

School Victimization and Bullying Experiences: Cross-National Comparisons Between Canada and the United States

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Abstract

The victimization of children in school and its mental health consequences have become national problems in both Canada and the United States, with evidence that severe cases of peer victimization might precede and/or be related to posttraumatic stress disorder. This study examines the frequency of victimization in schools, perpetrated by both peers and educators, and the psychological outcomes. The cross-national study included 1007 college/university students from four universities in the US and 210 university students from mid-western Canada. The “Student Alienation and Trauma Scale–Revised” (SATS–R) measures students’ negative experiences in school and assesses whether an individual developed PTSD. Overall, Canadian students remembered more victimization in school than US students. For both country samples, the verbal/relational bullying factor was most often identified as a student’s very worst school experience (approximately 40% for both countries). Both samples had similar rates of PTSD after their very worst school experience with no real differences in the types of symptoms experienced by students after their very worst school experience.

Introduction

The victimization of children in school and its mental health consequences are of major concern in both Canada and the United States (Craig & Pepler, 2003; Nansel, Overpeck, Pilla, Ruan, Simons-Morton, & Scheidt, 2001). The first systematic research on bullying or victimization has been attributed to Olweus in 1973. Olweus defined bullying as aggressive verbal or physical behaviour that is repeated, occurs over time, and involves a power imbalance (1994). Most definitions of bullying involve some reference to aggressive behaviour. Although bullying and victimization are often used interchangeably, it is generally acknowledged that bullying is a relationship problem in which actions are repeated over time (Social Program Evaluation Group, 2003) whereas victimization

may include one-time events as well as actions over time which may be referred to as “series victimization” (Lauritsen & Heimer, 2008).

Hyman, Cohen, Glass, Kay, Mahon, Siegel, et al. (2003) have divided the concept of school victimization into two general categories: peer-induced and educator-induced. Although the categories are divided, the types of assaults (physical and/or psychological) inflicted by both sets of perpetrators are considered to be bullying in nature (Hyman & Snook, 1999) and characterized by an asymmetrical power relationship. Therefore, it is reasonable to consider the outcomes of bullying of both categories.

Peer victimization, which includes peer bullying, has been empirically linked to numerous negative mental health outcomes such as depression (Espelage & Swearer, 2003; Nordhagen, Nielsen, Stigum & Kohler, 2005). Humiliation, loss of respect and ostracism from peers have also been identified as major negative social outcomes of either physical or psychological bullying and these can further lead to depression and other negative outcomes. In a meta-analytic review of twenty years of research on peer victimization and psychosocial maladjustment, Hawker and Boulton (2000) found that bullying had the strongest relationship to depression, but also linked bullying to the development of loneliness, generalized anxiety, social anxiety, global self-esteem, and social self-esteem.

Some researchers have indicated that children may experience bullying or victimization as highly traumatic. In a U.K. study of adolescents who reported having been bullied, 39.8% of the male respondents and 42.6% of the female respondents reported severe levels of Post Traumatic Stress Disorder (PTSD) symptoms (Mynard, Joseph, & Alexander, 2000). Similarly, a U.S. study identified a significant positive relationship between PTSD symptoms and victimization ($r = .37$ for overt victimization, $r = .33$ for relational victimization) in a sample of 205 (male and female) fifth and sixth grade students (Storch & Esposito, 2003). Additionally, in a retrospective study (Rivers, 2004), 17% of participants who were bullied because of their sexual orientation met the DSM-IV criteria for a diagnosis of PTSD.

Hyman, et al., (2003) reported that severe cases of peer victimization might precede and/or be related to the actual onset of PTSD. Experiencing PTSD in childhood or adolescence has been associated with later conditions such as depression (Lev-Wiesel, Nuttman-Shwartz, & Sternberg, 2006), anxiety disorders (Chu & Dill, 1990), multiple personality disorder (Kluft, 1985) as well as drug use and criminal behaviour (Burgess, Hartman, & McCormack, 1987). In their review of PTSD in childhood, Dyregrov and Yule (2006) concluded that exposure

to trauma in childhood may affect maturation of both the central nervous and neuro-endocrine systems. A U.S. report by Vossekuil, Fein, Reddy, Borum, and Modzeleski (2002) indicated that two-thirds of individuals who participated in school shootings felt bullied, threatened or persecuted prior to these attacks.

