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The Nature of School Violence Intervention Training for Canadian School
Psychologists
by
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Abstract

School violence is a global concern that has become a particular problem for Canadians, with worries that it is becoming more widespread and violent in nature. School psychologists have been considered to be in an optimal role for addressing the problem of school violence due to their unique training. In practice, however, there has been limited research done on the actual nature of school violence intervention training for Canadian school psychologists. This study sought to address this gap through a survey of 32 clinicians across Canada. Results suggested that school violence intervention lags considerably in both the level and vehicles offered in program training compared to other behavioral topics. The results suggest that training programs for Canadian school psychologists must be changed to address current concerns with school violence.

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Table of Content

Chapter One: Introduction	6
Context of the Problem	1
Chapter Two: Review of Related Literature	4
Definition of school violence.....	4
Is there concern over school violence?	5
What are the trends of Canadian and American school violence and gangs?	7
Why should school psychologists consider school violence as within their purview and why have they shown limited influence within this area?	11
What level of training do school psychologists have in youth gang and school violence training?	15
Purpose of the study	17
Methods.....	17
Questions to be answered or objectives to be investigated.....	18
Research Design: Variables	19
Importance of the study	22
Scope and Delimitation of the Study.....	Error! Bookmark not defined.
Chapter Three: Methodology.....	24
Research Methodology.....	24
Questionnaire Procedures	25
Participants Selection	26
Data Analysis.....	30
Chapter Four: Results.....	33
Sample Size Demographics	28
Level of Program Training Provided	33

Vehicle of training	34
Comparing American and Canadian data	37
Chapter Five: Summary and Conclusion	41
Limitations	46
Conclusions.....	53
Appendix A	74
Appendix B	77
Appendix C	78
Appendix D.....	85
Appendix E	92

List of Tables

Table 4.1. Frequency and Percentage of Canadian School Psychologists' Years of Practicing School Psychology.....	61
Table 4.2. Frequency and Percentage of Program Stream of Participant's Master's Degree (if applicable).....	62
Table 4.3. Frequency and Percentage of Program Stream of Participant's Doctoral Degree (if applicable).....	63
Table 4.4. Analysis results on the comparability of Canadian school psychologist training in school violence versus other behavior topics.....	64
Table 4.5. Analysis results of the comparability of school violence versus other behavioral topics being offered through discrete coursework for Canadian school psychologists.....	66
Table 4.6. Analysis results of the comparability of school violence versus other behavioral topics being offered through practica for Canadian school psychologists.....	68
Table 4.7. Analysis results of the comparability of school violence versus other behavioral topics being offered through internships for Canadian school psychologists.....	70
Table 4.8. Analysis results of the comparability of school violence versus other behavioral topics not being provided in training for Canadian school psychologists	72

Chapter One: Introduction

Context of the Problem

There is a struggle within Canada for school psychologists to adequately meet the mental health needs of today's youth. Recently, the Canadian Psychological Association sent an open letter to the federal government in request of a greater allocation of funding and attention towards the continuing decline of school psychologists available for what the association declared a necessary resource in preventing youth crime through the school system (Canadian Psychological Association, 2008). Youth crime is particularly concerning when the most prominent violations in Canadian schools is through assault, and that youth violence rates have increased 30% by 2006 since 1991 (Taylor-Butts & Bressan, 2008). The issue highlights the global uneasiness regarding the phenomenon of school violence (Akiba, LeTendre, Baker & Goesling, 2002). Indeed, the CPA's calls for greater focus on preventative measures of youth crime, including school violence, at the school level are supported by research suggesting that targeting at-risk students can play a crucial role in preventing future acts of violence. For example, Sprott, Jenkins and Doob (2005) found that despite environmental risk and early behavioral problems, the resulting elements of the child's experience through a good school bond were able to compensate for such risk factors in a way that prevented future development of violent delinquency. The CPA's address also noted two particular goals it would like to see the federal government achieve: a stronger provision of funding for mental

health services, with particular emphasis on children's mental health, and to work closely with the provincial governments in both making explicit and implementing a well-defined service model for a proactive mental health delivery system (Canadian Psychological Association, 2008). One final note expressed by the CPA was the concern over the poor ratio of psychologists to the nation's population that is far below the effective benchmark proportion for servicing its mental health needs (Canadian Psychological Association, 2008). Given these statements, it appears there is truly a concern over the ability to adequately meet the needs of children and adolescent's mental well-being. Managing good mental health is critical for students and understanding how they can control and release their emotions in a non-violent healthy manner is an important focus for safer schools.

Considering that school psychologists appear to be ideal candidates for addressing school violence, it is concerning that in many American institutions, the pre-service training programs for school psychologists show significant lag in targeting the area (Larson & Busse, 1998). Larson and Busse (1998) found that American school psychology programs emphasize several other topics in behavioral prevention and intervention over school violence and safe schools and gang intervention and prevention. For example, whereas treatment and consultation for Attention Deficit Hyperactivity Disorder and Conduct Disorder were required intervention training areas in roughly 80% to 90% of American school psychology programs, violence prevention and safe schools showed up in just fewer than 50% of them (Larson & Busse, 1998). Meanwhile, gang

prevention and treatment showed an even more dismal status, with respectively just under 30% and 20% of schools requiring such training areas (Larson & Busse, 1998). This is particularly concerning given both the increasing recognition that school psychologists are not getting their training needs met and the increasing worries over school violence. It is apparent that pre-service training in gang and school violence intervention is not being met in the pre-service system for aspiring school psychologists (Larson & Busse, 1998).

Given the potential gaps in school psychology training in the U.S.A. and global concerns of school violence overall, the question arises as to how well trained Canadian school psychologists are in the area. Unfortunately, at present there are no studies that have analyzed the state of training Canadian school psychologists are receiving for school violence intervention.

The purpose of this study is to address this void by exploring the issue through similar methodology as Larson and Busse's 1998 study, but with Canadian data. As well, this study will also address several questions from the available literature on the necessity of this topic including: a) what is the current level of concern over school violence in Canada?, b) what is the current level of school violence in Canada?, and c) why should Canadian school psychologists consider school violence as within the purview of their responsibilities.

Chapter Two: Review of Related Literature

This chapter covers a review of the literature regarding school violence including a discussion of its working definitions, specific concerns about school violence, trends in school violence in Canada and the United States, why the topic is important for school psychologists, why there have been limited influence in the area, and the nature of training that school psychologists have received in this area. Finally, the chapter will conclude with an overview of the specific purposes of this study and the hypotheses and variables included in the study.

Definition of school violence

Before addressing the literature on the nature of school violence, it is important to understand just what the term entails, especially since it is considered to be a catchall phrase that shows little preciseness from an empirical scientific perspective (Furlong & Morrison, 2000). A popular yet narrow definition of school violence has depicted the term as encompassing extreme forms of physical violence (Furlong & Babinski, 1994). It has also been described as a multi-factorial construct that encompasses both criminal acts and aggression committed in schools that damages the school's climate and limits development and learning (Furlong & Morrison, 2000).

School violence has also come to depict the wide-ranging societal worry about youth violence and how this phenomenon is affecting the schooling process (Furlong & Morrison, 2000). Despite the lack of a clear definition and relatively recent and broad use of the term school violence, there have been no directives to

pursue a different term (Furlong & Morrison, 2000). The use of the term school violence is a difficult and widely encompassing task. While there are multiple definitions that have been used in the literature, the current study seeks to use a single global definition. For the purpose of this study, the term school violence will follow Furlong and Morrison's (2000) parameters as anything that "involves involving criminal actions and aggression in schools, which inhibit development and learning, as well as harm the school's climate" (p. 71). In this case, criminal refers to anything in which the individual has been charged or recommended to the Crown for charging by police on top of anyone who is cleared by means other than the laying of a charge (Taylor-Butts & Bressan, 2008). Furthermore, although bullying is often classified as a form of violence, this study will not consider the act of bullying as part of its definition. According to a statement from the National Association of School Psychologists, although bullying can lead to violence, it typically is not categorized with more serious forms of school violence involving weapons, vandalism, or physical harm (Cohn & Canter, 2003). It is important to remember that although this term was operationalized for this research by excluding bullying, more recent conceptualizations have considered bullying as one of the non-criminal actions that should fall under the violence term (Spevak, 2006). It is clearly an evolving process through which current paradigms are more likely to see bullying as a form of violence.

Is there concern over school violence?

School violence is an area of national concern that is not limited to just the United States of America, but also to Canada, with considerable worry induced

from horrifying incidents such as school shootings in both U.S. and Canadian public schools (LeTendre et al., 2002; “Shooting violence in Canadian schools”, 2007). In particular, this rising concern and sensitivity over the rate of school violence and school gang involvement has led to an increased effort to take action and address the problem (Day, Golench, MacDougall & Beals-Gonzalez, 2002). Furthermore, there appears to be the belief that aggressive and antisocial behavior exhibited by children and youth is growing in confrontation, violence, and incidence rates (Day et al., 2002). Other characteristics that appear to be causing much dismay include the beliefs that youth violence is becoming more prone to involve weapons and gangs, is more destructive and virulent, and engages more females and younger children than that observed before (Day et al., 2002). Although there exists a belief that Canadian school violence is a steadily rising phenomena that may eclipse what is seen in the United States, there also exists a second belief that differences in definitions, awareness, and methods of reporting have exaggerated the nature of youth violence and that it is not as bad as the general public has been led to believe (Cusson, 1990; West, 1993). West makes the distinct point that the problem of Canadian school violence is much less severe than that found in American schools and warns that one should not be so quick to assume Canadian schools will approach such levels of aggression. For example, such worry and fear mongering can be accentuated and made more virulent by media reports that construct news stories with an exaggerated risk of student victimization in schools through crime and violence, despite few reports actually noting the findings of decreasing school crime and violence (Kupchick &

Bracy, 2009). Furthermore, media stories tend to be created in a manner that emphasizes knowledge that is local and impressionistic, rather than that of abstract data or trends (Kupchick & Bracy, 2009). Finally, media stories tend to be synthesized in a manner that depicts student victimization as a widespread phenomena that is unchecked by environmental constraints such as areas with high crime rates (Kupchick & Bracy, 2009). It is these characteristics of news stories amongst other factors which have fed an overall fear of an impending epidemic of school violence which have lead some to believe that the trend of Canadian school violence is not as worrisome as some believe (Kupchick & Bracy, 2009).

What are the trends of Canadian and American school violence and gangs?

With such debated concern over the prevalence of school violence, it is important to look at what studies have found the actual trends to be. Research from Statistics Canada provides evidence of increasing violence within schools, primarily through assault (Taylor-Butts & Bressan, 2008). With the Canadian population, Statistics Canada reported that in 2006, although youth crime (defined as 12 to 17 years of age individuals who have been formally charged or recommended to the Crown for charging by police as well as youth cleared by means other than the laying of a charge) had risen by 3% since 2005, it was 6% lower than the rate a decade earlier, and 25% lower than the 1991 peak. The study did note that violent crime committed by youth had gone up by 12% over the previous decade, as well as having gone up an alarming 30% since 1991. Also concerning was that assault was the most prevalent crime committed in violent

youth offenses. As well, Taylor-Butts and Bressan's 2008 study showed that 13% of youth crimes were committed on school property, with assault being the most prevalent offense at 27%. In addition, 7% of school crimes involved weapons, and less than 1% involved firearms. It was noted that most often the weapon used was a knife or blunt object. Uttering threats took up 8% of school youth crime.

