Adult Education to Help Reduce Child Sexual Abuse:

Developing Novel Classroom and Online Approaches Designed to Change Knowledge, Attitudes, and Behaviours

by

Erin Kathleen Martin

A thesis submitted in partial fulfillment of the requirements for the degree of

Doctor of Philosophy

Department of Psychiatry

University of Alberta

Abstract

Child sexual abuse (CSA) is common and individuals who experience CSA have higher rates of psychopathology and higher risk of medical, psychological, behavioural, and sexual disorders than those who have not been sexually abused. Adults who interact with children are in ideal positions to reduce children's vulnerability to CSA and their vulnerability to negative impacts associated with CSA. Few CSA prevention programs targeting adults are developed using a research informed approach, and even fewer have been evaluated to determine effectiveness. Evaluations have focused on knowledge gain, attitude change, and behavioural intentions. Little is known about participant's actual behaviour change in regards to CSA preventative behaviours.

This doctoral study involved developing and evaluating a novel research-informed CSA education program for adults, designed from a Canadian perspective. After extensive literature review and consultation with topic experts, a classroom format and then an online format was developed. The evaluation aimed to answer three questions. (1) How effective is the classroom version of the program? (2) How effective is the online version of the program? (3) How does the effectiveness of the online version compare to the effectiveness of the classroom version? The hypotheses were that participants taking part in the program would have an increase in their knowledge regarding CSA, decrease their adherence to myths (negative attitudes) about CSA, and increase their use of preventative behaviours meant to reduce children's vulnerability to CSA. For the online version, it was predicted that behavioural change scores would be statistically significant, but smaller in magnitude, than the in-person classroom version. Behaviour change was the primary outcome goal, and attitude and knowledge change were secondary outcome goals.

Using a pre-test post-test within-subject design, participants completed questionnaires before taking the program (baseline) and then again 3 months after the program. A total of 23 classroom format workshops were completed with a large number of participants (n=366), of whom 312 completed baseline ratings prior to taking the program. Of these individuals, 195 (63% of total baseline sample = 53% of total possible sample) completed follow-up assessments at 3 months. Next baseline data was collected for the evaluation of the online version, which was completed by 165 individuals, of which 101 completed follow-up assessments at 3 months (61% of total sample). In both groups the samples were similar, comprising primarily females aged between ages 18 and 49, predominantly reporting high levels of education. Most had no prior child sexual abuse training. The sample for the online format included signficantly more people who identified as having experienced child sexual abuse themselves (50%) than the sample for the classroom version (32%).

The Wilcoxon signed-rank test was used to determine statistically significant change from baseline to post-test for the classroom and online groups. There were statistically significant improvements in the classroom group and the online group for the amount of time participants' spent talking about sexual abuse and healthy sexual development, and also significant increases in the use of individual action strategies. There were statistically significant improvements in the classroom group, but not the online group, for the use of organizational action strategies. A Mann-Whitney U test was performed to compare participants' individual change scores and organizational change scores between the classroom group and the online group, and results indicated there was no statistically significant difference between them. Thus, both appeared equally effective in terms of the primary outcome goals.

A CSA prevention program can change adults' behaviours, in both a classroom format and on online format, and these changes are sustained for at least 3 months following the program. Both versions of the program increased adults' knowledge and decreased adherence to myths about CSA. The degree of change that occurred after taking the online version of the program was similar to the change after taking the in-person classroom version of the program, suggesting that an online approach may be a useful option for educating the general public adults about CSA. These results have the potential to lead to meaningful improvements in preventing child sexual abuse. The results suggest both the classroom and the online formats of the program are effective and support the program's more widespread use.

Preface

This thesis is an original work by Erin Martin, the Ph.D. candidate. The research project, of which this thesis is a part, received research ethics approval from the University of Alberta Research Ethics Board, Project Name "Evaluation of identification and training program to prevent Childhood Sexual Abuse", No. 38141, January 8, 2014.

Chapter 1 was based, in part, on a published article: Martin, E. K., & Silverstone, P. H. (2013). How much child sexual abuse is "below the surface," and can we help adults identify it early?. *Frontiers in Psychiatry, 4*(58), 1-8. The Ph.D. candidate was responsible for concept formation, literature review, and manuscript composition. Silverstone, P. H. was the supervisory author and contributed to concept formation and manuscript editing.

Chapter 3 is based, in part, on a published article: Martin, E. K., & Silverstone, P. H. (2016). An evidence-based education program for adults about child sexual abuse ("Prevent It!") that significantly improves attitudes, knowledge, and behaviour". *Frontiers in Psychology*, *7*(1177), 1-13. The Ph.D. candidate was responsible for program development, program implementation, questionnaire development, data entry, data analysis, and manuscript composition. Silverstone, P. H. was the supervisory author and contributed to concept formation and manuscript editing.

Chapter 4 is based, in part, on a publication soon to be submitted for publication: Martin, E. K., & Silverstone, P. H. (2016). An online education program for adults about child asexual abuse ("Prevent It!") improves attitudes, knowledge, and behaviour. The Ph.D. candidate was responsible for program development, program implementation, questionnaire development, data entry, data

analysis, and manuscript composition. Silverstone, P. H. was the supervisory author and contributed to concept formation and manuscript editing.

Because some of the sections are based on publications, and include both abstracts and introductions, there is some small repetition of information in parts of Chapters 3 and 4.

Each Chapter contains a reference list specific to the references in included in that Chapter. The thesis also includes a comprehensive bibliography at the end of the document with the references from the entire thesis.

Dedication

I dedicate this thesis to those who have lived through child sexual abuse and to those who are committed to making it stop.

"Never doubt that a small group of thoughtful, committed citizens can change the world; indeed, it's the only thing that ever has."

- Margaret Mead (1901-1978)

Acknowledgements

Thank you to the Centre for Effective Management in Addictions (CEBMAT) at the University of Alberta for providing me with financial support allowing me to complete my PhD research. Thanks to CEBMAT's support, I was able to present preliminary research findings at the International Violence, Abuse, and Trauma conference in 2016.

I wish to gratefully acknowledge Little Warriors for the opportunity to develop and evaluate their new educational program and for providing both financial support and in-kind support. A special thank you is necessary for Shannon Phelan, Bronwyn Peterson, and the other staff and volunteers at Little Warriors who contributed their time and energy in the planning stage and the evaluation stage of this project. Without you this project would not have been possible.

I wish to express my deep gratitude to the people who chose to share their experiences of abuse on film in order to help other people learn about child sexual abuse. Sharing your stories is helping to change the lives of children every day.

Thank you to the professionals who took time to talk with me and provide me with their expert opinions about child sexual abuse education and what is needed in our current Canadian context. I wish to specifically acknowledge individuals at the Edmonton Police Services, Royal Canadian Mounted Police, Sexual Assault Centre of Edmonton, SAFFRON, and the Zebra Centre for their helpful and constructive feedback.

Thank you to Global Creative, who donated significant time, expertise, and energy in both the filming of all video components and in the editing process. Due to their kind donations the program was much more impactful and effective than if it hadn't been for them.

Thank you to my supervisor, Peter Silverstone, for providing much needed guidance and support throughout this process. You cultivated my skills as a researcher by giving me enough guidance to succeed and enough freedom to grow. Thank you also to my supervisory committee, Kathy Hegadoren and Tony Joyce, for your involvement and for asking thoughtful questions about my research process that encouraged me to think critically about several aspects of the project.

Finally, thank you to my family for bearing with me through this process. I could not have completed this doctorate without the incredible support of my amazing spouse. Eric, my gratitude and appreciation for you are profound. Thank you to my little Edson, who gave me reason to stick to office hours and strive for work/life balance so that I didn't miss chasing tickle games and comfy cuddle sessions. Thank you to my Dad for answering all my random questions, for loaning me statistics books, and for listening to me ramble on during coffee meet ups. To my sister, who understands, for the endless back and forths about Ph.D. related topics. Liz, you are such an inspiration to me. Thank you to Sarrah, for giving me the guidance I need to follow my own path and for being my mirror when I need it. Thank you to my Mom, who is not here to see this great success, but who would be my biggest fan if she were. Mom, thank you for teaching me that I am capable of changing the world. I miss you so much.

Table of Contents

List of Tables

List of Figures

1 Introduction

1.1 How much child sexual abuse is "below the surface," and can we help adults identify it early?

1.1.1 Abstract

Child sexual abuse (CSA) occurs frequently and is significantly more common in girls than boys, with the peak age for CSA occurring when girls are aged 13–17. Many children experience multiple episodes of CSA, as well as having high rates of other victimizations (such as physical assaults). One of the problems for current research in CSA is different definitions of what this means, and no recent review has clearly differentiated more severe forms of CSA, and how commonly this is disclosed. In general we suggest there are four types of behavior that should be included as CSA, namely (1) non-contact, (2) genital touching, (3) attempted vaginal and anal penetrative acts, and (4) actual vaginal and anal penetrative acts. Evidence suggests that CSA involving types (2), (3), and (4) is more likely to have significant long-term outcomes, and thus can be considered has having higher-impact. From the research to date approximately 15% of girls aged 2–17 experience higher-impact CSA (with most studies suggesting that between 12 and 18% of girls experience higher-impact CSA). Approximately 6% of boys experience higher-impact CSA (with most studies suggesting that between 5 and 8% experience higher-impact CSA). The data also suggests that in over 95% of cases the CSA is never disclosed to authorities. Thus, CSA is frequent but often not identified, and occurs "below the surface" in the vast majority of higher-impact cases. Helping adults to understand "below the surface" CSA might help them to recognize it early, but there are very few indicators specific to CSA, making this a challenging goal to

achieve. Nonetheless, given that CSA frequently occurs with other types of abuse, a training program that focuses on both CSA and other abuse may offer a method to allow both early recognition and prevention by adults in the general population.

1.1.2 Introduction

Child sexual abuse (CSA) is a serious societal problem. There is an elevated risk of medical, psychological, behavioral, and sexual disorders in adults who were sexually abused as children (Maniglio, 2009). It is difficult to determine how frequently CSA occurs because of notable methodological differences between studies (Gilbert et al., 2009a,b). Research in the field of CSA uses a wide range of methodologies resulting in a large amount of variation between estimated rates. This methodological variation makes drawing conclusions about the rate of CSA an inaccurate process. Review articles tend to focus on one type of methodological approach such as prevalence studies (e.g., Finkelhor, 1994a; Pereda et al., 2009), or nationally based incidence studies (e.g., Public Health Agency of Canada, 2010). Comparing results achieved with differing methodologies may be useful in determining overall rates and trends regarding CSA. This review addresses this literature gap by considering both major methodological approaches, incidence studies, and retrospective prevalence studies. In this review we also examine whether or not there are currently tools that can help adults in the general public population identify CSA early. Such a review is necessary to better understand the occurrence of CSA in North America as informed by the current research literature.

One way of considering this problem is to use the analogy of an iceberg, with the relatively small number of disclosed occurrences being those that are "above the surface" and the much larger majority of occurrences that not disclosed to authorities as being "below the surface" (Sedlak,

1991; World Health Organization, 2004; Sedlak et al., 2010). This phraseology is more useful than traditional "incidence" or "prevalence" terms, since the occurrence reported in studies varies widely depending upon which criteria and which group is being studied.

Research exploring the impact of CSA is broad and a full review is beyond the scope of this article. Nonetheless, there is compelling evidence that the occurrence of sexual abuse leads to increased rates of multiple psychiatric disorders, including anxiety disorders, depressive disorders, eating disorders, sleep disorders, post-traumatic stress disorders, and suicide attempts (Chen et al., 2010). It is also possible that CSA can lead to long- term changes in neurobiological development that may make such psychiatric conditions more likely (De Bellis et al., 2011). Longitudinal studies have demonstrated that CSA early in life impacts cognitive development, both during the first 8 years of life (Enlow et al., 2012), and as children become adults (Veltman and Browne, 2001). Furthermore, a history of rape, specifically, further increases the risk of major depression, eating disorders, and post-traumatic stress disorders (Chen et al., 2010), and suggests that certain forms of sexual abuse may have a higher-impact and cause greater rates of long-term negative outcomes. One of the major issues, however, in measuring this is that in current CSA research there are no consistent definitions of the types of abuse that are used across studies (Bolen, 2001; Zwi et al., 2007).

For these reasons, there are four major goals of the current review. The first is to utilize the most recent research using a variety of methodological approaches to determination the likely under-lying rates of CSA. These include trying to answer the following questions: what are the rates of CSA; what are the types of CSA; how often do they occur; and is the type of CSA changing with

increased internet access? The second goal is to determine how much of the time CSA is reported to authorities, as it is clear that the large majority of children who have experienced CSA are not identified. The third goal is to outline some of the complex research issues that remain, and suggest possible approaches to overcome these. The fourth goal is to provide a preliminary exploration of how adults might be taught to identify CSA early, as well as the extent to which this goal is appropriate.

1.1.3 Methods

For this review, we searched databases (Medline and PsycINFO) using the following keywords: sexual abuse, prevalence, incidence, rates, occurrence, and epidemiology. We also conducted manual searches of the publication the Journal of CSA. We included articles published from 1990 until December 31, 2012, focusing on studies that included data on North American occurrences. We included incidence studies and prevalence studies when results were generalizable.

1.1.4 Definition of child sexual abuse

The definition of CSA varies, from those definitions that are inclusive of a wide range of activities to those definitions that are restricted to very few and severe actions (e.g., CSA being defined only if incest occurred) (Pereda et al., 2009). The World Health Organization (2003) provides the following definition: "Child sexual abuse is the involvement of a child in sexual activity that he or she does not fully comprehend, is unable to give informed consent to, or for which the child is not developmentally prepared and cannot give consent, or that violates the laws or social taboos of society. Child sexual abuse is evidenced by this activity between a child and an adult or another child who by age or development is in a relationship of responsibility, trust or power, the activity being intended to gratify or satisfy the needs of the other person" (p. 75).

1.1.5 Types of child sexual abuse

Another way to conceptualize CSA is by considering types of occurrence. There is a large range of behaviors reported as being CSA, i.e., involving sexual acts with older people or people in positions of trust, power, and/or authority. Previous research has divided the occurrence of CSA into types (e.g., Anderson et al., 1993; Public Health Agency of Canada, 2010; Sedlak et al., 2010). In keeping with this practice, we propose that one way to consider the wide range of behaviors is to combine them into one of four types of abuse: (1) non-contact (e.g., having somebody expose him/herself to the child, or being made to watch an individual masturbate, or being made to watch pornography); (2) genital touching (e.g., where an individual touches the genitals of the child with his/her hands or mouth, or where the child is made to touch the genitals of the perpetrator with his/her hands or mouth); (3) attempted vaginal and anal penetrative acts (e.g., an older person attempting to insert an object, finger, or penis into the vagina or anus); (4) vaginal and anal penetrative acts (e.g., the perpetrator inserts an object, finger, or penis into the vagina or anus of the child). A child is any person up to, and including the age of 17 years old. For older children, peer sexual assault (e.g., by those who are only 1–3 years older than the victim) can be conceptualized as separate from CSA because the concept of consent becomes an issue, although there are clearly overlapping issues and negative outcomes frequently occur (Danielson and Holmes, 2004; Howard and Wang, 2005; Sherrill et al., 2011).

There is evidence that experiencing CSA types (2), (3), and (4) has greater long-term consequences than type (1). It is also possible that this may also represent an increase in negative impacts since, for example, the occurrence of rape (defined here as CSA type 4) is more likely to be associated with subsequent psychiatric disorders than other forms (Chen et al., 2010). The level of severity

of CSA is also shown to be associated with the level of trauma and somatization in adults (Zink et al., 2009), as well as greater occurrence of adverse sexual health indicators (Lacelle et al., 2012). Additionally, penetrative abuse may be at least moderately correlated with psychological and social problems in women (Briere and Jordon, 2009), and a significantly higher likelihood of having contact with a mental health agency (Cutajar et al., 2010).

Penetrative sexual abuse is also associated with elevated risk of alcohol problems, more frequent use of illicit drugs, increased likelihood of suicide attempts, and more frequent marriage to an alcoholic (Dube et al., 2005). More severe abuse (i.e., penetrative abuse and abuse involving multiple offenders) is also associated with problems such as high-risk sexual behaviors (Spring and Friedrich, 1992).

From these findings there appears to be a complex interaction between multiple factors, as well as the severity of abuse, that impacts the development of psychiatric disorders and health problems. The following factors are all associated with increased negative impact of CSA in adulthood: an early age at first abuse episode (Briere and Jordon, 2009; Zink et al., 2009; Liu et al., 2012), the number of abusive episodes (Felliti et al., 1998), longer duration of abuse (Beitchman et al., 1992), the presence of coercion during abuse (Dube et al., 2005; Zink et al., 2009), use of force or threat of force (Beitchman et al., 1992), more than one perpetrator (Cutajar et al., 2010), parental mental illness, criminal activity, and substance use (Bailey and McCloskey, 2005), level of marginalization (Briere and Jordon, 2009), and abuse perpetrated by a father or father figure (Beitchman et al., 1992). The interaction between factors is complex and not yet well understood (Briere and Jordon, 2009), although dysfunction in the family of origin (i.e., early parental

separation, family violence, and lack of parental warmth) (Weiss et al., 1999), and the occurrence of other types of abuse, have both been shown to influence the later impact of CSA (Briere et al., 2008). There may be protective factors such as resiliency, blame placed on the offender rather than child, social support, and early intervention that mitigate some of the impact (Yancey et al., 2011). Nonetheless, the evidence supports suggestions that the more severe forms of abuse, i.e., what we have termed types (2), (3), and (4), are associated with more negative long-term outcomes. For this reason we suggest that these types of CSA may best be referred to as "higher-impact" CSA.

1.1.6 Frequency of childhood sexual abuse

Accurate estimation of the frequency of CSA is important because it informs assessment, intervention, treatment, funding, and policy-making decisions. However, accurately and reliably estimating its occurrence is difficult (Gilbert et al., 2009a), even though researchers consistently regard the high frequency as serious (Anderson et al., 1993; Finkelhor, 1994a,b; Sedlak, 2001; Finkelhor et al., 2005; Pereda et al., 2009).

There are generally two ways used to estimate the rate of occurrence of CSA, namely *incidence* studies and *retrospective prevalence* studies. Incidence studies measure the number of new cases occurring during a 1-year period while prevalence studies estimate the number of children sexually abused in childhood (Fallon et al., 2010). Incidence studies utilize official data collected by police, child protective services, and other agencies that serve children, and provide estimates of the occurrence of CSA in a 1-year period (e.g., Sarafino, 1979; U.S. Department of Health and Human Services, 1981; Sedlak and Broadhurst, 1996; Trocmé et al., 2001; Sedlak et al., 2010). Self-report retrospective prevalence studies capture information on abuse that in most cases is not reported to official sources. However, the large difference between incidence studies and retrospective

prevalence studies is, in large part, explained by differences in "above the surface" and "below the surface" CSA (**Figure 1**). A single study (Finkelhor et al., 2005) used a third approach that we refer to as a *retrospective incidence* study by asking youth to report CSA experiences that occurred within the past year. In some ways, this approach may offer a leading method to address issues with current data reports.

Figure 1. Iceberg analogy of CSA research studies

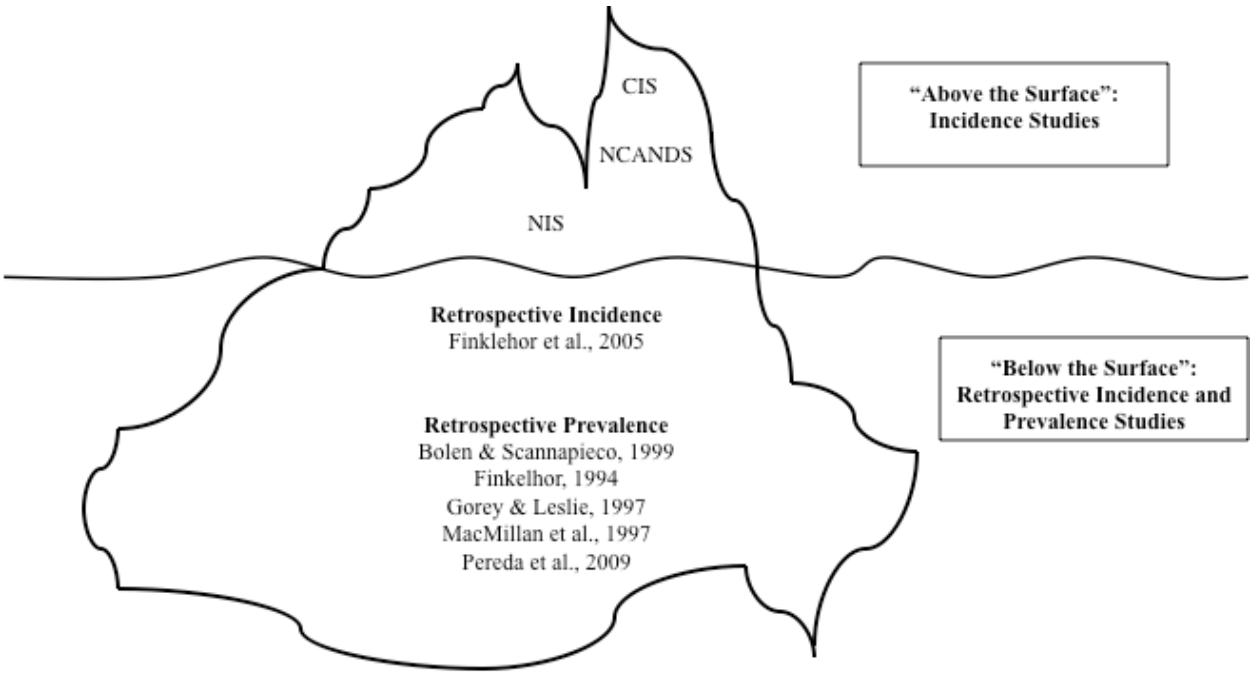


Figure 1 shows summary data for "Above Figure 1 shows summary data for "above the surface" and "below the surface" childhood sexual abuse (CSA). Incidence rates for both the United States in the National Incidence Studies (NIS) and for the Canadian Incidence Studies (CIS), with the latter only reporting on verified cases reported to child welfare services. There is no incidence rate for National Child Abuse and Neglect Data System (NCANDS) because it reports a percentage of total investigations rather than an estimated rate of occurrence.

1.1.7 "Above the surface" CSA

The term "above the surface" CSA is consistent with suggestions from the first NIS of CSA known to official sources (U.S. Department of Health and Human Services, 1981). "Above the surface" sources provide important information about disclosed and/or reported CSA. Data on "above the surface" CSA comes largely from the Canadian Incidence Studies (CIS), the NIS, National Child Abuse and Neglect Data System (NCANDS). The NIS and CIS are nationally representative studies estimating American and Canadian incidence of CSA respectively. Fallon et al. (2010) provides a comprehensive review of the details of each of these studies. The reported rates of CSA by each of the studies are presented in **Table 1**.

Table 1. North American rates of reported child sexual abuse (CSA) from national incidence studies

Incidence Study	County	CSA Rate
NIS-2, 1991	United States	2.1/1,000
NIS-3, 1996	United States	4.5/1,000
NIS-4, 2010	United States	2.4/1,000
CIS-1998	Canada	0.89 substantiated cases/1,000 children
CIS-2003	Canada	0.62 substantiated cases /1,000 children
CIS-2008	Canada	0.43 substantiated cases/1,000 children

Table 1 shows summary data for "above the surface" childhood sexual abuse (CSA) incidence rates for both the United States in the National Incidence Studies (NIS) and for the Canadian Incidence Studies (CIS), with the latter only reporting on verified cases reported to child welfare services.

The CIS represent the strictest version of the "above the surface" information, providing data from only the very tip of the iceberg. Thus, the CIS incidence estimates we discuss include only CSA that was investigated and then substantiated by child welfare services. CSA occurrences that are not reported to child welfare services, that do not meet strict validation thresholds, or that are investigated by police alone, are not captured in the CIS incidence rates. There have been three nationally representative CIS studies (Trocmé et al., 2001, 2005; Public Health Agency of Canada, 2010). The most recent Canadian NIS reported a substantiated CSA rate of 0.43/1,000 Canadian children (Public Health Agency of Canada, 2010). Note that this represents only 10–20% of the rates in the NIS studies and less than 1% of the rates from other incidence studies in the United States (Finkelhor et al., 2005).

The NCANDS also includes only CSA that was reported to child welfare agencies. Data is collected and investigated by a child welfare worker in each state in the United States (U.S. Department of Health and Human Services, 2009). Any investigation on child maltreatment or suspected CSA is then reported to NCANDS using their standardized format. NCANDS then is able to report on data from all states about child maltreatment. In 2009, NCANDS reported that 7.3% of the child welfare cases involved sexual abuse. However, they do not give a standardized rate per 1,000 children.

The NIS studies differ from the CIS and NCANDS. The NIS-2, NIS-3, and NIS-4 collected data on maltreated children from child protective services as well as identified professionals, or "sentinels" (Sedlak, 1991; Sedlak and Broadhurst, 1996; Sedlak et al., 2010). The sentinel design expands the reach of the study by capturing CSA that was disclosed to a non-child welfare

professional (e.g., to other professionals such as psychologists). Details of each maltreatment case are reviewed to avoid duplication (Sedlak, 2001). The basic design collects data to provide information on relationships between the characteristics of the abused children, the characteristics of the families, and details of their abuse including characteristics of the perpetrator(s) (Sedlak, 2001). The most recent NIS reported the estimate of "above the surface" CSA at 2.4/1,000 American children. Of the "above the surface" studies, the NIS is able to capture the widest range of CSA.

The CIS, NCANDS, and NIS approaches to studying occurrence of CSA have well recognized strengths and weaknesses. Both the NIS and CIS have excellent reliability in regards to which cases are included (Fallon et al., 2010), and the NIS "sentinel" design allows for more abused children to be identified than with child protection services data alone. Researchers improved the study design in NIS-2 when they started using probability proportional to size sampling (Sedlak, 2001). The basic design of subsequent studies for the NIS and CIS allow for comparisons between findings from more recent studies with findings from older studies. They also provide critical insight into the characteristics and features of "above the surface" CSA. Nonetheless, there are very significant limitations associated with these studies, and one recent review concluded that the definitions of CSA used in both the NIS and CIS are limiting and allow for identification of only certain types of CSA (Fallon et al., 2010). Furthermore, individual child welfare workers decide which cases meet the CIS and NCANDS definitions of child maltreatment (Fallon et al., 2010). Most importantly, the NIS, CIS, and NCANDS approach cannot provide information on the experience of children whose abuse is "below the surface." For all these reasons, the CIS, NCANDS, and NIS are unlikely to accurately represent the true occurrence of CSA.

1.1.8 "Below the surface" CSA

Several studies have examined the rates of "below the surface" CSA by exploring the number of adults in a sample population who report that they experienced CSA (e.g., Anderson et al., 1993; Finkelhor, 1994a; MacMillan et al., 1997; Bolen and Scannapieco, 1999). The CSA experiences identified by these studies include "above the surface" CSA occurrences (i.e., CSA that was reported to an official source), abuse that was not disclosed to an official source but was disclosed to another person such as a family member, and abuse that was not disclosed in childhood. One review reported that studies have found prevalence rates for women as low as 2% and as high as 45% (Bolen and Scannapieco, 1999) while another review reported studies citing rates for CSA in women ranging from 7% to 36% (Finkelhor, 1994a). Taking all available information, one review concluded that the likely "true" rates of CSA occurring throughout childhood for women were between 20% and 30% and for men just below 10% (Pereda et al., 2009). Another review, after controlling for some of the factors responsible for variance (e.g., number of screening questions, sample size, and date of study) concluded that the rate of CSA for women was likely to be between 30 and 40%, and for men between 3 and 13% (Bolen and Scannapieco, 1999). A review focusing on North American data concluded that CSA prevalence rates were 15% for women and 7% for men (excluding the broadest, non-contact, categories), but noted the need for a much better conducted incidence study (Gorey and Leslie, 1997). Since this date, studies have also looked at the rates of CSA in youth who are lesbian, gay, or bisexual, and (based upon data from the 1990s) concluded that there were higher rates of CSA in this group (Saewyc et al., 2006).

1.1.9 Retrospective incidence study

Adult retrospective studies ask adults to report what occurred when they were children, creating a potential recall issue with the data. Because the abuse occurred during childhood, with sample age

ranges from 18 to 65 years old, some adults are reporting CSA that occurred decades earlier. This creates two problems. First, the data collected is potentially flawed because CSA sometimes occurred many years earlier. Second, these studies do not necessarily give an accurate picture of what children and youth are currently experiencing in regards to CSA. One study (Finkelhor et al., 2005) that we refer to as a retrospective incidence study has done well to overcome these concerns.

To date, there is only a single retrospective incidence study that avoids many of the problems previously identified (Finkelhor et al., 2005). This study asked over 2,000 children about their experiences of victimization in the past year (an immediate caregiver answered questions for children up to age 9), providing insight into what children and youth have experienced recently. This approach may result in capturing more accurate information compared to asking adults to retrospectively report what they experienced in childhood. This study found that 9.6% of the girls and 6.7% of the boys interviewed in their sample reported some kind of CSA in the past year, and in general girls experienced more CSA than boys. Of these, a total of 4.2% of girls reported some form of sexual assault in the previous year compared to 2.2% of boys. Most sexual assaults and rapes reported occurred in the age range 13–17, with 6.7% in this age range experiencing a sexual assault in the previous year. Importantly, most children were likely to have experienced additional types of victimization during the same year, with 82% also being physically assaulted, 84% witnessing or experiencing indirect victimization, and 70% experiencing property victimization (Finkelhor et al., 2005). These individuals were also likely to experience more than one episode of sexual assault, although the degree to which this occurred was not specifically reported. It should also be noted that in this study nearly 6% of youth (or their parents on their behalf) refused to answer questions about sexual victimization, so it is possible that the rates reported in this study

underestimate the actual incidence of CSA.

1.1.10 What is the most accurate estimate for CSA?

Taking all the "below the surface" data together, the findings from studies to date suggests that approximately 4% of girls and 2% of boys experience childhood sexual assault each year, with the majority occurring in the teenage years. Since it is likely that these are often individuals who are re-victimized, it is likely that these numbers are not cumulative, i.e., that there is not an additional new cohort of 4% of girls experiencing CSA each year, and other data do not support such a suggestion either. These rates of reported CSA may also reflect the increase in CSA with age.