Schools are known to be a source of stress for children who experience bullying from peers. In addition to the stress caused by peers, children can be victimized, abused and alienated by school personnel. Due to differences in social support and legal contexts (Centre for Effective Discipline, 2008), some schools in the U.S., and to a lesser extent in Canada, continue to utilize punitive disciplinary strategies that have damaged the mental health and general well-being of schoolchildren. Examples include preventing students from using the bathroom, sarcastic remarks, and the use of corporal punishment (Hyman & Snook, 1999).

The safety of children in school is an international mission, not just a problem in Canada and the U.S.. Independent research teams have studied victimization in school and its effects on children in numerous countries including Australia, Belgium, Canada, Denmark, England, Finland, France, Germany, Ireland, Italy, Japan, Poland, Portugal, Netherlands, New Zealand, Norway, Scotland, Spain, Switzerland, United States of America, and Wales (for a review see Smith, Morita, Junger-Tas, Olweus, Catalano, & Slee, 1999). Furthermore, researchers have studied the direct similarities and differences of the nature and extent of victimization across a variety of countries (Akiba, LeTendre, Baker, & Goeslong, 2002; Boulton, Bucci, & Hawker, 1999; Nabuzoka, 2003; Smith, Cowie, Olafsson, & Liefoghe, 2002; Smith, et al., 1999; Wolke, Woods, Stanford, & Shultz, 2001). Nansel, Craig, Overpeck, Saluja, Ruan, et al. (2004) concluded from their cross-national study of 25 countries that there is a relationship between bullying and poorer psychosocial adjustment and that this issue is of critical concern.

School Victimization and PTSD

Operationalizing PTSD within the context of school victimization is difficult considering Criterion A of the DSM-IV diagnostic criteria. Criterion A states that “the person must experience or witness an event that involves actual or the threat of death or a threat to physical integrity.” In addition, “the person must have reacted to the event with intense fear, horror, or helplessness” (American Psychiatric Association, 1994, p. 427-8).

A critical question in this study is: Does bullying and other acts of victimization in school meet Criterion A? While children often react to school victimization with intense fear or horror, it is questionable if a child's very worst school experience qualifies as an event that involves actual or the threat of death or physical integrity. However, it is certainly conceivable that a child who is bullied or victimized may perceive the event as such and subsequently experience intense fear, horror, or helplessness.

The Current Study

While there is a growing literature base on cross-national differences in victimization at school, no cross-national comparisons between Canada and the U.S. have been reported. Further, there has not been a comparison of childhood and adolescent PTSD symptomatology between the two countries.

Another unique aspect of this study is that it expanded the definition of victimization and bullying to include educator-induced victimization (i.e., school victimization perpetrated by school personnel). In addition, rather than just assessing the relationship between victimization and clinical outcomes, the study attempted to link a student's *very worst* school experience to the development of a PTSD diagnosis and PTSD-related clinical symptomatology.

The purpose of this study was to raise awareness about the frequency of victimization in schools, perpetrated by both peers and educators, and the psychological outcomes related to the maltreatment, and to promote the physical and emotional safety for children and adolescents. Moreover, this study is intended to help researchers understand the importance of context by comparing school victimization and its clinical outcomes between samples from two nations, the U.S. and Canada. The present study was designed to answer the following research questions.

Research Question 1

How frequently do students in Canada and the U.S. experience negative events at school? Are there significant differences in the types of negative school experiences, both peer and educator-induced, and in the frequency of negative school experiences between students who attend schools in the U.S. and Canada?

Research Question 2

What do students in different countries remember as their very worst school experience? Do students from the U.S. and Canada remember

significantly different types of very worst school experiences? Are there significant differences in the school position (educator versus peer) and gender of the perpetrator of the very worst school experience between the two samples?

Research Question 3

What percentage of students remembered developing PTSD symptomatology after their very worst school experience? What types of negative school experiences are related to the onset of PTSD symptoms? Are there significant differences in the prevalence of PTSD symptoms resulting from a student's very worst school experience across countries?

Research Question 4

Are there significant differences in the array of other clinical symptoms endorsed after the very worst school experience?