Although not specifically within schools, it is worrisome that in 2006 the rate of homicides committed by individuals less than 18 years of age was at an all time high since 1961, when the statistics were first started (Taylor-Butts & Bressan, 2008). Although statistics of school assisted school homicides in Canada are currently unavailable, American statistics have shown that despite school assisted school homicides decreasing from July 1992 to June 2006, the rate has stabilized during the period of July 1999 to June 2006, through which 116 students were killed in 109 school-associated homicide events (Modzeleski et al. 2008).

Specifically, American school related homicides went from 0.07 to 0.03 total homicides per 100,000 5-18 years old students from July 1992 to June 2006 (Modzeleski et al. 2008). Hence, although homicide rates are lower than the peak in 1992, they are still a problem that shows no signs of decreasing in its current state. In terms of the nature of school crimes, 73% took place during school supervision time, while the remainder occurred after school (Taylor-Butts & Bressan, 2008). The study also noted that these rates could be subjected to two factors; a) after school would be a time where the lack of students, teachers or other school personnel would suggest that more crimes may be unnoticed and thus not reported to police and b) zero tolerance policies may enforce a higher rate of

reporting during school supervised hours (Taylor-Butts & Bressan, 2008). In general, Statistics Canada suggests that although there have been fluctuations in recent years, there has been an increase in youth crime rates in schools, with assault and uttering threats taking up 30% and 8% respectively of total incidents (Taylor-Butts & Bressan, 2008). Although more recent literature on Canadian school violence is scarce, one report from Statistics Canada (2009) shows that at least 15% of the 57,900 Toronto students in grades 7, 8 and 9 surveyed had been involved in actions of violent delinquency through robbery, weapon possession, threatening, group fighting and intentional injury using a weapon intended to harass or frighten others (Fitzgerald, 2009). Although this is localized for the city of Toronto, it does add to indications that school violence is still a credible problem in Canadian schools.

A look further back at school violence explains why there has been an increasing concern over school violence. Just after the 1991 peak of youth crime, an examination of the incidence rates of school violence in Canada showed that amongst 4000 Canadian high school students, 45% of them reported having known somebody who had been physically assaulted on school grounds (Bibby & Posterki, 1992; Statistics Canada, 2007). Such high rates in the early nineties would no doubt induce anxiety over such theories like those proposed by Bibby and Posterski (1992), who suggested that as a society, violence had been sanctioned and normalized to such an extent that it was being stoked, nurtured, and fed into the schools. Despite these alarming numbers, it is important to look at just why some authors have stated that Canada must be wary of assuming the

levels of violence in its schools will reach those of the American levels (West, 1993). This leads into the problems of research in school violence within Canada.

Critics of Canadian school violence research have pointed out that it is too limited in scope and prevalence to make valid and reliable conclusions (Day et al., 2002). The lack of agreement in the field as to what constitutes valid data leads to some uncertainty in the understanding of Canadian school violence. For example, critics place concern that much of the research tends to focus on teacher and police reports, but ignores a student perspective (Day et al., 2002). Students may be much more aware of violence in schools that is not reported to teachers (Day et al., 2002). It is possible that the greater reliance on teacher reported incidences of school violence minimizes the potentially greater danger experienced by students, and therefore is not an accurate and valid representation (Day et al., 2002). For example, Booren et al. (2006) found significant differences between teachers and students in terms of such factors as the civility of interpersonal relationships amongst students, based on the incidence of disruptive behaviors that includes notions like name-calling, arguments and conflicts (Skiba et al., 2004).

Overall, data suggests that students report a substantially higher level of dangerous or disruptive behavior in schools in comparison to teacher ratings, and that there was a clear difference between the perspectives of teachers versus students on such incidents (Booren et al., 2011; Skiba et al., 2006). Booren et al. (2011) suggested the difference between the two perspectives may be from teachers choosing to turn a “blind eye” to such behaviors, or that students only display such behaviors when the teachers are not looking. Conversely, a

discrepancy may also be indicated by the differences in perceptions versus direct reports of violent behaviors, which leads to the possibility that the students may be talking about such behaviors without having actually been subjected to them (Booren et al., 2011). Therefore, it may also not be valid to fully rely on student based reports of school violence, which leads to question of just how research methods should create an accurate picture of the phenomena. Regardless, it seems important that incidence of school violence not only depend on the perspectives given from teachers but also from students as well, given the likelihood that many behaviors may go unreported or unnoticed. Thus, there are research parameters that will require further refining before a more objective and reliable perspective for school violence can be obtained.

In general, it is difficult to provide a concrete answer to concerns of school violence becoming a widespread epidemic in, there is, nonetheless, a growing need to find solutions (Day et al., 2002). This leads to the next question, as to why school psychologists should consider such an intervention as an area within their purview.

Why should school psychologists consider school violence as within their purview and why have they shown limited influence within this area?

Despite the lack of certainty of Canadian school violence incidence and severity rates, school psychologists can nevertheless play a critical role in a school based level of intervention to buffer at-risk students from committing acts of violence (Day et al., 2002; Sprott, Jenkins & Doob, 2005). In particular, this comes as a necessity given that at the pre-service level, school administrators and

teachers receive inadequate, if any, explicit aptitude-based education for recognizing the large amount of mental health struggles students currently face, such as school violence (Koller & Bertel, 2006). For example, mental health training for teachers can be as little as a basic general psychology course with limited real-world application taught for classroom use (Koller & Bertel, 2006). A healthy mental state is critical for managing school violence, as children and youth must know how to dissipate emotions in a manner that is safe and appropriate for themselves, their peers and their environment. First year and mentor teachers find their own mental health at stake from worries like classroom violence and feel unprepared to identify and manage their own stress and burnout (Koller et al., 2004).

Additional struggles include traditional training programs for school based personnel that tend to ignore or belittle the significance of student mental well-being, emphasize pathology and illness instead of proactive interventions and utilize unclear definitions that appear to not match the preciseness that the mental health profession requires (Koller & Bertel, 2006). It is likely this lack of specific education has lead many school personnel to feel inadequate with their ability to control violence within their grounds. One study supporting this sentiment was noted through the Center for the Advancement of Mental Health Practices in Schools Center (CAMHPSC), a joint collaboration between the Missouri Department of Mental Health and the University of Missouri-Columbia (Koller & Bertel, 2006). Aiming for the specific needs of professionals in the field rather than the demands of an accrediting body, the center's extensive research has

pointed to several knowledge based skill level deficits that school personnel struggle with, including how to prevent violence and bullying in the classroom (Koller & Bertel, 2006). This research has not only pointed to a need for change in pre-service training, but has also lead to the implementation of coursework that specifically focuses on school environmental applications of basic psychological theories and principles targeting the mental health of children and adolescents (Koller & Bertel, 2006). Specific topics taught in the new framework include identifying warning signs of psychosocial maladjustment and mental health problems in students (Koller & Bertel, 2006). Overall, there is a clear indication of limited training and skill for school personnel to tackle such a problem as school violence at the current level of instruction and a need for research such as that done through the CAMHPSC. If there is to be an initiative towards a proactive mental health intervention at the school level to prevent such matters as future violence from at-risk students, then either a shift in pre-service training for school-based personnel or additional focus from school psychologists is needed (Sprott et al. 2005; Koller & Bertel, 2006). Success at the primary goal of student academic performance will require a focus that goes beyond class scores and into the student's mental health needs (Koller & Bertel, 2006).

School psychologists in Canada have shown a limited role in school violence intervention, not just because of the traditionally limited focus on proactive mental health care in schools, but also because of the higher concentration placed on the criminal nature of school violence (Koller& Bertel, 2006; Morrison & Furlong, 1994). Morrison and Furlong (1994) emphasized that

both educators and school psychologists need to view school safety as part of the educational mission, and not something that can simply be passed onto other professionals such as law enforcement. Although school psychologists have had the knowledge and skills to provide a considerable role in leadership for school violence intervention, they have not been doing so (Morrison & Furlong, 1994). This is in spite of the fact that the problem encompasses key areas that appear to be well within the realms of the school psychologist's domain; schooling, learning, developmental, and psychological issues (Morrison & Furlong, 1994).

Another aspect that may limit school psychologists from playing a more active role in school violence intervention is through the focus and content of their pre-service training (Curtis & Batsche, 1991). Curtis and Batsche (1991) state that several factors may influence and limit the nature of school psychology training programs, including the role of school psychologists based on the perspectives of the clinicians, the faculty's perception of what is important in program content, direction and training method, state and federal legislation determination of funding and role definitions and the accreditation and professional associations.

With the school psychology profession searching for different delivery systems, there is a stronger need to understand education through both an educational and psychological perspective (Morrison et al., 1994). Given that school safety affects all parts of the school system through its students, teachers, administrators and support personnel, and that in general, school personnel simply do not feel adequately trained in mental wellbeing, it is ripe for school psychologists to play a key role with interpreting school safety initiatives and

helping to implement interventions (Koller & Bertel, 2006; Morrison et al., 1994). Within the larger context of school safety and nurturing, the phenomenon of school violence encompasses aspects of schooling, learning, developmental, and psychological issues that makes it an issue for which school psychologists can provide highly specialized help (Morrison et al., 1994). Certainly there appears to be plethora of reasons why school psychologists have shown a relatively light influence in school violence intervention, and why they should be doing so. This then leads to the next question; do school psychologists have the training necessary for school violence intervention?

What level of training do school psychologists have in youth gang and school violence training?

Although school psychologists receive training in psychological processes that places them in an advantageous spot to comprehend the multi-factorial nature of maintaining safe schools (such as knowing how risk, resiliency, prevention and intervention work together), it is important to understand just how much specific training they receive in terms of school violence intervention (Morrison, Furlong & Morrison, 1994). School violence intervention programs are not simply added into Canadian schools. One must consider the wide range of vehicles Canadian school violence intervention programs are offered through. Spevak (2006) has identified several common components of intervention vehicles that are used across Canada. This includes a collaboration/whole school approach, curriculum integration, teacher training school leadership, student involvement, cooperative learning, parental involvement and school community partnerships. As seen

before, although research supports the use of program intervention through these vehicles, school personnel may not necessarily have the training to implement such a complex range of programs and it may be best to use school psychologists to implement these approaches. This emphasizes that school psychologists will need training to implement intervention programs through the typical vehicles of education that include discrete coursework, practica and internships. This question must first address how prepared school psychologists are in school violence intervention.

Prior studies have indicated that the school psychologists themselves feel that they are not well prepared for violence intervention occurring on their school sites (Furlong et al., 1994). In fact, on the seven-point rating scale used in Furlong et al.'s (1994) study (with one being totally unprepared and seven being totally prepared for school violence intervention) only one school psychologist gave a rating of seven, with the individual crediting this ability through an excess of twenty years of military service, rather than a school psychology program (Furlong et al., 1994). Furthermore, although nearly 90% of school psychologists surveyed indicated a need for explicit school violence training, just under 15% indicated they had actually received such instruction in their pre-service programs, reflecting more current trends of an underwhelming level of training versus needs of clinicians (Furlong et al., 1994; Larson & Busse, 1998). Furlong, Babinski and Poland (1994) believe that part of the problem includes the lack of an explicit definition of what school violence actually entails, and that it is typically believed to be one involving serious personal assault that is usually

accompanied with a weapon, which has been shown to be quite the opposite in Canadian schools (Taylor-Butts & Bressan, 2008). Larson and Busse (1998), Furlong, Babinski and Poland (1994) state that many pre-service programs simply do not offer clear training in the content and aptitude for school violence intervention, despite many clinicians reporting at least a moderate level of violence in their work sites.

