or *all the time* are presented in Table 1, along with the Chi-square tests of the independence of effects of urban or rural residence on these ratings. Using a Bonferonni correction for each of the five annual reports, significance levels were set at $p < .025$ for the analyses of each item. Statistical significance of Chi-square tests was also more likely, given the large size of our samples; hence, we also reported an assessment of effect size for each comparison (Cohen's d), which indicated the magnitude of differences found. Following Cohen's (1988), an effect size of 0.2 was considered small, 0.5 was medium, and 0.8 was large.

2.2.1 School Safety. Fewer students in rural districts reported "feeling safe at school" *all the time* or *many times* at each assessment point for all grades. Cohen's d's were moderate to large (d= > .50) in eight of the ten analyses of the students' data. Fewer rural 3rd/4th graders (79-83%) reported feeling safe in schools, as compared to their urban peers (83-86%). Similarly, fewer rural 7th graders reported feeling safe in schools (71-77%), as compared to their urban peers (76-78%). The percentage of parents who felt their children were safe was similar between rural and urban settings, and effect sizes were typically small in magnitude.

2.2.2 Peer Victimization. Significantly more students in rural districts reported "being bullied, teased, or picked on" *all the time* or *many times*. Cohen's d's were moderate to large in eight of the ten analyses of student data. Annual peer victimization rates from 2004 to 2009 ranged from 13-14% for rural 3rd/4th graders, as compared to 11-12% for urban students. Rates for rural 7th graders ranged from 11-14%, versus 10% in each year for 7th graders of urban school districts. Rates of peer victimization reported by rural parents were also significantly higher than those reported by urban parents across time (effect sizes ranged from .55 to 1.23). Percentages of rural elementary school parents who reported that their child was frequently victimized ranged from 8-11%, versus percentage of urban parents that ranged from 7- 10%. An exception was found for the 2007/2008 school year, in which percentages of peer victimization were similar for both rural and urban parents (Cohen's d= .04).

Table 1. *Study 1: Percents of students and parents reporting "many times" and "all the time" for school safety and peer victimization on BC School Satisfaction Surveys*

	Year				
	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009
How often do you feel safe at school?					
Students Grade 3 and 4					
Urban	86	85	84	85	83
N	25,162	25,185	24,545	19,612	23,400
Rural	83	81	83	80	79
N	2,967	3,007	2,827	2,906	2,774
X^2	13.92[t]	31.68**	2.09	33.77**	28.79**
d	0.79	1.15	0.51	1.22	1.04

Students Grade 7					
Urban	78	78	78	77	76
N	26,026	26,525	26,946	26,166	25,347
Rural	74	77	71	74	76
N	3,060	2,803	2,980	2,717	2,881
X^2	22.20**	1.61	63.48**	12.08 [t]	0.25
d	0.69	0.20	1.38	0.52	0.08
Parents Grades 3 and 4					
Urban	87	88	87	88	87
N	28,527	27,016	24,491	19,114	11,355
Rural	87	86	87	89	86
N	3,410	3,177	3,034	1,909	1,117
X^2	0.87	5.20 [t]	0.33	1.32	0.30
d	0.03	0.45	0.12	0.26	0.15
Are you bullied, teased, or picked at school?					
Students Grade 3 and 4					
Urban	12	12	11	11	11
Rural	14	14	14	14	13
X^2	8.31 [t]	16.97**	19.27**	23.22**	3.21
d	0.67	0.76	0.88	0.96	0.39
Students Grade 7					
Urban	10	10	10	10	10
Rural	14	11	13	12	11
X^2	31.67**	3.58	38.26**	8.80 [t]	3.25
d	1.55	0.36	1.37	0.79	0.64
Parents, Grades 3 and 4					
Urban	10	8	8	9	7
Rural	11	11	10	8	10
X^2	4.12 [t]	29.36**	8.43 [t]	0.07	14.54**
d	0.55	1.23	0.64	0.04	1.12

Note. Percents are different between urban and rural districts at [t] $p < .05$; ** $p < .001$. With Bonferroni correction for number of analyses p values < .025 are considered significant.

3.0 Study 2: Victimization in Adolescence at 2003 and 2008

3.1 Participants

The second sample was drawn from students in grades 7 and 8 from BC rural and urban schools, who participated in the BC Adolescent Health Survey (AHS) in 2003 and 2008 (McCreary Centre Society, www.mcs.bc.ca). The AHS is a paper-

and-pencil, anonymous, and voluntary questionnaire used to gather information on the health-related status of youth in BC. Public Health Nurses, nursing students, and other health professionals were responsible for administering the surveys.