Method

Research Design

This study utilized a retrospective, correlational, non-experimental design. University ethics approval was obtained at the post-secondary educational facilities prior to data collection.

Sample. The cross-national study included 1007 college/university students from four universities in the U.S. (one each from the northeast, midwest, southern, and south-western regions of the country) and 210 university students from a university in the western region of Canada. Canadian and American participants were accessed through convenience sampling of undergraduate students.

Instrument. The *Student Alienation and Trauma Scale–Revised* (SATS–R) was administered to all participants. The SATS–R was developed to measure students' negative experiences in school and to assess the development of PTSD, as defined by the Diagnostic and Statistics Manual–Fourth Edition, and PTSD-related symptomatology after their very worst school experience (Hyman, Snook, Berna, Kohr, DuCette, Cohen, et al., 2003). The SATS–R is a revised edition of the original *Student Alienation Trauma Survey* (SATS), which was an extension of the *My Worst Experience Scale* (MWES), a reliable self-report form constructed to assess PTSD and measure other PTSD-related pathology (e.g., depression, hypervigilance, oppositionality) in children and

adolescents (Hyman, Snook, Berna, DuCette, & Kohr, 2002). The SATS-R consists of two parts, Part 1 which lists 58 possible negative experiences that may have occurred at school as well as an open-ended section to list the participant's worst school experience and Part 2 which lists 105 symptoms which may have been experienced after respondents' very worst experience occurred and was used to assess PTSD symptomatology.

All validity and reliability data are based on studies using the original format of the instrument, the MWES. Therefore, all reliability and validity studies refer to the instrument as the MWES, and not the SATS-R. The authors acknowledge that this is a limitation of the study. The MWES has been found to have adequate reliability. The reliability of the MWES has been assessed by using internal consistency and test-retest reliability coefficients. Internal consistency was measured using Cronbach's alpha. The alpha coefficient for the MWES total score has been reported as .97. All subscales, except Impact of the Event and Somatic Symptoms, met the standard for adequate internal consistency according to APA standards (.80 and above). Two studies have found test-retest reliability coefficients for the total score to be adequate, .88 and .95 respectively (Lambert, 1990, as cited in Hyman, et al., 2002; Berna, 1993, as cited in Hyman, et al., 2002; Hyman et al., 2002). Many subscales of the MWES did not have adequate test-retest reliability.

Exploratory factor analysis techniques provided the empirical and conceptual basis for the MWES symptom subscales. The factor analysis also served as empirical evidence for construct validity (Berna, 1993, as cited in Hyman et al., 2002). Concurrent validity has been demonstrated by correlating the MWES with other measures. These correlations have produced moderate correlation coefficients (Hyman et al., 2002). Several different studies have provided data for discriminant validity. Kohr (1996, as cited in Hyman et al., 2002) administered the MWES to children diagnosed with PTSD, children with non-PTSD clinical diagnoses, and a nonclinical group.

The MWES was able to distinguish adequately between children who were diagnosed with PTSD and the non-PTSD clinical and nonclinical group. Berna (1993 as cited in Hyman et al., 2002) found that children of divorced parents had a significantly higher MWES total score than children of intact families. Goldwater (1993, as cited in Hyman et al., 2002) found that survivors of the hurricane were found to have a significantly higher total score and scores on four subscales: re-experiencing the event, somatic symptoms, and dissociation.

Procedures. For the Canadian sample, permission was obtained from a university professor to use class time to invite interested undergraduate students to participate in the study. The professor did not stay in the classroom during this time and students were free to leave if they did not wish to participate. All attending students chose to complete the questionnaire. Prior to questionnaire completion, students were given a consent form to read and sign and return with the completed questionnaire in a manner to protect their anonymity. The researcher gave the standardized directions to the participants beforehand and was present during the questionnaire completion.

Procedures for administering the questionnaire were uniform across all data collection sites in the U.S., where participants were solicited primarily through advertising in psychology, education, and business undergraduate classrooms. Before students were administered the survey, they were informed about their rights as voluntary research participants and were requested to sign the consent form. Members of the research team, which included graduate students, rotated in administering the questionnaire to groups of participants at the American Universities. The administrator provided the standardized directions. After the completion of the survey, study participants placed their survey into an envelope in the front of the room to protect anonymity.