Statement of the problem

With rising concerns over Canadian school violence, there is pressure to determine effective interventions to prevent such phenomena from occurring. One resource that has not been well accessed has been the use of school psychologists. Studies have shown that American school psychology programs have placed emphasis on school violence training that lags behind the need expressed by American school psychologists. There was currently no study which depicted the level of pre-service training that Canadian school psychologists have in school violence intervention, therefore the present study aimed to survey a subsample of psychologists on their school violence pre-service training.

Purpose of the study

The aim of this study was to replicate the study completed by Larson and Busse (1998) but with Canadian data. Therefore, the purpose of this study was to assess the readiness and practice of Canadian specialist-level school psychologists to address pre-service training needs in the area of school violence.

Methods

A listing of school psychologists operating in Alberta was obtained through the Psychologists Association of Alberta (PAA), Canadian Association of

School Psychologists (CASP) and British Columbia Association of School Psychologists (BCASP). A survey based off of Larson and Busse's 1998 study was created and e-mailed to each association's clinician contact LISTSERVs. The resulting data was processed to determine how the level of training in violence compared to other areas of behavioral prevention and intervention. As well, the vehicle of training and the levels of agreement on the comparative desirability of pre-service or in-service education in school violence intervention was be analyzed to determine the nature of instruction school psychologists received and what their current attitudes were towards the need for changes in school violence education. Interpretation of the questionnaires involved the tallying of questionnaire responses and using frequency analysis to determine the response patterns in general over all participants. Finally, the Canadian level and vehicle of training provided in school violence and levels of agreement on comparative desirability on various methods of school violence training was compared with American values obtained in Larson and Busse's (1998) study.

Questions to be answered/objectives to be investigated

Questions were asked in a Likert-scale format that was divided into sections. In the first part of the survey respondents were asked to indicate the level (required, provided as an elective, not provided but important for school psychology and not provided and not important for school psychology) and setting (i.e., course work, practicum, or internship) of pre-service intervention training they were offered for 17 behavior problem-training areas as seen in Appendix A.

In the second part of the survey, respondents were asked to rate on a 4-point scale their level of agreement with several items pertaining to the

comparative desirability of pre-service or in-service education in school violence intervention through discrete training, integration into current curricula and provided through continuing education.

A copy of the survey is located in Appendix A.

Research Design: Variables

Keeping in mind that the independent and dependent variables will vary based on each null hypothesis investigated; the following is a break-down of each statement:

1. There will be no significant difference between the levels of training

Canadian school psychologists have received between school violence and the 16 other behavior problem training areas.

Dependent variable: the level of training received by Canadian school psychologists in the 16 other behavior problem training areas.

Independent variable: the level of training received by Canadian school psychologists in school violence.

2. There will be no significant difference between the vehicle of training

Canadian school psychologists have received between school violence and the 16 other behavior problem training areas

Dependent variable: the vehicle of training Canadian school psychologists receive in the 16 other behavior problem training areas.

Independent variable: the vehicle of training Canadian school psychologists receive in school violence.

- 3. There will be no significant difference between the level of pre-service training that Canadian school psychologists receive in school violence than that obtained by American school psychologists**

Dependent variable: the level of pre-service training that Canadian school psychologists receive in school violence

Independent variable: the level of pre-service training that American school psychologists receive in school violence

- 4. There will be no significant difference in the method of training in school violence intervention Canadian school psychologists receive through course work, practica and internships compared to that found in Larson and Busses's 1998 study.**

Dependent variable: the method of training in school violence through course work, practica and internships that Canadian school psychologists receive.

Independent variable: the method of training in school violence intervention through course work, practica and internships found in Larson and Busses's 1998 study.

- 5. There will be no significant difference between the Canadian and American perceptions on the need for school psychology training programs to provide discrete pre-service training in prevention and intervention procedures in school violence.**

Dependent variable: the American perception on the need for school psychology training programs to provide discrete pre-service training in prevention and intervention procedures in school violence.

Independent variable: the Canadian perception on the need for school psychology training programs to provide discrete pre-service training in prevention and intervention procedures in school violence.

6. There will be no significant difference between the Canadian and American perceptions on the need for school psychology training programs to integrate prevention and intervention curricula into existing pre-service prevention and intervention training in school violence.

Dependent variable: the American perception on the need for school psychology training programs to integrate prevention and intervention curricula into existing pre-service prevention and intervention training in school violence.

Independent variable: the Canadian perception on the need for school psychology training programs to integrate prevention and intervention curricula into existing pre-service prevention and intervention training in school violence.

7. There will be no significant difference between the Canadian and American perceptions on the need for school psychology training programs to provide continuing education training opportunities for practitioners into existing pre-service and intervention training school violence.

Dependent variable: the American perception on the need for school psychology training programs to provide continuing education training

opportunities for practitioners into existing pre-service and intervention training school violence.

Independent variable: the Canadian perception on the need for school psychology training programs to provide continuing education training opportunities for practitioners into existing pre-service and intervention training school violence.

Importance of the study

With an increasing pressure for school psychologists to approach school problems through a more proactive, intervention based delivery system rather than the traditional assessment and service model, their roles are being challenged into moving into a role which follows this new initiative (McIntosh, MacKay, Andreou, Brown, Mathews, Gietz & Bennet, 2011). It is thought that as the educational model moves to the intervention based model from the traditional placement model, not only will school psychologists be pushed into the newer role, but they will also be able to address concerns like school violence and gang intervention as more than a secondary priority in their work's purview because of less time spent on paperwork and referrals (Larson & Busse, 1998; McIntosh et al., 2011). The phenomenon of school violence is a controversial topic that has been brought increasingly more into public scrutiny due to a number of high profile incidents and tailored media reports. Whether a school violence epidemic in Canada is a legitimate concern or one founded through sharpened media stories is still in debate, but it is clear that there are strong concerns over its advent. This study aims to determine the scope of Canadian school psychologists' training in school violence intervention in terms of what degree and where the practitioners

received training in, with hopes of providing assistance in future pre-service training development for clinicians as they face pressure in role expansion.

Chapter Three: Methodology

Training backgrounds of Canadian school psychologists and specific training regarding school violence intervention were explored using a descriptive study based off of a non-experimental design. The primary purpose of this study was to determine how the levels and vehicle of training in Canadian school psychologists compared between school violence intervention and other behavioral problem topics, what their agreement level was on different training vehicles for school violence, and how they compared to American school psychology program perspectives on the level and vehicle of training. This chapter provides an overview of the process of the survey, description of the questionnaire, participants, and finally, the statistical analysis.

Research Methodology

This study's research design was classified as non-experimental research for two reasons (Kerlinger, 1986). First, this systematic empirical inquiry occurred in an environment where the scientists did not have direct control over the independent variables (Kerlinger, 1986). The training the Canadian school psychologists have undergone already occurred and could not be manipulated (Kerlinger, 1986). It would be difficult or impossible to manipulate those variables in a laboratory or real life setting using experiments (Johnson & Christensen, 2008). Secondly, this study did not use direct intervention to make inferences about the relations among the study variables (Kerlinger, 2008). Thus, as Johnson and Christensen described it, studies like this did not manipulate the

independent variables nor have they used random assignments to groups like an experimental design would have.

The type of non-experimental quantitative research this study fell under was described as a descriptive research, through which the research's primary goal was to show a precise account of a phenomenon's standing or characteristics (Johnson & Christensen, 2008). Johnson and Christensen noted that the purpose of this type of research was to show how variables exist in a given situation and in some cases, what relationships exist between them. In this case, this study's goal was to describe the current status of Canadian school psychologists across a variety of characteristics including their training in school violence intervention. The time dimension this study followed has been described by Smith and Glass (1987) as a single group, single observation design, while Johnson and Christensen referred to it as cross sectional research. In both cases, the authors noted that the status of one or more variables was measured at just one single time point, or a relatively brief time period (enough gather data from all participants) in order to collect all the data from research participants (Smith & Glass, 1987; Johnson & Christensen, 2008).

Questionnaire Procedures

For a copy of the letter of introduction, follow up email and questionnaire, please see Appendix B, C, D & E. In the letter of introduction, the problem, study design and purpose was described briefly, and ended with a brief description of the questionnaire and a link to the actual study on SurveyMonkey.com. The questionnaire was divided into four sections. Part one requested demographic information including the number of years practiced, program stream in master

and doctoral degrees and the size of the locale of their practice. Part two asked participants to indicate the level of training participants received across seventeen different problem behavior training topics including school violence intervention. Part three looked at the same seventeen problem behavior topics, but asked participants to indicate the vehicle of training they were taught each topic in. Finally, part four asked participants whether they agreed with the necessity of training in school violence intervention across discrete coursework, integrating it into existing curricula and continuing education.

Participants Selection

Inclusion criteria included currently practicing Canadian school psychologists whose practice falls under the working definition of the National Association of School Psychologists (NASP) definition of a school psychologist: a registered professional with unique expertise in student learning, child development, behavior problems, school curriculum and school culture. Participants who did not meet the NASP definition would have been excluded from the study, however all respondents indicated that they met the criteria to take part. Because this study's recruitment was based off snowball sampling, subject selection was based off an honor system where participants were required to confirm that they were school psychologists based off the NASP definition.

E-mail communication was sent to Dr. Troy Janzen, Dr. Coranne Johnson, Co-Chair-Edmonton of the School Psychology Committee of the Psychologist's Association of Alberta and Dr. Joseph Snyder, President of the Canadian

Association of School Psychologists requesting assistance with distributing this study. In addition, it was recommended that identified school psychologist contacts would forward the e-mail to other colleagues through a snowballing procedure. Thus each research participant who volunteered to be in a research study was asked to identify one or more additional persons who met the characteristics of a school psychologist and may be willing to participate in the research study (Johnson & Christensen, 2008). An e-mail was then drafted up to have a brief summary of the study to be sent that had an attached letter of introduction and link to the survey hosted on Survey Monkey.

On April 4th, Dr. Janzen forwarded out the email to 3 recipients, while Dr. Johnson forwarded it to 7 recipients. Dr. Snyder forwarded out the e-mail to the CASP list serve that included 159 recipients. On May 15th, Dr. Douglas Agar President of BCASP sent out the study to approximately 290 members of BCASP. On May 25th, 2012, a follow up email was sent for one more final request of participants on May 25th, 2012. Due to the nature of the survey and condition of anonymity, a response rate for each of the associations including CASP, BCASP and CPA was not determinable. There was no question on the survey asking for professional psychological membership status. Overall, 459 participants were e-mailed the survey.

The data was recorded directly to the Surveymonkey website as participants submitted their responses. The data collection period ran from April 6th, 2012 to May 31st, 2012. Data was downloaded off the Surveymonkey website once the data collection period was over.

Sample Size Demographics

Although a total number of participants contacted could not be fully determined due to the snowball sampling method used, a response rate to the initial e-mail response showed limited numbers overall. With 459 participants initially contacted to participate in the study, 38 responses were sent back, and 6 had to be removed due to incompleteness, leaving a total of 32 complete surveys.. Although relatively low, the 7% response rate is not uncommon, as typical e-mail based survey response rates 20% or lower are not unusual (Witmer, Colman, & Katzman, 1999). Indeed, some studies have shown that the quality difference between response rates as low as 6% in email have shown no difference in response quality compared to paper mail format responses (Tse, Tse, Yin, Ting, Yi, Yee & Hong, 1995). Although the intent of this study was to control for the number of years practicing, as well as program backgrounds of clinicians in their master's and doctoral studies, the small sample size and high number of calculations lead to this being removed from calculations. However the participant demographics are still worth looking at for future research purposes. A look at the gender distribution of the sample showed that 7 out of the 32 (21.875%) participants were male while 25 out of 32 (78.125%) were female. This suggested that the majority of participants are skewed towards females in terms of gender. Table 4.1 shows the distribution of the years of practicing school psychology by participants. Although this was a small sample size, there was a reasonable distribution of experience among subjects. The mean response to years practicing school psychology was 13.281, indicating most had been working in the field from 10 to 15 years. The only group that was under represented was in the 15 to

20 years of experience which had only 1 individual response. At present, there have been no recent surveys providing census data practicing school psychologists in Canada and therefore, it is difficult to determine how well the current sample represented the existing demographics of school psychologists in Canada. There was a slight bias of younger school psychologists responding to this survey, which may be a function of their facility with using internet based survey tools like Survey Monkey. The limitations of this study which included a small sample size, are discussed in chapter 5 of this thesis.