The AHS applied a random cluster-stratified sampling frame, stratified by geography and grade. Forty-five of BC's 59 school districts participated in 2003, and 50 districts participated in 2008. In 2003, study participants came from 110 rural and 330 urban schools, while in 2008 they came from 89 rural and 372 urban schools. The urban sample size for students in grades 7 and 8 ranged from 38,636 to 41,475 between 2003 and 2008, and the rural sample size ranged from 4,801 to 6,120. Sample sizes were weighted to be representative of provincial enrolment and to account for differential probability of sampling and response rates. A detailed methodology fact sheet for the survey (Saewyc & Green, 2009) is available at www.mcs.bc.ca, including the sources and rationales for questions adopted by the AHS.

Students' perceptions of school safety were assessed using two items: "I feel safe at my school" [rated on a 5-point Likert scale (*strongly agree, agree, neither agree nor disagree, disagree, and strongly disagree*] and "How often do you feel safe at school?" [rated on a 5-point Likert scale (*always, often, sometimes, rarely, and never*)]. Peer victimization among students was assessed through the following question: "During the past 12 months, while at school or on the way to and from school, how many times did another youth: (a) tease or say something personal to you that made you feel bad or extremely uncomfortable; (b) keep you out of things on purpose, or exclude you from their group of friends or completely ignored you on purpose; and (c) physically attacked or assaulted you?" An additional question, focused on cyberbullying ("In the past 12 months, how many times did other people bully or pick on you through the Internet?"), was included in the 2008 sample. Each item was measured on a 3-point scale (*never, once,* and *2 or more times*).

3.2 Results

Due to the random cluster-stratified design of the AHS survey, cross tabulations comparing rural and urban school districts were analyzed using SPSS Complex samples software at the McCreary Centre Society. Rao-Scott chi-square tests of independence (Rao & Scott, 1981), a design-adjusted version of the Pearson chi-square test, were used to determine significance of rural-urban differences. Student responses at the extreme end of the scales (i.e., reported being victimized *2 or more times*) were compared, and the significance level was set at $p < .05$ based on the adjusted F (a variant of the second-order Rao-Scott adjusted chi-square statistic) and its degrees of freedom.

3.2.1 School Safety. As shown in Table 2, a slightly greater percentage of rural (8-13%) than urban (6-12%) grade 7 and 8 students *disagreed* or *strongly disagreed* with the statement, "I feel safe at my school". This difference was significant in two of the four assessments, and more rural students reported feeling *rarely* or *never* safe at school (8- 11%), as compared to urban students (6- 8%). This difference was significant at all assessment points, except in 2003 where the number of participant grade 8 students was smaller.

3.2.2 Peer Victimization. As shown in Table 2, the percentage of students who reported being victimized (teased, excluded or assaulted) *2 or more times*, was as high or higher for rural students than their urban counterparts. Percent of rural students ranged from 15-21% on the "teased" item; 15-17% on the "excluded"

item; and 4- 5% on the "physically assaulted" item. By contrast, percentages for urban students were typically lower, ranging from 13-17% for "teased"; 11-14% for "excluded"; and 3-4% for "physically assaulted". These differences were only consistently significant in 2008 among grade 8 students. In that same year, rural students (9%) reported similar levels of cyberbullying to their urban peers (7%) and differences were not significant.

Table 2. *Study 2: Percents for reported school safety and peer victimization*

		Year			
		2003		2008	
Survey Item		Grade 7	Grade 8	Grade 7	Grade 8
School Safety					
Disagreed or strongly disagreed with feeling safe	Urban	9	12	6	7
	Rural	11	13	8	11
	Adjusted *F*	5.14*	0.81	2.27	5.61*
	df	2, 201	2, 191	2, 474	2, 406
Rarely or never feel safe at school	Urban	7	8	6	6
	Rural	11	10	8	9
	Adjusted *F*	12.42*	3.28	5.13*	8.98*
	df	1,111	1, 96	1, 245	1, 216
Peer Victimization					
Teased	Urban	17	17	14	13
	Rural	17	21	15	18
	Adjusted *F*	0.30	5.71*	0.42	4.77*
	df	2, 207	2, 190	2, 470	2, 377
Excluded	Urban	14	12	14	11
	Rural	17	15	15	15
	Adjusted *F*	2.87	2.35	0.98	5.32*
	df	2, 206	2, 189	2, 471	2, 416
Physically Assaulted	Urban	3	4	3	3
	Rural	5	4	4	5
	Adjusted *F*	2.90	0.22	0.50	3.33*
	df	2, 211	2, 182	2, 443	2, 429
Bullied or picked on through the internet	Urban	NA	NA	7	7
	Rural	NA	NA	9	9
	Adjusted *F*	NA	NA	0.70	1.24
	df			2, 490	2, 432

Note. NA = item was not available in the 2003 survey.