Results

Table 1 contains details about the demographics of the study participants ($N=1217$). Pearson Chi-Squares were conducted to determine demographic differences between the Canadian and American samples for age, gender, ethnic background, family education, and family income. A Pearson Chi-Square found no significant differences in the age distributions and gender ratios of the subjects from the Canadian and American Sample. There was, however, a significant difference in the distribution of ethnic groups between the country samples ($\chi^2 (5, N = 1201) = 73.591, p = .000$).

Table 1: Demographic Information for the Canadian and U.S. Samples

Demographic Variable	Canada (N=210)	United States (N=1007)
Age		
17-21	185 (88.0%)	906 (90.0%)
Over 21	23 (11.0%)	88 (8.7%)
Not Identified	2 (1.0%)	13 (1.3%)
Gender		
Male	75 (35.7%)	337 (33.5%)
Female	135 (64.3%)	663 (65.8%)
Not Identified	0 (0.0%)	7 (0.7%)
Ethnic/Racial Background		
Asian	24 (11.4%)	66 (6.6%)
Black	4 (1.9%)	149 (14.8%)
Hispanic	5 (2.4%)	55 (5.5%)
Aboriginal/Native American	9 (4.3%)	1 (0.1%)
Caucasian/European heritage	159 (75.7%)	705 (70.0%)
Other	8 (3.8%)	16 (1.6%)
Not Identified	1 (0.5%)	15 (1.5%)

For the first research question, a frequency count for all the items in Part I of the SATS-R allowed for a descriptive report of the occurrences of each negative school event as presented in Table 2. A principal component analysis of the victimization items yielded 13 types or categories of school victimization: physical abuse, verbal and relational aggression, extreme victimization, school discipline/punishment, social exclusion, theft, verbal threat, verbal insults, being forced to engage in a behaviour, sexual victimization, terrorism, witnessing a negative event, and suicide in school (See Table 3). For each of these events, an educator or a peer could be identified as the perpetrator of the school victimization.

Table 2: Frequency of Negative School Events in Canadian and U.S. Samples

	Canada (n=210)			United States (n=1007)		
	How often did it happen?		n %	How often did it happen?		n %
<i>Item</i>	Not at all	Rarely	Often	Not at all	Rarely	Often
I was teased	15 7.1	121 57.6	74 35.2	111 11.0	553 54.9	343 34.1
I was yelled at	34 16.2	132 62.9	44 21.0	181 18.0	643 63.9	183 18.2
I was embarrassed by someone	16 7.6	117 55.7	77 36.7	74 7.3	545 54.1	388 38.5
Someone threatened to harm me or someone dear to me	117 55.7	77 36.7	16 7.6	624 62.0	346 34.4	37 3.7
Someone let other students hit, push, or slap me	160 76.2	39 18.6	11 5.2	856 85.0	135 13.4	16 1.6
I was forced to stay in class after school hours	61 29.0	109 51.9	40 19.0	350 34.8	527 52.3	130 12.9
I was suspended	161 76.7	42 20.0	7 3.3	868 86.2	132 31.1	7 0.7
I was expelled from school	204 97.1	4 1.9	2 1.0	991 98.4	14 1.4	2 0.2
I was not allowed to participate in special activities	165 78.6	40 19.0	5 2.4	841 83.5	148 14.7	18 1.8
I was not allowed to go to the bathroom	138 65.7	61 29.0	11 5.2	674 66.9	288 28.6	45 4.5
Someone threw a book, an eraser or something else at me.	115 54.8	82 39.0	13 6.2	797 79.1	193 19.2	17 1.7
I was beaten up	175 83.3	33 15.7	2 1.0	938 93.1	63 6.3	6 0.6