Table 4.2 depicts the frequency and distributions of participants' Master's degree program streams. There were 32 participants who had their Master's degree, while 12 held doctoral degrees. The majority of participants had a Master's background in Educational/School program streams, while approximately one third had a background in Clinical/Counseling. One participant indicated their Master's degree was in an unspecified psychology stream and did not clarify further what kind of psychology stream it was. Although the sample size was small, there appeared to have been a reasonable distribution of participants between educational/school and clinical/counseling, with the majority of participants having taken their Master's degrees in educational/school psychology.

Table 4.3 shows that educational/school was the most popular program stream in their doctoral degree for participants, while clinical/counseling was second (when it was applicable). There were thirteen participants who indicated this was not applicable and was likely due to them not holding doctoral degrees.

There were seven missing entries. Although the sample population was small, it still indicated that participants holding doctoral degrees tended to have taken it in either educational/school or clinical/counseling streams. There was a higher frequency in educational/school relative to clinical/counseling for individuals with a master's degree.

Data Analysis

The first question examining the difference between the levels of training Canadian school psychologists received in school violence compared to other problem behavior areas was determined through non-parametric testing via Related-Samples Friedman's Two-Way Analysis of Variance by Ranks to compare their distributions. When the level of statistical significance was determined, means were compared to determine the direction of the relationship.

The second question examining the a difference in the vehicle of training received between school violence and the sixteen other problem behavior areas was determined through non-parametric testing via Related-Samples Friedman's Two-Way Analysis of Variance by Ranks to compare their distributions. When a statistical difference was determined, means were compared to determine the direction of the relationship. An analysis was completed for each vehicle of training including discrete coursework, practicum, and internship.

The third question examining the difference between American and Canadian school psychology training levels in school violence was completed using a cross-tabs Pearson-Chi-Square analysis. When the results were found to be significant, a comparison of means was used to determine the direction of the relationship.

The fourth question of examining the difference between American and Canadian school psychology vehicle of training for school violence was done through a cross-tabs Pearson Chi-Square analysis of discrete coursework, practicum and internship. An analysis of the difference between school violence not being provided was not completed because the American values were not available for this question in Larson and Busse's (1998) study. When the results were found to be significant, a comparison of means was used to determine the direction of the relationship.

The fifth question of examining the difference between how Canadian and American perspectives differed in their agreement with training in school violence through discrete training, integrating it into current programs and continuing education was completed with a cross-tabs Pearson Chi-Square analysis. When results were significant, the means were compared to determine the direction of the relationship.

Finally the sixth question examining the current perspectives of Canadian school psychologists on training in school violence through discrete training, integrating it into current programs and continuing education was completed through a descriptive statistics analysis which showed the frequencies of their responses to each vehicle of training.

Although there was the intention of controlling for the participants' characteristics to determine if they had any effect on the results (including their size of practice, years of practice, and program streams in master and doctoral degrees taken), the small sample size coupled with large number of questions

would have resulted in a significant decrease in statistical power due to the increased chance of making a Type 1 error. Therefore the participant characteristics were only described through a frequencies analysis but not controlled for in this study.

Chapter Four: Results

This chapter presents the results of the analysis in six sections. First, it describes the sample population demographics. Second, data that review the results of the analyses for the five main questions of the study is presented. The next two sections compare the level and vehicle of training that Canadian school psychologists receive in school violence intervention versus sixteen other behavioral topics. The next two sections compare American and Canadian values in the level and vehicle of training received for school violence intervention. Finally, the last two sections target the level of agreement that Canadian school psychologists have on training school violence intervention across a range of mediums and whether this is different than American values.

Level of Program Training Provided

Table 4.4 shows the results of the analyses from the hypotheses “There will be no difference in the level of training Canadian school psychologists receive in school violence compared to the 16 other problem behavior topics.” Each behavioral topic was compared to school violence using the Friedman’s Two-Way Analysis of Variance by Ranks using non-parametric testing with a $p < 0.05$. From the decision results, the null hypothesis was rejected for every behavioral topic except for Conduct Problems- Parent Training, Gang Involvement- Primary and Secondary Prevention and Sexual Abuse Prevention/Protective Behaviors. In these cases, the results suggested that there was no difference in the level of training that Canadian school psychologists received in these areas. However, for the remainder of behavioral topics, there

was a significant difference not due to chance, between the level of training subjects received. Based on the mean values of each behavioral topic, the direction of the relationship was determined. The following behavioral topics had lower means than school violence: ADHD-Direct Treatment, ADHD-Consultation, ADHD- Parent Management, Anger Management Training, Conduct Problems- Direct Treatment, Conduct-Problems- Consultation, Depression- Direct Treatment, Depression-Consultation, Divorce/Family Change Treatment, Drug/Alcohol Abuse-Prevention, Drug/Alcohol Abuse – Treatment and Social Skills training. These lower scores indicated that the training Canadian school psychologists received in these areas was closer to being an elective topic in their training, as opposed to one that was not available. Of the thirteen topics that had the null hypothesis rejected, just one had a higher means, indicating that the majority of behavior topics had a significant difference in level of training compared to school violence, and that they were held in a more elective fashion due to their means being closer to an elective rather than required response.

Vehicle of training

Discrete coursework. The results of the analyses of the null hypotheses “there will be no difference in the vehicle of training Canadian school psychologists receive through discrete coursework between school violence and the sixteen other behavioral topics” are shown in Table 4.5. Friedman’s Two-Way Analysis of Variance by Ranks was used for this non-parametric testing with $p < 0.05$. There was a significant difference found in nine cases of behavior topics, suggesting that these topics were offered at a substantially different rate through discrete coursework than school violence for Canadian school

psychologists. Of these, just one topic Gang Involvement- Treatment, had a lower mean than school violence, indicating that for a majority of behavior topics that had a significant difference in being provided for training in discrete coursework, they were offered at a higher level than school violence. Thus school violence intervention was seen as lagging compared to other behavior topics in being provided through discrete coursework.

Practica. Table 4.6 describes the results of the analyses of the null hypothesis “There will be no difference between the amount of training Canadian school psychologists receive through practica between school violence and sixteen other behavioral topics.” The results from Friedman’s Two-Way Analysis of Variance by Ranks for non-parametric samples with $p < 0.05$ demonstrated that twelve out of sixteen behavioral topics were taken through practica at a significantly different level than school violence by Canadian school psychologists. Of these that were rejected, only two topics held a lower means than school violence: Gang Involvement- Prevention and Gang Involvement- Treatment. This means that the majority of behavior topics were being taken through practica training by Canadian school psychologists at a higher rate compared to school violence.

Internship. Table 4.7 shows the results of the analyses of the null hypothesis “There will be no difference between the number of Canadian school psychologists who received training through internships in school violence compared to sixteen other behavioral topics”. Friedman’s Two-Way Analysis of Variance by Ranks test for non-parametric samples with $p < 0.05$ indicated four

topics including ADHD – Direct Treatment, Drug and Alcohol Abuse- Treatment, Gang Involvement- Primary and Secondary Prevention and Gang Involvement- Treatment were taken at a significantly different level than school violence through internships by Canadian school psychologists. Of these topics, the mean was higher than school violence on two of them, while the others were the same means, indicating that while school violence lagged behind two behavior topics, it was also offered at a higher rate than two other topics through internships. Overall, school violence didn't show a significant lag behind other behavior topics in being offered through the medium of internships.

Training Not Provided. Table 4.4 shows the results of the analyses of the null hypothesis “There will be no difference in the number of Canadian school psychologists who have not been provided training in school violence compared to sixteen other behavior topics.” Through the results of the Related-Samples Friedman's Two-Way Analysis of Variance by Ranks and a $p < 0.05$, nine topics including ADHD – Direct Treatment and Consultation, Conduct Problems – Direct Treatment and Consultation, Depression- Direct Treatment and Consultation, Divorce/Family Change Treatment, Gang Involvement – Treatment and Social Skills Training were found to be significantly different than school violence. Of these topics, the School Violence mean was higher than all of them except for Gang involvement- Treatment, meaning that of behavior topics that were significantly different in not being offered in training for Canadian school psychologists, School Violence intervention was offered less than the majority of

them. Thus, school violence lagged behind other behavior topics by simply not being provided as a training subject for Canadian school psychologists.

Comparing American and Canadian data

Level of Training Provided for School Violence. A crosstabs analysis was run to compare the level of training Canadian school psychologists receive in school violence compared to American programs as found by Larson and Busse's 1998 study. The Pearson Chi-Square results with $p < 0.05$ were significant at a value of 0.000 indicating that there was a significant difference in their levels of training and rejecting the null hypothesis "There will be no difference in the level of training Canadian school psychologists receive compared to American school psychology programs." With a mean of 1.8701, American school psychology programs offered a level of school violence training that was closer to provided as an elective, than that obtained by Canadian school psychologists with a mean of 2.7419, which indicated that Canadian school psychologist training had school violence closer towards not being offered in program training. Thus, American school psychology training programs appeared to have emphasized a higher level of training for school violence intervention than Canadian programs.

Vehicle of training provided for school violence.

Discrete coursework. A crosstabs analysis was run to analyze the null hypothesis "There will be no difference in the number of Canadian school psychologists who receive discrete coursework training in school violence compared to what is offered in American school psychology programs." The Pearson Chi-Square results at a $p < 0.05$ were significant at a value of 0.000, indicating that there was a significant difference between the number of Canadian

school psychologists who received discrete coursework training in school violence compared to what American school psychology programs were offering. A look at the means indicated the direction of this relationship, where Americans had a higher means of 0.6707 compared to the Canadian value of 0.1563, indicating that Americans received more discrete coursework training in school psychology than Canadians. Thus school violence intervention training through discrete coursework showed significant lag in Canada compared to America.

Practica. A crosstabs analysis was run to analyze the null hypothesis the null hypothesis “There will be no difference in the number of Canadian school psychologists who receive practica training in school violence compared to what is offered in American school psychology programs.” The Pearson Chi-Square results with a $p < 0.05$ were significant at a value of 0.012, indicating that there was a substantial difference between the number of Canadian school psychologists who received practica training in school violence compared to what American school psychology programs were offering. A look at the means suggested the direction of this relationship, where Americans obtained a higher value of 0.3659 vs. the Canadian value of 0.1250, thus indicating that Americans received more school violence training through practica than Canadians. Therefore school violence training through practica lagged in Canada compared to America.

Internships. A crosstabs was run to analyze the null hypothesis “There will be no difference in the number of Canadian school psychologists who receive internship training in school violence compared to what is offered in American

school psychology programs.” The Pearson Chi-Square results with a $p < 0.05$ were significant at a value of 0.007, indicating that there was a significant difference between the number of Canadian school psychologists receiving internship training in school violence compared to what American school psychology programs are offering. A look at the means provided a direction in this relationship, where Americans received more internship training in school violence than Canadians, with respective means of 0.4268 vs. 0.1563. Thus internship training in school violence was lagging in Canada compared to America.