It can be clearly seen that the differences in the rate of CSA reported by different studies is dramatic. For example, the annual incidence of all types of CSA identified by United States sentinels (child welfare workers and other identified professionals) was in the range of 2.1–4.5/1,000 children (Sedlak, 1991; Sedlak and Broadhurst, 1996; Sedlak et al., 2010) compared to an incidence rate for any form of sexual victimization of 82/1,000 in a large well-controlled retrospective 1-year incidence study in the United States (Finkelhor et al., 2005). These findings imply that the "above the line" estimates identify only 3–5% of actual cases, which suggests that between 95 and 97% of CSA occurrences are "below the surface." Put another way, it is likely that at least 95% of CSA is not reported to authorities. Thus, estimates of the rate of CSA vary largely depending upon the source of information and consideration of other relevant factors, such as the definition of CSA, the methodology used, and the sample/sampling procedures, with all these factors contributing to the varying estimates of the incidence and prevalence rates for CSA (Anderson et al., 1993; Leventhal, 1998).

Taking all of the published information to date, we believe the data suggests that approximately 15% of girls experience higher-impact types of CSA (i.e., excluding non-contact experiences), with a likely range of between 12 and 18%. Most of this occurs during the teenage years (i.e., from 13 to 17). However, it should be recognized that given the significant limitations in the data (see below for further discussion of this), this conclusion must remain a "best guess."

It is also important to note that many CSA victims will be subject to repeated CSA, and that most victims will also experience other types of non-sexual abuse and victimization. Both of these are likely to be important factors in determining longer-term impacts on the individual. For boys the rates are lower, and the likely rates of higher-impact CSA are around 6%, with the range being from 5 to 8% (again, recognizing that these numbers are a "best guess"). These rates are for those aged 2–17 in North America, but it is possible that these rates vary significantly in other countries. These estimates are very high when compared with the strict and substantiated CSA estimates provided from reported "above the surface" data, with the most conservative data (i.e., that which requires confirmation) suggesting incidence rates of only 0.3% for Type 4 CSA (involving vaginal or anal penetration) (CIS 2001). This large difference between the "above the surface" and "below the surface" data supports suggestions that over 95% of CSA is never reported to authorities. This is very concerning for those who focus on intervention to prevent CSA and treatment of CSA (Lyon and Ahern, 2011).

1.1.11 Ongoing limitations in understanding the rate for CSA

Despite study findings to date, it is also very important to recognize the significant limitations of current research. While CSA rates by type are reported in many studies (U.S. Department of Health and Human Services, 1981; Sedlak, 1991; Trocmé et al., 2001; Finkelhor et al., 2005), there is

little published research on the type of sexual abuse according to age and gender. To date, there is only one study that reports CSA occurrence by type, age group, and gender (Finkelhor et al., 2005). Other studies separate age as percentage of the total (Trocmé et al., 2001, 2005) and by gender (Trocmé et al., 2001). It is clear that more research is needed to determine relationships between age group, gender, and type of CSA.

1.1.12 Rates by gender

The data is highly consistent in finding that that girls experience CSA at a higher rate than boys, with the relative rates being between 1.5 and 5.5 times as frequently (Sedlak, 1991; Finkelhor, 1994a; Fergusson et al., 1996; Sedlak and Broadhurst, 1996; MacMillan et al., 1997; Bolen and Scannapieco, 1999; Finkelhor et al., 2005; Pereda et al., 2009; Sedlak et al., 2010). The data from several studies including the United States NIS suggest that the degree of gender disparity changes with age (U.S. Department of Health and Human Services, 1981; Sedlak, 1991; Sedlak and Broadhurst, 1996). Studies that consider CSA rates by age and gender find that the rates for younger children (age 0–7) are similar for girls and boys, but that the rate in older children are significantly higher for girls (Trocmé et al., 2001, 2005; Finkelhor et al., 2005). The disparity in rates by gender increases with age, even when removing peer assault and considering only abuse perpetrated by adults. Thus, data suggests that at younger ages, girls and boys experience CSA at similar rates, but as girls get older they experience CSA at increasing rates. In contrast, boys demonstrate the opposite trend. At younger ages the rate is similar to girls but as age increases the rate of CSA decreases in boys. This disparity does not affect the overall finding that girls experience more CSA than boys. This aspect of CSA has not been emphasized in previous findings, and more research is needed to confirm these suggestions as it may have implications for intervention to identify or prevent CSA.

1.1.13 Rates by type of CSA

Estimating the rates of specific types of CSA is even more difficult than estimating the overall occurrence of CSA because few studies separate occurrence of CSA by into types of CSA (**Table 2**). Despite the difference in methodology, findings from the CIS-2, and the retrospective incidence study (Finkelhor et al., 2005) suggest that CSA involving genital contact occurs more frequently than the other types of CSA (Trocmé et al., 2001). When reported, CSA involving genital contact occurred at rates between four and eight times more frequently than penetrative abuse (Trocmé et al., 2001; Finkelhor et al., 2005). The NIS-2 data however, reports only a slightly higher rate of genital contact abuse (0.9/1,000) than penetrative abuse (0.8/1,000). The other types (penetration attempted, penetration completed, and exposure) occur at similar rates to each other (Trocmé et al., 2001; Finkelhor et al., 2005). The NIS-2 data reflects a similar lower rate for the remaining types of CSA. Thus, from the evidence to date there are not consistent findings regarding the type of CSA, and more research is clearly needed to clarify this. Simply identifying whether CSA was type (1), (2), (3), or (4) would allow much better comparisons from research findings between different studies.

Table 2. Rates for incidence of child sexual abuse (CSA) by type of abuse

	Type of Abuse				
Study	**Penetration**	**Genital Contact**	**Exposure of genitals to child**	**Attempted Penetration**	**Exploitation: Prostitution or pornography**
NIS-1	0.3/1,000	0.2/1,000	0.1/1,000		
NIS-2	0.8/1,000	0.9/1,000	0.5/1,000		
CIS-1998	0.29/1,000	0.82/1,000	0.21/1,000	0.29/1,000	0.1/1,000
Finkelhor et al., 2005	4/1,000	32/1,000	4/1,000	18/1,000	

Table 2 shows summary data for childhood sexual abuse (CSA) by type (where available) for incidence studies in both the United States National Incidence Studies (NIS) and the Canadian Incidence Studies (CIS), and compares these "above the surface" studies to an incidence study that includes "below the surface" rates (Finkelhor et al., 2005). Note that some studies have reported rates for several types of abuse together and the Finkelhor study did not examine rates for Exploitation.

1.1.14 Are there changes in the rates of CSA?

Variations in research methods make it difficult to assess whether or not the incidence of CSA is changing. Understanding changes in incidence of CSA is critical because it will inform prevention, intervention, and treatment approaches (Collin-Vézina et al., 2010). For example, CSA prevention programs that target children became increasingly common in the 1980s and 1990s. If these programs worked as prevention tools, then rates of CSA should have decreased (Leventhal, 1998). If no such decrease is evident, then several explanations are possible. These programs may not be working at reducing the occurrence of CSA, there may be other variables accounting for this lack of efficacy, and/or a better reporting process may be a factor in increased reporting rates of CSA seen in North American (Public Health Agency of Canada, 2010; Sedlak et al., 2010). It is not clear however, if reporting rates are increasing consistently as adolescent reporting rates of CSA did not change significantly between 2003 and 2008 (Finkelhor et al., 2010a,b). Nonetheless, in order to determine if the rate of CSA has been changing, methodological issues in the research must first be addressed (Fallon et al., 2010).

Some of the variation between studies can be attributed to methodological issues involving variations in CSA definitions, differences in screening questions used, type of data collection, and sample size and type. The definition of CSA impacts results, and studies with broader definitions yield higher rates than those with narrower ones (Finkelhor, 1994b; Pereda et al., 2009). Studies that examine only one type of abuse may result in under-estimates of the occurrence of CSA because each type, in isolation, is inadequate as an estimate because it may miss the overall occurrence of CSA (Shaffer et al., 2008). For women, a higher number of screening questions

predicts higher prevalence rates (Anderson et al., 1993; Bolen and Scannapieco, 1999). More descriptive and detailed questions are shown to result in higher rates being reported in reviews of epidemiological studies (Finkelhor, 1994a; Pereda et al., 2009), college samples (Fricker et al., 2003), and community samples (Martin et al., 1993).

The way in which CSA occurrence is determined also impacts resulting prevalence rates. For women, face-to-face interviews may provide opportunity for more detailed screening questions resulting in more disclosure of CSA and higher general prevalence rates but familial CSA may be reported more often in anonymous postal questionnaires (Martin et al., 1993). Differences in sample size and type also account for variation. Smaller sample sizes are associated with lower prevalence rates (Finkelhor, 1994a; Bolen and Scannapieco, 1999). Some studies propose that sample type (national, state, clinical, or community) is a factor in prevalence variation but in their corrective meta-analysis, Bolen and Scannapieco (1999) found that type (national, state, or community) did not result in statistically significant differences in prevalence. Clinical samples tend to be small and non-generalizable (MacMillan et al., 1997).

Perhaps because of these problems in methodology, previous reviewers have differed about whether rates are changing. In 1997, one review suggested that rates have had not changed in the previous 30 years (Gorey and Leslie, 1997). More recent reviews suggest that rates are decreasing, particularly in substantiated rates in American studies (Finkelhor et al., 2010a,b; Sedlak et al., 2010). In contrast, a recent Canadian study concludes that it is too soon to determine that rates of CSA are decreasing (Collin-Vézina et al., 2010), and as we have previously noted, that there are so many significant problems with so much of the data that it is simply not possible to confidently

determine if there have been any changes in incidence or prevalence rates of CSA over the past few decades.

1.1.15 Possible role of the Internet

Another important issue to consider in terms of possible changes in the rates of CSA is the potential impact of Internet pornography, particularly child-focused pornography). Despite the large amount of publicity given to Internet child pornography (Wolak et al., 2008) it is uncertain if this has altered the occurrence of CSA. It certainly appears to be the case that many individuals charged with offenses based upon viewing child pornography had not previously been identified as being sexual offenders against children (Briggs et al., 2011; Nielssen et al., 2011). This group also tends to have different characteristics to previous CSA offenders (Niveau, 2010). Thus, it remains unclear if there is any link between those who view Internet child pornography and those who commit CSA. It has been suggested that up to 32% of individuals who view child pornography may re-offend (or at least, be charged – more may re-offend without being caught), but a much smaller subset (4%) are actually charged with a new violent offense in the 6 years following their initial conviction (Eke et al., 2011). To date, however, research has not been able to demonstrate that the Internet has increased rates of CSA, although more youth do appear to have experienced on-line sexual harassment (Jones et al., 2012). Nonetheless, it does appear that for high-risk CSA offenders, pornography increases the risk of offending (Kingston et al., 2008). More research is clearly needed to determine the effect of easier access to child pornography on rates of CSA.

Other childhood factors are also associated with the occurrence of CSA. Family conflict, lower parental bonding, and parental problems with substance abuse or criminality are also demonstrated to correlate with occurrence of CSA (Fergusson et al., 1996). Given changes in economic

opportunity, and changes in substance abuse rates over the past 15 years (Merikangas and McClair, 2012), research determining how changes in these factors may be impacting CSA rates also needs to be carried out before it is clear if rates are changing, and if so, what the cause may be.

1.1.16 Can We Help Adults to Identify CSA Early?

Given the previously discussed rates of CSA and the potentially serious impacts (Maniglio, 2009), a critical questions remains to be asked, namely, can we teach adults in the general population to identify the occurrence of CSA early? Early identification could mean early intervention and treatment, potentially mitigating some of the longer-term impacts. An extensive body of research already exists on identifying CSA in forensic settings (see Faust et al., 2009) and medical settings (Adams, 2001; Heger et al., 2002; Horner, 2009; Adams et al., 2012). However, there is a dearth of research exploring the effectiveness and appropriateness of teaching adults in the general population to identify CSA.

An additional question is how effective is it to teach adults about the indicators of CSA? Evaluated adult-targeted CSA education approaches are shown to be effective at increasing participants' knowledge about CSA in terms of self-reported knowledge gains (Self-Brown et al., 2008; Kenny, 2009), when assessed by comparing pre-test results to post-test results (Rheingold et al., 2007; Bowman et al., 2010), and when comparing participants to non-participants (Hébert et al., 2002; Rheingold et al., 2012). Teaching adults about CSA is likely to increase their knowledge about the selected teaching topics. If programs were to teach adults about early identification of CSA, it is likely that adults would increase their knowledge in this area. Despite this, there is no evidence that such programs actually alter detection rates for CSA or that they increase prevention of CSA.

Given this, it is uncertain how appropriate it is to teach adults to identify CSA. There are very few definitive indicators of CSA and many childhood behaviors that might first appear concerning, such as sleep disturbances, are actually quite common in all children (Faust et al., 2009). Furthermore, a reproducible and reliable form of assessment for determining whether or not a child was sexually abused has yet to be developed for professionals (Faust et al., 2009), making it appear unlikely that we can reliably teach adults in the general population to accurately identify CSA.

Nonetheless, because psychological and behavioral indicators of CSA are so non-specific (i.e., they also occur after a child experiences non-CSA stressors, abuse, and neglect), it may not be appropriate to teach adults to use psychological and behavioral indicators to identify CSA alone. Therefore, adults in the general public could be trained to identify more general behaviors indicative of stress, and to then ask these children about CSA. It is likely that adults can be trained to recognize generally concerning psychological and behavioral occurrences in children and to respond appropriately. While these occurrences may not necessarily indicate CSA specifically, it remains in the best interest of the child for adults to respond with care and concern, as it is possible some type of abuse and neglect could be occurring. This is particularly relevant since studies indicate that many children who experience CSA also experience other types of abuse and neglect (Felliti et al., 1998; Finkelhor et al., 2005, 2007). Qualitative studies exploring children's disclosure experiences (Heger et al., 2002; Alaggia, 2004, 2010; Staller and Nelson-Gardell, 2005; London et al., 2008) can also be used to inform program content aimed to increase adult's accurate awareness of CSA disclosure and appropriate responses to disclosures.

Based on our current knowledge, it may be most appropriate to teach adults, more generally, about

signs that might indicate that a stressor is occurring in a child's life. This approach is appropriate for two main reasons: firstly, it allows for the opportunity of intervention and treatment of a range of types of abuse and neglect, recognizing the often overlapping nature of types of abuse and neglect; and secondly, it acknowledges our current lack of knowledge about what concerning signs indicate CSA specifically. For such a training course, this over-arching framework of teaching indicators of abuse can be done within a CSA specific education program so that information about CSA is also conveyed. This may prove to be a fruitful approach, but will need rigorous research to ensure both appropriate design and measurement of appropriate outcomes.

1.1.17 Conclusion and future directions

Child sexual abuse is a major health and psychological problem with major impacts on individuals and on society. Despite its importance, it is not clear exactly how commonly this occurs, or if the incidence of CSA is increasing, decreasing, or staying the same. There are important gaps in knowledge about the occurrence of CSA as it relates to child age, gender, and type of abuse. The impact of Internet child pornography on CSA rates is also unclear. Nonetheless, findings to date are consistent that most CSA occurs in girls and is not reported to authorities. Preventing and treating CSA should be a major priority for both research and society, as the longer-term effects, particularly of higher-impact CSA are profound and potentially life-long. Future research must consider the methodological issues highlighted in this article in order to provide accurate information about the yet unanswerable questions about CSA in North America.

Additionally, while it may not be ideal to teach adults to recognize indicators of CSA, there is reason to teach adults to recognize generally concerning signs in children that could indicate some type of stressor in the child's life. There is a clear requirement for education programs for adults

who may be able to help both decrease the incidence of CSA (by limiting access and increasing awareness) and to help increase disclosure rates (by being able to help those children who may be trying to disclose). For these reasons there is a clear need to develop specialized CSA education programs that are scientifically based and rigorously evaluated. The goal for all societies should be to completely eradicate CSA, and this will only occur if better educational programs are available and are widely implemented.

1.2 Other Impacts of Child Sexual Abuse

An understanding of some of possible impacts of CSA, beyond those already discussed (Martin & Silverstone, 2013), is critical in understanding the potential importance of early intervention and prevention of CSA. In particularly, prevention of both shame and re-victimization may help minimize future negative impacts.

1.2.1 Shame

The concept of shame is important in understanding an individual's experience after being sexually abused as a child. Shame is a person's negative self-concept (Lewis, 1971) and involves a negative evaluation of the entire self (Tangney, 1996). Shame also relates to an individual's perception that other people view him/her negatively (Tangney et al., 1996). Shame and guilt may share some common features but they are unique affective experiences because, unlike shame, guilt tends to focus on a specific occurrence, event, or action/inaction rather than being a persistent trait of the entire self that the person is powerless to change by him/herself (Tangney et al., 1996; La Bash & Papa, 2014).

In child sexual abuse specifically, focus group research using semi-structured interviews supports this concept of the "self-as-shame" in those who were sexually abused as children (Dorahy &

Clearwater, 2012, p. 162). In this specific group, the experience of "self-as-shame" was expressed in feeling "like a failure, defective, unworthy, value-less, and lacking a sense of esteem and efficacy" (p. 168). The voices of those in this study provide insight into how shame may make it more difficult for some children to disclose CSA, as well as into the ongoing shame about the CSA experience that continue making it difficult for individuals to talk about the abuse they suffered, even much later during adulthood. Thus, for some participants, the experience of shame was so profound they preferred isolation to the terror felt in response to the risk that another person may discover their past CSA experiences.

Shame may be linked to the experience of trauma symptoms. Using a sample recruited at an American university (n=99), La Bash and Papa (2014) explored the construct of shame to see if it has a direct or indirect effect on the development of post-traumatic stress disorder (PTSD). They found that individuals who experienced an interpersonal type of trauma had higher levels of PTSD symptoms and shame than those who experienced impersonal traumas, and that more shame after trauma contributed to higher levels of PTSD. This phenomenon is reflected in research with youth who experienced CSA, with those youth who reported shame persisting 6 years after the CSA also reporting the highest levels of PTSD symptoms (Feiring & Taska, 2005). These findings are consistent with earlier findings that higher levels of shame-proneness correlated with more severe PTSD symptoms in both adult child sexual abuse survivors (Talbot et al., 2004) as well as prisoners of war (Leskela et al., 2002). The experience of shame, degradation, and humiliation after prolonged interpersonal violence is so crucial that Herman (2011) proposes PTSD be reconsidered as a shame disorder rather than a fear disorder. For these reasons the issue of shame is important

in the discussion of CSA education because it has the potential to hinder disclosure and discussion of abuse, and greater levels of shame may contribute to greater severity of PTSD symptoms.

1.2.2 Re-victimization

Children who experience sexual abuse are more likely to experience subsequent sexual victimization in the form of adolescent and adult sexual assault (Messman-Moore & Long, 2003), making early intervention critical. Emotional dysregulation may act as mediator in re-victimization, with some survivors demonstrating difficulty coping with, and responding to, other people's emotions. This hinders their ability to utilize self-protective behaviours as needed (Zerubavel & Messman-Moore, 2013). In a large study of women who were sexually abused before the age of 14 (n=1,863) the authors considered potential sex-related mediator variables in re-victimization (Ullman & Vasquez, 2015). Using bivariate correlations and path analysis to create and test a model of mediators of re-victimization, they found that CSA was positively correlated with re-victimization, emotional dysregulation, and exchanging sex for money. There was a more complicated and less clear relationship between other sexual risk factors and re-victimization. Higher alcohol use and higher levels of trust may also contribute to higher rates of re-victimization (Lutz-Zois et al., 2011).

While the mediators of the relationship between CSA and re-victimization are not yet entirely clear, the relationship between CSA and later victimization is clear. Ecological factors that exist outside the person who has been abused, such as the interaction of attributes, behaviours, and beliefs about both the survivor and the perpetrator, as well as societal responses to sexual abuse, may also contribute to re-victimization (Messman-Moore & Long, 2003). Taken together, ideal practice would involve early intervention to stop CSA from happening or continuing, effective

treatment for CSA victims administered as rapidly as possible, combined with interventions to change societal beliefs and practices in response to sexual abuse, to help to reduce rates of re-victimization in the future.

1.3 CSA Education Approaches

The high rate of occurrence of CSA and the potentially profound negative impacts make intervention critical. To contextualize the discussion of CSA interventions, Koplan and colleagues' (2007) discussion of *prevention psychiatry* is useful as it includes consideration of protective/risk factors, epidemiology, evidence-based prevention interventions, health promotion, and cost-effectiveness, all with the goal of preventing harmful outcomes. *Primary prevention* involves preventing the occurrence of something; in this context, the occurrence of CSA. For example, a child-targeted program that teaches a child personal safety skills with the goal of preventing that child from experiencing CSA, is a primary prevention approach. *Secondary prevention* approaches refer to the detection of, and screening for, a specific condition. Teaching adults indicators of CSA so they can identify children who require intervention is an example of a secondary prevention approach. *Tertiary prevention* refers to interventions meant to decrease disability due to a condition or occurrence. For example, a tertiary prevention approach might be a treatment program for children who have been sexually abused. An education program may use a primary, secondary, or tertiary approach exclusively, or may fully or partially combine all approaches. CSA prevention is moving away from individualized strategies toward an ecological and multi-faceted approach that promotes intervention at the individual, relationship, community, and cultural levels (Collin-Vézina et al., 2013; Kenny & Wurtele, 2012). There is also a need for an increased diversity in the type of educational programs offered, and the groups targeted in CSA prevention, to try and ensure the best possible outcomes in a wide range of populations (Wurtele, 2009) .

On the individual level, children are commonly targeted in CSA prevention education in the school system, and this approach has been studied extensively (Zwi et al., 2007). Educating adults, comparatively, had been studied far less. Targeting non-offending adults about CSA can fall under secondary and tertiary prevention approaches. Most often, these adults are not present when the abuse occurs and therefore are not in a position to stop the abuse while it is occurring. However, adults could be taught to change their individual behaviours and organizational behaviours in ways that reduce children's vulnerability to CSA, with the overall goal of preventing the CSA from occurring. Caregivers may also be in positions where they can rapidly identify CSA situations and help at-risk or affected children (Hébert et al., 2002).

Beyond caregivers, adults who interact with children generally may also be in ideal positions to identify children who may have been abused, or are being abused, and to report any suspected abuse. They may also be well positioned to assist connecting children with appropriate services. Despite the potential for this group to be involved in the prevention of CSA there is a relative lack of research available. Recent evaluated adult-targeted CSA education programs reported in academic, peer-reviewed sources demonstrate a range of target groups, types of programs, format, length of session, follow-up, and recruitment processes (**Table 3)**. Evaluations of these programs report varied changes in participant attitude, knowledge, and behavioural intentions after taking the educational program **(Table 4)**.

Table 3. Review of recent adult-targeted CSA education programs for parents/caregivers: methods and content

Authors, year	Target group and sample size	Type of program	Format	Sessions	Length of session(s)	Post-test timing and response rate/retention	Recruitment process	Structure and content of the program (as described in study)
Bowman et al., 2010.	Developmental disabilities (DD) service providers N=124	Classroom-based	Pre-post-test design	1	4 hours	Immediate Response rate not given	Voluntary participation with incentive (organizational in-service credits)	**Structure:** Didactic instruction, small breakout activities, problem solving skills exercises **Content:** CSA definitions, reporting laws, statistics, patterns, risk factors, institutional issues, consent issues, identifying SA, actions after CSA suspicion
Hébert et al., 2002.	Parents N= 55 attendants 11 parents in 5 groups N= 217 non-attendant controls	Classroom-based	Post-test design, control group	1	2 hours	After 2 weeks 66% response rate to a total of 412 mailed-out surveys	Random selection of child serving organizations; parents self-selected	**Structure:** Role-play, guided discussion, behaviour modeling, rehearsal **Content:** Factors related to CSA vulnerability, rates, verbal and physical violence, indicators of victimization situations; information about interventions, resources
Kenny, 2009.	Parents N= 114 10-15 members/ group	Psycho-educational group format	Post-test design	16	1 hour	Immediate Response rate/ retention not given	Random selection of daycares and preschools; families self-selected	**Structure:** Psycho-educational group format with group leader **Content:** General safety skills, communication skills, assertive response/saying 'no', names of genitalia, knowledge of CSA, appropriate/ inappropriate touching, disclosure
Paranal et al., 2012	Volunteers and staff in child/youth serving organizations Total of N=318 Intervention Group: N=134 Comparison Group: N=84	Web-based	Non-equivalent groups design	Permitted multiple logins over 15 days	2.5 to 3 hours	Immediate, after 2 months, after 6 months	Voluntary participating in study	**Structure:** **Content:** Prevalence, impact, prevention strategies, how to recognize CSA, how to respond to CSA.

Authors, year	Target group and sample size	Type of program	Format	Sessions	Length of session(s)	Post-test timing and response rate/retention	Recruitment process	Structure and content of the program (as described in study)
Rheingold et al., 2007.	Parents N=200 50/condition	Media-based	Randomized control trial with four conditions (PSA, pamphlet, PSA & pamphlet, no media (control)	1	PSA: 2 minutes, pamphlet: 10 minutes	Immediate and after 1 month 37% retention	Random approach of prospective participants in 25 malls; randomized placement of participants in conditions	**Structure:** Watching/reading media materials **Content:** CSA epidemiology, rates of CSA disclosure, consequences of CSA, recognizing CSA, responding to CSA, preventive steps
Rheingold et al., 2012.	Caregivers in youth-serving organizations Total of N=588 Classroom: N=93/119 in groups of 5-20 members Web-based: N=95/117; Waitlist control: N=352	Classroom-based, web-based	Randomized control trial	Classroom: 1 Web-based: multiple sittings	2.5 hours total	Immediate Response rates: classroom= 78.15% web-based= 81.2%	Child care providers self-selected; randomized placement of participants in conditions	**Structure:** Classroom: 1.25 hr DVD with survivor testimonials and expert interviews; three group discussions with facilitator Web-based: Interactive exercises and videos **Content:** CSA epidemiology, risk factors, indicators, outcomes, CSA prevention and problem solving barriers to CSA prevention, guidelines for talking about CSA with adults and children, appropriate responding to CSA disclosure
Rheingold et al., 2015.	Childcare professionals Total of N-352 Classroom: N=115 groups of 5-20 members Web-based N=116 Waitlist control:	Classroom-based, web-based	Randomized control trial	Classroom: 1 Web-based: multiple sittings over 2 week period	2.5 hours total	Immediate and after 3 months	Childcare professionals recruited through youth serving organizations	**Structure:** Classroom: 1.25 hr DVD with survivor testimonials and expert interviews; three group discussions with facilitator Web-based: Interactive exercises and videos **Content:** CSA epidemiology, risk factors, indicators, outcomes, CSA prevention and problem solving barriers to CSA prevention, guidelines for talking about CSA with adults and children,

Authors, year	Target group and sample size	Type of program	Format	Sessions	Length of session(s)	Post-test timing and response rate/retention	Recruitment process	Structure and content of the program (as described in study)
	N=116							appropriate responding to CSA disclosure
Self-Brown et al., 2008.	Parents/caretakers N= 42 6 groups of 3-11 ethnically homogeneous parents	Media-based	Survey and focus group on two PSAs and one pamphlet	1	Unknown	Immediate Response rate/ retention not given	Parents self-selected through phone/ newspaper recruitment	**Structure:** Watching/reading media materials **Content:** CSA epidemiology, rates of CSA disclosure, consequences of CSA, recognizing CSA, responding to CSA, preventive steps

CSA = Child sexual abuse, N/A = not applicable, PSAs = public service announcements

Table 4. Summary of outcomes for recent adult-targeted CSA education programs for parents/caregivers: methods and content

Outcome Variables and Their Measurement					
Authors, year	**Attitudes**	**Knowledge**	**Behaviour**	**Other measures**	**Key findings**
Bowman et al., 2010.	Ad-hoc designed Sexual Abuse Attitudes and Knowledge Questionnaire (SAAKQ)	Ad-hoc designed SAAKQ	N/A	N/A	• CSA-knowledge improved significantly from pre-test to post-test • CSA-attitudes about sexual abuse improved
Hébert et al., 2002.	N/A	Ad-hoc designed knowledge test	Behavioral intentions towards a CSA disclosure vignette	Perceived self-efficacy measure (ad-hoc designed) to assess ease and comfort of participants' engaging in intended behaviours	• CSA-knowledge was significantly higher for workshop attendants than non-attendants • Workshop attendants showed more CSA-appropriate intended actions than non-attendants • No significant difference between groups in perceived self-efficacy with imagining carrying out these intended actions
Kenny, 2009.	N/A	Ad-hoc designed self-report of knowledge gain	N/A	Program satisfaction measures	• Self-reported CSA-knowledge increased • Attendants appreciated the program and reported increased thoughts about CSA related topics they had not thought about before the program
Paranal et al., 2012	N/A	Ad-hoc designed Likert scale knowledge test	Organizational perceptions of behavioural change in staff/volunteers	Participant satisfaction, organization satisfaction, change to perceived organizational culture	• Participants believed training was effective and useful • Participants liked the content, format, resources provided, and survivor video segments • Participants had some technical concerns with using the program • Organizational representatives believed training was effective in increasing participants knowledge and changing behaviours related to recognizing signs of CSA, responding to disclosures of CSA, and reducing one-on-one interactions with adults and children
Rheingold et al., 2007.	Child Sexual Abuse Myth Scale	Ad-hoc 3-item multiple choice questionnaire	Behaviour intentions to five CSA vignettes, five dichotomous items	N/A	• Significantly higher scores in the CSA-knowledge measure at post-test for those who viewed the PSA plus the pamphlet • CSA-attitudes did not significantly change in any condition • Changes to behavioural intentions measurements were mostly non-significant and the only significant improvement was seen immediately in the pamphlet-only group's intention to engage in primary prevention interventions

Outcome Variables and Their Measurement					
Authors, year	**Attitudes**	**Knowledge**	**Behaviour**	**Other measures**	**Key findings**
Rheingold et al., 2012 (web-based).	N/A	N/A	N/A	Ad-hoc designed questionnaires assessing levels of comfort with the materials and program	• No significant differences in overall discomfort between web-based and the classroom participants • Participants in the web-based program had significantly more discomfort than the classroom group while watching video-clips and reading online materials • 21% of participants in the web-based program believed the program would be better with a facilitator who could help participants with their emotional reactions.
Rheingold et al., 2012 (classroom-based).	N/A	N/A	N/A	Ad-hoc designed questionnaires assessing levels of comfort with the materials and program	• Workshop attendants scored significantly higher in the CSA-knowledge portion of the questionnaire than non-attendants • Workshop attendants reported more appropriate intended actions than non-attendants • No significant difference between groups in perceived self-efficacy with imagining carrying out these intended actions
Rheingold et al., 2015	CSA Myth Scale	Ad-hoc designed 12 question CSA Knowledge Test	Ad-hoc designed 21 item questionnaire to assess behavior change	Demographic information	• Participants had significantly higher scores for knowledge, attitude, and behaviour at 3 month post-test. • No significant difference was found between the classroom version and the online version
Self-Brown et al., 2008.	N/A	Ad-hoc designed knowledge test	Ad-hoc designed questionnaire assessing likelihood of behavioural change	Ad-hoc designed questionnaires assessing levels of comfort with the materials and program	• Self-reported CSA-knowledge increased • Parents appreciated the program and also reported increased thoughts about CSA related topics they had not thought about before the program

CSA = Child sexual abuse, N/A = not applicable, PSAs = public service announcements

1.3.1 Attitudes/beliefs

CSA attitudes/beliefs include perception of risk and risk factors of CSA to children, likelihood of children lying about CSA, feelings of responsibility toward teaching children about CSA, and attitudes about educational programs (Babatsikos, 2010). CSA myths, or incorrect beliefs, can be grouped into four categories (Cromer & Goldsmith, 2010): mischaracterizations of the extent of harm caused by CSA; minimization of the rate of CSA; diffusion of perpetrator blame; and stereotypes about perpetrators.