*Percents are different between urban and rural students at $p < .05$. Sample size is weighted to account to differential probability sampling and response rates (Saewyc & Green, 2009).

4.0 Study 3: Qualitative Themes

Qualitative data were collected in a focus group with school staff and members of youth-serving agencies from rural sites in Ontario, and in individual interviews with school staff from rural BC schools. All data were collected from individuals engaged in the early phases of qualitative studies, assessing the feasibility of

implementing the "Walk Away, Ignore, Talk it Out, Seek Help" (WITS) programs for the prevention of peer victimization in rural school sites (Leadbeater et al., 2012; Leadbeater & Sukhawathanakul, 2011; Leadbeater & Vine, 2012). No site had yet implemented the program. As is characteristic of the limitations of qualitative studies, our findings cannot be generalized beyond these participants; however, they do offer insight into potential challenges to, and opportunities for, addressing bullying in rural schools.

In April 2010, Ontario participants in the focus groups received invitations to attend an expense-paid workshop in Ottawa to discuss bullying prevention in rural sites, and to review the WITS® peer victimization prevention programs (www.witsprograms.ca), in order to inform efforts to disseminate children's bullying prevention and mental health promotion programs in rural and remote communities. The 25 adults who agreed to participate represented multiple groups, including national organizations (Canadian Public Health Association, Canadian Teachers Federation, Canadian Principals Association, National Crime Prevention Service-RCMP); rural school boards (Catholic District School Board of Eastern Ontario, Algonquin and Lakeshore Catholic School Board, Western School Board-PEI); not-for-profit youth-serving groups (YMCA, 4H Clubs); and professors and graduate students extensively involved in research with rural and remote communities (University of Victoria, Carleton University, York University, University of Ottawa, McMaster University).

The following focus group questions on bullying preceded review of the WITS program resources: "What are your concerns about bullying in rural school districts?", "What are program-training challenges for rural and remote districts?", "What are the financial challenges in disseminating programs?", "What works well in accessing evidence-based programs?", "How can evidence-based programs be better disseminated to meet your needs?" With participant consent, six graduate students were dispersed across small tables in the room and took notes during both small group discussions and plenary sessions. Ten school staff (7 principals, 2 school counsellors, and 1teacher) from rural communities in BC were individually interviewed about their experiences with starting up the WITS peer victimization prevention programs in their schools (see Leadbeater, Gladstone, Yeung Thompson, Sukhawathanakul, & Desjardins, 2012, for further details). On average, interviews (with individual written consent) lasted approximately 39 minutes and were digitally recorded and transcribed. Questions were open-ended and broad and, for the purpose of this study, focused on the initial evaluation of the program fit and strategies for implementation in rural schools: "How did you get involved with the WITS Program?", "What interested you in it?", "How do you think the WITS Program fits into your school's activities?", "Are there ways you have modified the program to make it fit better with your school or community goals?"

Descriptive analyses were conducted of the anonymous notes from the workshop and interviews, to reveal themes in the data that spoke to impediments toward accessing and implementing bullying prevention programs. While there is little theory to drive the analyses of rural-urban differences in bullying *per se*, our analyses were framed by an ecological systems perspective (Lerner et al., 2006). This involved an assumption that bullying and peer victimization were not merely a problem at the individual level, but that population health concerns were embedded in the relations among child, family, and schools, and in community beliefs, attitudes, and behaviours concerning interpersonal conflict. Given limited

past work on this topic, we aimed to be comprehensive in describing themes from the qualitative data, and we did not attempt to estimate how widely held these were or whether there was a consensus about any given idea.