Perspectives on how school violence intervention training should be provided. A review at the level of agreement on how school violence training should be provided revealed a tendency for most Canadian school psychologists to have agreed with offering discrete training, integrating it into existing curricula and offering continuing training opportunities. The percentage of school psychologists agreeing to having it offered with discrete training was 78.1% , whilst 21.9% agreed with reservations. Next, 81.3% agreed with integrating it into existing training, while 15.6% agreed with reservations and 3.1 percent tended to disagree. Finally, 80.6% agreed with offering it as continuing education, 16.1% agreed with reservations and 3.2% tended to disagree.

A crosstabs analysis was run to analyze the null hypothesis “There will be no difference between the American and Canadian perspectives on agreeing with school violence being provided as a discrete pre-service training in prevention and intervention procedures”. There was a significant difference based on the Pearson

Chi-Square result of 0.000 and a $p < 0.05$. The difference in means suggested a direction in this relationship where Canadians sat at a lower value of 1.22 compared to Americans at 1.99, therefore implying that Canadians tended to agree with having school violence taught as discrete pre-service training more than Americans.

A crosstabs analysis was used to analyze the null hypothesis “There will be no difference in the agreement American and Canadian perspectives have on integrating school violence prevention and intervention curricula into existing pre-service prevention and intervention training.” The Pearson Chi-Square results were not significant at a value of 0.228 and a $p < 0.05$. Therefore, it can be concluded that there was no significant difference in the level of agreement American and Canadian perspectives had on integrating school violence into already existing training.

Finally, a crosstabs analysis was run to analyze the null hypothesis “There will be no difference between American and Canadian perspectives on providing continuing education training opportunities on school violence for practitioners”. The Pearson Chi-Square results were not significant at 0.088 and a $p < 0.05$, indicating that there was no difference between the American and Canadian perspectives on providing school violence intervention training through continuing education.

Chapter Five: Summary and Conclusion

Canadian school psychologists are struggling to meet the mental health needs of Canadian youth (Canadian Psychological Association, 2008). With global concerns over school violence and assault being the most common Canadian school crime, training professionals to be competent in addressing this issue is a primary need (Akiba et al. 2002; Taylor-Butts & Bressan, 2008). Despite there being disagreement about the exact nature of Canadian school violence trends, violence remains a problem that needs to be effectively managed through a comprehensive strategy that includes training of highly qualified specialists. School psychologists appear to be the best educational personnel to work with violence in schools due to their unique training in preventative program training, counseling, and intervention in school systems. Yet there have been no studies that have investigated the current state of Canadian school psychology training programs on school violence intervention. This study aimed to address this limitation in Canadian research by utilizing the study instrumentations that Larson and Busse used in their 1998 study on American school psychology programs.

Specifically, the purpose of this study was designed to target several main topics; 1) How does the level of school violence intervention training Canadian school psychologists receive compare to other behavioral topics? 2) How does the vehicle of training in school violence intervention that Canadian school psychologists receive compare to other behavioral topics? 3) How does the level

of training in school violence intervention that Canadian school psychologists receive compare to American values? 4) How does the vehicle of training that Canadian school psychologists receive in school violence intervention compare to American values? 5) How would Canadian school psychologists like to receive school violence intervention? 6) How does the way Canadian school psychologists would like to receive school violence intervention differ from American values?

The results suggested that the level of training Canadian school psychologists received in school violence was significantly different than what they received in most other behavioral topics. Not only was there a significant difference compared to most topics, there were also lower means across most topics compared to school violence, suggesting that Canadian school psychologists received less required and elective opportunities to train in school violence intervention relative to other topics. The results also suggested that when Canadian school psychologists received training in school violence intervention, it was to a lesser extent across coursework, practica and internships. Additionally, school violence was not provided at a higher rate in training programs than most behavioral topics. A look at the results for discrete training showed that 8 out of 9 topics were offered significantly more than school violence, indicating that in discrete training, school violence intervention lagged behind almost all other behavioral topics. Results from practica training showed that there were twelve behavior topics which were taken more frequently than school violence. Additionally, ten out of twelve of these areas indicated that school violence

intervention training lagged behind most behavioral topics when offered through practica. In terms of internship training, just two behavior topics were taken at a significantly higher rate than school violence intervention, suggesting school violence intervention lagged behind behavior topics at a much lower level when offered in this medium versus coursework and practica. Overall, results from this study conclude that school violence intervention training lagged behind most behavior topics across discrete coursework and practica training, and to a much lesser degree with internship training, and was not provided at a higher degree than at least half of other behavior topics. This indicates that as a whole, school violence as an intervention topic, was considered to be of less importance relative to other behavior topics for school psychology training programs in Canada, both in level and vehicle of training offered.

Results comparing Canadian school psychologists' training with what was offered in American programs identified that there was not only a significant difference between the level of training offered, but that American school psychology programs had a stronger focus on providing school violence intervention as a required or elective topic compared to Canadians programs. The lesser emphasis on school violence intervention as a requirement or even option in school psychology training may be linked to current perspectives among training institutions that Canadian school violence will not reach the level experienced in America, and thus is not a requirement for their training (Day et al., 2002). As well, school violence risk factor differences between America and Canada could play a large role in why such differences exist. These can include the involvement

in gangs, drugs, alcohol or tobacco, academic performance, low commitment to school or school failure, low parental education or income, diminished economic opportunities, and high concentrations of poor residents, of which many of these risk factors are resultant of the large urban centers that are more widespread in America (Center for Disease Control and Prevention, 2010; Resnick, Ireland, Boroksky, 2004; Verlinden, Hersen & Thomas, 2000).

Results demonstrated Americans received more training across all three vehicles of training in school violence intervention. It was apparent that American school psychologists received more training in school violence intervention across discrete coursework, practica and internships, and that their training programs tended to emphasize school violence intervention at a greater degree, by having it as a required or elective course. Again, this may speak to perceptions of Canadian school violence as being less of a problem than what is seen in America, thus resulting in the limited emphasis on level and type of training seen here (Day et al., 2002).

Results from this study demonstrated that Canadian school psychologists expressed considerable agreement regarding the vehicles of school violence intervention training. Approximately eighty percent agreed to either have it provided as discrete training, integrate into current training and providing it through continuing education. This also demonstrated that school psychologists see training in violence as important as compared to how it was provided in their training where most school psychologists reported a lag both in the level and vehicle of training relative to other behavior topics.

There were differences in between American and Canadian perspectives regarding how they viewed where school violence intervention should occur. The results showed that Canadians much preferred discrete training versus integrating training into current coursework or providing additional continuing education. With a mean that was lower than their American counterparts, it could be concluded that Canadians tended to agree more with school violence intervention being taught as a discrete course. There was no significant difference between American and Canadian perspectives on training school violence intervention through integration in current training or through continuing education. This means both Canadians and Americans tended to agree that it was a necessary topic to train across both areas. This contrasted the previous findings of school violence intervention being taught to a lesser degree through level and vehicle of training for Canadians, and suggested that although Canadian school psychologists viewed it as an important topic for training, their programs did not necessarily share the same views. The difference in the discrete training could be resultant of a fear of Canadian school violence reaching American levels, and that the most direct way to learn intervention skills sets was through discrete courses. This view is not necessarily shared by all Canadian perspectives, but could be a reason for the discrepancy seen in this study (Cusson, 1990).

The study's overall results suggested that Canadian school psychologist training in school violence intervention did not match the need in both the required level and vehicles of training provided. School violence intervention lagged considerably behind most other behavioral training topics when

considering whether it was required, and how many clinicians were able to take it when offered through coursework, practica or training. This contrasted to how Canadian school psychologists expressed their level of agreement of whether it should be offered as a training topic across a range of methods, in which the majority agreed across all ways. While the CPA (2008) has expressed the need for a greater focus of resources and attention into utilizing school psychologists as a primary resource for school violence intervention, the results of this study have suggested that a great degree of that investment will be needed to develop their training before they can be best fit for such a role. Furthermore, the study also showed that while American and Canadian perspectives tended to both agree on having school violence intervention trained through a variety of vehicles, the latter tended to lag behind in terms of the level of requirement and opportunities to train through discrete coursework, practica and internship. This means that Canadian school psychology training still has much work to do, in order to focus and eliminate the lag it experienced behind the expressed need for school violence intervention training and what was actually provided and required. There will certainly be a need for school violence intervention to become a required topic in training, and more opportunities to learn about it in discrete coursework, practica and internships for future school psychology education in order to ensure Canadian clinicians are best prepared for such a responsibility.

Limitations

Limitations due to small sample size. A significant limitation of this study was the small sample size. Unfortunately, the response rates were very low in spite of efforts to have school psychologists complete the survey. With the

small sample size of this study came several implications that must be taken into consideration. The first was that there were higher chances of making false positive errors or making an over-estimate of the association's magnitude. Thus it was possible that in a larger sample size of Canadian school psychologists there would be no significant differences in magnitude reported. Second, statistical analyses hold limitations across a range of factors. It is often necessary to account for the effect of critical prognostic factors when looking at risk factors or other relationships. Typically this would be completed through methods like multivariate linear or logistic regression. In this study, participant characteristics such as gender, number of years practicing school psychology and size of the locale of practice were supposed to have been used to determine their effect on dependent variables. However, with such a small sample size, there was a large risk of failing to make sensible results or making unreliable results (Hackshaw, 2008).

Calculating multiple statistical analyses for this study by controlling for the demographics would have increased the number of calculations to a point where the higher number of tests would have resulted in more significant values found, and hence more Type 1 errors (Peres-Neto, 1999). Combined with the low sample size, the statistical power would be greatly reduced to a point where it would have been too risky to make any reasonable conclusions with such a risk for Type 1 errors. Had a larger sample size been collected, a multiple regression analyses could have been conducted to measure the relative impact of demographic variables (such as level of graduate training, years practicing in

school psychology, and size of the location of practice) on response outcomes. This information would have been valuable and important. For instance, registration into the profession of psychology does not require an individual's program stream to actually be in school psychology. In this study's sample, approximately 31% of respondents came from a program outside school or educational psychology even though they were currently practicing in a school setting. These respondents were less likely to have received training in issues pertinent to school psychologists. However, the impact of a subject's training program could not be statistically analyzed even though this information might have played a significant role in response outcomes. In addition, it would have also been interesting to note whether the size of practice affected their training, as other researchers have considered in their studies, including Larson and Busse's 1998 study.

Finally, although many of the calculations have shown a lack of statistical significance, it must be emphasized that the lack of statistical significance did not mean there was no effect (Hackshaw, 2008). It may be the case that there was a suggestion of an effect, or that there was some evidence of an effect but results had just missed statistical significance (Hackshaw, 2008). Thus there needs to be careful balance between not dismissing outright what could be a real effect and also not making undue claims about the effect (Hackshaw, 2008). Thus the differences found in this study need to be taken with careful consideration, as the relationships such as the non-significant differences found within internship

training between school violence and other behavioral topics may not be as many as the analysis has shown.