Babatsikos (2010) reviewed 16 studies exploring parent's attitudes/beliefs, knowledge, and behaviour in regards to CSA making the following conclusions about attitudes and beliefs: most parents believe that CSA education is important for children and believe they should be the primary source of information for the children, but they may also hold some inaccurate or negative beliefs about CSA; many parents believe their children are at low risk or at no risk of being abused; and that many parents have some level of skepticism about believing children's claims of sexual abuse. Wurtele & Kenny (2010) made similar conclusion in their discussion of parental CSA education. It remains unclear how strong these beliefs are currently because the studies are from different time periods: 1984 (Finkelhor) to 2008 (Wurtele). However, a replication of Wurtele's (1992) study on parental beliefs found that parental attitudes regarding CSA were very similar despite nearly 20 years passing (Deblinger, et al., 2010) so it is possible that these beliefs persist currently. Research on adults involved in sporting organizations suggests that similar inaccurate beliefs still exist, namely that raising awareness about CSA within the organization would lead to an increase in false allegations of abuse (Parent & Demers, 2011).

Programs often aim to change participant's attitudes about CSA generally (e.g., Bowman et al., 2010; Hébert et al., 2002; Rheingold et al., 2007) and some aim to change specific attitudes, such as those related to reporting CSA. Some studies (e.g. Rheingold et al., 2007) use established tests to measure attitude change such as the *Child Abuse Myth Scale* (Collings, 1997). The *Teacher Reporting Attitude Scale for Child Sexual Abuse* (TRAS-CSA) assesses teachers' attitudes toward reporting (Walsh et al., 2012) and has been studied more thoroughly than ad-hoc measures. Although this measure is specifically made for assessing attitudes about reporting in teachers, the psychometric properties of this measure are exceptionally well-characterized in the field of adult-targeted CSA education evaluation.

Results from studies that have measured some aspect of attitude change in adults after taking an adult targeted CSA program are variable (**Table 3** and **Table 4**). Bowman and colleagues (2010) measured CSA attitudes of caregivers in a developmental disability service provider finding an immediate improvement in CSA attitudes after participants attended the 4-hour classroom-based educational program. However, parents who were exposed to either a public service announcement, a pamphlet, or both did not show any change attitude as measured by the *Child Sexual Abuse Myth Scale* (Rheingold et al., 2007) suggesting that the type of exposure as well as length or exposure are important factors in achieving attitude change.

1.3.2 Knowledge

Knowledge about CSA includes prevalence, definition, risk of abuse, perpetrator characteristics, and possible indicator of abuse (Babatsikos, 2010). The majority of parents, studied from around the world, have inaccurate information about CSA (Babatsikos, 2010; Wurtele, 1994) and a replication study indicates this misinformation is persistent over time (Deblinger et al., 2010).

Parents often think CSA is less common than it is, may believe boys are unlikely to be sexually abused, and have inaccurate knowledge about potential signs of sexual abuse in children (Wurtele & Kenny, 2010). Accurate knowledge about CSA is important for adults because it will likely impact what they teach children about CSA.

CSA-knowledge gain is a common outcome measure in CSA education programs (e.g., Bowman et al., 2010; Rheingold et al., 2007; Walsh et al., 2012). Many studies create their own tests to measure knowledge change, such as the 3-item multiple choice questionnaire used by Rheingold et al., 2007 or the *Sexual Abuse Attitudes and Knowledge Questionnaire* (SAAKQ) created by Bowman et al. (2010), but these provide little evidence of the extent to which the measures reflect meaningful knowledge gain. Hébert et al.'s (2002) 8-item true/false knowledge test was based on two pre-existing knowledge measures, the *Sexual Abuse Knowledge Statements* (Hibbard & Zollinger, 1990) and the *Parental Knowledge Questionnaire* (Tutty, 1993). None of the other studies utilized these measures. The dependence on ad-hoc measures, and the lack of a consistent, standardised measure makes comparisons in actual CSA-knowledge gain between programs difficult. It should be noted that each program's specific structure, demands and participants will likely create the necessity for a level of creativity in assessing its effects; however, a combination of ad-hoc created measures with standardized scales seems most useful to generalize the findings.

Studies of adult-targeted CSA education programs generally support the assertion that this type of program can increase participants' accurate knowledge about CSA. Earlier programs targeting parents about CSA as part of school-based CSA educational programs showed little or no improvement in parent's general knowledge about CSA after taking an educational program

(Berrick et al., 1988; Kolka, 1987). However, more recent programs (**Table 3** and **Table 4**) have demonstrated their ability to change adult participants knowledge about CSA. Programs targeting parents have demonstrated significant knowledge increases as measured by an ad-hoc tool immediately after taking a program (Kenny, 2006) as well as 2 weeks after taking a program (Hébert et al., 2002). The format of the education appears to affect the amount of knowledge change as a randomized control study of parents exposed to various media based CSA materials found that only those parents exposed to a public service announcement as well as a pamphlet had increased accurate knowledge immediately after exposure which differed from the parents exposed to only one the items alone or not exposed at all (Rheingold et al., 2007). Programs targeting caregivers in child/youth serving organizations have demonstrated general knowledge increase immediately after taking a 4 hour long educational program (Bowman et al., 2010) as well as after 2.5 hours of education in either classroom or web-based format (Rheingold et al., 2012).

1.3.3 Behaviour

Behavioural practices include talking about CSA with children, the types of topics discussed, use of teaching tools, and attendance at prevention programs (Babatsikos, 2010). Parents often report wanting to talk to their children about CSA (Deblinger et al., 2001) but their lack of accurate knowledge about CSA affects the content of what they are talking about (Wurtele, & Kenny, 2010). Findings suggest a lower comfort level talking about CSA generally, with parents reporting this topic is more difficult to talk about than sexual intercourse, suicide, death, and abortion (Finkelhor, 1984). When parents do talk with their children about CSA they tend to talk about stranger sexual abuse and strategies for handling luring or kidnapping scenarios such as saying no and trying to get away than talking about coercion or taking videos and pictures as part of sexual abuse (Deblinger et al., 2010; Wurtele, & Kenny, 2010). Some parents identify a lack of knowledge

about CSA, a vocabulary for discussing it, and inaccessibility of supportive materials as barriers to talking about CSA with children (Wurtele et al., 1992).

It is also important to consider organizational behaviour as part of an ecological approach to CSA education but we know very little about current organizational behaviours as they relate to CSA. Organizations can be active in reducing children's vulnerability to CSA by implementing practices such as criminal record checks and ongoing monitoring of one-on-one time between adults and children/youth. Parent and Demers (2011) used a multiple instrumental case study design to gain unique insight into sport clubs and federations in Canada. They conducted semi-structured interviews with administrators, athletes, coaches, and parents. Content analysis lead them to conclude that overall there was a "climate of inaction" on the issue of CSA in these organizations (p.124). Negative beliefs about the ineffectiveness about CSA prevention strategies and education seen in these study participants may act as a barrier to making change at the organizational level.

In sexual assault prevention research, behaviour is increasingly being used as an outcome variable (Anderson & Whiston, 2005), but no adult-targeted CSA prevention studies have included measures of actual behavioural change. Some adult-targeted CSA studies have found creative ways to measure behavioural intentions as an indicator of likelihood of behavioural change by measuring participants' responses to CSA-vignettes and scenarios (Hébert et al., 2002; Rheingold et al., 2007; Walker-Descartes et al., 2009). The *Taking Action Strategies* is a 21-item scale created to assess the extent to which severity of CSA impacts likelihood of adult action (Descartes-Walker et al., 2011). According to its authors it has face validity and internal consistency (Descartes-Walker et al., 2011) but there is no peer-reviewed published evidence regarding its construct validity or

efficacy. It would be beneficial for CSA researchers to identify behavioural indicators of change and work to develop valid and reliable measurement tools.

While actual behaviour change after taking a CSA education program has not been measured previously, intentions to change behaviour have been assessed. Participation in a CSA educational program can increase participants' intentions to talk with children about CSA. Mothers who took an education program aimed at parents planned to discuss the topic more than fathers who took the same program (Elrod & Rubin, 1993), and overall parents that attended workshops had greater behavioural intentions to discuss this issue than those that did not (Burgess & Wurtele, 1998). Attendance at a workshop can also create more positive reactions in hypothetical disclosure scenarios (Hébert et al., 2002). After being exposed briefly to CSA educational material in public service announcement and pamphlets format (**Table 3** and **Table 4**), parents in one study reported that they were more likely to use prevention strategies they had just learned about (Self-Brown et al., 2008). However, parents exposed to similar media materials did not show any significant change in behavioural intentions after being exposed to hypothetical CSA vignettes at one-month follow-up (Rheingold et al., 2007).

Taken together, the research that is available on adult-targeted CSA education programs suggests that it is possible to change adult's attitudes, knowledge, and behavioural intentions regarding child sexual abuse. However, a relative dearth of research in this area makes it difficult to make clear conclusions about what type of format and approach is the most effective.

1.4 This Doctoral Study

Clearly, the issue of CSA prevention is complex and multifaceted. The preceding literature review reveals three major gaps: firstly, there is no research that has examined the effectiveness of any education program on actual behavioural changes; secondly, there is no current education program that is based on the recent evidence base; thirdly, there is no Canadian-specific education program. In order to address these needs, this research consisted of four major steps:

1) Understand the background and current research knowledge
2) Utilizing this knowledge, develop a research-informed, Canadian content, CSA prevention program.
3) Determine the effectiveness of this program within an in-person classroom version.
4) Determine if this program can also be effective in a modified online version, since this may increase the potential utility of such a program.

After an extensive literature review (as contained within the present chapter), the research project focused on developing a classroom-based educational program designed to change adult participants' behaviours in regards to CSA prevention. It was also intended to increase participants' knowledge and impact their attitudes towards CSA. After development of this program (which was an extensive component of the research program) a program of evaluation was put in place. The hypotheses of the research was that participants taking part in this program would demonstrate an increase in:

1) Accurate knowledge about CSA
2) Appropriate attitudes about CSA
3) Their use of preventative behaviours believed to reduce children's vulnerability to CSA

There was one additional hypothesis specific to the on-line version:

4) That behavioural change scores would be statistically significant, but smaller in magnitude, than the classroom version, since it was hypothesized that there would be greater impact from in-person training.

1.5 Scope of this Study

This thesis describes the development, implementation, and evaluation of the CSA education program, termed: *Prevent it! Taking Action to Stop Child Sexual Abuse (*"*Prevent it!*"). This program was developed and tested in close collaboration with a national charity, *Little Warriors*. Initial literature review for the development of this program began in May, 2012 and the program was implemented in October, 2014. The thesis describes all aspects of this project including the development of the program, all components of the program, and the program evaluation. It should be noted that this thesis is based, in part, on a previously published article and articles intended for publication. For this reasons, the reader may experience some minor repetition in the introductions for each section.

Section 1 is an overall introduction to this topic and research project. Section 2 describes the development of the program and the program itself in detail, as this was a significant part of this thesis. Section 3 describes the evaluation of the classroom version of this program. Section 4 describes the evaluation of the online version of the program. Section 5 includes a discussion considering the overall findings from this study and future recommendations are made.

References:

Adams, J. A. (2001). Evolution of a classification scale: medical evaluation of suspected child sexual abuse. *Child Maltreatment, 6*(1), 31–36. doi:10.1177/1077559501006001003

Adams, J. A., Starling, S. P., Frasier, L. D., Palusci, V. J., Shaprio, R. A., Finkel, M. A., et al. (2012). Diagnostic accuracy in child sexual abuse medical evaluation: role of experience, training, and expert case review. *Child Abuse & Neglect,* 36, 383–392. doi:10.1016/j.chiabu.2012. 01.004.

Alaggia, R. (2004). Many ways of telling: expanding conceptualizations of child sexual disclosure. *Child Abuse and Neglect,* 28, 1213–1227. doi:10.1016/j.chiabu.2004.03.016.

Alaggia, R. (2010). An ecological analysis of child sexual abuse disclosure: considerations for child and adolescent health. *Journal of the Canadian Academy of Child & Adolescent Psychiatry, 19*(1), 32–39.

Anderson, J., Martin, J., Mullen, P., Roman, S., and Herbison, P. (1993). Prevalence of childhood sexual abuse experiences in a community sample of women. *Journal of American Academy of Child and Adolescent Psychiatry, 32*(5), 911–919.

Bailey, J. A., and McCloskey, L. A. (2005). Pathways to adolescent substance use: among sexually abused girls. *Journal of Abnormal Child Psychology, 33*(1), 39–53. doi:10.1007/s10802-005- 0933-0 .

Beitchman, J. H., Zucker, K. J., Hood, J. E., DaCosta, G. A., Akman, D., and Cassvia, E. (1992). A review of the long-term effects of child sexual abuse. *Child Abuse and Neglect, 16*(1), 101–108.

Bolen, R. M. (2001). *Child Sexual Abuse: Its Scope and our Failure*. New York, NY: Kluwer Academic/Plenum Publishers.

Bolen, R. M., and Scannapieco, M. (1999). Prevalence of child sexual abuse: a corrective-meta-analysis. *Social Service Review, 73*(3), 281–313. doi:10.1086/514425.

Bowman, R. A., Scotti, J. R., and Morris, T. L. (2010). Sexual abuse prevention: a training program for develop- mental disabilities service providers. *Journal of Child Sexual Abuse, 19*(2), 119–127. doi:10.1080/10538711003614718.

Briere, J., and Jordon, C. E. (2009). Childhood maltreatment, intervening variables, and adult psychological difficulties in women: an overview. *Trauma Violence Abuse, 10*(4), 375–388.

Briere, J., Kaltman, S., and Green, B. L. (2008). Accumulated childhood trauma and symptom complexity. *Journal of Traumatic Stress, 21*(2), 223–226. doi:10.1002/jts.20317.

Briggs, P., Simon, W. T., and Simonsen, S. (2011). An exploratory study of Internet-initiated sexual offenses and that chat room sex offender: has the Internet enabled a new typology of sex offender? *Sexual Abuse*, *23*(1), 71–91.

Chen, L. P., Murad, M. H., Paras, M. L., Colbenson, K. M., Sattler, A. L., Goranson, E. N., Elamin, M. B., Seime, R. J., Shinozaki, G., Prokop, L. J., & Zirakzadeh, A. (2010). Sexual abuse and lifetime diagnosis of psychiatric disorders: Systemic review and meta-analysis. *Mayo Clinic Proceedings, 85*(7), 618-629. doi:10.4065/mcp.2009.0583.

Collin-Vézina, D., Daigneault, I., & Hébert, M. (2013). Lessons learned from child sexual abuse research: Prevalence, outcomes, and preventative strategies. *Child & Adolescent Psychiatry & Mental Health, 7*(22), 1-9.

Collin-Vézina, D., Hélie, S., & Trocmé, N. (2010). Is child sexual abuse declining in Canada? An analysis of welfare data. *Child Abuse & Neglect, 34*(11), 807-812. doi:10.1016/j.chiabu.2010.05.004.

Cromer, L. D., Goldsmith, R. E. (2010). Child sexual abuse myths: Attitudes, beliefs, and individual differences. *Journal of Child Sexual Abuse, 19*(6), 618-647. doi**:**10.1080/10538712.2010.522493.

Cutajar, M. C., Mullen, P. E., Ogloff, J. R. P., Thomas, S. D., Wells, D. L., and Spataro, J. (2010). Psychopathology in a large cohort of sexually abused children followed up to 43 years. *Child Abuse Negl.* 34, 813–822. doi:10.1016/j.chiabu.2010.04.004

Danielson, C. K., and Holmes, M. M. (2004). Adolescent sexual assault: an update of the literature. *Current Opinion in Obstetric Gynecology, 16*(5), 383–388. doi:10.1097/00001703-200410000- 00005.

De Bellis, M. D., Spratt, E. G., and Hooper, S. R. (2011). Neurodevelopmental biology associated with childhood sexual abuse. *Journal of Child Sexual Abuse, 20*(5), 548–587. doi:10.1080/10538712.2011.607753.

Dorahy, M. J., & Clearwater, K. (2012). Shame and guilt in men exposed to childhood sexual abuse: A qualitative investigation. *Journal of Child Sexual Abuse, 21*(2), 155-175. doi: 10.1080/10538712.2012.659803.

Dube, S. R., Anda, R. F., Whitfield, C. L., Brown, D. W., Felitti, V. J., Dong, M., et al. (2005). Longer- term consequences of childhood sexual abuse by gender of victim. *American Journal of Preventative Medicine,* 28, 430–438. doi:10.1016/j.amepre.2005.01.015

Eke, A. W., Seto, M. C., and Williamson, J. (2011). Examining the criminal history and future offending of child pornography offenders: an extended prospective follow- up study. *Law and Human Behavior, 35*(6), 466–478. doi:10.1007/s10979-010- 9252-2.

Elrod J. M., & Rubin, R H. (1993). Parental involvement in sexual abuse prevention education. *Child Abuse & Neglect, 17*(4), 527-538.

Enlow, M. B., Egeland, B., Blood, E. A., Wright, R. O., and Wright, R. J. (2012). Interpersonal trauma exposure and cognitive development in children to age 8 years: a longitudinal study. *Journal of Epidemiological & Community Health, 66*(11), 1005–1010. doi:10.1136/jech-2011-200727.

Fallon, B., Trocmé, N., Flukec, J., MacLaurind, B., Tonmyre, L., and Yuan, Y. (2010). Methodological issues in measuring maltreatment. *Child Abuse &Neglect, 34(1)*, 70–79, doi: 10.1016/**j**.chiabu.2009.08.008.

Faust, D., Bridges, A. J., and Ahern, D. C. (2009). "Methods for the identification of sexually abused children: issues and needed features for abuse indicators," in *The Evaluation of Child Sexual Abuse Allegations: A Comprehensive Guide to Assessment and Testimony*, eds K. Kuehnle, and M. Connell (New York: Wiley), 49–79.

Feiring, C., & Taska, L. S. (2005). The persistence of shame following sexual abuse: A longitudinal look at risk and recovery. *Child Maltreatment, 10*(4), 337-349. DOI: 10.1177/1077559505276686.

Felliti, V. J., Anda, R. R., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., et al. (1998). Relationship of child- hood abuse and household dysfunction to many leading causes of death in adults. *American Journal of Preventative Medicine,* 14, 245–258. doi:10.1016/S0749- 3797(98)00017-8

Fergusson, D. M., Lynskey, M. T., and Horwood, J. L. (1996). Childhood sexual abuse and psychiatric disorder in young adulthood: I. Prevalence of sexual abuse and factors associated with sexual abuse. *Journal of American Academy of Child and Adolescent Psychiatry,* 34, 1355–1365. doi:10.1097/00004583- 199610000-00023

Finkelhor, D. (1994a). The international epidemiology of child sexual abuse. *Child Abuse &*

Neglect, 18, 409–417. doi:10.1016/j.chiabu.2008.07.007
Finkelhor, D. (1994b). Current information on the scope and nature of child sexual abuse. *Future of Children.* 4, 31–53. doi:10.2307/1602522.
Finkelhor, D., Jones, L., and Shattuck, A. (2010a). Updated trends in child maltreatment. *Crimes Against Children Research Centre.* Available at: http://unhinfo.unh.edu/ccrc/ pdf/CV203_Updated%20trends% 202010%20FINAL_12- 19- 11.pdf
Finkelhor, D., Turner, H., Ormrod, R., and Hamby, S. (2010b). Trends in childhood violence and abuse exposure: evidence from two national surveys. *Archives of Pediatric.and Adolescent Medicine,* 164, 238–242. doi:10.1001/archpediatrics.2009.283
Finkelhor, D., Ormrod, R., Turner, H., and Hamby, S. (2005). The victimization or children and youth: a comprehensive, national survey. *Child Maltreatment, 10*(1), 5–25. doi:10.1177/1077559504271287.
Finkelhor, D., Ormrod, R. K., and Turner, H. A. (2007). Poly-victimization: a neglected component in child victimization. *Child Abuse & Neglect, 31*(1), 7–26. doi: 10.1016/j.chiabu.2006.06.008.
Fricker, A. E., Smith, D. W., Davis, J. L., and Hanson, R. (2003). Effects of context and question type on endorsement of childhood sexual abuse. *Journal of Traumatic Stress, 16*(3), 265–268. doi:10.1023/A:1023748124626.
Gilbert, R., Widom, C. S., Browne, K., Fergusson, D., Webb, E., and Janson, S. (2009a). Burden and consequences of child maltreatment in high-income countries. *Lancet, 373*, 68–81. doi:10.1016/S0140- 6736(08)61706-7
Gilbert, R., Kemp, A., Thoburn, J., Sidebotham, P., Radford, L., Glaser, D., et al. (2009b). Recognizing and responding to child maltreatment. *Lancet, 373*, 167–180. doi:10. 1016/S0140-6736(09)60725-X
Gorey, K. M., and Leslie, D. R. (1997). The prevalence of child sexual abuse: integrative review adjustment for potential response and measurement biases. *Child Abuse & Neglect, 21*(4), 391–398.
Hébert, M., Lavoie, F., and Parent, N. (2002). An assessment of outcomes following parents' participation in a child abuse prevention program. *Violence and Victims, 17*(3), 355–372.
Heger, A., Ticson, L., Velasquez, O., and Berliner, R. (2002). Children referred for possible sexual abuse: medical findings in 2384 children. *Child Abuse & Neglect.* 26, 645–659.
Herman, J. (2011). "Posttraumatic stress disorder as a shame disorder". in *Shattered States: Disorganized Attachment and Its Repair,* eds J Yellin and K White. (London: Bowlby Centre). 261-275.
Horner, G. (2009). Common conditions that mimic findings of child sexual abuse. *Journal of Pediatric Health Care, 23*(5), 283–288. doi:10.1016/j.pedhc.2008.05.003.
Howard, D. E., and Wang, M. Q. (2005). Psychosocial correlates of U.S. adolescents who report a history of forces sexual intercourse. *Journal of Adolescent Health, 36*(5), 372–379. doi: doi:10.1016/j.jadohealth.2004.07.007.
Jones, L. M., Mitchell, K. J., and Finkelhor, D. (2012). Trends in youth Internet victimization: findings from three youth inter- net safety survey 2000-2010. *Journal of Adolescent Health, 50*(2), 179–186. doi:10.1016/j.jadohealth.2011.09.015.
Kenny, M. C. (2009). Child sexual abuse prevention: Psychoeducational groups for preschoolers and their parents. *The Journal for Specialists in Group Work, 34*(1), 24-42. DOI: 10.1080/01933920802600824.
Kingston, D. A., Fedoroff, P., Firestone, P., Curry, S., and Bradford, J. M. (2008). Pornography

use and sexual aggression: the impact of frequency and type of pornography use on recidivism among sexual offenders. *Aggressive Behavior, 34*(4), 341–351. doi:10.1002/ab.20250.

La Bash, H., & Papa, A. (2014). Shame and PTSD Symptoms. *Psychological Trauma: Theory, Research, Practice, and Policy, 6*(2), 159-166. doi:org/10.1037/a0032637.

Lacelle,C., Hébert,M., Lavoie,F., Vitaro, F., and Tremblay, R. E. (2012). Child sexual abuse and women's sexual health: the contribution of CSA severity and exposure to multiple forms of childhood victimization. *Journal of Child Sexual Abuse, 21*(5), 571–592. doi:10.1080/10538712.2012.688932.

Leventhal, J. M. (1998). Epidemiology of sexual abuse of children: old problems, new directions. *Child Abuse & Neglect*, *22*(6), 481–491.

Lewis, H. B. (1971). Shame and guild in neurosis. *Psychoanalytic Review, 58*(3), 419-438.

Liu, R. T., Jager-Hyman, S., Wagner, C. A., Alloy, L. B., and Gibb, B. E. (2012). Number of childhood abuse perpetrators and the occurrence of depressive episodes in adulthood. *Child Abuse & Neglect, 36*(4), 323–332. doi:10.1016/j.chiabu.2011.11.007.

London, K., Bruck, M., Wright, D. B., and Ceci, S. J. (2008). Review of the contemporary literature on how children report sexual abuse to others: findings, methodological issues, and implications for forensic interviewers. *Memory, 16*(1), 29–47. doi:10.1080/09658210701725732.

Lutz-Zois, C. J., Roecker Pehlps, C. E., & Reichle, A. C. (2011). Affective, behavioral, and social-cognitive dysregulation as mechanisms for sexual abuse revictimization. *Violence and Victims, 26*(2), 159-175. doi: 10.1891/0886-6708.26.2.159.

Lyon, T. D., and Ahern, E. C. (2011). "Disclosure of child sexual abuse," in *The APSAC Handbook on Child Maltreatment: Third Edition*, ed. J. E. B. Myers (Newbury Park, CA: Sage), 233–252.

MacMillan, H., Feming, J., Trocmé, N., Boyle, M., Wong, M., Racine, Y., et al. (1997). Prevalence of child physical and sexual abuse in a com- munity sample: results from the Ontario health supplement. *Journal of the American Medical Association, 278*(2), 131–135.

Maniglio, R. (2009). The impact of child sexual abuse on health: A systematic review of reviews. *Clinical Psychology Review, 29*, 647-657. doi:10.1016/j.cpr.2009.08.003.

Martin, J., Anderson, J., Romans, S., Mullen, P., and O'Shea, M. (1993). Asking about child sexual abuse: methodological implications of a two stage survey. *Child Abuse Negl.* 17, 383–393.

Martin, K. E., & Silverstone, P. H. (2013). How much child sexual abuse if "below the surface" and how can we help adults identify it early? *Frontiers in Psychiatry, 4*(58), 1-10 doi: 10.3389/fpsyt.2013.00058.

McGee, H., O'Higgins M., Garavan, R., & Conroy, R. (2011). Rape and child sexual abuse: What beliefs persist about motives, perpetrators, and survivors? *Journal of Interpersonal Violence, 26*(17). 3580-3593. DOI: 10.1177/0886260511403762

Messman-Moore, T. L., Long, P. J. (2003). The role of childhood sexual abuse sequlae in the sexual revictimization of women: An empirical review and theoretical reformulation. *Clinical Review, 23*(4), 537-571.

Merikangas, K. R., and McClair, V. L. (2012). Epidemiology of sub- stance use disorders. *Hum. Genet.* 131, 779–789. doi:10.1007/s00439- 012-1168-0

Nielssen, O., Dea, J., Sullivan, D., Rodriquez, M., Bourget, D., and Large, M. (2011). Child

pornography offenders detected by surveillance of the Internet and by other methods. *Criminal Behaviour and Mental Health, 21*(3), 215–224. doi:10.1002/cbm.809.
Niveau, G. (2010). Cyber-pedocriminality: characteristics of a sample of internet child pornography offenders. *Child Abuse & Neglect, 34*(8), 570–575.
Pereda, N., Guilera, G., Forns, M., & Gómez-Benito, J. (2009). The international epidemiology of child sexual abuse: A continuation of Finkelhor (1994). *Child Abuse & Neglect, 33*(6), 331-342. doi:10.1016/j.chiabu.2008.07.007.
Public Health Agency of Canada. (2010). *Canadian Incidence Study of Reported Child Abuse and Neglect – 2008: Major Findings*. Ottawa, ON: Minister of Public Works and Government Services Canada.
Rheingold, A. A., Campbell, C., Self-Brown, S., Arellano de, M., Resnick, H., & Kilpatrick, D. (2007). Prevention of child sexual abuse: Evaluation of a community media campaign. *Child Maltreatment, 12*(4), 352-363. doi: 10.1177/1077559507305994.
Rheingold, A. A., Zajac, K., & Patton, M. (2012). Feasibility and acceptability of a child sexual abuse prevention program for childcare professionals: Comparison of a web-based and in-person training. *Journal of Child Sexual Abuse, 21*(4), 422-436. doi: 10.1080/10538712.2012.675422.
Saewyc, E. M., Skay, C. L., Pettingell, S. L., Reis, E. A., Bearinger, L., Resnick, M., et al. (2006). Hazards of stigma: the sexual and physical abuse of gay, lesbian, and bisexual adolescents in the United States and Canada. *Child Welfare, 85*(2), 195–213.
Sarafino, E. P. (1979). An estimate of nationwide incidence of sexual offences against children. *Child Welfare, 58*(2), 127–134.
Sedlak, A. J. (1991). *National Incidence Study of Child Abuse and Neglect: 1988, Revised Report*. Rockville, MD: National Clearinghouse on Child Abuse and Neglect Information.
Sedlak, A. J. (2001). *A History of the National Incidence Study of Child Abuse and Neglect*. Rockville, MD: Westat Inc.
Sedlak, A. J., and Broadhurst, D. D. (1996). *Third National Incidence Study of Child Abuse and Neglect. Executive Summary*. Washington, DC: U.S. Department of Health and Human Services.
Sedlak, A. J., Mettenburg, J., Basena, M., Petta, I., McPherson, K., Greene, A., et al. (2010). *Fourth National Incidence Study of Child Abuse and Neglect (NIS–4): Report to Congress*. Washington, DC: U.S. Department of Health and Human Services, Administration for Children and Families.
Self-Brown, S., Rheingold, A. A., Camp- bell, C., and Arellano, M. A. (2008). A media campaign prevention pro- gram for child sexual abuse: com- munity members' perspectives. *Journal of Interpersonal Violence, 23*(6), 728–743. doi:10.1177/0886260507313946
Shaffer, A., Huston, L., and Egeland, B. (2008). Identification of child maltreatment using prospective and self-report methodologies: a comparison of maltreatment incidence and relation to later psychopathology. *Child Abuse & Neglect, 32*(7), 682–692. doi:10.1016/j.chiabu.2007. 09.010.
Sherrill, A., Renk, K., Sims, V., and Culp, A. (2011). Undergraduate students' attributions of depicted adult-adolescent and adolescent- adolescent sexual interactions. *Journal of Child Sexual Abuse. 20*(2), 157–181. doi:10.1080/10538712.2011.554342.
Spring, F. E., and Friedrich, W. N. (1992). Health risk behaviors and medical sequelae of child-

hood sexual abuse. *Mayo Clinic Proceedings. 67*(6), 527–532. doi:10.1016/S0025-6196(12)60458-3.