I was pinched until it hurt	133 63.3	63 30.0	14 6.7	702 69.7	284 28.2	21 2.1
I was slapped	155 73.8	50 23.8	5 2.4	846 84.0	150 14.9	11 1.1
I was pushed	95 45.2	95 45.2	20 9.5	571 56.7	383 38.0	53 5.3
I was held strongly	149 71.0	51 24.3	10 4.8	776 77.1	212 21.1	19 1.9
I was shaken	182 86.7	23 11.0	5 2.4	895 88.9	103 10.2	9 0.9
I was pulled by my ears or hair	139 66.2	64 30.5	7 3.3	765 76.0	222 22.0	20 2.0
I was hit with a rule, a bat, or other object	176 83.8	27 12.9	7 3.3	878 87.2	119 11.8	10 1.0
I was chased after	103 49.0	80 38.1	27 12.9	685 68.0	267 26.5	55 5.5
I was picked up last	109 51.9	74 35.2	27 12.9	541 53.7	376 37.3	90 8.9
Other students stopped talking to me	110 52.4	82 39.0	18 8.6	579 57.5	368 36.5	60 6.0
Someone made others dislike me	88 41.9	102 48.6	20 9.5	461 45.8	469 46.6	77 7.6
I was tripped	99 47.1	104 49.5	7 3.3	661 65.6	312 31.0	34 3.4
Someone talked about sex and I didn't like it	171 81.4	34 16.2	5 2.4	795 78.9	184 18.3	28 2.8
Someone lied about me, and that caused me to get into trouble	85 40.5	119 56.7	6 2.9	596 59.2	384 38.1	27 2.7
No one asked me when I asked for help	133 63.3	72 34.3	5 2.4	770 76.5	202 20.1	35 3.5
Someone made me stay alone, away from everyone	171 81.4	30 14.3	9 4.3	852 84.6	137 13.6	18 1.8
Sexual remarks were made about me	130 61.9	67 31.9	13 6.2	646 64.2	271 26.9	90 8.9
I was touched in a sexual manner	190 90.5	13 6.2	7 3.3	853 84.7	127 12.6	27 2.7

I was present, and saw something terrible happen	143 68.1	59 28.1	8 3.8	786 78.1	201 20.0	20 2.0
I was punched	141 67.1	60 28.6	9 4.3	819 81.3	166 16.5	22 2.2
I was forced to have sexual intercourse	205 97.6	4 1.9	1 .5	985 97.6	18 1.8	4 .4
I was locked in a closet or small room	199 94.8	11 5.2	0 0.0	976 96.9	29 2.9	2 .2
I was tied	206 98.1	3 1.4	1 .5	987 98.0	18 1.8	2 0.2
I was body searched	205 97.6	4 1.9	1 0.5	981 97.4	23 2.3	3 0.3
Someone stole something from me	61 29.0	141 67.1	8 3.8	393 39.0	579 57.5	35 3.5
I was left out	85 40.5	105 50.0	20 9.5	412 40.9	482 47.9	113 11.2
Someone made fun of my clothes	82 39.0	110 52.4	18 8.6	427 42.4	470 46.7	110 10.9
Someone made up a story about me	88 41.9	102 48.6	20 9.5	451 44.8	485 48.2	71 7.1
I wanted to make friends with someone who didn't want to be my friend	130 61.9	69 32.9	11 5.2	596 59.2	348 34.6	63 6.3
Someone drew a gun, a knife, or other weapon at me	188 89.5	19 9.0%	3 1.4	880 87.4	119 11.8	8 .8
I saw someone that got badly wounded or killed	163 77.6	45 21.4	2 1.0	847 84.1	153 15.2	7 .7
I was hurt so badly, I needed to turn to a hospital	191 91.0	19 9.0	0 0.0	928 92.2	77 7.6	2 .2
Someone bothered me on the way to or from school	142 67.6	59 28.1	9 4.3	725 72.0	231 22.9	51 5.1
Someone said bad things about my mother or my family	125 59.5	70 33.3	15 7.1	630 62.6	324 32.2	53 5.3