4.1 Results

Consistent with ecological systems theory, participants described challenges and opportunities for prevention programs (targeting rural schools) that related to values, beliefs, and organizational or structural concerns (e.g. staff turnover, tax base, transportation costs). Discussion among workshop participants suggested several themes that may increase the likelihood of bullying and limit the dissemination of prevention programs in rural areas, including a) diversity in rural values norms for identifying and acting on bullying behaviours; b) distinct opportunities, locations and times for bullying behaviours; c) obstacles to parent engagement; and d) structural problems related to program funding and sustaining staff expertise. Individual interviews with rural staff echoed some of these concerns and also drew attention to e) the need for a dedicated local program champion to advocate on behalf of the program and to overcome barriers. Each of these themes is described below.

a) Rural values and norms for identifying and acting on bullying behaviours were seen as highly variable in rural areas. Participants said that many rural parents encouraged "fighting back" to stop victimization, and suggested that children and youth from rural communities with reputations of being "tough" may have felt the need to live up to this reputation by aggressively sticking up for themselves and their friends. Being a victim of bullying may have also been stigmatized, again limiting the identification of the problem and undermining advocacy for prevention programs. On the other hand, some participants said that parents held idealized beliefs about the bucolic nature of country life, which could contribute to thinking that their children were unlikely to experience bullying and victimization. Some participants even suggested that the term "bullying" was overused, and thought it did not exist in well-organized rural after-school programs; therefore, further work to reduce bullying was not required.

b) Distinct locations, times and opportunities for rural bullying behaviours were also identified. Diverse age groups of children and youth may have experienced long bus rides together with little adult supervision, providing opportunities for chronic bullying. In addition, rural youth who travelled by bus were unable to participate in structured before or after school activities. Such activity could protect victimized youth by providing adult relationships and mentoring. Participation in extracurricular activities could also help children to meet friends outside of classroom configurations, and could reduce the exclusiveness of school-centred reputations (Leadbeater 2008). The Internet and cell phones also allowed bullying to follow victims home, although these avenues of bullying were not unique to rural populations.

c) Obstacles to parent engagement. Parental advisory councils and support networks are often central aspects of effective prevention programs; however, it is often difficult to engage parents who are themselves often working. For rural parents, getting involved in school-based programs could also demand long commutes and time costs that competed with the demands of self-employment or farming schedules. One BC interviewee also believed parents' own school experiences may have influenced their reluctance to get involved:

> In our school, we have trouble in getting parents involved in any facet of what's going on in this building and we feel a lot of that has to do with what their schooling was like, so they're not comfortable in the building. Some are very comfortable and they'll come and they'll do whatever it is that we've asked them to do or shown them and be very into it, but for the most part the majority of the population tries to avoid the building.

d) *Structural problems can limit implementing or sustaining prevention programs in rural schools*. Associated costs were seen by participants as a major barrier to finding or disseminating programs. Funding and budget restrictions were seen as particularly onerous in small rural schools with limited base funding from taxes. Rural school staff may have also held many positions at one time, such as teacher-librarians or teacher-administrators. Funding to replace teachers to allow them to attend training sessions in centralized locations was often nonexistent. Program start up costs could also be greatly augmented by the disproportionate transportation costs required to bring expert trainers to rural schools.

Small rural schools were also vulnerable to closures that disrupted staff expertise. Staff transitions and turnovers could leave gaping holes in expertise and leadership required to sustain a program in schools, with no resources to re-establish said expertise. Few programs included on-site mechanisms for staff renewal, and one BC participant described how multiple administrative staffing changes challenged efforts to sustain the WITS victimization prevention program in their school:

> ...Our administrator last year retired so we got two new, a principal and a vice-principal and now they've left us half way through the year to go to new places and now we've had two brand new administrators come last week so and I had to present to them and remind them about WITS.

Compounding problems created by staff changes were high rates of program turnover. Many programs failed to become embedded into school culture; thus, leading many to believe that most programs were transient and would leave with the school's administrator, or were merely "the flavour of the month" to be replaced by the next popular wave. As reflected in one interviewee's statement, such programs were therefore not worth the time it took to adopt them:

> We get so many programs thrown at us in education. Try that; try this; oh, look at that; look at this. I think a barrier would be getting it across to everyone. How it is going to look and what will it look like in this school and then, if you get it rolling, keeping it rolling. For example, if I am the one who starts it rolling and I end up being placed somewhere else next year [what happens then].

On the other hand, staff turnover in some instances carried needed expertise to new schools. A program advocate described how a "re-discovery" process helped to convince a new principal to support program uptake across a transition:

> So [our new principal] took over from [the previous one] just at the beginning of this year and he pretty much inherited this initiative - that he was going to kick off! He was quite enthusiastic and supportive. He had actually a couple of years back when he was in [his previous school] gotten a hold of the curricular material. But it had never been implemented there.

e) "*You have to have a key champion."* Interviews with the BC school staff suggested that uptake in rural areas relied on the capacity and willingness of highly motivated, local champions. Each champion described personal and school-specific reasons to surf, search, and self-educate using online materials, prior to persuading others to do the same. As a comment from one administrator suggested, this is a process that often relied on volunteers and could take several years:

> You need a key player. So that is why I don't want to just take it to staff and say, we have this program, why don't we try this. I would rather take this year in some of my little prep time try some of these lessons, get a feel for these lessons and build more of these lessons. I think if we have a key player who goes "this really works well. I have tried it. I think we should try it."