Staller, K. M., and Nelson-Gardell, D. (2005). "A burden in your heart": lessons of disclosure from female pre-adolescent and adolescent survivors of sexual abuse. *Child Abuse & Neglect, 29(12)*, 1415–1432.

Talbot, J. A., Talbot, N., & Tu, X. (2004). Shame-proneness as a diathesis for dissociation in women with histories of child sexual abuse. *Journal of Traumatic Stress, 17*(5), 445.448. doi: 10.1023/B:JOTS.0000048959.29766.ae

Tangeny, J. P. (1996). Conceptual and methodological issues in the assessment of shame and guilt. *Behaviour Research and Therapy, 34*(9), 741-754.

Tangney, J. P. Miller, R. S., Flicker, L., & Barlow, D. H. (1996). Are shame, guilt, and embarrassment distinct emotions? *Journal of Personality and Social Psychology, 70*(6), 1256-1269.

Trocmé, N., Fallon, B., MacLaurin, B., Daciuk, J., Felstiner, C., Black, T., et al. (2005). *Canadian Incidence Study of Reported Child Abuse and Neglect – 2003: Major Findings*. Ottawa, ON: Minister of Public Works and Government Services Canada.

Trocmé, N., MacLaurin, B., Fallon, B., Daciuk, J., Billingsley, D., Tourigny, M., et al. (2001). *Canadian Incidence Study of Reported Child Abuse and Neglect: Final Report*. Ottawa, ON: Minister of Public Works and Government Services Canada.

U.S. Department of Health and Human Services. (1981). *Study Findings: National Incidence and Severity of Child Abuse and Neglect*. Washing- ton: U.S. Department of Health and Human Services. [DHHS Publication No. (OHDS) 81-30325]. U.S. Department of Health and Human Services. (2009). *Administration on Children, Youth and Families. Child Maltreatment 2007*. Washington, DC: U.S. Government Printing Office.

Veltman, M. W. M., and Browne, K. D. (2001). Three decades of child maltreatment research: implications for the school years. *Trauma Violence Abuse, 2*(3), 215–239.

Ullman, S. E., & Vasquez, A. L. (2015). Mediators of sexual revictimization risk in adult sexual assault victims. *Journal of Child Sexual Abuse, 24*(3), 300-314. doi: 10.1080/10538712.2015.1006748.

Weiss, E. L., Longhurst, L. G., and Mazure, C. M. (1999). Childhood sexual abuse as a risk factor for depression in women: psychosocial and neurobiological correlates. *American Journal of Psychiatry, 156*(6), 816–828.

Wolak, J., Finkelhor, D., Mitchell, K. J., and Ybarro, M. L. (2008). Online "predators" and their victims: Myths, Realities, and implications prevention and treatment. *American Psychologist, 63*(2)*,* 111-128. . http://dx.doi.org/10.1037/0003-066X.63.2.111.

World Health Organization. (2003). *Guidelines for Medico-Legal Care for Victims of Sexual Violence. Gender and Women's Health, Family and Community Health Injuries and Violence Prevention, Noncommunicable Diseases and Mental Health*. Available at: http://whqlibdoc.who.int/ publications/2004/924154628X.pdf

World Health Organization. (2004). *Managing Child Abuse: A Handbook for Medical Officers*. World Health Organization, Regional office for South East Asia. Available at: http://www.scribd.com/doc/545430 22/Managing-Child-Abuse- Handbook-for-Medical-Officers.

Wurtele, S. K., & Kenny, M. C. (2010). Partnering with parents to prevent childhood sexual abuse. *Child Abuse Review, 19*(2), 130-15. doi: 10.1002/car.1112.

Yancey, C. T., Hansen, D. J., and Naufel, K. Z. (2011). Heterogeneity of individuals with a

history of child sexual abuse: an examination of children presenting to treatment. *Journal of Child Sexual Abuse, 20*(2), 111–127. doi:10.1080/ 10538712.2011.554341

Zerubavel, N., & Messman-Moore, T. L. (2013). Sexual victimization, fear of sexual powerlessness, and cognitive emotion dysregulation as barriers to sexual assertiveness in college women. *Violence Against Women, 19(*12), 1518-1537. doi: 10.1177/1077801213517566.

Zink, T., Klesges, L., Stevens, S., and Decker, P. (2009). The development of a sexual abuse severity score: characteristics of child- hood sexual abuse associated with trauma symptomatology, somatization, and alcohol abuse. *Journal of Interpersonal Violence, 24*(4), 537–546. doi:10.1177/0886260508317198.

Zwi, K., Woolfenden, S., Wheeler, D. M., O'Brien, T., Tait, P., and Williams, K. J. (2007). School- based education programs for the prevention of child sexual abuse. *Cochrane Database System Review* 3, CD004380. doi:10.1002/14651858. CD004380.pub2.

2 Program Development

Literature review, consultation, and program component development began in May 2012 and continued until program implementation in September, 2014 **(Table 5)**. While the process was roughly linear, many of the activities involved in the development of the program overlapped with one another. A substantial portion of this section of the project involved amalgamating information gleaned through the consultation process in order to form the content of the program.

2.1 Consultation Process: Literature, Experts, and Stakeholders

2.1.1 Literature Review

The literature review related to CSA topics was carried out in order to determine program content, with this review using the databases Pubmed, PsycInfo, and Eric. In order to obtain an overview of the topic, the databases were searched using the following terms: sexual abuse, rates, occurrence, epidemiology, impact, signs, indicators, victim, survivor, offenders, perpetrators, disclosure, education, prevention, reporting, parents, children, caregivers, and teachers. The research was also utilized to determine the appropriate theoretical grounding for the program and the most appropriate program structure.

2.1.2 Consultation with Experts

Extensive consultation with topic experts was carried out in order to assess current needs in CSA education. This included contacting members of the Edmonton Police Services, the Royal Canadian Mounted Police, psychologists working in the field of CSA, and therapists working at sexual assault centres. Consultation was also carried out with staff and volunteers at the non-profit

organization, Little Warriors. This included members of the Board of Directors, staff members, and volunteers to ensure that the program was feasible for implementation utilizing their resources.

Table 5. Summary of timeline for the development of the *Prevent It! Taking Action to Stop Child Sexual Abuse* program

Task	**Timeline**
Literature review on topic of CSA*	May 2012 – November 2012
Published review article on CSA	July 2013
Consultation with experts	May 2013 – January 2014
Consultation with stakeholders	February 2013 – ongoing as needed
Program Guide	July 2013 – January 2013
Program Workbook	November 2013 – April 2014
Narrator script	February 2014
Video production process	November 2013 – June 2014
Recruiting survivors and professionals	December 2013 – January 2014
Filming survivors and professionals	January - February 2014
Filming narrator	February 2014
Editing	January 2014 – March 2014
Classroom version implementation	September 2014 – October 2014
Online version implementation	March 2015 – March 2016

*CSA – child sexual abuse

2.2 Theoretical Grounding

Because the primary goal of the program was behavioural changes, with attitude and knowledge changes being secondary goals, it was critical that the program be designed in a way that maximized the likelihood of participant's subsequent behavioural changes. The lack of research on behaviour change in relation to adult-targeted CSA education means that little was known about how best to change participants' behaviour in this context. Literature on behaviour change more generally was consulted and used to adopt a theoretical grounding.

2.2.1 Transtheoretical model of change

The transtheoretical model of change (TTM) is a widely accepted model that combines critical elements of the major theories of change into one, carefully designed model (Diclemente & Prochaska, 1998). The TTM has 5 stages that adults cycle through when they are changing their behaviour: (1) *precontemplation*, during which adults are not yet thinking about making the change in question, (2) *contemplation*, in which the person is considering the change, but has not yet decided to change, (3) *preparation*, when people begin preparing for and planning for making the behavioural changes, (4) *action*, in which the individual begins making the change and finally, (5) *maintenance,* in which the change is made and is continued over a longer period of time. The TTM thus provides the theoretical background for understanding how adults change behaviour. In the development of this program the TTM provides the rationale for understanding that participants may be in differing stages of change in regards to the targeted behaviours, and how the program is to facilitate movement towards action.

2.2.2 Transfer of knowledge

In order to achieve behaviour change, knowledge must be taught and learned effectively, but it must also be applied in the real world. *Transfer* is the process through which knowledge gained in a teaching environment is applied to a corresponding real-life situation (Barnett & Ceci, 2002). While knowledge and attitude change may be an important part of this process, the application of this new knowledge to real world occurrences is critical in achieving behavioural changes.

2.2.3 Experiential Learning Cycle

The experiential learning cycle (ELC) is used to facilitate participant's movement through the TTM towards the action stage. The ELC (Kolb, 1975) has 4 components: (1) *concrete experience*, (2) *reflective observation*, (3) *abstract conceptualization*, and (4) *action/active experimentation*. In the first stage, the facilitator creates a structured experience or exercise designed to engage participants in an activity that is related to the desired outcomes and providing a common base for discussion. In the second stage, participants reflect on the concrete experience. The facilitator helps participants explore answers to questions. Participants personalize the experience by exploring their feelings about, reactions to, and observations of the activity. In the third stage, participants look for lessons and future applications answering "*so what"* and "*now what"* questions. They make real-world meaning of the activity by utilizing general principles. The facilitator guides participants to explore applications of their learning, allowing them to generalize this learning to other situations. In the fourth stage, participants explore ways to implement their learning. They are told that the experiential learning model is a cycle, and that when they implement an action plan they create a new experience.

The model of change provides the background for the stages that adult learners go through when learning. The program's goal is transfer, meaning that participants who take the program will be using the tools learned in the program to their everyday lives. The experiential learning cycle is the tool the program uses to facilitate learning of knowledge and transfer it into behaviour.

2.3 Program Guide Document

First, a program guide was developed that included detailed information about the program, as well as the rationale for each section. This program guide takes the information collected in the literature and presents it as the rationale for each section. It provides all necessary background information for the program content and rationale. It is written with the intention of being accessible to a non-academic audience while still being very specific and detailed. The material for the program guide was researched extensively and written over a 6-month period between July, 2013 and January, 2013. The program guide is an 85-page document and is potentially available to program staff, volunteer facilitators, funders, and other members of the public interested in gaining an in-depth understanding of the program. A copy of the program guide can be obtained by contacting the author. Creating this guide was an extensive endeavor, taking many months of full-time work (**Table 5**). It was the critical piece required before any further program development could occur.

2.4 Program Content

The absence of good peer-reviewed material describing best-practices in adult-targeted CSA education necessitated that conclusions be drawn based on the existing literature. This section describes each major content area including the rationale for inclusion in the program.

2.4.1 General Information about CSA

Although child sexual abuse (CSA) happens frequently, it is common for individuals to have inaccurate information about it, often believing for example, that children are most at risk of being abused by strangers (Babatsikos, 2010). The goal of this section is for participants to gain accurate knowledge about CSA so that they understand the problem as it occurs today, in Canada. The general information section of the program included accurate information about CSA based on published conclusions about the definition of CSA, prevalence, rates by gender, rates by type of CSA, and the possible role of the Internet (Martin & Silverstone, 2013). These are detailed in Chapter 1. Additional information was given regarding youth and consent, marginalization, risk factors associated with CSA, myth about CSA, and offenders of sexual abuse. These, and other related issues that are included in the program, are described below.

2.4.1.1 Youth and Consent

Beyond the definition of CSA discussed previously, *consent* is a voluntary agreement to engage in sexual activity. The legal age of consent in Canada is 16 but the law allows for room for voluntary sexual experimentation among certain peers (such as two teenagers where one is 15 but the other 14), while criminalizing abusive sexual occurrences. No child under the age of 12 can give consent to engage in sexual activity. Inviting, asking, or advising a child to engage in an activity for sexual purposes is also a crime (Criminal Code, 1985). This program focuses on sexual abuse that occurs with children as the target, rather than *sexual assault*, which involves two people who are legally able to provide consent to one another but where one person has perpetrated a non-consensual sexual assault. This program focuses on abuse perpetrated by an older and/or more powerful person upon the child. This includes family members, babysitters, teachers, coaches, and older children.

2.4.1.2 Marginalization

Marginalization is the process where some groups of people are relegated to the outer limits of the community, and to a lower social status. Many children who are First Nations, are gay, lesbian, bisexual, or transgender, or have developmental disabilities, are marginalized in Canada. Overall, there is a substantial shortage of research on sexual abuse in children growing up in marginalized communities. There is some evidence to suggest that these groups are at even higher risk of CSA than the general community, but there is not yet enough research to make definitive conclusions.

Marginalization may make some children more vulnerable to CSA because an offender might target a child that is already marginalized. It needs to be clear that a child is not vulnerable because they are for example, First Nations. Rather, the vulnerability comes from the marginalization that many First Nations people and communities often experience. Marginalization may act as a risk factor for more negative outcomes as a result of CSA. These factors make it important to discuss three groups of children in more detail within the program.

First Nations Children. The term *First Nations* is used to respect those people who are descendants of the first people to inhabit Canada (adapted from Farley et al., 2005). It is not clear how often First Nations children experience CSA. It is believed they experience a higher rate of substantiated maltreatment investigations than non-First Nations children (Public Health Agency of Canada, 2010). Additionally, First Nations children are overrepresented in the child welfare system (Sinha et al., 2013). However, in terms of CSA specifically, there is some evidence that CSA of First Nations children is reported at similar rates to CSA of Caucasian children (Lavergne et al., 2008). There is also a link between poverty and child abuse of all types, and there are significantly higher

numbers of First Nations children living in poverty than non-First Nations. Likely, this relationship to poverty, which further marginalizes these children, may contribute to this link. Thus, although it may be thought that First Nations children experience CSA at higher rates than non-First Nations children, a marked lack of current Canadian information and research makes it difficult to determine if this is the situation or not.

Children with Disabilities. Children with developmental disabilities (e.g. autism or speech, language delays) experience CSA at significantly higher rates than children without these disabilities (Jaudes & Machey-Baile 2008; Sullivan & Knutson, 1998; Sullivan & Knutzon, 2000). Children with behavioural and/or mental health concerns also appear to be maltreated at higher rates than those children without these concerns (Jaudes & Machey-Baile 2008; Sullivan & Knutzon, 2000). These children have increased vulnerability to sexual abuse because they depend on others for personal care, are exposed to many caregivers in various settings, and may have difficulty with social skills and judgment (Lumley & Miltenberger, 1997). In addition, as well as having a higher risk of CSA, children with disabilities may also have unique challenges associated with disclosing their abuse and communicating what happened to them to other people. Thus, the law states that anytime another person who is in a position or trust, authority, or whom the person with the disability is in a relationship of dependence invites, advices, or touches the adult with a disability in a way meant for a sexual purpose, he/she is perpetrating "sexual exploitation of a person with disability" (Criminal Code of Canada, Section 153.1, p. 170). The law is clear on this matter, although this doesn't seem to prevent such abuse.

Gay (G), Lesbian (L), Bisexual (B), and Transgender (T) Youth. Being sexually abused does not cause a youth to later identify as gay, lesbian, bisexual, or transgender (in Saewyc, 2006). However, teenagers who identify as GLBT report higher rates of sexual abuse than do their heterosexual peers (Saewyc, 2006). Currently, knowledge about the vulnerability of this group of youth is limited because it is not clear when the increased incidences of CSA are occurring: in early childhood before the development of sexual identification, or as youth who have just begun to identify as GLBT.

2.4.1.3 People who sexually abuse children

The psychology of child sexual offenders is complex, and the following is not intended to explore this topic in any depth; rather it presents basic demographic information about offenders in general. One key point, however, is that no group is excluded from offending. The research to date is clear that more men sexually abuse children than do women, and the large majority of persons who abuse children and commit CSA are known to the child (Pereda et al., 2009). Many large studies support this conclusion, and it should therefore be noted that the risk from strangers is much less than the risk from those that the child knows (Trocmé et al., 2001; Trocmé et al., 2005; Public Health Agency of Canada, 2010). Examples include family members (such as a parent, grandparent, aunt/uncle, older cousin, or sibling) or other people known to the child such as a teacher, coach, or friend's parent (Finkelhor et al., 2005; Paine & Hansen, 2002; Trocmé et al., 2005). The person who abuses a child is often emotionally close to the child (Paine & Hansen, 2002), and is often in a position of trust or authority (Elliot et al., 1995). Individuals who abuse a child often offend against multiple children. Identified offenders have usually sexually abused more children than then ones they are currently being investigated for, or have been convicted of abusing (Paine & Hansen, 2002).

People who sexually abuse children often engage in *grooming behaviour*. Such *grooming* is a gradual process through which the offender builds trust with the child, and other people around the child, in order to gain access to the child. Similar grooming processes occur online as those that occur in person (Wolak, 2008). Grooming behaviour includes some or many of the following (in Paine & Hansen, 2002): developing a relationship with the child and with adults in the child's life; comments and behaviours that initially are only slightly inappropriate but become increasingly explicit and/or abusive; providing and/or removing attention, gifts, and privileges; and distorting the sexual abuse and presenting it as acceptable and normal and between the adult and child. Grooming behaviour helps explain why sexual abuse can be so confusing for children. Sometimes, a child is abused in a way that is sudden and very physically violent. However, it is more common for children to experience more subtle forms of grooming that increase over time by an adult he/she already knows. The grooming process is done in such a way that, at first, the child does not realize that it is sexual and inappropriate. Once the child realizes what is happening, she/he may feel involved or complacent in the abuse, making it very difficult for her/him to disclose. The child may also appreciate aspects of the grooming process that make him/her feel special, such as increased positive attention and gift giving. This appreciation increases feelings of confusion for the child and may also contribute to feelings of self-blame and shame. They often experience conflicting emotions about the person that offended against them. They may feel ambivalence and they may report loving the offender, as well as hating him/her (Berliner & Conte, 1990).

2.4.2 Healthy Sexual Development

Participants are taught about healthy child development with a focus on healthy sexual development in order to assist adults to identify children who might be experiencing abuse. This topic is included because it may be that when adults have accurate knowledge of what is expected in healthy sexual development (**Table 6)** they will be better able to recognize behaviour that is concerning and might indicate that abuse has occurred. The goal of this section is to increase participant knowledge of expected child behaviours based on child development theory.

Table 6. Developmentally expected sexual behaviours

Developmentally Expected Sexual Behaviours	
Early Childhood (2 to 6 years) (Poole & Wolfe, 2010)	• Kisses nonfamily members • Tries to look at undressing and/or naked people • Undresses in front of others • Sits with crotch exposed • Touches own genitals at home and in public • Masturbated or stimulates self • Touches breasts • Shows genitals to other children and adults • Dressed like the opposite gender • Tries to watch other children in the bathroom • Uses sexual words • Talks about sex • Plays doctor games/looks at other children's genitals • Touches another child's genitals
Middle Childhood (7 to 10 years) (Poole & Wolfe, 2010)	• Tries to look at people undressing or naked • Touches own genitals at home • Masturbation • Fondles non-genital areas such as the back and stomach • Shows genitals to another child • Talks about sex • Kisses/hugs other children • Humps or pretends intercourse • Tend to have same gender social groups
Late Childhood (11 to 12 years) (Poole & Wolfe, 2010)	• Very interested in opposite sex (for child that have a primary attraction to the opposite sex) • Masturbates • Fondles non-genital areas such as back and stomach • Talks about sex • Kisses/hugs other children • Looks at pornographic pictures • Sexual teasing (e.g. lifting skirts, using sex words) • Humping or pretending intercourse • Start of puberty for some children
Adolescence (13 to 17 years old) (DeLamater & Friedrich, 2003)	• Exploration of and development of sexual identity • Exploration of gender identify • Biological changes associated with puberty • Increased levels of sex hormones result in physical changes, sexual attraction, and fantasies • Increased curiosity about sexual acts: kissing, touching genitals, oral sex, and vaginal, and/or anal intercourse • Curiosity about pornography • Masturbates

Sexual development in children is not as well understood as other types of development (Lagerberg, 2001). However, a multi-disciplinary review of research on children's sexual development provides markers of healthy sexuality in children (McKee et al., 2010). Children are sexual learners who are curious about their bodies and the bodies of others. They need help from trusted adults in order to develop healthy sexuality. In healthy sexual development children learn about public/private boundaries and how they work in their own culture. In healthy sexual development children develop the ability to access, understand, critique, and create representations of sexuality in media presentations. Supportive adults are needed to help them develop healthy sexuality by teaching what it means to consent (agree to do something freely) and what ethical conduct is in a more general setting. Children need to develop a general understanding of these concepts so that they can, at some point, understand what it means to consent to sexual activity. Healthy adults also help children develop self-acceptance of their own sexuality and to develop an awareness of sexuality as potentially pleasurable and positive rather than shameful. Children need healthy adults to teach them about important parental and societal values regarding sexuality, how to make informed decisions about their own sexuality in relation to them, to provide education about the biological aspects of sexual practice, to help them gain an understanding of safety in sexual practice, to help them build relationship skills, and to teach them they are in control of their own bodies, their own sexuality, and in control of who interacts with them in sexual ways. Adults can help children to understand their rights in regards to their own bodies and sexuality.

Sometimes children experiment sexually with one another. Depending on the specifics of what occurs between children this can be expected behaviour and part of their healthy sexual development. Sometimes, children act-out sexually, in ways that are not expected

developmentally. This can, in some situations, indicate that the acting-out child has experiences some type of CSA. However, just because an adult discovers that children are engaged in sexual play does not mean that CSA has occurred. Characteristics of healthy peer experimentation include: engaging in activity that is voluntary, fun, playful, and free from coercion.

2.4.2.1 Healthy Sexuality and Children with Disabilities

Children with disabilities also have a normal process of sexual development including developing sexual knowledge, beliefs, and values as well as developing gender-role socialization, physical maturation, body image, social relationships and future social aspirations (Murphy & Elias, 2006). Some caregivers may worry about the appropriateness about educating children with developmental disabilities about sexuality but this very lack of education increases their vulnerability to CSA (Murphy & Elias, 2006). Children with disabilities have similar needs to children without disabilities as they develop sexually. In some cases, supportive adults may need to adjust their language or approach in order to be sure that the information is developmentally appropriate for the child with the disability.

2.4.2.2 Healthy Development and Culture

Children's cultural background plays an important role in their developmental process. While some developmental milestones occur consistently across cultures, such as learning language, others are influenced by culture. For example, the way in which an adolescent explores their identify formation is influenced by her/his cultural background. For some youth, developing a bi-cultural identity may be a necessary part of their developmental process (Spicer et al., 2012). Self-expressive play, including behaviours such as smiling and laughing, vary depending on the child's

cultural background (Chen & Eisenberg, 2012). Variation in child development due to cultural differences is normal and to be expected.

2.4.3 Talking about CSA

Many adults are uncomfortable talking to children about CSA (Babatskos, 2010), but despite this it is important for healthy development that supportive adults engage children in age-appropriate discussion of topics surrounding CSA. Talking openly with children about sexual development and sexual abuse may reduce their vulnerability to CSA. It can also help to create a supportive relationship between the adult and child where the child can talk about any concerning things that have happened, or about sexual abuse should it occur. In the present study program (*Prevent It!*), adults are taught the importance of talking to children about sexuality and CSA because there is "absolute agreement in the literature that this is important for preventing sexual abuse" (McKee et al., 2009). The goal is to increase the number of times that adult talk, appropriately, about sexuality and sexual abuse with children by providing them with an understanding of the significance of talking with children about sexuality and CSA, and by providing them with helpful ideas of what things are appropriate and positive to talk about with children they know. This program emphasizes that adults need to talk with children about the following major teaching points (Mckee et al., 2009; Wurtele & Kenny, 2010): provide proper names for body parts and processes, talking about boundaries, saying "no" is allowed**,** a range of emotions are acceptable and how to identify them in selves and others, healthy sexual development**,** sexual abuse, and to tell a trusted adult if CSA occurs.

The present program also teaches adults general communication skills with the goal of improving their communication with children, because children need open communication about sexual

development and sexual abuse with adults they trust (McKee et al., 2010). Family communication may act as a protective factor against CSA as families that communicate more with their children are less likely to report CSA than those that communicate less (Ramirez et al., 2011). The types of protective communication include talking about the child's emotions, fears, friendships, problems, and knowledge of where the child is/what the child is doing. It is clear that disclosing CSA is very difficult for children, and establishing a regular routine of talking about sexually related topics, including CSA, can provide children opportunities to disclose CSA. It can also provide an opportunity for children to talk about other people who make them feel uncomfortable, even if they are not able to clearly describe why. Program participants are encouraged to reflect on their own roles with children and to think about what type of communication would be appropriate/inappropriate in their different roles.

2.4.4 Possible Indicators of CSA

Adults lack awareness of possible indicators of CSA (Babatsikos, 2010) making it important to teach adults what may indicate that CSA may have occurred. The goal of this part of the program is to increase participants' knowledge and about and ability to identify concerning signs in children. There are challenged with identifying indicators of CSA as no assessment tool currently exists that can achieve high levels of accuracy in identifying if a child has been sexually abused (Faust, Bridges, & Ahern, 2009), leaving us to rely on general and non-specific indicators. Therefore, this sections aims to teach adults about occurrences that can indicate a child is undergoing some type of stressor in her/his life. This section is a useful teaching tool for helping adults become more sensitive to general signs of distress in children. In some cases the adult might identify CSA as the specific concern, in which case the remainder of the program educates adults on how to be more effective supporters when CSA has occurred.

Most indicators of CSA are *non-specific* (Faust, Bridges, & Ahern, 2009); they could be indicative of a range of stressors that are occurring in the child's life. There are some changes that an adult may notice in a child that are generally concerning but do not necessarily mean that CSA has occurred. Moreover, it has been noted that many children experience challenges related to sleep, anxiety, fears, toileting, somatic complaints, eating, and ritualistic behaviours as part of normal development (Poole & Woolfe, 2010). These common challenges suggest that a balance must be struck between watching for signs that might indicate abuse and recognizing that many children may experience some of the behaviours as part of normal development, or as a response to some other life-stressor such as starting at a new school. This section of the program encourages adults to be more aware of things that *might* indicate a distressing event has occurred in a child's life, while at the same time recognizing that this event could be unrelated to CSA.

2.4.5 Disclosures of CSA

Adults may find themselves in situations where a child tells them, or *discloses,* that they were sexually abused. When the abuse is current, these critical moments are an opportunity to stop CSA from continuing. Disclosure is also an opportunity for the child to be connected with any services that she or he may need (i.e., counselling, school support, alternative living situation). Disclosure is a complicated process requiring specific skills for effective responses. The goals of this section in the program are: to increase adult participants' ability to recognize when a child is disclosing**;** to increase knowledge about how to respond to disclosure of CSA; and to increase positive interactions with children regarding disclosure of CSA.

Qualitative research asking youth and adults retrospectively about their own experiences of disclosure provides valuable insights into the process of disclosure. This body of research suggests that disclosure of sexual abuse is complex and usually occurs in an interactive, ongoing, and non-linear manner (Adams et al., 2005; Alaggia, 2004; Jensen et al., 2005; Staller & Nelson-Gardell, 2005). The way that other people respond when a child discloses can also significantly impact the child's future disclosures (Adams et al., 2005). Younger children (up to age 11) appear to disclose abuse to adults far more often than to peers (Schaeffer et al., 2011). Very young children may lack the language and verbal skills to disclose (Paine & Hansen, 2002) and older children (age 11-19) disclose to peers more frequently than to adults (Schaeffer et al., 2011). As children get older they disclose less frequently to family members (Ungar et al., 2008). Children have also been known to tell a wide range of individuals including siblings, other relatives, friends, supervisors, psychotherapists, psychiatrists, physicians, church workers, dentists, social workers, and other workers at support organizations (Jonzon & Lindbald, 2005). Because of this wide range, it is critical that as many adults as possible have the training and tools they need to be able to both recognize CSA disclosure when it happens, and to be able to respond positively and supportively. Disclosure can be thought of as a first step; alone it may not enough to stop the abuse or to help the child heal (O'Leary et al., 2010), but it can be an important opportunity for caring adults to connect children with the support they need.

A child may or may not tell another person about sexual abuse experiences. Many factors influence their decision to tell including previous disclosure experiences, their age, and abuse specific characteristics. Sometimes children disclose because the secret of the abuse becomes too much to carry anymore, with pressure building up until they seemingly cannot hold it in anymore and tell

another person (McElvaney et al., 2012). Other reasons for disclosure include stopping the abuse, to get support, and in response to being asked about abuse or encouraged to talk about it (in Paine & Hansen, 2002). This latter reason is another advantage of ensuring that children have appropriate communication about sexuality and CSA as it can provide a situation in which disclosures can occur.

Some children disclose CSA right away, giving adults an opportunity to connect the child with supports quickly. Many children wait to disclose or delay their disclosure (Staller et al., 2005). Delay of disclosure means that when a child does disclose CSA, the adult might learn that the abuse has happened more than once, or has been happening for quite some time. Some children actively deny that sexual abuse occurred when they are asked, even when asked repeatedly by a trusted person (McElvaney et al., 2012). The child may feel shame, fear, and confusion making the abuse difficult to talk about, and these emotions can be amplified by the offender's threats and behaviours increasing the child's hesitance to talk about it (Paine & Hansen, 2002).