Someone forced me to do something that I didn't want to do	156 74.3	48 22.9	6 2.9	758 75.3	221 21.9	28 2.8
Someone didn't let me play or be with my friends	158 75.2	47 22.4	5 2.4	796 79.0	186 18.5	25 2.5
Someone made me miss class or school day	152 72.4	46 21.9	12 5.7	890 88.4	100 9.9	17 1.7
Someone deliberately stained my clothes	173 82.4	36 17.1	1 0.5	900 89.4	102 10.1	5 .5
Someone committed suicide	164 78.1	43 20.5	3 1.4	776 77.1	220 21.8	11 1.1
I saw somebody being threatened with a knife, a gun, or other weapon	187 89.0	21 10.0	2 1.0	899 89.3	102 10.1	6 0.6
Someone said there is a bomb in school and we had to leave.	147 70.0	54 25.7	9 4.3	501 49.8	440 43.7	66 6.6
I was given a punishment that was not fair	88 41.9	103 49.0	19 9.0	521 51.7	435 43.2	51 5.1
I was in a fight	116 55.2	75 35.7	19 9.0	686 68.1	283 28.1	38 3.8
Someone made fun of me because of my race	169 80.5	34 16.2	7 3.3	823 81.7	127 12.6	57 5.7
I got into trouble because of something I did	63 30.0	119 56.7	28 13.3	319 31.7	540 53.6	148 14.7

Factor scores were created for each victimization type/category. A subject's scores on the victimization categories were used in the subsequent analysis; the 58 SATS-R items were not individually analyzed. A Multivariate Analysis of Variance (MANOVA) was utilized to determine if there were significant differences between the two countries for types of victimization. The MANOVA also controlled for Type I errors that might have occurred due to multiple comparisons. Eta squared coefficients were used as the metric for reporting effect sizes. The MANOVA also controlled for Type I errors that might have occurred due to multiple comparisons.

Table 3: Category Construction & Factor Analysis of Negative School Experience Items in Part One of the SATS–R

Category/ Factor	Items	Ldg
1. Physical abuse	Other students were allowed to hit push, or slap me (item5).	.516
	Things like a book, an eraser, or something else were thrown at me (item11).	.557
	I was pinched or squeezed so hard that it hurt (item13).	.688
	I was slapped (item14).	.629
	I was pushed (item15).	.733
	I was grabbed very hard (item16).	.740
	I was shaken (item17).	.568
	I had my ear or hair pulled (item18).	.550
	I was chased (item20).	.502
	I was tripped (item24).	.532
	I was punched (item32).	.525
	I was hit with a ruler, paddle, or something else (item 19).	.320*
	Someone messed up my clothes on purpose (item 50).	.304*
2. Verbal and Relational Aggression/ Victimization	I was teased (item 1).	.671
	I was embarrassed (item3).	.598
	I was picked last (item 21).	.673
	Other students stopped talking to me (item 22).	.684
	Someone got others not to like me (item 23).	.697
	I was left out (item 38).	.732
	Someone made fun of my clothes (item 39).	.635
	Someone made up a story about me (item 40).	.498
	I wanted to be friends with someone who didn't want to be friends with me (item 41).	.658
	Someone picked on me on my way to or from school (item 45).	.510
Someone lied about me and I got into trouble (item 26).	.278**	
3. Extreme Victimization	I was expelled from school (item 8).	.686
	I was beaten (item 12).	.470
	I forced to have sex (item 33).	.528

	I was locked in a close or small room (item 34).	.568
	I was tied up (item 35).	.693
	I was strip searched (item 36).	.643
	I was hurt so badly that I had to go to the hospital (item 44).	.382
4. Witnessing a Negative Event	I saw something really bad happen (item 31).	.526
	Someone took out a gun, a knife, or another weapon (item 42).	.725
	I saw someone get badly hurt or killed (item 43).	.711
	I saw someone be threatened with a gun, knife, or other weapon (item 52).	.710
5. School discipline/Punishment	I was yelled at (item 2).	.505
	I was given detention (item 6).	.742
	I was suspended (item 7).	.655
	I was given a punishment that was not fair (item 54).	.480
	I was in a fight (item 55).	.511
	I got into trouble because of something I did (item 57).	.620
6. Social Exclusion	I was not allowed to be part of special subjects or activities (item 9).	.493
	I was not allowed to go to the bathroom (item 10).	.462
	No one helped me when I asked for help (item 27).	.489
	I was made to stay alone, away from everybody (item 28).	.575
	Someone would not let me play or be with my friends (item 48).	.367
7. Sexual Victimization	Sexual comments were made about me (item 29).	.747
	I was touched sexually (item 30).	.685
8. Verbal Insults	Someone made fun of me because of my race (item 56).	.619
	Someone talked about sex and I didn't like it	