Effective program champions engaged in a number of strategies to slowly increase program acceptance, including building consensus among already overburdened staff members through repeated presentations; assess the fit of the program with their ongoing school values and activities; try out aspects of the program in their own classes; "raving" about it to others; or by getting children, parents, or other teachers on board as advocates (Leadbeater et al. 2012). One interviewee described program characteristics and direct efforts used to promote positive feedback loops in support of the program uptake by over burdened school staff:

> Like every program, if it is seen as an add-on teachers will always say, 'Ok my plate is this big. You've given me something to put on that plate. What comes off?' So if you can convince them that what is going to come off is five or six interactions a day between children that they are able to handle on their own then you'll see 'Ok give me a helping of that. Put it on my plate.' But if you say, 'no it's just another extra thing that we want you to do' then teachers' backs will start to go up, they'll tune out at staff meetings. If I get one staff member at the next staff meeting who says, 'this doesn't work. This is stupid. We tried it before with ...' If that [negative opinion] gains any legs, if anyone else at the staff meeting begins to agree, then it is really hard to pull it back. But if you're talking

> about strategies for getting them to buy into it, I would plant seeds with certain staff members to speak up at a staff meeting about a success they've had with the program, so that we're all talking about the successes.

Program champions were expected to look for ways to encourage teacher participation that would circumvent unfavourable top-down implementation strategies. The interviewees suggested that teachers were more likely to participate in a program after having heard about it through multiple pathways. Teachers were particularly receptive to hearing about new programs from other teachers, who could corroborate the program's usefulness. Seeing examples of the program working in the school also helped capture interest. In the following example, one principal suggested that children could be powerful enablers of programs by modelling the program and showing its efficacy:

> Our primary staff, they've been around for awhile. And they just want to, you know, carry on, and so what I'm trying to do is a backwards way around, and get the kids showing that, "hey this really does make a difference", then go to the staff and say "did you hear what those kids said?" It's really making a difference; we need to inject some more energy into this.

5.0 Discussion

Consistent with prior limited research using rural samples, students from grades 3/4 in rural elementary schools reported more peer victimization than their peers attending urban institutions. Across multiple waves of the BC school satisfaction surveys from 2003 to 2009, more rural students reported high levels of peer victimization than urban pupils (with the exception of grade 3/4 students in 2006-2007). In all but one assessment, a higher number of rural parents of elementary school students also reported that their children were frequently victimized. Our findings suggest that peer victimization may be a consistent concern among students and parents in elementary school. Overall across the five year period reflected in Study 1, 10-14% of students and 7-11% of their parents reported peer victimization *many times* or *all the time*. While rural-urban differences are notable, these stable and high overall rates confirm the need for enhanced prevention efforts in all schools: one in ten children experience serious levels of victimization.

At each assessment point, grade 3/4 students were less likely to feel safe at school, while reports of children feeling safe at school were similar for rural and urban parents. Feeling safe at school *many times* or *all the time* was also typically lower for grade 7 students across assessments, but rural-urban differences were significant only in two of the five annual assessments. For both students and parents, feeling safe at school may reflect broader concerns than peer victimization; for example, the quality of relationships with teachers, playground and school designs, adult supervision of hallways or playgrounds, and the accessibility of help. Rural students may also feel less safe going to and from school if they feel threatened by older youth, stray dogs, or other wild life. Given

the consistent findings for all grades, there is a clear need for qualitative research that can identify sources of safety concerns among students.

Similar to the findings for school safety on the school satisfaction questionnaire, rural grade 7 and 8 students were less likely to feel safe at school, in both the 2003 and 2004 assessments. Findings of greater risk for peer victimization (two or more times) in rural schools, using the two waves of the Adolescent Health Survey for students in grades 7 and 8, were also inconsistent. Differences were significant only for 8th grade students in the 2008 survey. While affecting 7-9% of youth, internet bullying in 2008 did not differentiate between rural and urban youth.