A child may never disclose their CSA in childhood. Studies in which adults were interviewed about the CSA that they experienced, showed that between 25 – 69 % did not tell anyone about the abuse until adulthood (Alaggia, 2004; 2010; London et al., 2008). Many factors are associated with low disclosure rates. These include being a male victim, having a close relationship with the person who was the abuser, being very young, having been the victim of multiple incidences of CSA, experiencing more severe abuse, and having a perceived unsupportive and/or non-believing primary caregiver (Heger, 2002; Alaggia, 2004; Staller & Nelson-Gardell, 2005). Other factors include the child's expectation of the consequence for disclosing and the amount of self-

blame/guilt the child experiences (Staller & Nelson-Gardell, 2005). Sometimes these final factors are considered "barriers" to disclosure, and it has been suggested that unless "barriers to disclosure are eradicated, negative effects of CSA can persist manifesting in serious mental health issues" (Alaggia, 2010). The abused child may also worry about what will happen to the perpetrator, and because of feelings of ambivalence toward the offender, the child may not want to get this person in trouble (Paine & Hansen, 2002). This can be even more complicated if the child depends on the offender to meet basic needs. Some children may recant or retract previous disclosures, even when the abuse occurred. This may happen when the child experiences disbelief, lack of support, and upheaval after they disclose (Paine & Hansen, 2002). There is relatively little research on disclosure of CSA by children who are from ethnic and cultural minority groups, but it is likely that these children experience additional challenges associated with disclosure than those children from majority groups (Paine & Hansen, 2002).

2.4.5.1 Responding to Disclosures

Research asking children and adults to recall their disclosure experiences contributes to our understanding of individual's own perceptions of their disclosure process. Somewhere between 31% and 45% of sexually abused children directly disclose sexual abuse to an adult (London et al., 2008). After a direct disclosure, the adult is clearly aware that CSA happened and now has a legal obligation to report the abuse. Adult's response to the disclosure can impact the long-term negative impacts of CSA (Goodyear-Brown et al., 2012) as well as the health and healing of a child (Jonzon & Lindblad, 2005). Some specific situations in an adult's life can impact the way in which an adult responds to a disclosure of CSA, such as the type of CSA, the degree of related stress, the consequences that have occurred since the disclosure, the adult's own history of child maltreatment, psychological resources, ways of coping, and social support all impact responses to

CSA disclosures (Cyr et al., 2013). Many adults report anxiety when they respond to CSA disclosures (Rheingold et al., 2012).

"There is a certain urgency to providing a positive reaction to disclosure" and we have a need for "timely, early intervention" (Gries et al., 2000, p. 45). Providing emotional support, believing the child, and taking action against perpetrators are examples of supportive responses after disclosure (Everson et al., 1989). After disclosure, children need to ongoing emotional support in the form of reassurance, love, acceptance, non-abandonment, and non-blame (Gries et al., 2000). Listening, believing, and asking open questions are important parts of positive responses to disclosure (Jonzon & Lindblad, 2004). For this reason, the relevant section of the *Prevent It!* program teaches supportive listening skills and concrete strategies in order to increase participants' confidence in responding to disclosures.

2.4.6 Reporting CSA

Inadequate training and knowledge about CSA and reporting procedures contributes to low reporting of CSA in groups such as teachers (e.g. Krase, 2013). Adults will be more likely to report suspected CSA when they understand the importance of doing so, when they understand their legal obligation to do so, and when they are equipped with accurate knowledge about how to do this and what to expect. The goals of this section of the *Prevent It!* program are: to increase participants knowledge of reporting requirements regarding suspected child abuse; to increase knowledge about how to report suspected CSA; and to increase likelihood of reporting suspected CSA. This part of the program provides participants with information about reporting laws in their province/territory, addresses common worries about reporting CSA, discusses when to report

suspected abuse, provides tips for how to report abuse, and discusses what to expect from the reporting process.

Each Canadian province and territory has mandatory reporting laws for adults who suspect a child is being abused (Canadian Child Welfare Research Portal, 2016). When an adult has reason to believe that a child might have been abused and/or neglected then that adult must report the abuse to child social services and/or police. Reporting laws vary between provinces and territories but consistently require that any adult who has reason to believe that a child might be being abused or neglected must report this abuse to the appropriate authorities. The consistent message across provinces and territories is that of *protection*. It is each adult's legal obligation to make sure they are acting in the best interest of children by reporting suspected abuse and/or neglect so local child welfare agency workers and/or police can protect the child from further abuse. Reporting suspected CSA is critical because at its centre is the goal to keep children safe from further abuse. Despite these mandatory reporting laws, the reporting rate for CSA is very low. In Canada, it is estimated that over 95% of CSA is never reported to an official source (Martin & Silverstone, 2013). This is a serious problem because it means that most children who are sexually abused are not receiving the support they desperately need.

2.4.7 Action Strategies

The *Prevent It!* program provides suggestions for individual as well organizational action strategies aimed at reducing children's risk of CSA and encourages participants to consider how they may be able to implement these strategies in their own lives and organizations. No research is available on the effectiveness of specific strategies in preventing CSA and so the suggestions

were developed using a combination of published expert commentary, local expert consultation, and the content of other programs.

2.4.7.1 Individual Strategies

Individual action strategies are things that adults can do themselves in order to work toward reducing the risk of CSA for children in their lives. These strategies include seeking out accurate information about CSA, talking about CSA in appropriate ways with children in their lives, watching for signs of distress in children, watching for concerning signs in other adults, responding positively to disclosures of CSA, and reporting suspicions of abuse.

2.4.7.2 Organizational Strategies

Relatively few organizations have clear protocols aimed at reducing risk of CSA (Parent & Demers, 2010), despite high rates of CSA and many high profile cases in the media. Reviews of protective policies in sport found that while administrators of large organizations have awareness or prevention practices, those of smaller organizations were not implementing them as often and athletes, parents, and coaches lacked the same knowledge (Parent & Demers, 2010). The program included the current best practice guidelines of organizational practices for sexual abuse prevention (Parent & Demers, 2010) which include: mandatory background checks (Finkelhor, 2009); screening interviews; written policy outlining expected conduct; guidelines outlining one-on-one time between adults and children; and CSA specific training for adults involved in the organization including administrators, coaches, and leaders.

2.5 *Prevent It!* Program Components

2.5.1 Prevent It! Program Workshop

After developing the details of the program content, the *Prevent It!* program was designed to be delivered during a 2.5 hour long workshop. This time was based upon significant feedback from multiple stakeholders, and was believed to be the most appropriate and acceptable for the population of interest. This was also based upon existing programs and their acceptability. The program was also designed to be facilitated largely by community volunteers who have taken a weekend training program. The decision to utilize community volunteers as facilitators was made for several reasons. Firstly, an American program (called "From Darkness to Light") has shown some success changing adult's knowledge and behavioural intentions with a program facilitated by volunteers (Rheingold et al., 2012). Secondly, a model using volunteers reduces costs, increasing the possibility for more widespread access. Thirdly, this model allows for volunteers from a range of communities to be trained and to return to their own communities (and surrounding areas) to provide the workshop, potentially increasing access for individuals in more remote and rural areas as well as creating sources of increased knowledge in such areas.

The workshop includes a range of exercises aimed to engage participants in the material a variety of ways. The workshop includes exposure to written material in the workbook, visual material in video format, facilitator-led individual reflection, and facilitator-lead group discussion. Each of the exercises is structured using the Experiential Learning Cycle as the guide (as previously discussed).

The program workshop is structured around a STOP acronym:

Study - Participants learn about child sexual abuse and become familiar with basic information about it. Individuals will learn about healthy sexual development and what is expected in children as well as what behaviours are concerning.

Talk - Participants learn that talking with children about their sexual development and about child sexual abuse is a critical step in reducing their vulnerability to sexual abuse.

Observe - Participants learn about concerning signs to watch for in children that could indicate sexual abuse has occurred. Individuals will also learn about concerning signs to watch for in other adults.

Prepare for action - Participants learn ways they can begin taking action today, to stop child sexual abuse through helping children they are concerned about, as well as working to reduce the risk of sexual abuse to other children.

2.5.2 Participant Information Book

A detailed participant information book was developed, providing adults who enroll in the workshop with complementary and additional information to the workshop content. Each individual who enrolls in the program receives an information book aiming to enrich the participant's experience within the workshop, as well as their access to knowledge once they leave the workshop. The program facilitator refers to the booklet at specific points during the workshop in order to direct participants' attention to specific issues. The facilitator also directs participants to the booklet to engage in exercises throughout the workshop. The facilitator guides the participants through the exercises contained within the information book. Because of copyright considerations, the information guide is not included in this thesis. However, the author can be contacted if a copy is required.

2.5.3 Facilitator Script

The facilitator script provides complete details regarding every aspect of the entire workshop, and what is expected from the facilitator at every stage during the workshop. In order to allow for volunteers to facilitate the workshop confidently and competently a highly detailed guide was created for them to follow. The guide outlines the specific language to use when introducing each video segment as well as the subsequent exercises. It provides facilitators with specific questions to prompt participant reflection, and also discusses the points that are to be emphasized or summarized at the end of each exercise. Facilitators are expected to follow the script and guide closely to ensure that all groups receive a very similar experience. Because of copyright considerations, the facilitator script is not included in this thesis. However, the author can be contacted if a copy is required.

2.5.4 Facilitator Training

Facilitator training was designed to take place over a 2-day weekend. In advance of training, participants were provided with a copy of the Program Guide and encouraged to read this in advance. The Program Guide is referred to throughout the training process. Trainee volunteer facilitators are guided through the program itself, but in greater detail and depth, so they have the experience of it as a participant and the understanding of the rationale for each section. They then learn and practice basic facilitation practice skills.

2.6 Program Video Production

The workshop includes a video component. The facilitator shows video segments throughout the workshop. The facilitator introduces each section before showing it. After viewing the segment, the facilitator guides participants through an exercise aimed to facilitate personal and critical

reflection on the material. The video consists of a narrator who provides information and consistency throughout the sections. There are also segments of interviews with two expert groups: survivors of sexual abuse and professionals who work in related fields. All filmed individuals completed detailed informed consent procedures prior to participation. The PhD candidate led all steps of the video production, including writing the narrator script and interview questions, attending each taping session, and attending editing sessions. Final decisions on content were made in close collaboration with the research team, a staff member from Little Warriors, and the video producer.

2.6.1 Narrator Script and Narrator Filming

The narrator script was written based on the program content areas developed previously and summarized in the Program Guide. The narrator was a trained media professional whose role was to introduce video segments and to highlight important points throughout the video. The narrator followed the script exactly. The narrator, Sienna Collings with Global Edmonton, was filmed on February 19, 2014.

2.6.2 Interviews with Professionals

Professionals working in fields related to sexual abuse were also interviewed. Effort was taken to have a wide range of professional voices represented. Interviews featured in the film include a detective with the Royal Canadian Mounted Police (RCMP), a defense attorney, a psychologist and traumatologist, and a psychiatrist. The PhD candidate created questions for the interviewer to ask each expert to respond to based on that individual's expertise. The interviewer also asked some questions spontaneously if an appropriate moment arouse. The PhD candidate attended all but one

taping (which was done in Vancouver), as well as supervising and making suggestions for subsequent questions to be asked for clarification of specific points.

2.6.3 Interviews with Survivors of CSA

Five people who experienced sexual abuse as children were interviewed about their experiences. The survivor interviews provide personal accounts of sexual abuse, as well some of the impacts of CSA. These interviews helped to highlight the personal toll of CSA, and remind participants that CSA has a wide range of long-term impacts. Consideration was given to having a diverse range of individuals interviewed who represent a range of genders, backgrounds, and experiences. Survivors were selected in consultation with the research team, and there was careful discussion with all potential interviewees regarding any potential harm that could occur as a by-product of telling their story in this format. In order to reduce the potential risks, only CSA survivors who had previously told their stories publicly were selected to be video-taped. All CSA survivors were told in advance about the types of questions they would be asked in the interview, that they were in complete control of the question answering process, and did not need to answer any questions if they did not want to. They were also reminded at several points that they could change their mind and decide not to participate at any time during the video production phase, including after the interview and filming was completed.

The PhD candidate attended all filming sessions with survivors (except one carried out in Calgary), and as a Certified Clinical Counsellor, was able to also act as an emotional support for the CSA survivors telling their stories on camera. This also included ensuring that all individuals taking part were emotionally grounded after their taping, and encouraging them to use their own supports to talk through any emotions that might arise as a result of the interview.

2.6.4 Editing

The PhD candidate was intimately involved in the editing process. Video production yielded over 11 hours of film that needed to be condensed down to 45 minutes of video. Clips that illustrated important points clearly needed to be identified. The actual video editing was done by professionals at Global Creative (a unit of Global TV, who kindly donated their time and expertise for this program). The first round of editing was carried out directly under the supervision of the PhD candidate, with subsequent editing being carried out collaboratively with other key stakeholders and the producer from Global Creative. At the time of editing, visual components for the video were finalized as well. These included bullet point lists, charts, and images to emphasize important content of the workshop throughout the video. Professionals at Global Creative worked to edit these visual materials seamlessly into the flow of the overall video. This generous donation of time and expertise allowed the video components of the *Prevent it!* program to have extremely high production values, which were intended to improve the impact and utility of the program.

References:

Adams J. A., Starling, S. P., Frasier, L. D., Palusci, V. J., Shaprio, R. A., Finkel, M. A., & Botash, A. S. (2012). Diagnostic accuracy in child sexual abuse medical evaluation: Role of experience, training, and expert case review. *Child Abuse & Neglect, 36*(5), 383-392.

Alaggia , R. (2004). Many ways of telling: expanding conceptualizations of child sexual disclosure. *Child Abuse & Neglect, 28*(11), 1213-1227. doi:10.1016/j.chiabu.2004.03.016.

Alaggia, R. (2010). An ecological analysis of child sexual abuse disclosure: Considerations for child and adolescent health. *Journal of the Canadian Academy of Child & Adolescent Psychiatry, 19*(1), 32-39.

Babatsikos, G. (2010). Parents' knowledge, attitudes, and practices about preventing child sexual abuse: A literature review. *Child Abuse Review, 19*(2), 107-129. doi: 10.1002/car.1102.

Barnett S. M., & Ceci, S. J. (2002). When and where do we apply what we learn? A taxonomy for far transfer. *Psychologocal Bulliten, 128*(4), 612-637.

Berliner, L., & Conte, J. R. (1990). The process of victimization: the victims' perspective. *Child Abuse and Neglect, 14*(1), 29-40.

Canadian Centre for Child Protection Inc. (2008-2013). *Child Sexual Abuse: It Is Your Business*. Winnipeg, Manitoba, Canada.

Canadian Child Welfare Research Portal (2016). Retrieved from www.cwrp.ca in 2016.

Chen, X., & Eisenberg, N. (2012). Understanding cultural issues in child development: Introduction. *Child Development Perspectives, 6*(1), 1-4.

Criminal Code, R.S.C. 1985, Section 152, p. 167–168.

DiClemente, C. C., & Prochaska, J. O. (1998). Toward a comprehensive, transtheoretical model of change: Stages of change and addictive behaviors. In *Treating Addictive Behaviours.* (Eds) Miller & Heather. New York, NY.

Elliot, M., Browne, L. K., & Kilcoyne, J. (1995). Child sexual abuse prevention: What offenders tell us. *Child Abuse and Neglect, 19*(5), 579-594.

Farley, M., Lynne, J., & Cotton, A. J. (2005). Prostitution in Vancouver: Violence and the Colonization of First Nations Women. *Transcultural Psychiatry, 42*(2), 242-271. doi: 10.1177/1363461505052667.

Gries, L. T., Goh, D. S., Andrews, M. B., Gilbert, J., Praver, F., & Stelzer, D. N. (2000). Positive reaction to disclosure and recovery from child sexual abuse. *Journal of Child Sexual Abuse, 9*(1), 29-51.

Jenson, T. K., Gulbrandsen, W., Mossige, S., Reichelt, S., Tjersland, O. A. (2005). Reporting possible child sexual abuse: A qualitative study on children's perspectives and the context for disclosure. *Child Abuse & Neglect, 29*(12), 1395-1415. doi:10.1016/j.chiabu.2005.07.004.

Jaudes, P. K., & Mackey-Bilaver, L. (2008). Do chronic conditions increase young children's risk of being maltreated? *Child Abuse & Neglect*, 32, 671–681.

Jonson, E., & Lindbald, F. (2005). Adult female victims of child sexual abuse: Multitype maltreatment and disclosure characteristics related to subjective health. *Journal of Interpersonal Violence, 20*(6), 651-666.

Kolb, D. A. (1975). Toward an applied theory of experiential learning. In C. Cooper (Ed.), *Studies of Group Process.* (pp. 33-57). New York: John Wiley.

Krase, K. S. (2013). Educational personnel as reporters of suspected child maltreatment. *Children & Schools*. Published June 28, 2013.

Lagerberg, D. (2001). Parents' observations of sexual behaviour in preschool children. *Acta Paediatrica, 90*, 367-369.

Lavergne, C., Dufour, S., Trocmé, N., & Larrivée. M. (2008). Visible minority, Aboriginal, and Caucasian children investigated by Canadian Protective Services. *Child Welfare League of America*, *87*(2), 59-76.

London, K., Bruck. M., Wright, D. B., & Ceci, S. J. (2008). Review of the contemporary literature on how children report sexual abuse to others: Findings, methodological issues, and implications for forensic interviewers. *Memory, 16*(1), 29-47.

Lumley, V. A., & Miltenberger, R. G. (1997). Sexual abuse prevention for persons with mental retardation. *American Journal of Mental Retardation, 101*(5), 459-472.

Martin, K. E., & Silverstone, P. H. (2013). How much child sexual abuse if "below the surface" and how can we help adults identify it early? *Frontiers in Psychiatry, 4*(58), 1-10 doi: 10.3389/fpsyt.2013.00058.

McKee, A., Albury, K., Dunne, M., Grieshaber, S., Hartley, J., Lumby, C., & Mathews, B. (2010). Healthy sexual development: a multidisciplinary framework for research. *International Journal of Sexual Health, 22*(1), 14-19.

McElvaney, R., Greene, S., & Hogan, D. (2011). Containing the secret of child sexual abuse. *Journal of Interpersonal Violence, 27*(6), 1155-1175.

Murphy, N. A., & Elias, E. R. (2006). Sexuality of children and adolescents with developmental disabilities. *Pediatrics, 118*(1), 398-403.

O'Leary, P., Coohey, C., & Easton, S. D. (2010). The effect of severe child sexual abuse and disclosure on mental health in adulthood. *Journal of Child Sexual Abuse, 19*, 275-289.

Paine, M. L., & Hansen, D. J. (2002). Factors influencing children to self-disclose sexual abuse. *Clinical Psychology Review, 22*, 271-295.

Parent, S., & Demers, G. (2011). Sexual abuse in sport: A model to prevent and protect athletes. *Child Abuse Review, 20*, 120-133.

Poole, D. A., & Wolfe, M. (2009). Child development: Normative sexual and nonsexual behaviors that may be confused with symptoms of sexual abuse. In K. Kuehnle & M. Connell (Eds)., *The Evaluation of Child Sexual Abuse Allegations: A Comprehensive Guide to Assessment and Testimony*, (101-128). New York: Wiley.

Public Health Agency of Canada. (2010). *Canadian Incidence Study of Reported Child Abuse and Neglect – 2008: Major Findings*. Ottawa, ON. Minister of Public Works and Government Services Canada.

Ramírez, C., Pinzón-Rondón, A. M., & Botero, J. C. (2011). Contextual predictive factors of child sexual abuse: The role of parent-child interaction. *Child Abuse & Neglect, 35*, 1022-1031.

Rheingold, A. A., Zajac, K., & Patton, M. (2012). Feasibility and acceptability of a child sexual abuse prevention program for childcare professionals: Comparison of a web-based and in-person training. *Journal of Child Sexual Abuse, 21*(4), 422-426. doi: 10.1177/1077559507305994.

Rheingold, A. A., Zajac, K., Chapman, J. E., Patton, M., de Arellana, M., Saunders, B., & Kilpatrick, D. (2015). Child sexual abuse training for childcare professionals: An independence multi-site randomized controlled trail of Stewards of Children. *Prevention Science, 16*(3), 374-385.

Saewyc, E. M., Skay, C. L., Pettingell, S. L., Reis E. A., Bearinger, L., Resnick, M., Murphy, A., & Combs, L. (2006). Hazards of stigma: The sexual and physical abuse of gay, lesbian, and bisexual adolescents in the United States and Canada. *Child Welfare League of America, LXXXV*(2), 195-213

Spicer, P., LaFramboise, T., Markstrom, C., Niles, M., West, A., Fehringer, K., Grayson, L., & Sarche, M. (2012). Toward an applied developmental science for Native children, families, and communities. *Child Development Perspectives, 6*(1), 49-54.

Staller, K. M., & Nelson-Gardell, D. (2005). "A burden in your heart": Lessons of disclosure from female pre-adolescent and adolescent survivor's of sexual abuse. *Child Abuse & Neglect, 29*(12), 1415-1432.

Sullivan, P. M., & Knutson, J. F. (1998). The association between child maltreatment and disabilities in a hospital-based epidemiological study. Child Abuse and Neglect, 22(4), 271–288.

Trocmé, N., MacLaurin, B., Fallon, B., Daciuk, J., Billingsley, D., Tourigny, M., Mayer, M., Wright, J., Barter, K., Burford, G., Hornick, J., Sullivan, R., & McKenzie, B. *Canadian Incidence Study of Reported Child Abuse and Neglect: Final Report*. Ottawa, ON: Minister of Public Works and Government Services Canada, 2001.

Trocmé, N., Fallon, B., MacLaurin, B., Daciuk, J., Felstiner, C., Black, T., Tonmyr, L., Blackstock, C., Barter, K., Turcotte, D., & Cloutier, C. *Canadian Incidence Study of Reported Child Abuse and Neglect – 2003: Major Findings*. Ottawa, ON: Minister of Public Works and Government Services Canada, 2005.

Ungar, M., Tutty, L. M., McConnel, S., Barter, K., & Fairholm, J. (2009). What Canadian youth tell us about disclosing abuse. *Child Abuse & Neglect, 33*, 699-708.

Wolak, J., Finkelhor, D., Mitchell, K. J., & Ybarro, M. L. (2008). Online "predators" and their victims: Myths, Realities, and implications prevention and treatment. *American Psychologist, 63*(2), 111-128. http://dx.doi.org/10.1037/0003-066X.63.2.111.

Wurtele, S. K., & Kenny, M. C. (2010). Partnering with Parent to Prevent Childhood Sexual Abuse. *Child Abuse Review, 19*(2), 130-152. doi: 10.1002/car.1112.

3 Effectiveness of the "*Prevent It!*" program delivered in a classroom setting

3.1 Abstract

The primary goal of the *Prevent It!* program is to change the behaviour of participants, as well as to increase knowledge about child sexual abuse (CSA), and improve attitudes towards individuals who have experienced this. The program includes a detailed manual to allow standardized administration by trained facilitators, as well as multiple video segments from CSA survivors and professionals. A comprehensive review reveals this is a novel approach. A total of 23 program workshops were run, with 366 adults participating. Of these, 312 agreed to take part in the study. All completed baseline ratings prior to the program and 195 (63% of the study sample) completed follow-up assessments at 3 months. There were no significant differences between those who completed the follow-up assessments and those who did not. Assessments included demographic data, knowledge, attitudes, and several measures of behaviour (the primary outcome variable). Behavioural questions asked individuals to select behaviours used in the previous 3 months from a list of options including "how many times in the previous 3 months" have you "talked about healthy sexual development or child sexual abuse with a child you know"; "suspected a child was sexually abused"; "taken steps to protect a child"; or "reported suspected sexual abuse to police or child welfare"? The majority of attendees were women, with the commonest age group being between 30 – 39 years old. Approximately 33% had experienced CSA themselves. At 3-month follow-up there were statistically significant improvements in several aspects of behaviour, as well as knowledge and attitudes regarding CSA. For example, the number of subjects actively looking for evidence of CSA increased from 46% at baseline to 81% at follow-up, while the number of subjects who actively took steps to protect children increased from 25% at baseline to 48% at

follow-up. This is the first program designed for effective training in CSA using the current evidence base, the first to examine medium-term outcomes, and the first to focus on actual behavioural outcomes. The results suggest it is effective, and support more widespread use.

3.2 Introduction

Child sexual abuse (CSA) is common (Finkelhor, 1994; Pereda et al., 2009), with as many as 1-in-6 girls and 1-in-12 boys experiencing sexual abuse that has involved bodily contact (Martin & Silverstone, 2013). It is uncertain if there are changes in the rates of CSA in the United States (Finkelhor, 2009) or Canada (Collin-Vézina et al., 2010), particularly given the increase in use of internet pornography (Diamond et al., 2011; Livingstone & Smith, 2014). The impact of CSA is very significant, with adults who experienced CSA having much higher rates of subsequent psychopathology (Chen et al., 2010) as well as being at significantly greater risk for a range of medical, psychological, behavioural, and sexual disorders (Maniglio, 2010). This impact may be mediated via a variety of physiological changes (Anda et al., 2006; Belksy & de Haan, 2011; Kaffman, 2009), with "child maltreatment [being] a preventable contributor to child psychopathology, cognitive impairment, and developmental difficulties" (Watts-English et al., 2006). For these reasons, preventing CSA is of great importance. One proposed method is to utilize a wide range of individuals in prevention efforts including parents, professionals, and the general public (Wurtele, 2009). It is therefore likely that adults who interact with children may be in the best position to reduce children's vulnerability to CSA, and thus to reduce the negative impacts associated with CSA, leading to fewer negative impacts (Yancey et al, 2011).

Previous studies of the effectiveness of adult training programs have shown improvements in knowledge and attitude change, as well as changes in behavioural *intentions* (Self-Brown et al.,

2008; Rheingold et al., 2007). However, despite the importance of this issue, there have been no previous studies that have examined the effectiveness of programs on actual *changes* in preventative behaviours anticipated to reduce the occurrence of CSA, or on behavioural *changes* to intervene early when CSA is suspected. Furthermore, very few CSA prevention programs targeting adults have been developed using a research informed approach, and none that incorporate more recent research findings or current theoretical understandings of healthy child development (Zeuthen & Hagelskjær, 2013). Furthermore, evidence-based approaches that include policy, legislation, and services are also currently lacking (Collin-Vézina, Hélie, & Trocmé, 2010). For this reason, we believe that development of a novel program is required. Here we report on such a program, "*Prevent It!* Taking Action to Stop Child Sexual Abuse" (*Prevent It!*). The current chapter briefly summarizes the research and theoretical background, and then discusses the methodology utilized in the development of the program and the results regarding effectiveness. In particular, we examined the extent to which *Prevent It!* changed participant's behaviours in the 3 months after the program, as well any changes in attitudes and knowledge over the same time period.

3.3 Methods

3.3.1 Ethical and Personal Impact Consideration

This study was approved by the Research Ethics Board of the University of Alberta. All participants completed informed consent prior to any involvement in the program. All individuals were given a unique study number, and this was the only identifier used to collect all study-related information. Additionally, to ensure confidentiality for participants in the group setting the importance for all participants to respect and maintain each other's confidentiality during the program was frequently repeated. It was also recognized that there is potential for the *Prevent It!*

program to be emotionally upsetting for participants, particularly for those individuals who have experienced CSA themselves, and several actions were taken to support program participants, including the provision of a 24-hour crisis line resource to access should they want to talk to someone outside their own support system or get more information about professional services.

3.3.2 Current Situation

The best methods to reduce CSA are uncertain. School-based child prevention programs have been used, since accessing children directly through schools allows educators to reach children from a wide range of socio-economic and ethnic backgrounds (Zwi, 2007; Wurtele, 2009). Targeting children at school, rather than relying on parents to provide information, also helps children who are being abused in their homes to have access to CSA education. However, the extent to which schools are currently using this type of approach is yet to be assessed in a systematic way (Wurtele, 2009). Literature reviews (Fryda & Hulme, 2015; MacMillan et al., 2009) and a meta-analysis (Davis & Gidycz, 2000; Zwi et al., 2009) suggest child-targeted programs can increase children's knowledge and self-protective behaviours (MacMillan et al., 2009). While child-targeted CSA education plays an important role in CSA prevention, adults may also be a useful target group since they can directly intervene to provide early recognition and also minimize risks for children (Wurtele, 2009; Zeuthen & Hagelskjær, 2013).

Of the adult-targeted education, research on caregivers is most common (Berrick, 1988; Kenny, 2009; Hébert, 2002; Rheingold et al., 2007; Self-Brown et al., 2008). Caregivers may be in positions where they can rapidly identify CSA situations and help at-risk or affected children (Hébert et al., 2002). It should be noted that children's disclosure of abuse is often a process rather than a one-time event (Alaggia, 2004; Jensen et al., 2005), and their caregivers can be in ideal

positions to respond to these disclosures. Nonetheless, a caregiver may also be involved in perpetrating abuse (Public Health Agency of Canada, 2010), making it necessary for adults outside the home to also receive CSA education. In part for this reason, it has been suggested (Wurtele, 2009) that non-caregiver adults should also have CSA education, although these adults remain the least studied group. Teachers have received slightly more attention than other non- caregiver adults (Walsch et al., 2012), and the potential effectiveness of media campaigns on general adult populations has also been examined (Self-Brown, 2008). The focus of many adult- targeted education programs has been on changing knowledge and attitudes about CSA (Bowman et al., 2010; Walsh et al., 2012), as well as behavioural *intentions* with regard to responding to suspected CSA (Hébert et al., 2002; Self-Brown et al., 2008). To our knowledge, there are no previous studies that have examined actual changes in behaviour after training programs.

Adult-targeted CSA education programs use a variety of formats to teach adults about CSA. One randomized controlled study measured attitudes, knowledge, and behavioural intentions after being exposed to media-based CSA materials and found a significant increase in knowledge scores after exposure but no significant change in attitude (Rheingold et al., 2007). Another study used survey and focus group methods to evaluate the effectivness of public service announcements on knowledge and likelihood of behavioural change, but while they found a very short-term increase in knowledge, participants agreed this approach was not enough to change behaviour (Self-Brown et al., 2008). The results from these studies suggest that a brief exposure to CSA educational materials may increase knowledge in the short-term, but not be sufficient to change behaviour. Similarly, other classroom-based studies show an increase in short-term knowledge as well as increases in appropriate behavioural intentions (Bowman, 2007; Hébert et al., 2002; Kenny, 2009;

Rheingold et al., 2012). However, none of these studies included follow-up assessments beyond two weeks, and thus the longer-term effectiveness of previous adult-targeted classroom-based education remains uncertain. It is also unclear if repeated information sessions, rather than a single exposure, alters the effectiveness of education (Rheingold et al., 2007; Davis & Gidycz, 2000). Taken together, the current literature suggests there are no tools that show an increase in knowledge over more than a 1-month period, and none that have examined actual behavioural changes. Given increasing literature and knowledge about the most effective types of adult education (Petty & Thomas, 2014; Taylor & Laros, 2014), we developed a novel education program (*Prevent It!*) to address this issue. We also evaluated the program, with our primary outcome measure focusing on behaviour changes over a 3-month period.