	(item 25). Someone said bad things about my mother (item 46).	.576 .160**
9. Theft	Someone stole something from me (item 37).	.633
10 Suicide in School	Someone killed him/herself (item 51).	***
11. Terrorism	Someone said there was a bomb in school and we had to leave (item 53).	.566
12 Verbal Threat	Someone threatened to do something bad to me or to someone I care about (item 4).	***
13. Forced to Engage in a Behaviour	Someone made me do something I did not want to do (item 47). Someone made me miss class or school (item 49).	.429 .577

*while it has a small loading, the item makes sense conceptually to be in this factor

**higher loading on another factor, but made more sense here conceptually

***item does not load highly on a factor

To address the second research question, chi-squares tests were used to determine if there were significant differences across the two countries in the types of worst school experiences. For research question three, a frequency count was utilized to determine what percentage of each sample met the DSM-IV criteria for PTSD. Chi-squares were employed to determine if there were any statistical differences in the prevalence of PTSD between the two countries. A MANOVA was utilized to measure group differences on the symptoms subscale scores for the fourth research question. Eta squared coefficients was used as the metric for assessing effect sizes.

Question 1: Negative school events. An omnibus Multivariate Analysis of Variance (MANOVA) was performed in order to determine whether there were significant differences in the frequency that the negative school experiences occurred in the U.S. and Canada. An omnibus MANOVA (Wilk's Lambda = .935, $p = .000$) demonstrated that there were

significant differences in the frequency of negative school experiences reported in the Canadian and American samples. Tests of between subjects effects found that Canadian participants remembered experiencing significantly more physical abuse ($F(1,1217) = 34.238, p = .000$), extreme victimization ($F(1,1217) = 4.931, p = .027$), school discipline/punishment ($F(1,1217) = 12.519, p = .000$), social exclusion ($F(1,1217) = 4.610, p = .032$), theft ($F(1,1217) = 6.204, p = .013$), verbal threat ($F(1,1217) = 7.465, p = .006$), and being forced to engage in a behaviour ($F(1,1217) = 14.097, p = .000$) than students in the U.S.

Participants in the U.S. remembered experiencing significantly more terrorism than Canadian participants ($F(1,1217) = 20.738, p = .000$). Effect sizes were low for the between country effects with Partial Eta Squared ranging from .001 (sexual victimization) to .027 (physical abuse factor). Although significant differences were found between the countries on a variety of victimization variables, these differences may have very limited clinical or practical relevance as indicated by the low effect size coefficients. No significant between country effects were found for the verbal/relational victimization subscale, the witnessing a negative event subscale, sexual victimization subscale, verbal insults subscale, and the suicide/witnessing death subscale.

Question 2: Very worst school experience. Among the participants in the U.S. sample, 43% identified relational/verbal victimization as their very worst school experience, 37% a different form of abuse (one of the 10 other victimization factors), 15% school discipline victimization, and 5% physical victimization. In comparison, 38% of the Canadian sample identified relational/verbal victimization as their very worst school experience, 41% another type of victimization (one of the ten other victimization factors), 17% school discipline, and 4% physical victimization. The differences in these distributions were not significant. For both countries, the perpetrator of the very worst school experience was most likely to be male.

The perpetrator of the very worst school experience significantly varied between the two countries ($\chi^2(1, N = 944) = 10.757, p = .001$). In the Canadian sample, 30.5% of the perpetrators were reported to be adults/school personnel and 60.5% were reported to be another student. In the American sample, 44.0% of the perpetrators were identified as adults/school personnel and 56.0% were reported to be another student. The frequency counts indicated that adults and/or school personnel were more likely to cause the very worst school experience in the U.S. than in Canada. In the Canadian sample, other students were more often the perpetrator of the very worst school experience than adults and/or school

personnel. Interestingly, both country samples had many students whose worst experiences were perpetrated by adults.

Question 3: PTSD Symptomology. Approximately 8% of the Canadian sample and 10% of the American sample met the DSM-IV criteria for a PTSD diagnosis with almost 0.5% of each sample obtaining clinically significant PTSD T-scores. No significant differences were found in the prevalence of PTSD between the two countries (no differences when measured using T-scores and the DSM criteria to define PTSD). For both countries, the verbal and relational aggression factor was the type of victimization that most often led to a remembered PTSD diagnosis after a subject's very worst school experience.