Despite the relatively low response rate of 7%, it is not uncommon to see rates below 20% on e-mail based surveys (Witmer et al, 1999). In terms of the quality of the responses, some survey research have found no difference in the quality of e-mail versus paper mail research in responses as low as 6%, suggesting that the quality of responses of this study could be no better if the response rate was higher (Tse et al, 1995). More importantly were the issues regarding the non-response bias that comes with low response rates, that could result in misinformed conclusions (Shih & Fan, 2008). Thus this paper's conclusions need to be taken with careful consideration because a larger response rate may show less bias towards responding participants that may not reflect the decisions non-responders would make (Shih & Fan, 2008). Therefore it is important that future research focuses on increasing the response rate on the surveys. Although electronic surveying through e-mail recruitment and online hosted surveys were used in this study to take advantage of the faster response speed and lower non-response rates over mail surveys, future research should incorporate the latter format to increase the response rates in lieu of this study's 7% response rate (Kwak & Radler, 2002). Not only have response rates been shown to be higher on initial mailings, but follow up response rates are also higher when comparing mail based versus electronic surveying methods (Kwak & Radler, 2002). Sax, Gilmartin and Bryant (2003) found that response rates were highest when recipients received a paper survey with an option to complete the survey online. Thus, in order to capture a

greater sample of the population, future research should involve a paper based design first, with an optional web based format also provided in order to take advantage of both formats.

Limitations due to time elapsed from graduation. The next limitation was related to the time elapsed from the clinician's graduation from their programs and the validity of their responses. Due to the wide range of times that survey participants indicated they had been practicing school psychology, it was assumed that there was a considerable range of time elapsed from graduating from their training programs to the time they completed the survey. The memories of respondents and the accuracy of their responses could be affected by this variable. In addition to controlling for the number of years the participants have been practicing school psychology, there was the question of the optimal time to survey graduates in order to obtain feedback about an educational program. This issue was investigated by Crook, Woodward and Feldman (1982). Their study focused on the use of follow up surveys as tools to provide decision makers with information about the effect of the educational program in terms of the quality of its graduates and to provide information about program components and processes as assessed by the graduates (Crook, Woodward & Feldman, 1982). The findings of the studies indicated that the quality, type, and cost of information varied depending on the elapsed time from graduation (Crook et al, 1982). As an overall statement, the study concluded there was no appreciable benefit to be had by waiting some time post-graduation to survey program feedback for greater ease of access and that responses were quite stable at various points afterwards (Crook et

al, 1982). Thus, this indicated that there should be no concerns about whether this study on school psychology training was limited in validity because of time elapsed from graduation. This also means that future studies could be done immediately near the point of graduation to monitor the nature of program training to gain the advantages of ease of access to students (Crook et al, 1982).

For this study, it was possible that those who have been practicing school psychology for a long duration of time may not have provided the most accurate description of their programs completed. However, the fact those respondents from this survey had acquired considerable experience likely helped provide a more experienced viewpoint of training needs, as these individuals had been exposed to other educational programs and real world work experiences (Crook et al, 1982). Thus they may have been better at deciding whether their programs were useful or relevant (Crook et al, 1982). Based on their 1982 study, Crook, Woodward and Feldman looked at how student (graduate) feedback about a program varies as a function of time from graduation, and found that regardless of time elapsed from program graduation, different classes of nursing students identified the same strengths and weaknesses as did medical students two and even five years later. Similarly, Marsh and Overall (1979) found that even after several years of program completion, university students were consistent in their evaluation of courses and. Overall, Crook et al. concluded that with responses received at various times beyond graduation being quite stable, there was no significant benefit from conducting program immediately after program completion. Thus for this study, it could be concluded that the length of time

elapsed from graduation would not necessarily indicate a serious limitation in their responses.

Limitations due to research design. Johnson and Christensen (2008) described several weaknesses with cross-sectional research designs that applied to this study. First, it would be difficult to establish any sort of causality, as time order could not be made with absolute certainty (Johnson & Christensen, 2008). This means that there would be limited application in exploring the effect of the time of practicing school psychology on this study's outcomes. Since this study collected data from research participants at a single time point only, it could not directly measure changes that are occurring to them over time (Johnson & Christensen, 2008). Actually observing the clinicians over time would provide a much stronger basis for time order and could not be replaced by the weaker time order that could be partially established in cross-sectional research through theory, past research findings, and an understanding of the independent variable (Johnson & Christensen, 2008). It would be difficult to follow clinicians for such duration, and establishing a time order partially would still have problems of validity and reliability. Essential to note in cross-sectional studies like this one, was that people at different ages were not the same people overall, and thus the age of practice didn't represent the perceptions of school psychologists changing over time (Johnson & Christensen, 2008). Thus, it would be difficult to determine how the perception of the necessity of training in the seventeen behavioral training areas was affected by the number of years practicing school psychology had it been controlled for. As well, critical extraneous variables may have varied

between older vs. younger clinicians, such as the education they received and again limited any explorations of age of clinicians and the effect on the study's outcomes (Johnson & Christensen, 2008). Although this study's intentions were to control for education, there would have been many other variables that could account for differences other than time order, and it would have been very difficult to eliminate these as extraneous variables.

Overall, the limitations of this study must be taken into account when understanding and applying the results. It could be seen that one of the main limiting factors of this study was the small sample size, which resulted in limited power and limited ability to control for participant demographics. Thus in order to provide more power to the study and limit the chances of Type 1 errors, as well as explore how participant demographics may have affected the results, a smaller number of questions would have to be explored and a greater participant pool would be needed.

Conclusions

This study showed a significant discrepancy between how Canadian school psychologists see the level and vehicle of training in school violence they should receive and what they have been offered and taken in their background education. Additionally, it was identified that there were differences with their American counterparts, with Canadians either being provided lesser levels of training and opportunities to train across discrete coursework, practica and internships, but also wanting to receive training at a similar or greater degree across those three training platforms. Overall results were similar to what Larson and Busse (1998) found in their American study, in that school violence lagged at

a great degree behind other behavior topics in school psychologist's training programs.

In terms of application, the results of this study suggested that for Canadian school psychologists to be better enabled for intervening in school violence, the current state of their training programs must change. There was a clear discrepancy between what they feel was necessary for training needs and what was actually provided for them, level and vehicle wise.

In conclusion, although the smaller sample of this study limited its power, it tentatively showed that Canadian school psychologists have limited readiness based off their background training to address the area of school violence and reflects similar trends that were found in Larson and Busse's (1998) study. If they are the ideal profession to tackle such a problem, they need to have a higher level of training and more opportunities to train in their intervention skills. If program training is not changed from its current state, Canadian school psychologists will continue to hold limited training opportunities to solve the problem of school violence.

References

- Akiba, M., LeTendre, G. K., Baker, D. P., & Goesling, B. (2002). Student Victimization: National and School System Effects on School Violence in 37 Nations. *American Educational Research Journal*, 39, 829-853.
- Booren, L. M., Handy, D. J., & Power, T. G. (2011). Examining perceptions of school safety strategies, school climate and violence. *Youth violence and juvenile justice*, 9, 171-187.
- Bibby, R.W. & Poterski, D.C. (1992). *Teen Trends: A Nation in Motion*. Toronto: Stoddart.
- Bressan, A., & Taylor-Butts, A. (2008). Youth crime in Canada, 2006. *Juristat*, 28, 1-16.
- Carter, S. P., & Stewin, L. L. (1999). School violence in the Canadian context: an overview and model for intervention. *International Journal for Advancement of Counseling*, 21, 267-277.
- Canadian Psychological Association. (2008, October 03). *Combating youth crime in Canada: prevention in schools*. Retrieved January 10, 2012, from <http://www.cpa.ca/cpasite/userfiles/Documents/Press%20Releases/NewsReleaseOct.3.pdf>
- Centers for Disease Control. (2010). *Understanding school violence*. Retrieved January 02, 2012, from http://www.cdc.gov/violenceprevention/pdf/schoolviolence_factsheet-a.pdf
- Cohn, A. & Canter, A. (2003, October 07). *Bullying: facts for schools and*

- parents*. Retrieved January 06, 2012, from http://www.nasponline.org/resources/factsheets/bullying_fs.aspx
- Curtis, M., & Batsche, G. (1991). Meeting the needs of children and families: Opportunities and challenges for school psychology training programs. *School Psychology Review, 20*, 565–576.
- Cusson, M. (1990). La violence à l'école: Le problème et les solutions. *Apprentissage et Socialisation, 13*, 213-221.
- Crook, J., Woodward, C., & Feldman, E. (1982). A question of timing: when is the best time to survey graduates to obtain feedback about an educational program? *Assessment and Evaluation in Higher Education, 7*, 152-158.
- Day, D. M., Golench, C. A., MacDougal, J., & Beals-Gonzalez, C. A. (2002). School-based violence prevention in Canada: Results of a national survey of policies and programs, 1995-02. Ottawa, ON: Ministry of the Solicitor General of Canada.
- Goldstein, A. P. (1994). Aggression towards persons and property in America's schools. *The School Psychologist, 48*, 6–18.
- Fitzgerald, R. (2009). Self-reported Violent Delinquency and the Influence of School, Neighbourhood and Student Characteristics. *Crime and Justice Research Paper Series, 17*, 1-20.
- Furlong, M., & Morrison, Gale. (2000). The school in school violence: definitions and facts. *Journal of Emotional and behavioral disorders, 8*, 71-82.
- Furlong, M. J., Babinski, L., & Poland, S. (1994). School psychologists respond to

school violence: Results of a national survey. Paper presented at the Annual Meeting of the National Association of School Psychologists, Seattle, WA.

Hackshaw, A. (2008). Small studies: strengths and limitations. *European Respiratory Journal*, 32, 1141-1143.

Hughes, J. N., & Hasbrouck, J. E. (1996). Television violence; Implications for violence prevention. *School Psychology Review*, 25, 134–151.

Koller, J., Osterlind, S., Paris, K., & Weston, K. (2004). Differences between novice and expert teachers' undergraduate preparation and ratings of importance in the area of children's mental health. *International Journal of Mental Health Promotion*, 6(2), 40-46.

Koller, J. R., & Bertel, J. M. (2006). Responding to today's mental health needs of children, families and schools: revisiting the pre-service training and preparation of school-based personnel. *Education and treatment of children*, 29, 197-217.

Kupchik, A., & Bracy, N. L. (2009). The news media on school crime and violence : constructing dangerousness and fueling fear. *Youth Violence and Juvenile Justice*, 7, 136-156.

Kwak, N. & Radler, B. (2002). A comparison between mail and web surveys: response pattern, respondent profile, and data quality. *Journal of Official Statistics*, 18, 257-273.

Larson, J., & Busse, R. T. (1998). Specialist-level preparation in school violence and youth gang intervention. *Psychology in the Schools*, 35, 373-379.

- Lochman, J. E., Lampron, L. B., Gemmer, T. C., & Harris, S. R. (1987). Anger-coping intervention with aggressive children: A guide to implementation in school settings. In P. A.
- Keller & S. A. Heyman (Eds.), *Innovations in clinical practice: A source book* (Vol. 6, pp. 339–356). Sarasota, FL: Professional Resources Exchange.
- Marsh, H.W., & Overall, J.U. (1979), Long-term stability of student's evaluations: a note on Feldman's 'Consistncy & Variability Among College Students in Rating their Teachers and Courses'. *Research in High Education* , 10, 129-147.
- Mayer, M. L., & Leone, P. E. (1999). A structural analysis of school violence and disruption: implications for creating safer schools. *Education and Treatment of Children*, 22, 333-356.
- McIntosh, K., MacKay, L. D., Andreou, T., Brown, J. A., Mathews, S., Gietz, C., & Bennet, J. L. (2011). Response to Intervention in Canada: Definitions, the Evidence Base, and Future Directions. *Canadian Journal of School Psychology*, 26, 18-43.
- Morrison, G. M., Furlong, M. J., & Morrison, R. L. (1994). School violence to school safety: Reframing the issue for school psychologists. *School Psychology Review*, 23, 236–256.
- Parhsall, C.G., & Kromrey, J.D. (1996). Tests of independence in contingency tables with small samples: a comparison of statistical power. *Educational and Psychological Measurement*, 56, 26-44.