3.3.3 Consultation and Theoretical Grounding

Taking into consideration the current situation, we consulted a broad group of topic experts in order to assess current needs (and potential gaps) in CSA education. These included members of the Police Services involved with all aspects of CSA, psychologists working in the field of CSA, charities involved in training, and with sexual assault centres. Section 2.1 of this thesis outlines the consultation process and **Table 5** provides the associated project timeline. Because our main outcome goal for the program was behavioural change, it was important to structure the program utilizing methodology previously demonstrated to maximize the likelihood of subsequent behavioural changes. Although some studies have shown changes in behavioural *intentions* after taking an adult-targeted CSA education program (Hébert et al., 2002; Paranal et al., 2012; Rheingold et al., 2007; Self-Brown et al., 2008), we are unaware of any studies measuring actual behaviour *changes*. The lack of research means that little is known about the key components required to change participant's behaviour in regards to sexual abuse prevention. For these reasons,

we used previously well-established models, namely the Transtheoretical Model of change (Diclemente & Prochaska, 1998; Diclemente et al., 1991) and the Experiential Learning Cycle (Kolb, 1974) to develop the program, as discussed previously in Section 2.2 of this thesis.

3.3.4 Content and Program Guides

Program content was determined after the detailed consultation process, combined with regular communication and contact with the range of stakeholders and also with experienced trainers. A detailed "program guide" was developed, including the rationale for each section, presented in an easy to understand format written for a general audience. It provides all necessary background information for the program content and approach. The program guide is an 80-page document and was made available to program staff.

A briefer "information book" was also developed for all program participants, derived directly from the program guide, to be used by all participants during the program, and subsequently by them as reference material. During the program, facilitators directed participants to the relevant sections of the information books to engage in exercises throughout the program, and used this to guide participants through the exercises.

The program includes a significant video component, with the group facilitator showing video segments throughout the program. The facilitator introduces each section before showing it, and after viewing each segment, there was a guided exercise aimed to increase personal and critical reflection on the material. Video sections include overall narration, interviews with experts in the area, survivors of sexual abuse, and professionals who work in related fields.

The survivor interviews provide personal accounts of sexual abuse and highlight the short and long-term impacts of CSA. These interviews helped to highlight the personal toll of CSA and remind participants that CSA significantly impacts a range of different people in multiple ways. In order to reduce the potential for harm to people that might regret their decision to tell their story in the educational video format, only CSA survivors who were already publicly sharing their stories were approached to be involved. All survivors were told in advance about the types of questions they would be asked in the interview, and were told that they were in control of the question answering process. They did not need to answer all the questions if they did not want to, and they were reminded that they could change their mind and decide not to participate at any point in time during the video production phase or subsequently.

Professionals working in fields related to sexual abuse were also interviewed. Efforts were taken to have a wide range of professional voices represented. Interviews featured in the film, in addition to CSA victims, include a psychologist and traumatologist, an experienced police detective involved in many cases of CSA, a defense attorney, and a psychiatrist.

3.3.5 Facilitator Guide

The facilitator guide explained what was expected from the facilitator at each point in the program workshop, with information grouped around several themes. **Table 7** outlines program themes and topics. The program workshops were designed to be given by community volunteers, rather than specialists, to allow it to be generalizable. For this reason, the Facilitator Guide was written in non-specialist language. Additionally, this model allows for volunteers from a range of communities to be trained and to return to their own communities (and surrounding areas) to provide the program. This model can increase access to the program for individuals in many areas, is scalable,

and also practical for use in remote and rural areas. In order to allow for volunteers to facilitate the program consistently a highly detailed guide was created for them to follow. The guide describes what to say to introduce each video segment and each of the subsequent exercises. It also provides questions to prompt participant reflection, and identifies key points that are to be emphasized or summarized at the end of each exercise. Two highly experienced individuals managed all aspects of the *Prevent It!* program workshops for the study (such as recruitment, room bookings, arranging facilitators, etc), with funding for these individuals being provided by a charity (Little Warriors). Both had significant experience supporting similar programs previously. To ensure fidelity across sessions, all facilitators utilized were instructed to follow the script and guide closely during each program workshop.

Table 7. Content of the *Prevent It!* child sexual abuse education program

Section	Topics
General Information	• Definitions • Rates • Offenders • Internet
Talking with Children	• Being a good listener • HSD[1] • Talking with children about HSD • Talking with children about CSA[2]
Observing children and adults	• Possible signs of distress in children • Possible signs of CSA • Grooming • Concerning signs in other adults
Preparing for Action	• Disclosures of CSA • Reporting CSA • Suspicions of CSA • Individual prevention strategies • Organizational best practices • Individualized goal setting

[1]HSD = healthy sexual development, [2]CSA = child sexual abuse

3.3.6 Program Evaluation

The target group was adults who interact with children, including caregivers, teachers, coaches for sports and recreation activities, youth group leaders, and religious leaders. This study evaluated the effectiveness of the *Prevent It!* program at changing adult participant's behaviours 3 months after the training session (the primary outcome goal), as well as improving attitudes towards CSA and knowledge about this. *A priori* hypotheses were that participants who took the workshop would: (1) decrease adherence to myths about CSA (increase positive attitudes), (2) increase accurate knowledge about CSA, and (3) increase their use of individual and organizational prevention behaviours to reduce risk of CSA and identify ocrrences early. One explicit long-term goal, not studied in the current program, was that this program will help with early identification of, and appropriate interventions of CSA when it occurs. We hope to explore this issue in subsequent research.

3.3.7 Sampling Strategy and Setting

We wanted to measure the effectiveness of the program based on the population that it will be serving. To do this, we used a convenience sample of adults who registered to take educational programs with a charity that provides this (Little Warriors).

3.3.8 Recruitment

Study participants were recruited from individuals that enrolled to take the program. While registering for the program, each person was informed in general terms about the study, and asked if he/she could be contacted with more information. Individuals who agreed to find out more were provided with information and the informed consent form. If they agreed to take part they were then given a unique user number and information about how to use this to access the secure online

site where baseline information was collected. The only required inclusion criteria, other than agreeing to take part in the training session and study, was that they were aged 18 or older. There were no additional exclusion criteria for this study.

3.3.9 Measurement of Effectiveness and Research Design

Participants were given pre-test (baseline) measurements to assess attitudes, knowledge, and behaviours related to CSA during the 7-days prior to the program workshop. Three months after their participation in the program workshop they were asked to complete follow-up questionnaires. Each participant's post-test results were compared to baseline results to assess the amount of change that occurred. The main hypothesis being tested was that, at 3 months post-training, participation in the *Prevent It!* program would increase behaviours to reduce children's vulnerability to CSA.

3.3.10 Procedures

During the 7 days prior the program workshops, participants completed baseline questionnaires via the secure online site. Participants then took part in the 3 hour program workshop. Three months after completion of the program, study participants were contacted and asked to complete the follow-up questionnaire online. This process involved contact (via phone or email – at the choice of the participant). A maximum of 3 attempts were made to contact each individual who did not complete the follow-up questionnaire.

3.3.11 Demographics

Participants were asked to self-report their gender, age, highest education level completed, level of previous CSA training received, and if they had experienced any type CSA themselves during their childhood. Before being asked about their own experience of sexual abuse, each participant

was reminded of the confidentiality of their responses and of the reason for collecting the information. Participants were able to skip demographic details if they so choose. **Table 10** contains detailed information on study demographics.

3.3.12 Knowledge, Attitudes, and Behavioural Change

Previous studies demonstrate increased accurate knowledge and positive attitudes after exposure to a CSA education program (Bowman et al., 2010; Hébert et al., 2002; Rheingold et al., 2007; & Self-Brown et al., 2008). Consequently, we measured these constructs briefly. Knowledge was measured using three Likert scale items. To measure attitudes we utilized three items from the *Child Abuse Myth Scale* (Collings, 1997) and participants were asked to indicate the extent to which they agreed with the statements (**Table 8**) using Likert scale answers.

To measure behavioural change we created questions based upon current best knowledge about how to decrease children's vulnerability to CSA (Martin & Silverstone, 2013). We measured behaviours related to 4 major categories: talking about CSA and healthy sexual development; suspecting and reporting CSA; individual action strategies; and organizational action strategies. We assessed participant's use of behavioural strategies by asking them to select the number of times they had used the strategy in the previous 3 months as well as to select all of the specific items they used from provided checklists. **Table 9** details the format, measurement, and coding of each question.

Table 8. Measurement of knowledge and attitude

Measure	Statement[1]
Knowledge	Children are most commonly sexually abused by people who are known to the child and the child's family.
	When a child tells an adult he/she was sexually abused, it is important for the adult to determine whether or not the abuse happened.
	If I suspect that a child is being sexually abused, I have a legal obligation to report this abuse to child social services or police.
Attitude	Children who act in a seductive manner are not to blame if an adult responds to them in a sexual way.
	Sexual contact between an adult and a child that does not involve actual or attempted sexual intercourse is unlikely to have serious psychological consequences for the child.
	Children who do not report ongoing sexual abuse must want the sexual contact to continue.

[1]Measured using a 5-point Likert scale: Strongly disagree (coded 4), disagree (coded 3), not sure (coded 2), agree (coded 1), strongly agree (coded 0).

Table 9. Measurement and coding

Behavioral Measures		
Talking About CSA and Healthy Sexual Development	**Measurement**	**Codes**
In the past 3 months, how many times have you talked about healthy sexual development or child sexual abuse with children that you know?	0 times 1-2 times 3-4 times 5 or more times	0 1 2 3
In the past 3 months, which of the following have you talked about with a child you know? Select all that apply. Boundaries Identifying a range of emotions Internet safety Proper names for genitals Using the word "surprise" for things like birthday presents rather than "secret" Definition of sexual abuse Grooming techniques adults might use Children are never to blame if they are sexually abused What to do if you are sexually abused How to tell someone if you are sexually abused Saying "no" is allowed	Total score between 0 and 11	0=No 1=Yes
Suspecting and Reporting CSA		
In the past 3 months, how many times have you suspected a child you know might have been sexually abused?	0 times 1-2 times 3-4 times 5 or more times	0 1 2 3
In the past 3 months, how many times have you reported a child who you suspected was sexually abused to child social services or police?	0 times 1-2 times 3-4 times 5 or more times	0 1 2 3
Individual Action Strategies		
In the past 3 months, what things have you done individually? Select all that apply. Watched for signs of abuse in children Taken steps to protect children from sexual abuse Been a responsible role model for other adults in your interaction with children	Total score between 0 and 3	0 = No 1 = Yes
Organizational Action Strategies		
In the past 3 months, what things has your organization done with adults who interact with or want to interact with children? Select all that apply. Does not apply to me[1] Criminal record checks Child welfare checks Screening interviews Reference checks Provide written policy outlining appropriate conduct with children Monitoring one-on-one time between adults and children Provide written policy for handling suspicions of abuse Provide written policy for handling disclosure of abuse Provide written policy for identifying and handling inappropriate comments and behaviors by adults	Total score between 0 and 8	0 = No 1 = Yes

[1]Participants who selected *Does not apply to me* were excluded from this analysis.

This table summarizes each type of behaviour that was measured and how it was measured. Coding and effect sizes are included where relevant.

3.3.13 Statistical Analysis

In order to assess change from pre-test to 3-month follow-up we computed scores for several of the measures. To assess attitude and knowledge change, each Likert scale response was scored with higher scores representing more ideal responses. Each participant was given an attitude score and a knowledge score at baseline and at pre-test, with higher scores representing more ideal responses. These scores were used to determine attitude and knowledge change.

We assessed behaviour change in several ways. First, the measures for the number of times talking about CSA and healthy sexual development, the number of times suspecting CSA, and the number of times reporting CSA were compared directly between baseline measurement and post-test measurement. Total scores for CSA and healthy sexual development related topics, individual action strategies, and organizational action strategies were computed by adding together each strategy selected. We then computed an overall behaviour score for each participant at baseline and post-test by summing the scores for CSA/ healthy sexual development related topics talked about, individual action strategies, and organizational action strategies used to produce a single total score for each participant. Note that participants who selected *not applicable* for organizational action strategies were excluded from the organizational strategies analysis.

We used a two-tail Wilcoxon signed rank test to determine within-subject statistically significant change from baseline measurements to post-test measurements, given that the Wilcoxon test is appropriate for use with non-parametric data and related groups. Note that we did not apply a

Bonferroni correction for multiple comparisons since, while a Bonferroni correction can be useful for reducing the risk of Type I errors in multiple comparisons, it also creates a loss of power to detect changes that are present making its usefulness disputed in studies such as the current one (Divine, et al., 2013; Keppel, 1991; Perneger, 1998). Effect sizes were calculated using the standardized *z*-score from the results of the Wilcoxon signed Rank test divided by the square root of "n" (Field, 2009). Effect sizes were understood using Cohen's (1992) guidelines: r = 0.01 (small effect), r = 0.30 (medium effect), r = 0.50 (large effect). Statistical significance was defined as $p<0.05$. Spearman's correlation was used to determine associations between demographic variables and dependent variables. Missing values due to lack of response to individual questions were excluded from analysis.

3.4 Results

There were a total of 23 program workshops, involving 366 participants, carried out during September – December, 2014 in 14 communities in Western Canada. The individual who facilitated the vast majority of groups had no previous expertise in this, and no background in medicine or allied professions. This was deliberate, so that the study would allow some approximation towards the anticipated outcomes when given by other untrained individuals. Groups who participated in program workshops included those offered to the general public (14), child/youth serving organizations (5), community groups (2), a mother's group (1), and a group of individuals attending a conference regarding youth issues (1).

3.4.1 Sample and Demographics

The sample consisted of 312 adults who took the program and completed the informed consent and pre-test questionnaire. Of these, 209 individuals (67%) also completed the 3-month follow-

up questionnaire. However, of these a total of 12 questionnaires were not usable due to incomplete identifying information, while one individual with the same identifying information completed the questionnaire twice and both versions were therefore excluded. Thus the final study sample consisted of 195 individuals (63%) for whom there was study data, although some individuals did not complete every section as specified below. Demographic details are shown in **Table 10**. It is important to note that we have baseline demographic data on 312 individuals, but detailed follow-up data only 195 individuals. However, a Wilcoxon signed-rank test showed no statistically significant demographic differences between these groups.

Table 10. Demographics of classroom study participants at 3 month follow-up (n=195)

Demographic Information	N (%)
Gender	
Male	21 (11%)
Female	174 (89%)
Age	
18-29	57 (29%)
30-39	64 (33%)
40-49	41 (21%)
50-59	21 (11%)
60 and older	12 (6%)
Level of Education Completed	
High school	25 (13%)
Post-secondary	139 (71%)
Graduate studies	31 (16%)
Previous CSA[1] Training	
None	105 (54%)
Some	80 (41%)
Extensive	10 (5%)
Previous Personal History of CSA	
Yes	62 (32%)
No	115 (59%)
Unsure	14 (7%)
Did not answer	4 (2%)

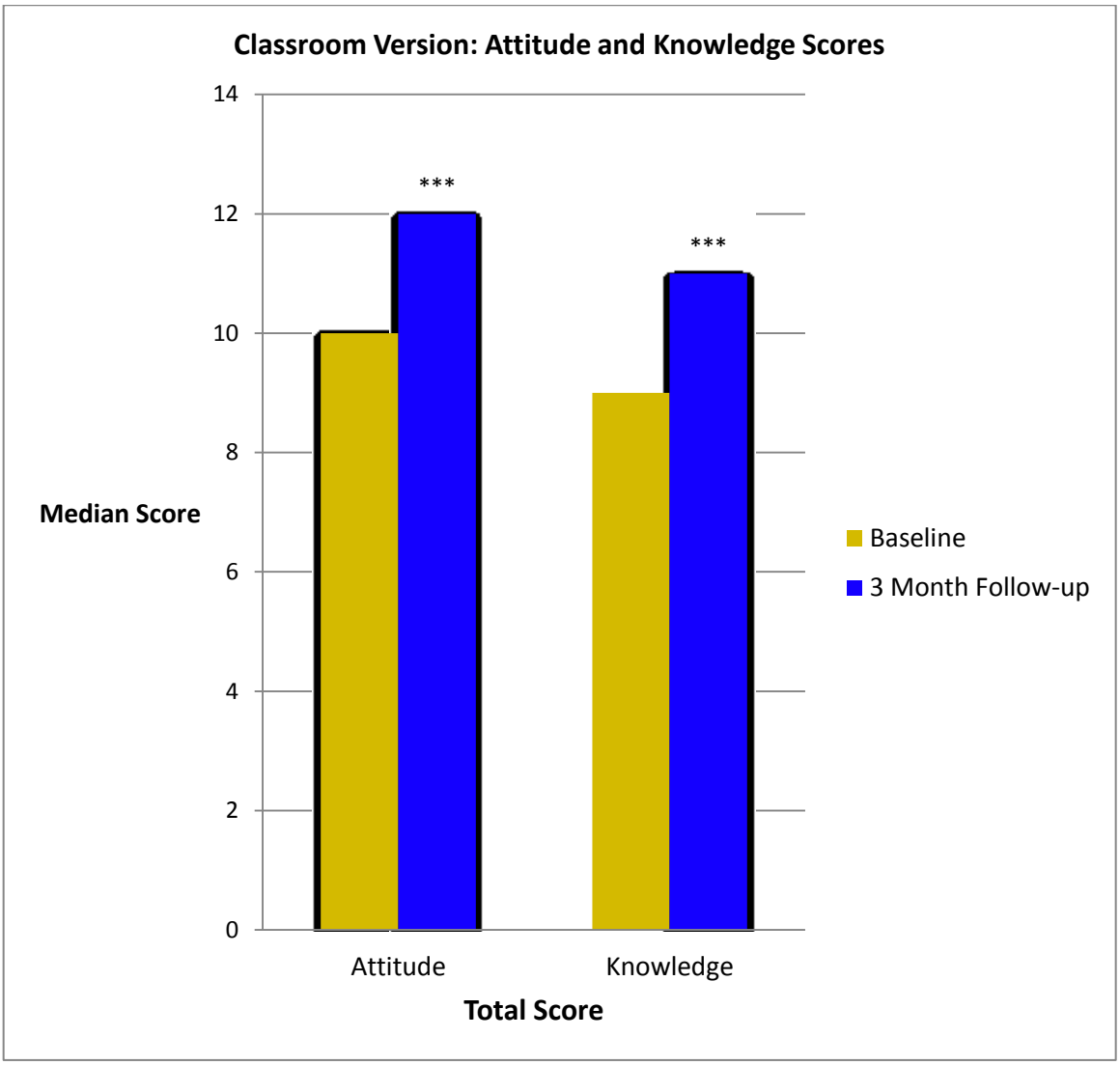
[1]CSA = child sexual abuse

Demographic make-up of the post-test sample. There was no significant difference between the sample at baseline and the sample at 3 month-follow up.

3.4.2 Knowledge and Attitude

Measurements of knowledge and attitude had statistically significantly increases from pre-test to 3-month follow-up (**Figure 2**). A total of 174 study participants completed both baseline and 3-month follow-up questionnaires in the knowledge section of the questionnaire. A Wilcoxon signed-rank test determined a highly statistically significant median increase in knowledge score from pre-test (9) to 3-month follow-up (11), $z = 7.463$, $p < 0.001$. Of the 174 participants, 108 had higher scores. 44 had no change, and 22 had a decrease. A total of 189 study participants completed both baseline and 3-month follow-up questionnaires in the attitude section of the questionnaire. A Wilcoxon signed-rank test also showed a highly statistically significant median increase in attitude score from pre-test (10) to 3-month follow-up (12), $z = 4.724$, $p < 0.001$. Of the 189 participants, 78 had increased scores, 86 had no change, and 25 had a decrease in scores.

Figure 2. Classroom version: Median score for attitude and knowledge before taking the workshop (baseline) and at 3 months after taking the workshop (3-month follow-up)



***Results significant at $p < .001$

Behavioural measures

All 195 study participants completed at least one section of the behavioural questionnaire at both baseline and follow-up, while a total of 117 study participants completed both baseline and 3-month follow-up questionnaires on all sections of the behavioural questionnaire (including organizational – which didn't apply to many individuals). Results of a Wilcoxon signed-rank test found a highly statistically significant change between the median at baseline and 3-month follow-up, $z = 5.322$, $p < 0.001$ (Figure 1). From the total number of 113 participants 77 scores increased, 7 scores did not change, and 29 scores decreased.

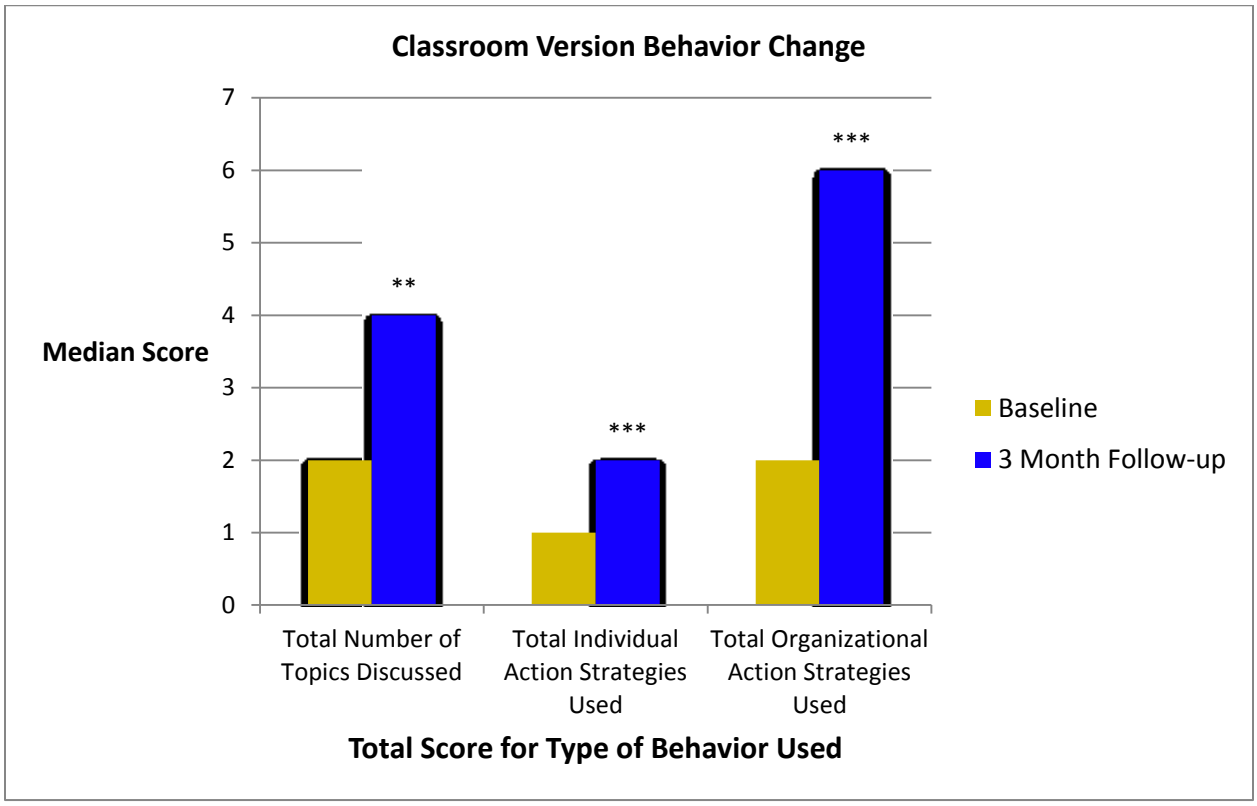
(i) Suspecting child sexual abuse. A total of 186 study participants completed both baseline and 3-month follow-up questionnaires in this section of the behavioural questionnaire. Results of a Wilcoxon signed-rank test found no statistically significant changes between the median at baseline and 3-month follow-up, $z = 0.250$, $p = 0.802$. After the 3-month follow-up 22 participant's scores in regards to suspecting child sexual abuse increased, 141 stayed the same, and 23 decreased.

(ii) Reporting child sexual abuse. A total of 180 study participants completed both baseline and 3-month follow-up questionnaires on this section of the behavioural questionnaire. Results of a Wilcoxon signed-rank test found no statistically significant changes between the median at baseline and 3-month follow-up, $z = 0.179$, $p = 0.858$. After the 3-month follow-up, 13 participant's scores in regards to reporting child sexual abuse increased, 155 stayed the same, and 12 decreased.

(iii) Number of times talking about child sexual abuse or healthy sexual development. A total of 186 study participants completed both baseline and 3-month follow-up questionnaires in this section of the behavioural questionnaire. Results of a Wilcoxon signed- rank test found a statistically significant change between the median at baseline and 3-month follow-up, $z = 2.456$, $p = 0.014$. From the total number of 186 participants 81 scores increased, 51 scored did not change, and 54 scores decreased.

(iv) Total number of topics talked about. A total of 195 study participants completed both baseline and 3-month follow-up questionnaires on this section of the behavioural questionnaire. The median score at 3-month follow-up was higher than at pre-test (**Figure 3).** Results of a Wilcoxon signed-rank test found a highly statistically significant change between the median at baseline and 3-month follow-up, $z = 3.204$ $p = 0.001$ (Figure 2). From the total number of 195 participants there were 101 increased scores, 31 did not change, and 63 had decreased scores.

Figure 3. Classroom version: Median scores for specific behaviour change categories before taking the workshop (baseline) and at 3 months after taking the workshop (3-month follow-up)

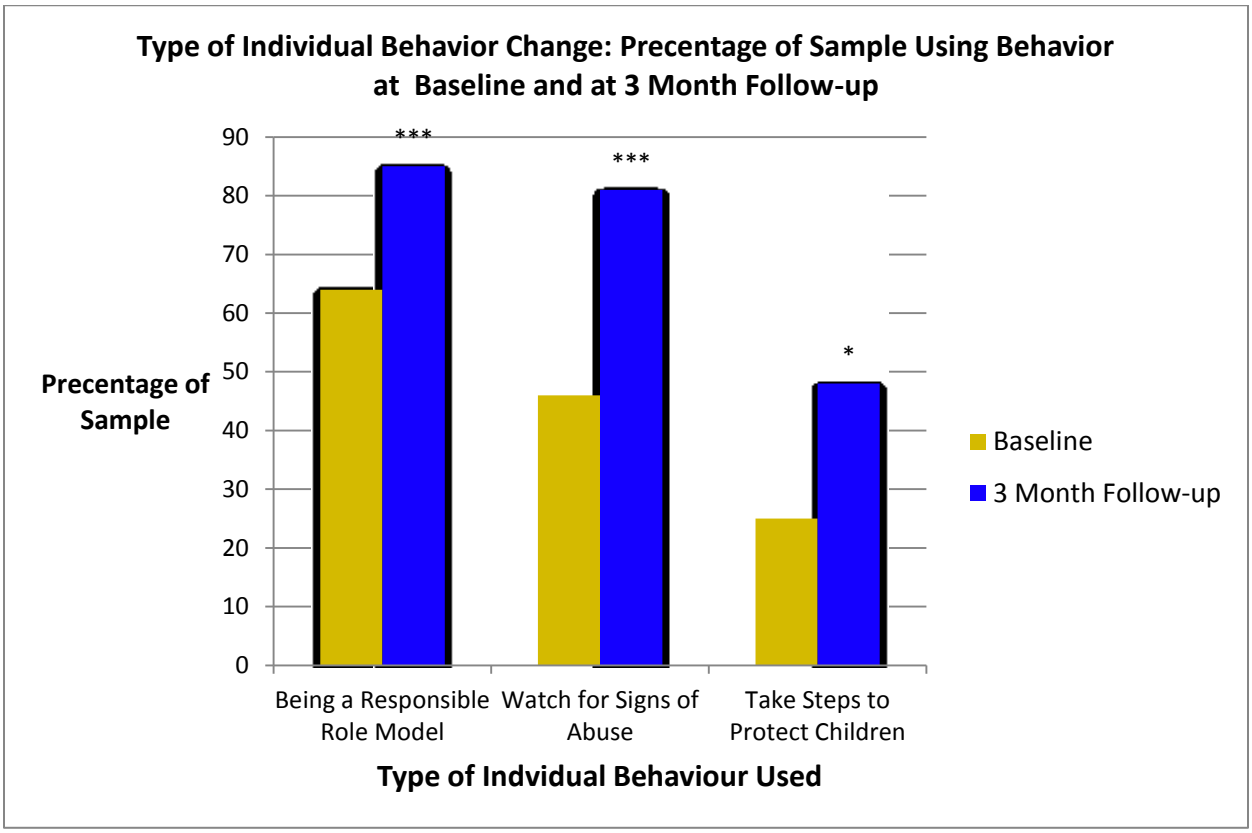


***Results significant at $p < .001$
**Results significant at $p = .001$

(v) Total individual prevention strategies used. A total of 194 study participants completed both baseline and 3-month follow-up questionnaires on this section of the behavioural questionnaire. Median score at 3-month follow-up was double that at pre-test (Figure 2). Results of a Wilcoxon signed-rank test found a statistically significant change between the median at baseline and 3-month follow-up, $z = 5.398$, $p < 0.001$. Of the 194 participants that completed these measures, 101 had an increase in score, 49 scores did not change, and 44 scores decreased.

The individual action strategies are shown in **Figure 4** with each category being measured using the percentage of the sample that used each strategy both at pre-test (Baseline) and at 3-month follow-up. Results of a Wilcoxon signed-rank test found a statistically significant change for watching for signs of abuse between the median at baseline and 3-month follow-up, $z = 5.830$, $p < 0.001$. Of the 194 participants that completed these measures, 72 had an increase in score, 105 scores did not change, and 17 scores decreased. The Wilcoxon signed-rank test also found statistically significant change for taking steps to protect children, $z = 3.736$, $p < 0.001$. Of the 194 participants that completed these measures, 74 had an increase in score, 85 scores did not change, and 35 scores decreased. Statistically significant change from pre-test to 3 months follow- up also occurred in being a responsible role model for other adults $z = 2.962$, $p = 0.003$. Of the 194 participants that completed these measures, 74 had an increase in score, 85 scores did not change, and 35 scores decreased.