Question 4: Other clinical symptoms. A test of between-subject effects found that Canadian participants remembered experiencing significantly more oppositional behaviour symptoms after their very worst school experience than participants from the U.S.: $F(1, 1204) = 6.731, p = .010$. However, the effect size was small (partial eta squared = .006). Tests of between subject effects found no significant differences for the total PTSD symptomatology subscale, impact of the event, re-experiencing the trauma, avoidance, arousal, depression, oppositionality, hypervigilance, somatization, hopelessness, dissociation, and maladjustment subscales.

There were no differences between the two country samples in the types of experiences that were identified as a subject's very worst school experience. For both country samples, the verbal/relational bullying factor was the factor that was most often identified as a subject's very worst school experience (approximately 40% for both countries). The second most identified very worst school experience in both countries was school discipline (approximately 18% in the Canadian sample and 15% in the American sample). Both samples had similar rates of PTSD (approximately 10% of each sample) after their very worst school experience and there were no real differences in the types of symptoms experienced by students after their very worst school experience.

Examples of experiences

The following written comments are examples of verbal/relational bullying identified as the very worst experience:

“I was often made fun of for being “slower” than the other students. Sometimes I didn't care, other times I did. It really bothered me when it would be carried out in the playground.”

“It may not seem like a worst experience to many, but being left out hurts. School is supposed to be a place where you learn things not where out should feel left out and alone. I never had many friends, was always last when picked at sports, and ate my lunch alone beside my locker.”

“I was teased a lot in elementary school, on the playground and in class. This hurt me a lot and brought down my self esteem to the point that I would cry to my mom and beg her to let me stay home.”

Examples of some respondents’ descriptions of school discipline as the very worst experience are:

“A teacher misunderstood a situation and thought that I had said something that I really did not. She yelled at me for around five minutes in front of the whole class. It was embarrassing and stupid because I really had nothing to do with the situation.”

“In Grade One, I was falsely accused of cheating on a test and yelled at by a teacher who I admired very much. Not only was I upset because it wasn’t true, I was hurt that she would yell at me.”

“Corporal punishment was allowed so the teacher hit me hard on my back and also like fifteen times on my hands and then made me kneel down with my hands lifted up for hours.”

Discussion and Conclusion

Overall, the participants in the Canadian sample remembered experiencing more victimization in school than the participants in the U.S. sample did. However, the effect sizes were small for cross-national differences in rates of victimization, indicating that the differences might not be meaningful. There were no differences between the two country samples in the types of experiences that were identified as a subject’s very worst school experience. Verbal/Relational aggression was most often remembered as the very worst school experience in both samples, even more than physical forms of victimization. This finding indicates that verbal/relational aggression may have profound long-term mental health effects. PTSD symptomatology was found to be related to school victimization as a substantial proportion of the participants remembered experiencing PTSD symptoms after their very worst school experience.

The prevalence of PTSD after a subject's very worst school experience did not vary between the two countries. The prevalence of PTSD was higher in the two samples when the DSM-IV Criteria was used as compared to using PTSD normative scores, indicating that the prevalence of PTSD will vary depending on the measure used to assess the presence of the disorder. Observed similar rates of PTSD across both American and Canadian samples indicate that there may be a universal nature to this mental health disorder in western culture.

There were several limitations of the present study. First, the study was retrospective. A significant confound in retrospective studies is memory bias (e.g., forgetting, memory distortion). The lack of a representative sample from both nations hindered the external validity of the study. Due to limited external validity, it was difficult to generalize the findings to all or even most students in the U.S. and Canada. There are also limitations to the correlational design of this study in that findings cannot be used to infer causation. In other words, it is difficult to conclude that the symptoms of PTSD were directly caused by traumatic events. In order to infer such a causal relationship, an experimental design needs to be conducted.

In conclusion, bullying and victimization can have major and long lasting negative effects on children. Individuals who have this experience as children may continue to experience symptoms of trauma as adults. Efforts must be continued and increased to address the issue in the forms of prevention, identification and intervention. These efforts must also include a closer look into the types of situations at schools in which adults may be acting as perpetrators of behaviours that are interpreted by children as bullying in nature. Children should be able to learn and develop in a safe environment at both home and school.

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