Although little past research has illuminated the contextual characteristics that could explain differences in rates of victimization among rural and urban students, our qualitative data suggest that community norms about aggression, greater opportunities for bullying on long bus rides, and lack of or difficulties participating in extracurricular activities, may explain some of the observed rural-urban differences. Obstacles to accessing bullying and peer victimization prevention programs in rural areas were also identified, including lower tax base in small rural schools to support costs of resources; training costs that are inflated by transportation needs; and obstacles to parent involvement. Program implementation barriers were also noted, including those created by frequent school staff turnover and school closures; repeated demands for uptake of new programs that are not sustained over time; staff overload and burnout; and a lack of program champions or local expertise. It is possible that some of these concerns could be addressed through online open access to program resources and training, support or financial incentives for school champions, and resources to evaluate and sustain effective programs. Increased outreach to parents and greater efforts to retain highly qualified school staff are also required to fully implement prevention programs.

5.1 Limitations

Although we analyzed multiple samples from different time points, each data set was cross-sectional. Longitudinal studies are needed to monitor trends in children's experiences of victimization across grades and time. This study was also limited by the secondary analyses of existing data sets, which use single items to assess school safety and peer victimization. Surveys that adopt more reliable assessment instruments, and that examine both relational and physical victimization as well as cyber bullying experiences, are needed. The available data does not allow for the analyses of subgroup differences (e.g., for males and females or visible minorities); nevertheless, they are used to identify concerns and to guide policy and educational responses to school problems. These data reveal a pattern of higher levels of concern about victimization and school safety among rural students, which can extend across time, grade, and data source. This gives some confidence in the findings despite their limitations: rural-urban differences may be unique to BC students and findings of the qualitative study, although heuristic, cannot be generalized beyond the samples of Ontario and BC participants.

5.2 Implications for Peer Victimization Prevention Programs in Rural Communities

Children and families living in rural areas may experience higher risks, as well as more challenges in accessing mental health services and support, than do their urban counterparts. Services can be limited due to geographic, transportation, or

economics factors; lack of access to educational resources or specialists; or community support for aggressive attitudes and the stigmatization of victims (Boydell et al., 2006; Boydell et al., 2008; Nordal et al., 2003; Srebalus et al., 1996). Srebalus et al. (1996) found that 59% of school counsellors from rural districts in Maryland, West Virginia, Ohio, Pennsylvania, and Illinois, believed that school safety was an increasing concern. Seventy percent of the counsellors also reported that they were not adequately prepared to deal with youth who were aggressive in their schools. With limited access to mental health services, rural families may rely heavily on schools for mental health promotion and early intervention in problems (Cutrona et al., 1996). This is troubling given that prevention programs may be limited and/or are unlikely to be tested in rural communities (Hoagwood et al., 2001). Strategies to overcome risks for bullying and victimization, and assessing inequities in access to prevention programs, are clearly needed (see Leadbeater & Vine 2012).

The transportability of evidence-based prevention programs requires sensitivity to gender, ethnic, and cultural differences, as well as consideration of differential community access due to poverty, rural and remote locations, stigma, and health disparities (Banister et al., 2011). Program dissemination relates not only to program characteristics (e.g., portable training and program materials), but also to user characteristics at local levels (e.g., perceived need for program, available expertise, funding) and contextual differences (e.g. culture, community norms and beliefs). Previous research has shown that school size, community poverty, and urban or rural residences can influence the quality of program implementation: larger schools located in poorer urban communities exhibit greater levels of program use relative to small or rural communities (Payne & Eckert, 2010).

Additional research (Leadbeater, 2010; Schoenwald & Hoagwood, 2001) has been initiated to illuminate the factors that can affect equitable access to prevention programs in specific contexts, including structural and organizational characteristics of user groups related to cultural differences, funding disparities, internet access, and the availability of local expertise and champions. Overcoming inequities in access and implementing prevention programs requires sensitivity to the unique needs of rural communities. Existing program evaluations of violence prevention programs implemented in rural American schools show mixed results (e.g., the *Second Step Violence Prevention Program*, Taub, 2002; the *Responding in Peaceful and Positive Ways Program*, Farrell et al., 2003).

Policy initiatives and reforms to improve mental health outcomes may be ineffective if the distinct characteristics and needs of rural and urban contexts are not considered; for example, Ministry requirements to create a “school code of conduct” and plans to reduce bullying may encounter unique obstacles in high-need rural areas, related to their low funding base, scant local expertise, and difficulties in reaching out to parents. Moreover, small communities require community- wide participation that is sensitive to local norms and values. Community-wide consultations that set priorities for addressing perceived needs and concerns of children and their parents, and ongoing community involvement in and support for program adaptations and implementation, show promise in enhancing the transportability of evidence-based programs and in fostering collective action for reducing widespread or entrenched societal problems (Hawkins et al., 2002; Leadbeater & Vine 2012).