Figure 4. Classroom version: Percentage of sample that reported using each individual prevention strategy before taking the workshop (baseline) and after taking the workshop (3-month follow-up)



***Results significant at $p < .001$
*Results significant at $p = .05$

(vi) Total organizational prevention strategies used. A total of 124 study participants completed both baseline and 3-month follow-up questionnaires on this section of the behavioural questionnaire, with the rest stating this section of the questionnaire was not relevant to their role. Median scores at 3-month follow-up were 3 times higher than at pre-test (**Figure 3**). Results of a Wilcoxon signed-rank test found a highly statistically significant change between the median at baseline and 3-month follow-up, $z = 4.165$, $p < 0.001$. Of these 124 individuals involved with organizations 79 had an increase in score, 9 scores did not change, and 37 scores decreased.

3.4.3 Correlations between Outcome Variables and Demographic Variables:

Using a Spearman's rank correlation co-efficient test we examined potential correlations between demographic variables and changes in knowledge attitude, total topics talked about, total individual action strategies used, total organizational strategies used, number of times suspecting CSA, or number of times reporting CSA. However, we found no statistically significant correlations between these variables and gender, age, highest level of education completed, or self-reported sexual abuse as a child other than a single negative relationship between having previous CSA training and change in use or organizational action strategies, $r_S = -0.278$, $p = 0.002$.

3.4.4 Effect Sizes

Medium effect sizes were seen for individual and organizational behaviour change and small effect sizes for measures related to talking with children about CSA and healthy sexual development. Effect sizes for behaviour change measures are presented in **Table 11**. Effect size for knowledge change was large (0.57) and medium for attitude (0.34).

Table 11. Effect sizes for classroom version behaviour change

Behaviour Change Measure	**Effect Size [2] for Classroom Version**
Number of Times Talking About CSA and Healthy Sexual Development	0.18
Number of CSA and Healthy Sexual Development Topics Discussed	0.23
Suspecting CSA	NS [3]
Reporting CSA	NS
Total Individual Action Strategies	0.39
Total Organizational Action Strategies Used [1]	0.37

[1] Participants who selected *Does not apply to me* were excluded from this analysis.
[2] Effect sizes based on Cohen's (1992), r = 0.01 (small effect), r = 0.30 (medium effect), r = 0.50 (large effect)
[3] NS – non-significant. Effects were not calculated when results were non-significant.

3.5 Discussion

The *Prevent It!* program workshops described in this study are a novel approach to create a program that can potentially help, or even reduce, the large numbers of individuals who experience child sexual abuse (CSA). This program was developed in a comprehensive manner and is unique compared to previous approaches. The goal was to develop an evidence-based program that can be administered by community volunteer adults involved with children, which would increase their knowledge and attitudes towards CSA. Perhaps even more importantly, the primary outcome goal was that the *Prevent It!* program would improve the actual behaviours of the adults taking part. The results from the present study strongly support these objectives. The results clearly show that this program significantly improves knowledge, attitudes, and behaviours in adults that take the program.

Interestingly, while we found many changes overall, for the two items, "Suspecting CSA" and "Reporting CSA", there were no statistically significant changes. However, we believe the likely reason for this lack of change was that 3 months was not enough time for individuals to be in situations where they may have come across CSA. To answer such a question, a 12-month follow-up may help determine if the *Prevent It!* program changes these behaviours over the longer-term, and we anticipate such longer-term research in the future.

Our findings support previous studies that have found classroom-based teaching of adults about CSA can improve knowledge, attitudes, and behavioural intentions. However, one drawback of classroom-based training is the cost involved, and therefore internet based approaches are now starting to be considered because they are more cost-effective and can increase accessibility

(Wurtele, 2007). It is unknown if there would be a differential effectiveness of in-person training with a facilitator (Rheingold et al., 2012; Paranal et al., 2012) relative to an online program. Therefore, an ideal future research approach would involve comparisons with an internet-based version of *Prevent It!* Additionally, although the program is designed to be facilitated by community volunteers, the present study utilized primarily a single individual who may therefore have developed specific skills. Therefore, further research should compare the outcomes when such volunteers are facilitators with no, or minimal, previous experience.

Despite the positive findings from the present study, there are some methodological matters that should be considered as potential limitations. Firstly, we utilized a within-subjects design, comparing baseline to 3-month follow-up, with studies suggesting that attitudes and behavioural intentions are persistent over time (Deblinger et al., 2010). Nonetheless, for further certainty that the positive findings were due to the program, a randomized wait-list control study could be carried out, to ensure that the improvements were not simply due to the factor of time. Secondly, the study population only consisted of 63% of those who took the program and completed baseline demographic data. However, there were no statistically significant differences in demographics between those who completed follow-up and those who did not, and we therefore believe that the results reflect the wider group, not just the responders. Thirdly, only a small number of men (n=22) took part in the program, and therefore the impact of this program on men is less certain. This is a problem that is common in studies in this area (i.e., Rheingold et al., 2012), and it has also been suggested that there may be less support regarding the issue of CSA in some male-dominated organizations (Parent & Demers, 2009). It is possible that subsequent focus group research involving men may help address this issue.

In conclusion, the purpose of this study was to determine the effectiveness of a novel program to increase awareness and action to reduce child sexual abuse. Previous research has demonstrated the ability of programs such as this to change knowledge and increase participant's likelihood of using preventative behaviours. This is the first study to measure participant's self-reported use of preventative behaviours. Compared to baseline, at the 3-month follow up, participants who took the program were talking about CSA and healthy sexual development twice as much, were using twice as many individual action strategies, and were utilizing three times as many organizational strategies. Knowledge and positive attitude also increased significantly. The results of the classroom format evaluation thus suggest that the *Prevent It!* program is effective and would support its widespread use.

While the results of this research are specific to classroom version of this program, future research will want to consider other formats of education as well. While media campaigns may be a popular approach, the early evidence suggests there are limitations to their capacity to create lasting behaviour change (Rheingold et al., 2007; Self-Brown et al., 2008). Online formats of adult-targeted CSA education is a possible approach, and this appears to be liked by participants (Rheingold et al., 2012) as well as by organizations (Paranal et al., 2012). This high level of satisfaction, paired with potential cost-saving possibilities make an online program a promising potential for future uses of the *Prevent It!* intervention.

References:

Alaggia , R. (2004). Many ways of telling: expanding conceptualizations of child sexual disclosure. *Child Abuse & Neglect, 28*(11), 1213-1227. doi:10.1016/j.chiabu.2004.03.016.

Anda, R. F., Felitti, V. J., Bremner, D. J., Walker, J. D., Whitfield, C., Perry, B. D., Dube, S. R., & Giles, W. H. (2006). The enduring effects of abuse and related adverse experiences in childhood: A convergence of evidence from neurobiology and epidemiology. *European Archives of Psychiatry and Clinical Neuroscience, 256*(3), 174-189. doi: 10.1007/s00406-005-0624-4.

Babatsikos, G. (2010). Parents' knowledge, attitudes, and practices about preventing child sexual abuse: A literature review. *Child Abuse Review, 19*(2), 107-129. doi: 10.1002/car.1102.

Belsky, J., & de Haan, M. (2011). Annual research review: Parenting and children's brain development: the end of the beginning. *The Journal of Child Psychology and Psychiatry, 52*(4), 409-428. doi: 10.1111/j.1469-7610.2010.02281.x.

Berrick, J. D. 1(988). Parental involvement in child abuse prevention training: What do they learn? *Child Abuse & Neglect, 12*(4), 543-553. doi:10.1016/0145-2134(88)90071-3.

Bowman, R. A., Scotti, J. R., & Morris, T. L. (2010). Sexual abuse prevention: a training program for developmental disabilities service providers. *Journal of Child Sexual Abuse, 19*(2): 119-27. doi: 10.1080/10538711003614718.

Chen, L. P., Murad, M. H., Paras, M. L., Colbenson, K. M., Sattler, A. L., Goranson, E. N., Elamin, M. B., Seime, R. J., Shinozaki, G., Prokop, L. J., & Zirakzadeh, A. (2010). Sexual abuse and lifetime diagnosis of psychiatric disorders: Systemic review and meta-analysis. *Mayo Clinic Proceedings, 85*(7), 618-629. doi:10.4065/mcp.2009.0583.

Cohen, J. (1992). A power primer. *Psychological Bulletin, 112*(1), 155-159.

Collin-Vézina, D., Hélie, S., & Trocmé, N. (2010). Is child sexual abuse declining in Canada? An analysis of welfare data. *Child Abuse & Neglect, 34*, 807-812. doi:10.1016/j.chiabu.2010.05.004.

Collings, S. J. 1(997). Development, reliability, and validity of the child sexual abuse myth scale. *Journal of Interpersonal Violence, 12*(5), 665-674. doi: 10.1177/088626097012005004.

Davis, M. K., & Gidycz, C. A. (2000). Child sexual abuse prevention programs: A meta-analysis. *Journal of Clinical Child Psychology, 29*(2), 257-265. doi: org/10.1207/S15374424jccp2902_11.

Deblinger, E., Thakkar-Kolar, R. R., Berry, E. J., & Schoeder, C. M. (2010). Caregivers' efforts to educate their children about child sexual abuse. A replication study. *Child Maltreatment, 15*(1), 91-100. doi: 10.1177/1077559509337408.

Diamond, M., Jozifkova, E., Weiss, P. (2011). Pornography and sex crimes in the Czech Republic. *Archives of Sexual Behaviour*, 40(5), 1037-43; discussion 1045-50. doi: 10.1007/s10508-010-9696-y.

Diclemente, C. C., & Prochaska, J. O. (1998). Toward a comprehensive, transtheoretical model of change: Stages of change and addictive behaviors. *Treating Addictive Behaviors (2nd Edition), Applied Clinical Psychology*. New York: Plenum Press.

Diclemente, C. C., Prochaska, J. O., Fairhurst, S. K., Velicer, W. F., Velasque, M. M., & Rossi, J. S. (1991). Process of smoking cessation: An analysis of precontemplation, contemplation, and preparation stages of change. *Journal of Consulting and Clinical Psychology, 59*(2), 295-304. doi: org/10.1037/0022-006X.59.2.295.

Divine, G., Norton, H. J., Hunt, R. & Dienemann, J. (2013). A review of analysis and sample

size calculation considerations for Wilcoxon tests. *Economics, Education, and Policy, 117*(3), 699-710. doi: 10.1213/ANE.0b013e31827f53d7.
Field, A. *Discovering Statistics Using SPSS (and sex and drugs and rock 'n' roll). Third Edition.* London: Sage Publications.
Finkelhor, D. (1994). The international epidemiology of child sexual abuse. *Child Abuse & Neglect, 18(5), 409-417.*
Finkelhor, D. (2009). The prevention of childhood sexual abuse. *The Future of Children, 19*(2), 169-194.
Fryda C. M., & Hulme, P. A. (2015). School-based child sexual abuse prevention programs: An integrative review. *The Journal of School Nursing*, 31(3), 167-182. doi: 10.1177/1059840514544125.
Hébert, M., Lavoie, F., & Parent, N. (2002). An assessment of outcomes following parents' participation in a child abuse prevention program. *Violence and Victims, 17*(3), 355-372. DOI: http://dx.doi.org/10.1891/vivi.17.3.355.33664.
Jenson, T. K., Gulbrandsen, W., Mossige, S., Reichelt, S., Tjersland, O. A. (2005). Reporting possible child sexual abuse: A qualitative study on children's perspectives and the context for disclosure. *Child Abuse & Neglect, 29*(12), 1395-1415. doi:10.1016/j.chiabu.2005.07.004.
Kaffman, A. (2009). The silent epidemic of neurodevelopmental injuries. *Biological Psychiatry, 66*, 624-626. doi: 10.1016/j.biopsych.2009.08.002.
Kenny, M. C. (2009). Child sexual abuse prevention: Psychoeducational groups for preschoolers and their parents. *The Journal for Specialists in Group Work, 34*(1), 24-42. DOI: 10.1080/01933920802600824.
Keppel, G. (1991). *Design and analysis: A researchers' handbook*. New Jersey: Prentice-Hall Inc.
Kolb, D. A (1974). Toward an applied theory of experiential learning. In C. Cooper (Ed.), *Studies of Group Process* (pp. 33-57). New York: John Wiley.
Livingstone, S., Smith, P. K. (2014). Annual research review: Harms experienced by child users of online and mobile technologies: the nature, prevalence and management of sexual and aggressive risks in the digital age. Journal Child Psychology and Psychiatry, 55(6), 635-654. doi: 10.1111/jcpp.12197
MacMillan, H., Wathen, C. N., Barlow, J., Fergusson, D. M., Lenethal, J. M., Taussig, H. N. (2009). Interventions to prevent child maltreatment and associated impairment. *Lancet, 373*. 250-266. doi:10.1016/S0140- 6736(08)61708-0.
Maniglio, R. (2009). The impact of child sexual abuse on health: A systematic review of reviews. *Clinical Psychology Review, 29*, 647-657. doi:10.1016/j.cpr.2009.08.003.
Martin, K. E., & Silverstone, P. H. (2013). How much child sexual abuse if "below the surface" and how can we help adults identify it early? *Frontiers in Psychiatry, 4*(58), 1-10 doi: 10.3389/fpsyt.2013.00058.
Paranal, R., Washington, T. K., & Derrick, C. (2012). Utilizing online training for child sexual abuse prevention: Benefits and limitations. *Journal of Child Sexual Abuse*, *21*(5), 507-520. doi: 10.1080/10538712.2012.697106.
Parent, S., & Demers, G. (2009). Sexual abuse in sport: A model to prevent and protect athletes. *Child Abuse Review, 20*(2), 120-133. doi: 10.1002/car.1135.
Pereda, N., Guilera, G., Forns, M., & Gómez-Benito, J. (2009). The international epidemiology of child sexual abuse: A continuation of Finkelhor (1994). *Child Abuse & Neglect, 33*(6),

331-342. doi:10.1016/j.chiabu.2008.07.007.
Perneger, T. V. (1998). What's wrong with Bonferroni adjustments. *BMJ, 316*(7139), 1236-1238. doi: org/10.1136/bmj.316.7139.1236.

Petty, T.,& Thomas, C. C. (2014). Approaches to a successful adult education program *College Student Journal, 3*(48), 473-480.
Public Health Agency of Canada. *Canadian Incidence Study of Reported Child Abuse and Neglect – 2008: Major Findings.* Ottawa, ON, 2010.
Rheingold, A. A., Campbell, C., Self-Brown, S., Arellano de, M., Resnick, H., & Kilpatrick, D. (2007). Prevention of child sexual abuse: Evaluation of a community media campaign. *Child Maltreatment, 12*(4), 352-363. DOI: 10.1177/1077559507305994.
Rheingold, A. A., Zajac, K., & Patton, M. (2012). Feasibility and acceptability of a child sexual abuse prevention program for childcare professionals: Comparison of a web-based and in-person training. *Journal of Child Sexual Abuse, 21*(4), 422-436. doi: 10.1080/10538712.2012.675422.
Self-Brown, S., Rheingold, A. A., Campbell, C., & Arellano, M. A. (2008). A media campaign prevention program for child sexual abuse: Community members' perspectives. *Journal of Interpersonal Violence, 23*(6), 728-743. doi: 10.1177/0886260507313946.
Taylor, E. W., & Laros, A. (2014). Researching the practice of fostering transformative learning: Lessons learned from the study of andragogy. *Journal of Transformative Education, 12*(2), 134-147. doi: 10.1177/1541344614548589.
Walsch, K., Rassafiani, M., Mathews, B., Farell, A., & Butler, W. (2012). Assessment and prevention: Exploratory factor analysis and psychometric evaluation of the teacher reporting attitude scale of child sexual abuse. *Journal of Child Sexual Abuse, 21*(5), 489-506. doi: 10.1080/10538712.2012.689423.
Watts-English, T., Fortson, B. L., Gibler, N., Hooper, S. R., & De Bellis, M. D. (2006). The Psychobiology of Maltreatment in Childhood. *Journal of Social Issues,* 62(4), 717-736.
Wurtele, S. K. (2009). Preventing sexual abuse of children in the twenty-first century: preparing for challenges and opportunities. *Journal of Child Sexual Abuse, 18*(1), 1-18. doi: 10.1080/10538710802584650.
Yancey, T. C., Hansen, D. J., & Naufel, K. Z. (2011). Heterogeneity of individuals with a history of child sexual abuse: An examination of children presenting to treatment. *Journal of Child Sexual Abuse, 20*(2), 111-127. doi: 10.1080/10538712.2011.554341.
Zeuthen, K., & Hagelskjær, M. (2013). Prevention of child sexual abuse: Analysis and discussion of the field. *Journal of Sexual Abuse, 22*(6), 742-60. doi: 10.1080/10538712.2013.811136.
Zwi, K., Woolfenden, S., Wheeler., D. M., O'Brien, T., Tait, P., & Williams, K. J. (2007). School-based education programmes for the prevention of child sexual abuse. *Cochrane Database of Systematic Reviews, 3*. Art. No.: CD004380. doi: 10.1002/14651858.CD004380.pub2.

4 Effectiveness of an online version of the "*Prevent It!*" program, and comparison to the in-person Classroom version

4.1 Abstract

This study describes the evaluation an online version of the evidence-based education program for adults about childhood sexual abuse (CSA), called *Prevent It!* The study had two goals: to determine the effectiveness of the program in changing adult participant's CSA prevention behaviours, and to determine if the online version of this program was as effective as the in-person classroom version.

Using a pre-test post-test design we compared participant's individual and organizational CSA prevention behaviours before taking the program to those seen 3 months after taking the program. Data was collected using online questionnaires addressubg demographic data, knowledge, attitude, and behaviour. Because behavioural change was the primary outcome goal of interest, individuals were asked to indicate the types of behaviours they engaged in within the previous 3 months in several categories at both baseline and follow-up. Categories were: talking about CSA, suspecting/reporting CSA, individual prevention strategies, and organizational prevention strategies.

Baseline data was collected for the evaluation of the online version (n=165). Of the individuals who expressed interest and who started the on-line program there were 126 (78%) who completed the online workshop. Of these 126 individuals a total of 101 completed the 12-week follow up questionnaire (80% of sample). The study group consisted of mostly women, largely age 18 to 39

(61%), highly educated, and over half had no previous CSA training. Half of the sample reported a personal experience of CSA.

Results of the Wilcoxon signed-rank test indicate there was statistically significant change from pre-test to post-test for attitude, knowledge, and specific prevention behaviours after taking the online workshop. Effect sizes for the online group were similar to the classroom group, with slightly smaller effect sizes for the online group than the classroom group. Individual change scores and organizational change scores did not differ significantly between the classroom version and the online version. Results indicate the online version of this CSA education program was effective in changing adult participants' individual prevention behaviours in a manner similar to that seen with the classroom version of the program.

4.2 Introduction

Child sexual abuse (CSA) occurs commonly (Martin & Silverstone, 2013; Finkelhor, 1994). It remains uncertain if the rate of CSA is constant over time (Pereda et al., 2009), or changing (Finkelhor & Jones, 2004; Collin-Vézina et al., 2010). In any event, it is clear the vast majority of cases are never reported (Martin & Silverstone, 2013; Finkelhor, 1994; Public Health Agency of Canada, 2010). There are significant long-term negative medical, psychological, and behavioural outcomes of CSA (Chen et al., 2010; Maniglio, 2010), with CSA leading to longer term changes in brain structure and function (Anda et al., 2006; Belksy & de Haan, 2011; Kauffman, 2009), which may in turn cause psychiatric problems (DeBellis et al., 2011). This cascade of events makes child maltreatment "a preventable contributor to child psychopathology, cognitive impairment, and developmental difficulties" (Watts-English et al., 2006). Sexual abuse does not exist in isolation. Evidence from a national, one-year incidence study indicates that children who

experience sexual abuse often experience other types of victimization as well (Finkelhor et al., 2005). Given the cumulative effect of adverse childhood events and the overlapping occurrence of various abuse types, prevention and early intervention are of critical importance.

Classroom-based education is the most commonly used approach to adult-targeted CSA education and this approach, as well as media-based approaches, are reviewed in Chapters 2 and 3 of this thesis. An alternative approach to classroom education is an online format. This is because access to classroom-based sessions can be problematic for some individuals, while online approaches may increase accessibility for participants and also reduce administrative costs for agencies (Paranal et al., 2012; Wurtele, 2009). Online training for professionals can increase professionals' knowledge about identifying and reporting child maltreatment, and the convenience can be highly appreciated (Kenny, 2007). Online approaches have been evaluated for feasibility and acceptability (Rheingold et al., 2012) as well as for perceived effectiveness (Paranal et al., 2012). In their randomized control trial study, Rheingold and colleagues (2012) compared feasibility and acceptability of the online version to a classroom version of a CSA education program, and reported that the vast majority of web-based participants (92%) felt it was an effective way to deliver the material. It may also be effective in increasing their knowledge and behavioural intentions regarding CSA (Paranal et al., 2012). However, participants taking online versions had significantly lower behavioural intention scores than those who took the classroom version (Rheingold et al., 2012). It is yet to be determined how effective online approaches are to changing attitude, knowledge, and actual behaviours.

For these reason we aimed to determine the effectiveness of an online version of the *Prevent It! Taking Action to Stop Child Sexual Abuse* program. We hypothesized that adults who took the online version of the program would report increased use of prevention behaviours, increased accurate knowledge, and increased positive attitude towards CSA. We also hypothesized that there would be statistically significant smaller magnitudes of change for the online version compared to the in-person classroom version.

4.3 Methods

4.3.1 Ethical and Personal Impact Consideration

This study was approved by the Research Ethics Board of the University of Alberta (Ethics approval number Pro00038141). All participants completed informed consent prior to their involvement in the study. Each participant was assigned an individual study number and this was the only identifying information used during data analysis. Participation in such programs can be emotionally upsetting, and each participant was provided with a 24-hour crisis line resource to access in order to get support if needed. At the beginning of the online program, the online narrator reminds participants that the workshop may be upsetting and can bring up difficult thoughts and feelings. At the beginning and the end of the program the narrator reminds participants to use their own support systems if helpful, and to seek professional support as needed.

4.3.2 Program Background

As previously discussed, the *Prevent It!* program was developed by the researchers in order to address the lack of Canadian content, research-informed, CSA education programs. The development of the classroom version of the program has been documented in detail previously (Chapter 2). The online version was adapted from the classroom version using the same content

and theoretical grounding. Participants who took the online version of the workshop were given a secure login that allowed them to complete the workshop in segments. They were allowed to log-in and log-out as many times as needed to complete the material during the study period. The workshop followed the content and structure of the classroom version and had an extra "online narrator" who's purpose was to guide participants through the workshop, and communicate important messages or content that the in-person facilitator in the classroom version would usually emphasize. Participants were exposed to learning experiences, such as a video section, and then guided through an exercise to encourage their active engagement with the material. At times these activities were completed online and at other times participants were directed to a page in the corresponding workbook to complete an activity. At the end of each section, participants completed obligatory multiple choice questions and could not continue to the next section until they answered each question and reviewed points discussing each correct answer. Each participant was given access to a PDF, online version of the program workbook to refer to during the workshop, which they could keep for their information and future reference once the workshop was completed.

4.3.3 Program Evaluation

The target group for this evaluation was adults who interact with children, including caregivers, teachers, coaches in a variety of sports and recreation activities, youth group leaders, and religious leaders. The primary outcome goal of the *Prevent It! Taking Action to Stop Child Sexual Abuse* program is to change adults' behaviour. This study evaluated the effectiveness of the online version by comparing adult participants' self-reported behaviours before taking the program to their behaviour 3 months after taking the program. Secondary outcome goals of the program were to improve attitudes towards CSA and increase accurate knowledge about CSA. The first three of

four hypotheses corresponded with our previous study on the classroom version of the *Prevent It!* program (Martin & Silverstone, 2016) and were that participants who took the workshop would: (1) decrease negative attitudes towards CSA, (2) increase accurate knowledge about CSA, and (3) increase their use of individual and organizational prevention behaviours to reduce risk of CSA and identify incidences early. The final hypothesis was unique to online version: (4) there would be smaller magnitudes of change for the online version than for the classroom version, particularly for measures of behaviour change.

4.3.4 Sampling Strategy and Setting

We wanted to measure the effectiveness of the program based on the population that it will be serving. To do this, we used a convenience sample of adults who registered with a charity (Little Warriors) that provides CSA educational programs to adults.

4.3.5 Recruitment

In order to gain a sample that closely relates to the target group, participants were recruited using multiple strategies that were identical to those used to recruit for the classroom version: emails to agencies/organizations, social media sources, and website postings. Participants were told about the online program and given the incentive of taking the program at no cost when participating in the study. Each person who contacted the researchers expressing interest in participating in the study was supplied with a detailed information letter and an informed consent form. Once the informed consent form was completed, participants were supplied with an electronic link to the baseline questionnaire, and details on how to access the online workshop. Participants were required to be of 18 years or older to participate in the study. There were no other exclusion criteria.

4.3.6 Research Design

Once participants agreed to participate in the study they were provided with an electronic link to the pre-test (baseline) questionnaire. Upon completion of the pre-test they were provided with electronic access to the online program. Participants could complete the workshop in any number of sittings during the course of the study. Three months after completing the online program they were provided with online access to the post-test surveys. Participants were contacted a maximum of 3 times to remind them of the follow-up questionnaire. Post-test results were first compared to pre-test results using a within-subjects design. Secondly, behaviour change results from the online version of the program were compared to behaviour change results from the classroom version using a between-subjects design.

4.3.7 Measurement: Knowledge, Attitudes, and Behavioural Change

In order to allow direct comparison between the online program and the in-person classroom version, we used the same measurement tools as in our previous evaluation (**Table 8** and **Table 9** in Chapter 3). Data on demographics were collected. Participants were asked to report their gender, age, highest education level completed, level of previous CSA training received, and if they had experienced any type CSA themselves during their childhood. Before asking about personal experience with CSA, the questionnaire included a section reminding participants of the confidentiality of their responses, informing them they were not required to answer the question if they did not want to, and providing the reason for collecting the information in the study. Participants were able to skip any demographic details they chose.

Because previous studies have found statistically significant changes in knowledge and attitudes after taking a CSA education program (Bowman et al., 2010; Hébert et al., 2002; Rheingold et al.,

2007; Self-Brown et al., 2008), we also measured these using three Likert scale items for each measure. We utilized three items from the *Child Abuse Myth Scale* (Collings, 1997) to measure attitudes. In terms of behavioural changes we examined if they suspected child abuse, if they reported child abuse, how frequently they discussed CSA or healthy sexual development, the total number of topics discussed, the total number of individual strategies used to address CSA, and (where relevant) the total number of organizational strategies used (all as described previously in Chapter 3).

4.3.8 Statistical Analysis

In order to assess change from pre-test to 3 month follow-up we followed a similar protocol as for the classroom evaluation (Chapter 3). First, to assess attitude and knowledge change, we coded the Likert scale responses giving the more ideal responses higher scores. Then, total scores were computed and each participant was given an attitude score and a knowledge score with higher scores representing more ideal responses. We used the scores at baseline and at follow-up to determine knowledge and attitude change.

Because behaviour change was the primary outcome goal and has not been measured in a previous online study for general public adults, we assessed it more thoroughly than the constructs of knowledge and attitude. Questions that were structured using ordinal categories (0 times, 1-2 times, 3-4 times, 5 or more times) were analyzed by comparing the pre-test to the follow-up directly. This approach applies to the following measures: number of times talking about CSA and healthy sexual development, the number of times suspecting CSA, and the number of times reporting CSA. For those questions that asked participants to select all of the relevant content, we computed total scores and then compared each participant's total score and pre-test to their total

score at follow-up. This approach applies to CSA and healthy sexual development related topics spoken about, individual action strategies used, and organizational action strategies used. Participants who selected *not applicable* to the organizational action strategies were not included in that specific analysis.

We analyzed the data in two stages. First, we utilized a within-subject approach to determine statistically significant change for the outcome variables for the online version from pre-test to post-test. Second, we used a between-subjects approach to determine if the change that occurred via the online program differed significantly from the change that occurred via the classroom version (Martin & Silverstone, 2016). After considering the descriptive data, we used the Wilcoxon signed rank test to determine within-subject statistically significant change in outcomes for the online version. The Wilcoxon test is appropriate for use with non-parametric data from related groups. Note that while a Bonferroni correction may be used to address the risk of Type I errors in multiple comparisons, we did not apply a Bonferroni because of the corresponding loss of power to detect changes that can occur (Divine, et al., 2013; Keppel, 1991; Perneger, 1998).

Statistical significance is necessary but is not sufficient for determining how meaningful the change may be (Cohen, 1994), and so for those comparisons that yielded statistically significant change (as determined by the Wilcoxon signed rank test), we also calculated effect size to determine the magnitude of change. We used the standardized *z*-score from the results of the Wilcoxon signed Rank test divided by the square root of "n" to calculate effect sizes (Field, 2009) and Cohen's (1992) guidelines to interpret them: r = 0.01 (small effect), r = 0.30 (medium effect), r = 0.50 (large effect). Statistical significance was defined as $p<0.05$. Missing values were

excluded from the analysis when the lack of response was due to a lack of response to individual questions.

Secondly, after determining that statistically significant change occurred within-subjects, we compared the change after taking the online version to the change after taking the classroom version. We used the Mann-Whitney U test to compare behaviour change scores from each version. The Mann-Whitney U test is appropriate for non-parametric data and a between-subject design for unrelated groups.