- Pedhazur, E.J., & Schmelkin, L.P. (1991). *Measurement, design and analysis: An integrated Approach*. Hillsdale, NJ: Lawrence Erlbaum.
- Rosenblatt, J. A., & Furlong, M. J. (1997). Assessing the reliability and validity of student self-reports of campus violence. *Journal of Youth and Adolescence*, 26 (2), 187-202.
- Resnick, M. D., Ireland, M., & Borowsky, I. (2004). Youth violence perpetration: what protects? What predicts? Findings from the National Longitudinal Study of Adolescent Health. *Journal of Adolescent Health*, 35, 424.e421-424.e410.
- Sax, L.J., Gilmartin, S.K., & Bryant, A.N. (2003). Assessing response rates and nonresponse bias in web and paper surveys. *Research in Higher Education*, 44, 409-432.
- Saklofske, D.H., Schwean, V.L., Bartell, R. et al. (2007). *School Psychology in Canada: Past, present, and future perspectives*. In T. Fagan & P. Wise (eds.). *School Psychology: Past, present, and future perspectives*. Bethesda, MD: National Association of School Psychologists.
- Shih, T.H. & Fan, X. (2008). Comparing response rates from web and mail surveys: a meta-analysis. *Field Methods*, 20, 249-271.
- Shooting violence in Canadian schools 1975-2007. (2007, May 23). *The Star*. Retrieved from www.thestar
- Smith, M.L., & Glass, G.V. (1987). *Research and evaluation in education and the social sciences*. Englewood Cliffs, NJ: Prentice Hall.

- Spevak, A. (2006). *Bullying and violence prevention in schools: a focus on personal and social development*. The Society for Safe and Caring Schools and Communities.
- Sprott, J. B., Jenkins, J. M., & Doob, A. N. (2005). The importance of school: protecting at-risk youth from early offending. *Youth Violence and Juvenile Justice*, 3, 59-77.
- Verlinden, S., Hersen, M., & Thomas, J. (2000a). Risk factors in school shootings. *Clinical Psychology Review*, 20, 3-56.
- West, W. G. (1993). Escalating problem or moral panic?: A critical perspective. *Orbit*, 24 (1), 6-7.
- Witmer, D. F., Colman, R. W., & Katzman, S. L. (1999). From paper-and-pencil to screen-and-keyboard. In S. Jones (Ed.), *Doing internet research: Critical issues and methods for examining the net* (pp. 145-162). Thousand Oaks, CA: Sage.

Table 4.1

Frequency and Percentage of Canadian School Psychologists' Years of Practicing School

Psychology

Years Practicing School Psychology	Frequency (n)	Percent
less than 5 years	7	21.9
5 to 10 years	8	25.0
10-15 years	5	15.6
15 to 20 years	1	3.1
20 to 25 years	4	12.5
25 to 30 years	6	18.8
30-35 years	1	3.1
Total	32	100.0

Table 4.2

*Frequency and Percentage of Program Stream of Participant's Master's Degree
(if applicable)*

Master's Degree Program Stream	Frequency	Percentage
Educational/ School	22	68.8
Clinical/Counseling	9	28.1
Unspecified Psychology	1	3.1
Total	32	100.0

Table 4.3

Frequency and Percentage of Program Stream of Participant's Doctoral Degree

(if applicable)

Doctoral Degree Program Stream	Frequency (n)	Percent
Educational/School	7	21.9
Clinical/Counseling	5	15.6
Not applicable	13	40.6
Total	25	78.1
Missing	7	21.9
Total	32	100.0

Table 4.4

Analysis results on the comparability of Canadian school psychologist training in school violence versus other behavior topics

Behavior Topic	Significant Number	Median	Mean
ADHD Direct Treatment	0.000	2	2.09
ADHD Consultation	0.000	2	2.03
ADHD Parent Management Training	0.004	2.5	2.25
Anger Management Training	0.007	3	2.41
Conduct Problems- Direct Training	0.000	2	2.03
Conduct Problems- Consult	0.000	2	1.91
Conduct Problems- Parent Training	0.052	3	2.38
Depression-Direct Treatment	0.000	2	1.75
Depression- Consultation	0.000	2	1.81
Divorce Family Change	0.000	2	2.13
Drug/Alcohol Abuse- Prevention	0.018	3	2.34
Drug/Alcohol Abuse-	0.018	3	2.41

Treatment			
Gang Involvement- Prevention	0.132	3	2.97
Gang Involvement- Treatment	0.013	3	3.16
Sexual Abuse Prevention/Protective Behaviors	0.197	3	2.56
Social Skills Training	0.000	2	2.00

Note: The Median for School Violence is 3.00 and the mean is 2.74

Table 4.5

Analysis results of the comparability of school violence versus other behavioral topics being offered through discrete coursework for Canadian school psychologists

Behavior Topic	Significant Number	Median	Mean
ADHD Direct Treatment	0.003	0.00	0.44
ADHD Consultation	0.003	0.00	0.44
ADHD Parent Management Training	0.157	0.00	0.28
Anger Management Training	0.317	0.00	0.22
Conduct Problems- Direct Training	0.004	0.00	0.47
Conduct Problems- Consult	0.021	0.00	0.41
Conduct Problems- Parent Training	0.257	0.00	0.25
Depression-Direct Treatment	0.007	0.00	0.44
Depression- Consultation	0.001	1.00	0.53
Divorce Family Change	0.034	0.00	0.34
Drug/Alcohol Abuse- Prevention	0.739	0.00	0.19

Drug/Alcohol Abuse-Treatment	0.480	0.00	0.09
Gang Involvement-Prevention	0.102	0.00	003
Gang Involvement-Treatment	0.025	0.00	0.00
Sexual Abuse Prevention/Protective Behaviors	0.366	0.00	0.25
Social Skills Training	0.002	0.00	0.47

Note: The median for school violence is 0.00 and the mean is 0.16.

Table 4.6

Analysis results of the comparability of school violence versus other behavioral topics being offered through practica for Canadian school psychologists

Behavior Topic	Significant Number	Median	Mean
ADHD Direct Treatment	0.000	1.00	0.53
ADHD Consultation	0.002	0.00	0.44
ADHD Parent Management Training	0.059	0.00	0.28
Anger Management Training	0.014	0.00	0.31
Conduct Problems- Direct Training	0.000	1.00	0.53
Conduct Problems- Consult	.001	0.00	0.47
Conduct Problems- Parent Training	0.008	0.00	0.34
Depression-Direct Treatment	0.002	0.00	0.44
Depression- Consultation	0.008	0.00	0.34
Divorce Family Change	0.025	0.00	0.28
Drug/Alcohol Abuse- Prevention	0.705	0.00	0.16

Drug/Alcohol Abuse-Treatment	1.000	0.00	0.13
Gang Involvement-Prevention	0.046	0.00	0.00
Gang Involvement-Treatment	0.046	0.00	0.00
Sexual Abuse Prevention/Protective Behaviors	0.257	0.00	0.22
Social Skills Training	0.001	0.50	0.5

Note: The median for school violence is 0.00 and the median is 0.13

Table 4.7

Analysis results of the comparability of school violence versus other behavioral topics being offered through internships for Canadian school psychologists

Behavior Topic	Significant Number	Median	Mean
ADHD Direct Treatment	0.025	0.00	0.31
ADHD Consultation	0.180	0.00	0.25
ADHD Parent Management Training	0.317	0.00	0.22
Anger Management Training	1.000	0.00	0.16
Conduct Problems- Direct Training	0.317	0.00	0.22
Conduct Problems- Consult	0.317	0.00	0.22
Conduct Problems- Parent Training	0.655	0.00	0.19
Depression-Direct Treatment	0.102	0.00	0.28
Depression- Consultation	0.180	0.00	0.25
Divorce Family Change	1.000	0.00	0.16
Drug/Alcohol Abuse- Prevention	0.083	0.00	0.06

Drug/Alcohol Abuse-Treatment	0.025	0.00	0.00
Gang Involvement-Prevention	0.046	0.00	0.03
Gang Involvement-Treatment	0.025	0.00	0.00
Sexual Abuse Prevention/Protective Behaviors	0.157	0.00	0.09
Social Skills Training	0.317	0.00	0.19

Note: The median for school violence is 0.00 and the mean is 0.16

Table 4.8

Analysis results of the comparability of school violence versus other behavioral topics not being provided in training for Canadian school psychologists

Behavior Topic	Significant Number	Median	Mean
ADHD Direct Treatment	0.000	0.00	0.25
ADHD Consultation	0.000	0.00	0.28
ADHD Parent Management Training	0.052	0.50	0.50
Anger Management Training	0.132	1.00	0.56
Conduct Problems- Direct Training	0.001	0.00	0.25
Conduct Problems- Consult	0.000	0.00	0.22
Conduct Problems- Parent Training	0.109	1.00	0.53
Depression-Direct Treatment	0.000	0.00	0.22
Depression- Consultation	0.000	0.00	0.16
Divorce Family Change	0.046	0.00	0.47
Drug/Alcohol Abuse- Prevention	0.285	1.00	0.59

Drug/Alcohol Abuse-Treatment	0.796	1.00	0.75
Gang Involvement-Prevention	0.058	1.00	0.91
Gang Involvement-Treatment	0.003	1.00	1.00
Sexual Abuse Prevention/Protective Behaviors	0.090	0.50	0.50
Social Skills Training	0.000	0.00	0.28

Note: The median for school violence is 1.00 and the mean is 0.72

Appendix A

The proposed survey to be sent out to clinicians would take the following format:

Part 1 of the survey:

Behavior Problem-Training Area	Level of Training	Setting of Training
1. ADHD—Direct Treatment		
2. ADHD— Consultation		
3. ADHD—Parent Management Training		
4. Anger Management Training		
5. Conduct Problems—Direct Treatment		
6. Conduct Problems—Consultation		
7. Conduct Problems—Parent Training		
8. Depression—Direct Treatment		
9. Depression— Consultation		
10. Divorce/Family Change Treatment		
11. Drug and Alcohol Abuse—Prevention		
12. Drug and Alcohol Abuse—Treatment		
13. Gang Involvement—Primary and Secondary Prevention		
14. Gang Involvement— Treatment		
15. Sexual Abuse Prevention/Protective Behaviors		
16. Social Skills Training		
17. Violence Prevention/Safe Schools		
	¹ Please itemize the problem-training areas on a 4-point scale with the following criteria: 4 - Required for all students in program completed as integrated or discrete	² Please indicate whether training was provided in any or all of the following: 1. Discrete course work or integrated classroom instruction, and

Part 2 of the survey:

Questions Regarding Training Endorsement in School Violence Training

Target areas in pre-service or in-service education in school violence intervention	Level of agreement ³
1. Provide discrete pre-service training in prevention and intervention procedures in school violence	
2. Integrate prevention and intervention curricula into existing pre-service prevention and intervention training in school violence	
3. Provide continuing education training opportunities for practitioners into existing pre-service and intervention	

training school violence	
	<p>³ Please indicate your level of agreement on a four point scale with the following criteria:</p> <p>1- Agree</p> <p>2- Agree with reservations</p> <p>3- Tend to disagree</p> <p>4- Disagree</p>

Appendix B

The following e-mail was used for recruiting participants:

**Study Title: Level and Scope of Pre-service School Violence Intervention
Training in Canadian School Psychologists**

Hello!