6.0 Acknowledgements

This research was funded by grants from the Public Health Agency of Canada. The views expressed herein do not necessarily represent the views of the Public Health Agency of Canada.

7.0 References

Banister, E. M., Leadbeater, B., & Marshall, A. (Eds.). (2011). *Knowledge transition in context: Indigenous, policy, and community settings.* Toronto: University of Toronto Press.

Boydell, K. M., Pong, R., Volpe, T., Tilleczek, K., Wilson, E., & Lemieux, S. (2006). Family perspectives on pathways to mental health care for children and youth in rural communities. *Journal of Rural Health, 22*(2), 182-188.

Boydell, K. M., Stasiulis, E., Barwick, M., Greenberg, N., & Pong, R. (2008). Challenges of knowledge translation in rural communities: The case of rural children's mental health. *Canadian Journal of Community Mental Health, 27*(1), 49-63.

British Columbia Ministry of Education (2009). *School Satisfaction Survey*. Victoria, BC: British Columbia Ministry of Education. [Online]. Available: http://www.bced.gov.bc.ca/reporting/district_data_summary.php#

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Earlbaum Associates

Cutrona, C.E., Halvorson, M.B.J., & Russell, D.W. (1996). Mental health services for rural children, youth, and their families. In Heflinger, C.A. and Dixon, C. (Eds.), *Families and the Mental Health System for Children and Adolescents.* Thousand Oaks, CA: Sage.

DesMeules, M., Pong, R., Lagace, C., Heng, D., Manuel, D., Pittblado, R., Bollman, R., Guernsey, J., Kazanjian, A., & Koren, I. (2006). *How Healthy Are Rural Canadians? An Assessment of Their Health Status and Health Determinants*. Ottawa, Ontario: Canadian Institute for Health Information.

Dulmus, C., Sowers, K. M., & Theriot, M. T. (2006). Prevalence and bullying experiences of victims and victims who become bullies (bully-victims) at rural schools. *Victims and Offenders, 1*(1), 15-31.

Dulmus, C., Theriot, M., Sowers, K., & Blackburn, J. (2004). Student reports of peer bullying victimization in a rural school. *Stress, Trauma and Crisis: An International Journal, 7*(1), 1-16. DOI:10.1080/15434610490281093.

du Plesssi, V., Beshiri, R., Bollman, R. D., & Clemenson, H. (2001). Definitions of rural. *Rural and Small Town Canada Analysis Bulletin, 3*(3), 1-17. Statistics Canada. Catalogue no. 21-006-XIE. Ottawa, ON. [Online]. Available: www.statcan.gc.ca.

Eisler, L., & Schissel, B. (2004). Privation and vulnerability to victimization for Canadian youth: The contexts of gender, race, and geography. *Youth Violence and Juvenile Justice, 2*(4), 359-373. DOI:10.1177/1541204004267784.

Farrell, A. D., Valois, R. F., Meyer, A. L., & Tidwell, R. (2003). Impact of the RIPP violence prevention program on rural middle school students: A between schools study. *Journal of Primary Prevention, 24*, 143–167.

Hawker, D. S., & Boulton, M. J. (2000). Twenty years' research on peer victimization and psychosocial maladjustment: A meta-analytic review of cross-sectional studies. *Journal of Child Psychology & Psychiatry, 41*(4), 441-455.

Hawkins, J. D.; Catalano, R. F.; Arthur, M. W. (2002). "Promoting science-based prevention in communities". *Addictive Behaviors, 27* (6): 951–976. DOI:10.1016/S0306-4603(02)00298-8. PMID 12369478.

Hoagwood, K., Burns, B., Kiser, L., Ringeisen, H., & Schoenwald, S. (2001). Evidence-based practice in child and adolescent mental health services. *Psychiatric Services, 52*(9), 1179-1189.

Jennissen, T. (1992). *Health issues in rural Canada*. (BP-325E). Political and Social Affairs Division: Government of Canada. [Online]. Available: http://dsp-psd.pwgsc.gc.ca/Collection-R/LoPBdP/BP/bp325-e.htm.

Laurent, S. (2002). *Rural Canada: Access to health care.* PRB02-45E, Economics Division: Government of Canada. [Online]. Available: http://dsp-psd.pwgsc.gc.ca/Collection-R/LoPBdP/BP/prb0245-e.htm#14end

Leadbeater, B. (2008). Engaging Community Champions in the Prevention of Bullying. In D. Pepler & W. Craig (Eds.), *Understanding and Addressing Bullying: An international Perspective*, PREVNet Series, Vol 1., (pp 166-183). AuthorHouse, Bloomington, In.

Leadbeater, B. (2010). The fickle fates of push and pull in the dissemination of mental health programs for children. *Canadian Psychology/Psychologie canadienne, 51*(4), 221-230. DOI:10.1037/a0020486

Leadbeater, B. J., Gladstone, E. J., Yeung Thompson, R.S., Sukhawathanakul, P. & Desjardins, T. (2012). Getting started: Assimilatory processes of uptake of mental health promotion and primary prevention programs in elementary schools. *Advances in School Mental Health Promotion*, 1-19, DOI:10.1080/1754730X.2012.736790

Leadbeater B. J., & Sukhawathanakul, P. (2011). Multi-component programs for reducing peer victimization in early elementary school: A longitudinal evaluation of the WITS® Primary program. *Journal of Community Psychology, 39(5),* 606-620.

Leadbeater, B. J. & Vine. L. (2012). Changing social problems: Community leaders catalyze collective impact for the reduction of bullying and victimization in rural communities. Manuscript submitted for publication.

Leipert, B. & Reutter, L. (2005). Developing resilience: How Women Maintain Their Health in Northern Geographically Isolated Settings. *Qualitative Health Research, 15*, 49-65.

Lerner, R. M., Lerner, J. V., Almerigi, J., & Theokas, C. (2006). Dynamics of Individual ←→ Context Relations in Human Development: A Developmental Systems Perspective. In J. C. Thomas, D. L. Segal, M. Hersen, J. C. Thomas, D. L. Segal, M. Hersen (Eds.) , *Comprehensive Handbook of Personality and*

Psychopathology, Vol. 1: Personality and Everyday Functioning (pp. 23-43). Hoboken, NJ US: John Wiley & Sons Inc.

Mitura, V., & Bollman, R. (2004). Health status and behaviours of Canada's youth: A rural urban comparison. *Rural and Small Town Canada Analysis Bulletin, 5*(3), 1-22. Statistics Canada. Catalogue no. 21-006-XIE. Ottawa, ON. [Online]. Available: www.statcan.gc.ca

Nansel, T. R. Overpeck, M., Pilla, R. S., Ruan, W. J., Simons-Morton, B., & Scheidt, P. (2001). Bullying behaviors among US youth: Prevalence and association with psychosocial adjustment. *Journal of the American Medical Association, 285*(16), 2094–2100.

Nordal, K.C., Copans, S.A. & Stamm, B.H. (2003). Children and adolescents in rural and frontier areas. In Stamm, B.H. (Ed.), *Rural Behavioral Health Care: An Interdisciplinary Guide.* Washington, D.C., US: American Psychological Association.

Olweus, D. (1993). Bullying at school: What we know and what we can do. Cambridge, USA: Blackwell.

Payne, A. A., & Eckert, R. (2010). The relative importance of provider, program, school, and community predictors of the implementation quality of school-based prevention programs. *Prevention Science, 11*(2), 126-141.

Poon, C. S., & Saewyc, E. M. (2009). Out Yonder: Sexual-Minority Adolescents in Rural Communities in British Columbia. *American Journal of Public Health,* 99(1), 118-124. DOI:10.2105/AJPH.2007.122945

Puderer, H. A. (2009) Urban Perspectives and Measurement. *Geography WorkingPaper*. Catalogue no. 92F0138M — No. 2009001. Ottawa, ON. [Online]. Available: www.statcan.gc.ca

Rao, J. N. K., & Scott, A. J. (1981). The analysis of categorical data from complex sample surveys: chi-square tests for goodness of fit and independence in two-way tables. *Journal of the American Statistical Association, 76*, 221-230.

Saewyc E., & Green R. (2009). Survey methodology for the 2008 BC Adolescent Health Survey IV. *[Fact Sheet]*. Vancouver, BC: McCreary Centre Society.

Schoenwald, S., & Hoagwood, K. (2001). Effectiveness, transportability, and dissemination of interventions: What matters when? *Psychiatric Services, 52*(9), 1190-1197.

Srebalus, D. J., Schwartz, J. L., Vaughan, R. V., & Tunick, R. H. (1996). Youth violence in rural schools: Counselor perceptions and treatment resources. *School Counselor, 44*(1), 48-54.

Taub, J. (2002). Evaluation of the SECOND STEP violence prevention program at a rural elementary school. *School Psychology Review, 31*(2), 186–200.

Wolke, D., Woods, S., Stanford, K., & Schulz, H. (2001). Bullying and victimisation of primary school children in South England and South Germany: Prevalence and school factors. *British Journal of Psychology, 92*, 673–696.