You have been specifically invited to participate in a research project with the University of Alberta because of your position as a school psychologist as defined by the National Association of School Psychologists working definition of a registered professional with unique expertise in mental health and educational interventions, child development, learning, behavior, motivation, curriculum and instruction, assessment, consultation, collaboration, school law, and systems.

The purpose of this research is to determine the level and scope of pre-service school violence intervention and perspectives on the matter amongst Canadian school psychologists. Specifically it aims to look at the level and nature of school violence intervention training in clinician's pre-service education relative to other behavior problem training areas, and what are current clinician perspectives on school violence intervention training. The overall aim for this research is to help guide school psychology training programs so that clinicians can hold better clinical outcomes with their clients, and have better job security in the future workforce.

Please read first the letter of introduction to this study attached to this e-mail, and find the link to the survey hosted at the following URL: <http://www.surveymonkey.com/s/3SGZZ36>

Your participation is invaluable for this research and greatly appreciated. Furthermore, if there is anybody whom you feel qualifies as a participant in this study, please forward this e-mail to them.

Having more participants in this study is always welcomed and needed.

Thank you.

Appendix C

The following letter of introduction and consent form was attached to the recruitment e-mail:

INFORMATION LETTER and CONSENT FORM

Study Title: Level and Scope of Pre-service School Violence Intervention Training in Canadian School Psychologists

Research Investigator:

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Hello!

You have been invited to participate in a research project with the University of Alberta because of your position as a school psychologist as defined by the National Association of School Psychologists' working definition of a registered professional with unique expertise in mental health and educational interventions, child development, learning, behavior, motivation, curriculum and instruction, assessment, consultation, collaboration, school law, and systems. Please note that participation in this study is based off an honor system, in that in order to

participate in the survey, you must be a practitioner whose role falls under the NASP definition that has been provided above. The results of this study will be use in support of my Master's thesis.

Purpose

The purpose of this research is to determine the level and scope of pre-service school violence intervention and perspectives on the matter amongst Canadian school psychologists. Specifically it aims to look at the level and nature of school violence intervention training in clinician's pre-service education relative to other behavior problem training areas, and what are current clinician perspectives on school violence intervention training.

Research has shown that there are rising global concerns over school violence, particularly due to a string of high profile school shootings in the past decade. Although school violence levels have dropped since the early nineties peak, levels have stabilized at a number that still requires effective intervention. It has been suggested that school psychologists are the best prepared personnel to tackle school violence because they are the only school staff that have received training in all three areas of counseling, intervention, and preventative program planning. With recent calls from the Canadian Psychological Association to the federal government requesting stronger focus and funding towards psychologists to combat youth crime by starting in the school systems, there is a clear demand for the profession to step into this intervention role. With globally rising concerns over the advent of school violence becoming more prevalent, violent, and

involving younger ages and gangs it is important that a greater understanding of how school psychologists have been trained in school violence intervention, so that training programs can be molded to fit any gaps in knowledge best. While studies have been conducted on American school psychology pre-service training programs, there has been limited work done with Canadian practitioners.

Please note the following clarification for this study: As the use of the term school violence involves a wide range of definitions and shows little signs of agreement from an empirical scientific perspective, one definition will be used for the practicality of this study. For the purpose of this study, the term school violence is defined through Furlong and Morrison's parameters as anything that "involves involving criminal actions and aggression in schools, which inhibit development and learning, as well as harm the school's climate. Furthermore, although bullying is often classified as a form of violence, this study will not include it. According to a statement from the National Association of School Psychologists, although bullying can lead to violence, it typically is not categorized with more serious forms of school violence involving weapons, vandalism, or physical harm.

Study Procedures

The study requires you to participate in filling out a set of questionnaires located online at Survey Monkey. The whole set of questionnaires will take approximately 15 to 30 minutes of your time. This study will be completed by the fall of 2012. Please note that for the study's timeline, the survey must be

completed by May 31st, 2012. Data to be collected include the surveys that will take from 15 to 30 minutes to complete. Please note that a preview of the survey questions in a condensed format is attached at the bottom of this letter for your convenience, but completing the survey will be done online at the following URL <http://www.surveymonkey.com/s/3SGZZ36>

Benefits

There are no direct benefits from participating in this study. In terms of reasonable benefits to society for completing this study, I hope the information I obtain will create a stronger foundation and understanding of Canadian school psychology pre-service training in school violence intervention. Thus general benefits to clinicians include guidance in developing better clinical outcomes and role security in the school environment, and safer and more effective schools as a whole. There are no costs or compensation involved for you by participating in this research, aside from my utmost appreciation for your time and effort.

Risks

There are no known or expected risks or consequences to participation or nonparticipation in this research. There may be risks to being in this study that are not known. If I learn anything during the research that may affect your willingness to continue being in the study, I will tell you right away.

Voluntary Participation

Please be assured that there is no obligation to participate and participation is completely voluntary. Furthermore, you are not obliged to answer any specific

questions even if participating in the study. You may opt out without penalty and can ask to have any collected data withdrawn from the database and not included in the study up to a month after data collection is complete. If you wish at any point to withdraw from the study, data relating to you will be withdrawn. Participants' identifying information will be removed during database creation phase and they will be given a pseudonym. Subsequently, all their data will be coded using that pseudonym. However, to facilitate data withdrawal from the study, a master pseudonym list will be kept in a locked cabinet separate from the data, and I will use that list to identify and withdraw the targeted data.

Confidentiality & Anonymity

This research study's intended use, include the thesis component of my program, and participants will not be personally identified in this. Data is kept confidential, and only the research team will have access to this data. Anonymity is guaranteed, and participants will not be identified in the dissemination of the research. Data will be kept in a secure place for a minimum of 5 years following completion of research project. It will be stored on a password encrypted computer and when appropriate, destroyed in a way that ensures privacy and confidentiality. If requested, participants will receive a copy of a report of the research findings by e-mailing the team at ellisc@ualberta.ca. There is a possibility that I may use the data from this study, in future unspecified research projects, but if I do this it will have to be approved by a Research Ethics Board.

Finally, to ensure further anonymity, the survey will be completed online through Survey Monkey, with the link to follow at the end of this letter. For your convenience, a copy of the survey can be found attached to the end this letter so that you see what it is like. As noted, to complete the survey, please go to the Survey Monkey website and fill out the questionnaire.

Further Information

If you would like to participate in this study, please complete the questionnaires and e-mail them back to me at ellisc@ualberta.ca. Furthermore, if you have any questions regarding the study, please do not hesitate to e-mail me as well. Finally please note as stated before, that this study's timeframe will require the surveys to be completed by May 31st, 2012.

A Research Ethics Board at the University of Alberta has reviewed the plan for this study for its adherence to ethical guidelines. For questions regarding participant rights and ethical conduct of research, contact the Research Ethics Office at (780) 492-2615.

Thank you for taking the time to consider this opportunity and I hope to hear from you – even if just with questions regarding the study. Your participation and interest is invaluable for my research and I greatly appreciate it.

Sincerely,

Ellis Chan, B.Sc. B.Ed. M.Ed. Candidate

Department of Educational Psychology

Faculty of Education

University of Alberta

Appendix D

To complete this survey please go to the Survey Monkey website in the following web link. The following pages are for your convenience to see what this survey will be asking.

Survey Monkey link:

<http://www.surveymonkey.com/s/3SGZZ36>

PART 1 - Demographics

I am currently practicing under the National Association of School Psychologists working definition of a registered professional with unique expertise in mental health and educational interventions, child development, learning, behavior, motivation, curriculum and instruction, assessment, consultation, collaboration, school law, and systems.

1. Yes
2. No

What is the approximate size of the locale where you practice?

1. >50,000 people
2. 25,000 to 50,000
3. 10,000 to 25,000
4. 5,000 to 10,000
5. less than 5,000

Please state your gender:

1. male
2. female

Please state the number of years you have been practicing school psychology

1. less than 5 years
2. 5 to 10 years
3. 10 to 15 years
4. 15 to 20 years
5. 20 to 25 years
6. 25 to 30 years
7. 30 to 35 years
8. 35 to 40 years
9. more than 40 years

Please state the program stream in your masters degree training (if applicable)

1. Educational/School
2. Clinical/Counselling
3. Forensic
4. Neuropsychology
5. Health
6. Rehabilitation

7. Industrial/Organizational

8. Not applicable

Please state the program stream of your doctoral level of training (if applicable)

1. Educational/School

2. Clinical/Counselling

3. Forensic

4. Neuropsychology

5. Health

6. Rehabilitation

7. Industrial/Organizational

8. Not applicable

If applicable, please state where you had the majority of your school violence intervention training:

1. Pre-service education

2. In-service education

3. Not applicable

PART 1:

A) Indicate the level of training provided in your pre-service education for ADHD—

Direct

Treatment:

- a. Required for all students in program as integrated or discrete course work
- b. Elective study for interested students only
- c. Not offered in my pre-service training but is a topic important to school psychology pre-service preparation
- d. Not offered in my pre-service training and is not a topic important to school psychology pre-service preparation

PART 2:

Please note the clarification for the following set of questions: A practicum is defined as a practical application of previously learned material for both masters and Ph.D. students, while an internship is defined as an advanced form of a clinical experience of 1 year's duration for Ph.D. students.

B) Please indicate whether training was provided in any or all of the following:

- 1. Discrete course work or integrated classroom instruction**
- 2. Practicum dedicated to or containing a significant amount of planned, supervised experience.**
- 3. Internship experience dedicated to or containing a significant amount of planned, supervised experience.**
- 4. Not provided**

Behavior Problem-Training Area	A) Level of Training Provided	B) Setting of Training Given
1. ADHD—Direct Treatment		
2. ADHD— Consultation		
3. ADHD—Parent Management Training		
4. Anger Management Training		
5. Conduct Problems—Direct Treatment		
6. Conduct Problems—Consultation		
7. Conduct Problems—Parent Training		
8. Depression—Direct Treatment		
9. Depression— Consultation		
10. Divorce/Family Change Treatment		
11. Drug and Alcohol Abuse—Prevention		
12. Drug and Alcohol Abuse—Treatment		
13. Gang Involvement—Primary and		
14. Gang Involvement— Treatment		
15. Sexual Abuse Prevention/Protective		
16. Social Skills Training		
17. Violence Prevention/Safe Schools		

PART 2:

Please indicate your level of agreement on a four point scale with the following criteria:

1- Agree

2- Agree with reservations

3- Tend to disagree

4- Disagree

Questions Regarding Training Endorsement in School Violence Training	
Target areas in pre- service or in-service education in school violence intervention	Level of agreement
1. Provide discrete pre- service training in prevention and intervention procedures in school violence	
2. Integrate prevention and intervention curricula into existing pre-service	

prevention and intervention training in school violence	
3. Provide continuing education training opportunities for practitioners into existing pre-service and intervention training school violence	

Appendix E

The following e-mail was sent out as a follow up to the initial e-mail in order to gather more participants:

Hi there!

I am just following up on my previous e-mail regarding my study involving the level and nature of school violence intervention within school psychology training programs. I am still in need of further participants for my study and have extended the availability of the online survey to May 31st, 2012. If you have already completed my survey, I'd like to thank you for your participation as it is greatly appreciated. If you haven't, please do consider taking a look at the study and what it entails. I do hope to use this study to contribute positively to the well being of professional practice in school psychology in the near and distant future, especially in regards to potential changes of practice such as through Response to Intervention.

Your input is greatly appreciated! As well, if it is possible to forward this e-mail out to any school psychologists who you feel may have an interest in taking part of this study, that would be fantastic. You will find a following brief description of my study, an attached letter of introduction and the embedded link to the survey hosted at Survey Monkey.

Thank you so much!