4.4 Results

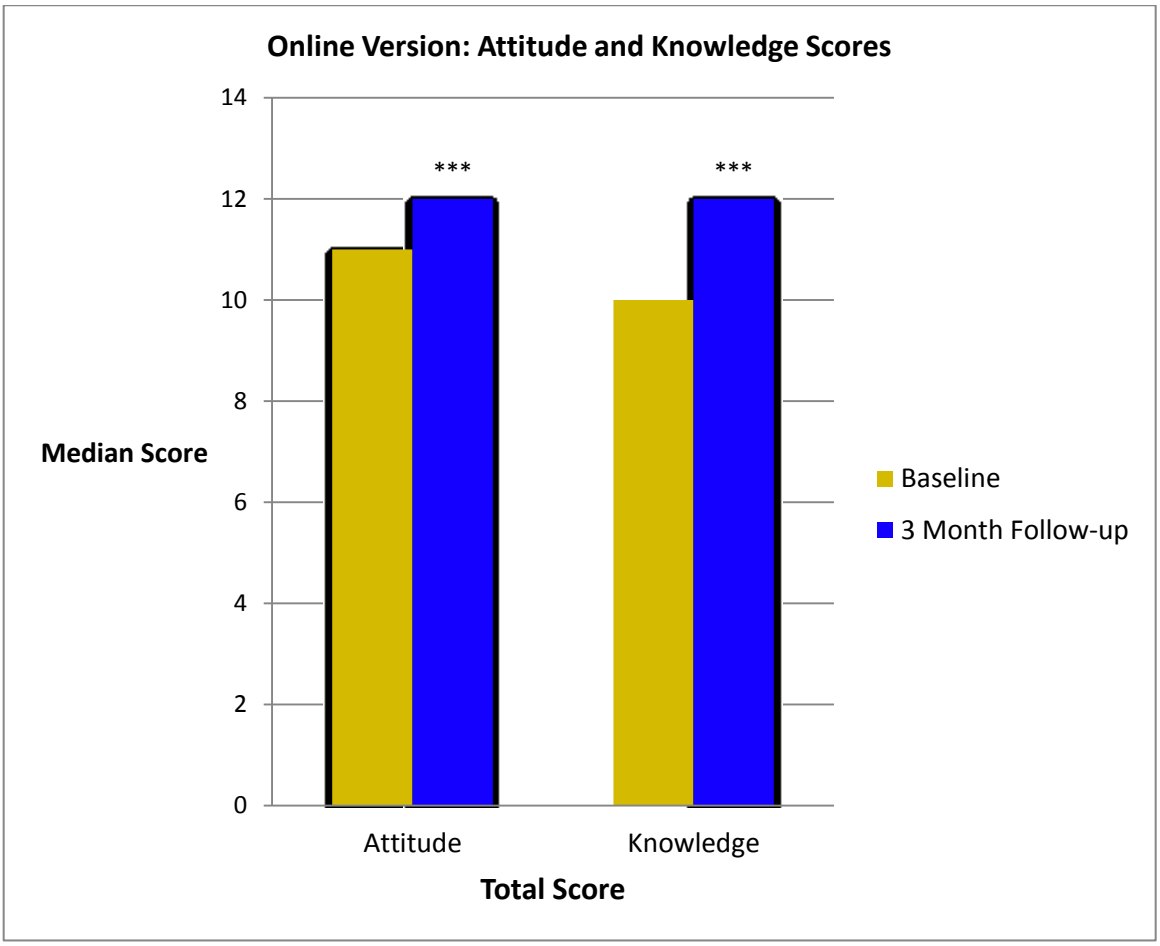
4.4.1 Sample Characteristics

The sample consisted of 165 people who expressed interest and who started the on-line program. Of these participants, 126 completed the program and 101 (80% of study sample) completed the follow-up questionnaire. The sample at follow-up was predominantly women (94%) with an age range of: 18 – 29 years old (22%); 30 – 39 years old (39%); 40 – 49 years old (25%); 50 – 59 years old (11%): and those who were 60 years old or older (3%). Most of the sample (67%) had completed post-secondary education as their highest education level, 16% had completed some graduate studies, 25% completed high school, and 1 person reported they did not complete school. The majority of participants did not have previous CSA-related training (60%), while 37% had some previous training, and a very small proportion had extensive previous training (3%). Half of the sample (50%) reported having experienced some type of sexual abuse as a child, while 5% were unsure, and the remaining 45% said they had not.

4.4.2 Knowledge and Attitude Change

As hypothesized, the scores for attitude and knowledge increased significantly from pre-test to post-test (**Figure 5**). The median score for attitude increased highly significantly from pre-test to follow-up ($z = 4.072$, $p < 0.001$). The effect size for attitude change was moderate (0.41). The median score for knowledge scores also increased highly significantly from pre-test to post-test ($z = 5.928$, $p < 0.001$). The effect size for knowledge change was large (0.59).

Figure 5. Online version: Median score for attitude and knowledge change before taking the workshop (baseline) and at 3 months after taking the workshop (3 month follow-up)

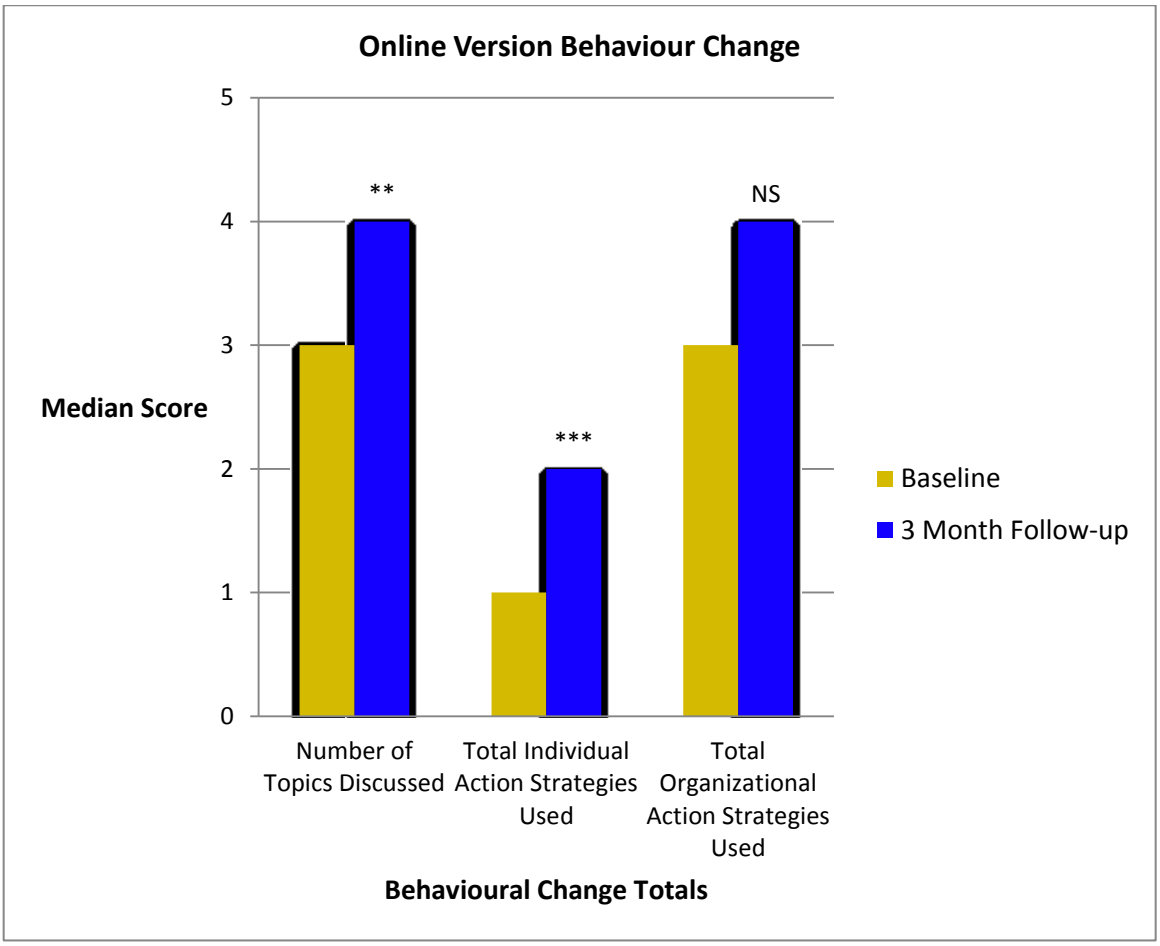


***Results significant at $p < .001$

Behavioural Changes

There were statistically significant increases from pre-test to post-test for the frequency of talking about healthy sexual development and CSA, the total number of topics related to CSA discussed with children, and the total number of individual action strategies used (**Figure 6)**.

Figure 6. Online version: Median score for specific behaviour change measures before taking the workshop (baseline) to 3 months after taking the program (3 month follow-up)



***Results significant at $p < .001$
**Results significant at $p = .001$
NS = non-significant

Figure 7 shows the individual action strategies used, expressed as the percentage of the sample, at pre-test and at post-test reporting using each strategy. The Wilcoxon signed rank test indicated no statistically significant changes for the number of times suspecting CSA, the number of times reporting CSA, and the total number of organizational strategies used. Effect sizes were calculated for statistically significant changes, and were small for number of times taking about CSA and healthy sexual development, medium for total topics discussed, and large for number of individual prevention strategies used. These can be seen in **Table 12**, which shows the *z* score, *p* value, and effect size for each behavioural change measure.

Figure 7. Percentage of online version sample that reported using each individual prevention strategy before taking the program (baseline) and 3 months after taking the program (3 month follow-up)

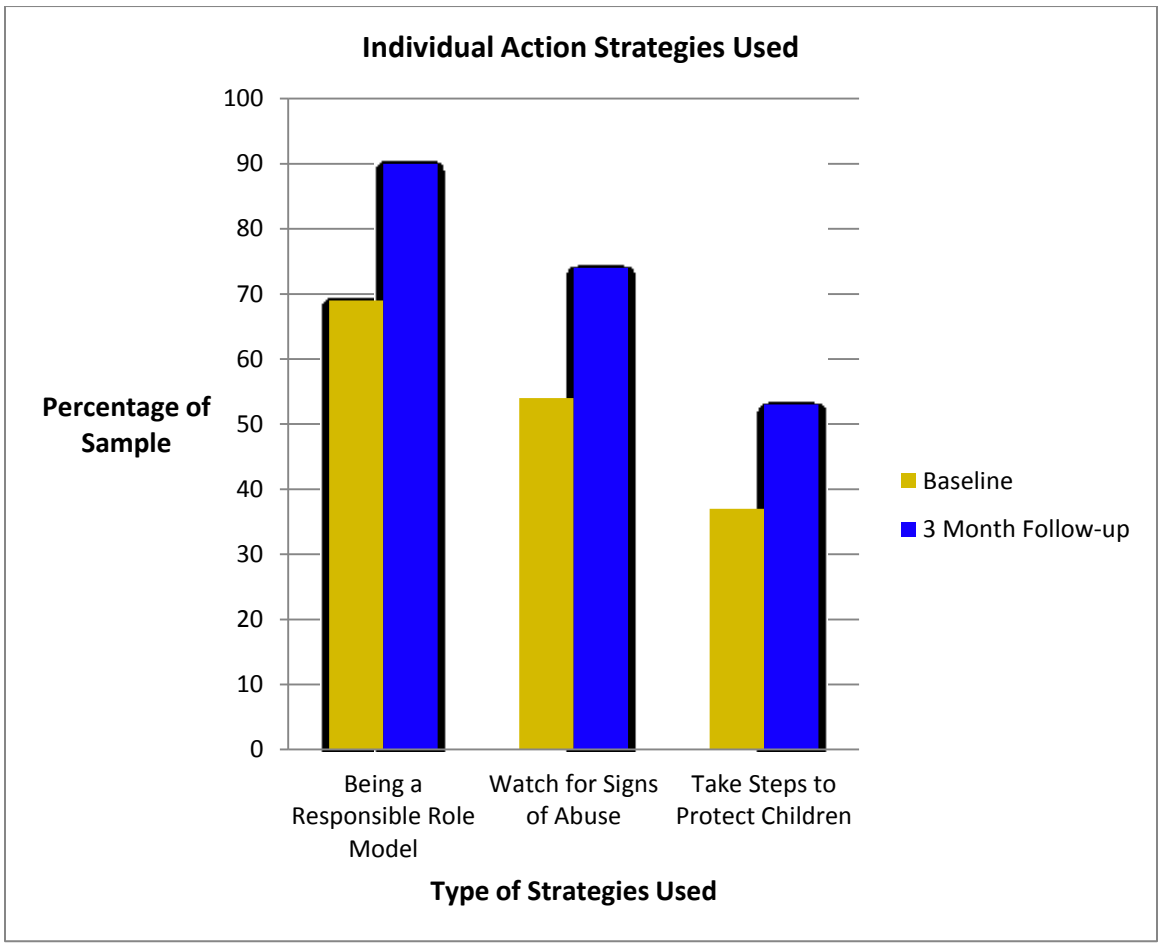


Table 12. Online version: Z score, significance, and effect size for measures of behaviour at baseline compared to 3-month follow-up

	Behavioural Measures		
Talking About CSA and Healthy Sexual Development	***z* score[1]**	***p* value[2]**	**Effect Size[3]**
In the past 3 months, how many times have you talked about healthy sexual development or child sexual abuse with children that you know?	2.962	0.003	0.23
In the past 3 months, which of the following have you talked about with a child you know? Select all that apply. • Boundaries • Identifying a range of emotions • Internet safety • Proper names for genitals • Using the word "surprise" for things like birthday presents rather than "secret" • Definition of sexual abuse • Grooming techniques adults might use • Children are never to blame if they are sexually abused • What to do if you are sexually abused • How to tell someone if you are sexually abused • Saying "no" is allowed	3.334	0.001	0.36
Suspecting and Reporting CSA			
In the past 3 months, how many times have you suspected a child you know might have been sexually abused?	0.577	0.564	NS[4]
In the past 3 months, how many times have you reported a child who you suspected was sexually abused to child social services or police?	1.00	0.317	NS
Individual Action Strategies			
In the past 3 months, what things have you done individually? Select all that apply. • Watched for signs of abuse in children • Taken steps to protect children from sexual abuse • Been a responsible role model for other adults in your interaction with children	5.364	0.000	0.53
Organizational Action Strategies			
In the past 3 months, what things has your organization done with adults who interact with or want to interact with children? Select all that apply. • Does not apply to me[5] • Criminal record checks • Child welfare checks • Screening interviews • Reference checks • Provide written policy outlining appropriate conduct with children • Monitoring one-on-one time between adults and children • Provide written policy for handling suspicions of abuse • Provide written policy for handling disclosure of abuse • Provide written policy for identifying and handling inappropriate comments and behaviours by adults	1.311	0.190	NS

[1] *z* score calculated using the Wilcoxon signed rank test.
[2] *p* value significance determined by $p<0.05$
[3] Effect sizes based on Cohen's (1992), r = 0.01 (small effect), r = 0.30 (medium effect), r = 0.50 (large effect)
[4] NS – non-significant. Effects were not calculated when results were non-significant.

[5] Participants who selected *Does not apply to me* were excluded from this analysis.

Online Version Compared to Classroom Version

Behavioural change scores were used to compare the online version of the program to the classroom version. The classroom and online version participants were similar in age ($U = 24643$, $z = 0.344$, $p = 0.731$), gender ($U = 23613$, $z = 1.920$, $p = 0.055$), and education level ($U = 24608.5$, $z = 3.205$, $p = 0.717$). There was a highly statistically significant difference between the occurrences of self-reported child sexual abuse, with the online sample reporting significantly more CSA than the classroom sample ($U = 21020.5$, $z = 3.205$, $p = 0.001$).

A Mann-Whitney U test was performed to determine if there were differences in individual change scores and organizational change score between the classroom group and the online group. Individuals that did not complete the post-test were excluded from this analysis. A visual review determined the shapes of these distributions to be similar. There were no significant differences between either individual action strategy change scores for the classroom (n = 191, mean rank 144.82) and the online (n = 99, mean rank 146.81) versions of the program ($U = 9325$, $z = 0.197$, $p = 0.844$). Once N/A responses were filtered out of the analysis, there were no statistically significant differences between organization change between the classroom (mean rank = 87.41) and the online (mean rank = 72.98) versions, $U = 2249$, $z = 1.727$, $p = 0.084$).

4.5 Discussion

This is the first study to evaluate an online version of an adult-targeted CSA prevention program to determine its effectiveness at changing adult's behaviour. It is also the first study to compare behaviour change after taking an online version of an adult-targeted CSA prevention program, and we were able to also compare results to behavioural changes seen after taking a classroom version

of the same program. This study provides three critical insights: first we demonstrate that an online version of a CSA prevention program targeting adults in the general population can result in change to adults' knowledge and attitudes persisting 3 months after taking the program. Secondly, we found that an online approach can change actual behaviours, which are present 3 months after taking the program. Thirdly, and in contrast to our initial hypothesis, we found that the degree of change that occurred after taking the online version of the program was similar to the change that occurred after taking the in-person classroom version of the program (described in Chapter 3). However, it should be noted that a total of 101 individuals provided 3-month follow-up information on the online version of *Prevent it!* compared to 195 for the classroom based version. The two populations were, overall, quite similar but the online group had a significantly greater disclosed history of CSA. Therefore, there remains the possibility that there may be some additional differences between the two samples that may, in part, account for these findings.

When designing this study we hypothesized that participation in an online version of a CSA education program would increase participant's positive attitudes about CSA, accurate knowledge of CSA, and use of prevention behaviours related to CSA. The results of this study confirm that the online version of this adult-targeted child sexual abuse prevention program can change participant's longer-term behaviours related to talking about CSA, healthy sexual development, and in the use of individual action strategies. The online version also changed participant's knowledge and attitudes about CSA. The organizational behaviour change results are less clear since we did not detect statistically significant change after taking the program, even though (at the same time) we did not find any statistically significant differences between the online version and the classroom version. It is possible that this may reflect the smaller sample from the online

version, but there may be other reasons. In this regard, it should be noted that the number of people in the online version for whom this section of the questionnaire was applicable was quite low (n = 39), and therefore it is conceivable that there was not enough statistical power to detect change in this category.

This study had an unusually high proportion of participants who identified as survivors of sexual abuse. One explanation is that the anonymity of taking the online program allowed people to self-identify more comfortably as having been sexually abused. Alternatively, it is possible that some survivors of sexual abuse themselves feel more comfortable taking a program such as *Prevent It!* in an online format rather than an in classroom format. Perhaps providing an online version of the program can increase not just geographic accessibility but also make the program more emotionally available for some groups of people.

Overall, the trend of change reflects that seen in our previous evaluation of the classroom version of the program but with a slightly smaller magnitude of change. This is not surprising as behavioural change theory on which the *Prevent It!* program is based within posits that adult engagement with material, critical thinking about material, and personalizing learning is critical in adult learning (Kolb, 1975). It is possible that eliciting this type of engagement with the material is more difficult in an online context than it is in a classroom-based format with a live facilitator. An online version may be sufficient to elicit knowledge change and individual behaviour change, but it may prove to be more difficult to elicit lasting organizational behaviour change using this type of approach. Future program developers will want to think critically and creatively to develop

new online approaches that work to effectively engage adult learners given such potential limitations.

In conclusion, we have demonstrated that an online version can be similarly effective as an in-person classroom version, and that both versions of our novel program, *Prevent It!*, can be more widely utilized in an adult population. Given the high frequency of CSA, and the relatively few tools available to address this issue, we believe the present study supports the use of both versions of this program for more widespread use.

References:

Alaggia , R. (2004). Many ways of telling: expanding conceptualizations of child sexual disclosure. *Child Abuse & Neglect, 28*(11), 1213-1227. doi:10.1016/j.chiabu.2004.03.016.

Anda, R. F., Felitti, V. J., Bremner, D. J., Walker, J. D., Whitfield, C., Perry, B. D., Dube, S. R., & Giles, W. H. (2006). The enduring effects of abuse and related adverse experiences in childhood: A convergence of evidence from neurobiology and epidemiology. *European Archives of Psychiatry and Clinical Neuroscience, 256*(3), 174-189. doi: 10.1007/s00406-005-0624-4.

Babatsikos, G. (2010). Parents' knowledge, attitudes, and practices about preventing child sexual abuse: A literature review. *Child Abuse Review, 19*(2), 107-129. doi: 10.1002/car.1102.

Belsky, J., & de Haan, M. (2011). Annual research review: Parenting and children's brain development: the end of the beginning. *The Journal of Child Psychology and Psychiatry, 52*(4), 409-428. doi: 10.1111/j.1469-7610.2010.02281.x.

Berrick, J. D. 1(988). Parental involvement in child abuse prevention training: What do they learn? *Child Abuse & Neglect, 12*(4), 543-553. doi:10.1016/0145-2134(88)90071-3.

Bowman, R. A., Scotti, J. R., & Morris, T. L. (2010). Sexual abuse prevention: a training program for developmental disabilities service providers. *Journal of Child Sexual Abuse, 19*(2): 119-27. doi: 10.1080/10538711003614718.

Chen, L. P., Murad, M. H., Paras, M. L., Colbenson, K. M., Sattler, A. L., Goranson, E. N., Elamin, M. B., Seime, R. J., Shinozaki, G., Prokop, L. J., & Zirakzadeh, A. (2010). Sexual abuse and lifetime diagnosis of psychiatric disorders: Systemic review and meta-analysis. *Mayo Clinic Proceedings, 85*(7), 618-629. doi:10.4065/mcp.2009.0583.

Cohen, J. (1994). The earth is round. *American Psychologist, 49*(12), 997-1003. doi: 10.1037/0003-066X.49.12.997.

Cohen, J. (1992). A power primer. *Psychological Bulletin, 112*(1), 155-159. doi: 10.1037/0033-2909.112.1.155.

Collin-Vézina, D., Hélie, S., & Trocmé, N. (2010). Is child sexual abuse declining in Canada? An analysis of welfare data. *Child Abuse & Neglect, 34*, 807-812. doi:10.1016/j.chiabu.2010.05.004.

Collings, S. J. 1(997). Development, reliability, and validity of the child sexual abuse myth scale. *Journal of Interpersonal Violence, 12*(5), 665-674. doi: 10.1177/088626097012005004.

Davis, M. K., & Gidycz, C. A. (2000). Child sexual abuse prevention programs: A meta-analysis. *Journal of Clinical Child Psychology, 29*(2), 257-265. doi: org/10.1207/S15374424jccp2902_11.

Deblinger, E., Thakkar-Kolar, R. R., Berry, E. J., & Schoeder, C. M. (2010). Caregivers' efforts to educate their children about child sexual abuse. A replication study. *Child Maltreatment, 15*(1), 91-100. doi: 10.1177/1077559509337408.

Diamond, M., Jozifkova, E., Weiss, P. (2011). Pornography and sex crimes in the Czech Republic. *Archives of Sexual Behaviour*, *40*(5), 1037-43; discussion 1045-50. doi: 10.1007/s10508-010-9696-y.

Diclemente, C. C., & Prochaska, J. O. (1998). Toward a comprehensive, transtheoretical model of change: Stages of change and addictive behaviors. *Treating Addictive Behaviors (2nd Edition), Applied Clinical Psychology*. New York: Plenum Press.

Diclemente, C. C., Prochaska, J. O., Fairhurst, S. K., Velicer, W. F., Velasque, M. M., & Rossi, J. S. (1991). Process of smoking cessation: An analysis of precontemplation,

contemplation, and preparation stages of change. *Journal of Consulting and Clinical Psychology, 59*(2), 295-304. doi: org/10.1037/0022-006X.59.2.295.
Divine, G., Norton, H. J., Hunt, R. & Dienemann, J. (2013). A review of analysis and sample size calculation considerations for Wilcoxon tests. *Economics, Education, and Policy, 117*(3), 699-710. doi: 10.1213/ANE.0b013e31827f53d7.
Field, A. *Discovering Statistics Using SPSS (and sex and drugs and rock 'n' roll). Third Edition.* London: Sage Publications.
Finkelhor, D. (1994). The international epidemiology of child sexual abuse. *Child Abuse & Neglect, 18(5), 409-417.*
Finkelhor, D. (2009). The prevention of childhood sexual abuse. *The Future of Children, 19*(2), 169-194.
Fryda C. M., & Hulme, P. A. (2015). School-based child sexual abuse prevention programs: An integrative review. *The Journal of School Nursing*, 31(3), 167-182. doi: 10.1177/1059840514544125.
Hébert, M., Lavoie, F., & Parent, N. (2002). An assessment of outcomes following parents' participation in a child abuse prevention program. *Violence and Victims, 17*(3), 355-372. DOI: http://dx.doi.org/10.1891/vivi.17.3.355.33664.
Jenson, T. K., Gulbrandsen, W., Mossige, S., Reichelt, S., Tjersland, O. A. (2005). Reporting possible child sexual abuse: A qualitative study on children's perspectives and the context for disclosure. *Child Abuse & Neglect, 29*(12), 1395-1415. doi:10.1016/j.chiabu.2005.07.004.
Kauffman, A. (2009). The silent epidemic of neurodevelopmental injuries. *Biological Psychiatry, 66*(7), 624-626. doi: 10.1016/j.biopsych.2009.08.002.
Kenny, M. C. (2007). Web-based training in child maltreatment for future mandated reporters. *Child Abuse & Neglect, 31*(6), 671-678.
Kenny, M. C. (2009). Child sexual abuse prevention: Psychoeducational groups for preschoolers and their parents. *The Journal for Specialists in Group Work, 34*(1), 24-42. DOI: 10.1080/01933920802600824.
Keppel, G. (1991). *Design and analysis: A researchers' handbook*. New Jersey: Prentice-Hall Inc.
Kolb, D. A (1975). Toward an applied theory of experiential learning. In C. Cooper (Ed.), *Studies of Group Process* (pp. 33-57). New York: John Wiley.
Livingstone, S., Smith, P. K. (2014). Annual research review: Harms experienced by child users of online and mobile technologies: the nature, prevalence and management of sexual and aggressive risks in the digital age. *Journal Child Psychology and Psychiatry*, *55*(6), 635-654. doi: 10.1111/jcpp.12197
MacMillan, H., Wathen, C. N., Barlow, J., Fergusson, D. M., Lenethal, J. M., Taussig, H. N. (2009). Interventions to prevent child maltreatment and associated impairment. *Lancet, 373*. 250-266. doi:10.1016/S0140- 6736(08)61708-0.
Maniglio, R. (2009). The impact of child sexual abuse on health: A systematic review of reviews. *Clinical Psychology Review, 29*, 647-657. doi:10.1016/j.cpr.2009.08.003.
Martin, E. K. & Silverstone, P. H. (2013). How much Child Sexual Abuse is "below the surface", and can we help adults identify it early?. *Frontiers in Psychiatry*, *4*(58). doi: 10.3389/fpsyt.2013.00058.
Perneger, T. V. (1998). What's wrong with Bonferroni adjustments. *BMJ, 316*(7139), 1236-1238. doi: org/10.1136/bmj.316.7139.1236.

Paranal, R., Washington, T. K., & Derrick, C. (2012). Utilizing online training for child sexual abuse prevention: Benefits and limitations. *Journal of Child Sexual Abuse*, *21*(5), 507-520. doi: 10.1080/10538712.2012.697106.

Parent, S., & Demers, G. (2009). Sexual abuse in sport: A model to prevent and protect athletes. *Child Abuse Review, 20*(2), 120-133. doi: 10.1002/car.1135.

Pereda, N., Guilera, G., Forns, M., & Gómez-Benito, J. (2009). The international epidemiology of child sexual abuse: A continuation of Finkelhor (1994). *Child Abuse & Neglect, 33*(6), 331-342. doi:10.1016/j.chiabu.2008.07.007.

Petty, T.,& Thomas, C. C. (2014). Approaches to a successful adult education program *College Student Journal, 3*(48), 473-480.

Public Health Agency of Canada. *Canadian Incidence Study of Reported Child Abuse and Neglect – 2008: Major Findings.* Ottawa, ON, 2010.

Rheingold, A. A., Campbell, C., Self-Brown, S., Arellano de, M., Resnick, H., & Kilpatrick, D. (2007). Prevention of child sexual abuse: Evaluation of a community media campaign. *Child Maltreatment, 12*(4), 352-363. DOI: 10.1177/1077559507305994.

Rheingold, A. A., Zajac, K., & Patton, M. (2012). Feasibility and acceptability of a child sexual abuse prevention program for childcare professionals: Comparison of a web-based and in-person training. *Journal of Child Sexual Abuse, 21*(4), 422-436. doi: 10.1080/10538712.2012.675422.

Self-Brown, S., Rheingold, A. A., Campbell, C., & Arellano, M. A. (2008). A media campaign prevention program for child sexual abuse: Community members' perspectives. *Journal of Interpersonal Violence, 23*(6), 728-743. doi: 10.1177/0886260507313946.

Taylor, E. W., & Laros, A. (2014). Researching the practice of fostering transformative learning: Lessons learned from the study of andragogy. *Journal of Transformative Education, 12*(2), 134-147. doi: 10.1177/1541344614548589.

Walsch, K., Rassafiani, M., Mathews, B., Farell, A., & Butler, W. (2012). Assessment and prevention: Exploratory factor analysis and psychometric evaluation of the teacher reporting attitude scale of child sexual abuse. *Journal of Child Sexual Abuse, 21*(5), 489-506. doi: 10.1080/10538712.2012.689423.

Watts-English, T., Fortson, B. L., Gibler, N., Hooper, S. R., & De Bellis, M. D. (2006). The Psychobiology of Maltreatment in Childhood. *Journal of Social Issues, 62*(4), 717-736.

Wurtele, S. K. (2009). Preventing sexual abuse of children in the twenty-first century: preparing for challenges and opportunities. *Journal of Child Sexual Abuse, 18*(1), 1-18. doi: 10.1080/10538710802584650.

Yancey, T. C., Hansen, D. J., & Naufel, K. Z. (2011). Heterogeneity of individuals with a history of child sexual abuse: An examination of children presenting to treatment. *Journal of Child Sexual Abuse, 20*(2), 111-127. doi: 10.1080/10538712.2011.554341.

Zeuthen, K., & Hagelskjær, M. (2013). Prevention of child sexual abuse: Analysis and discussion of the field. *Journal of Sexual Abuse, 22*(6), 742-60. doi: 10.1080/10538712.2013.811136.

Zwi, K., Woolfenden, S., Wheeler., D. M., O'Brien, T., Tait, P., & Williams, K. J. (2007). School-based education programmes for the prevention of child sexual abuse. *Cochrane Database of Systematic Reviews, 3*. Art. No.: CD004380. doi: 10.1002/14651858.CD004380.pub2.

5 Conclusion

This project aimed to develop a research informed, adult-targeted CSA education program. The results of the research suggest that the program, developed after extensive literature review and consultation with experts, and using an established theoretical orientation, is effective in increasing participant's prevention related behaviours, increasing positive attitudes about CSA, and increasing accurate knowledge about CSA. This program is effective in both the in-person classroom format and the online format.

5.1 Implications for Research

The results of this research fill some gaps of knowledge in the current body of literature in this area. It has been demonstrated that child-targeted CSA education programs can change child participant's knowledge and behaviours (Zwi, 2009) but much less is known about adult-targeted programs. The results of this evaluation, in regards to changing knowledge and attitudes, are consistent with previous studies examining these outcome goals. It seems that if we expose adults to accurate information about CSA, they will have more appropriate attitudes about it and will have an increase in accurate knowledge about it. Previous studies carried out with similar target populations have demonstrated knowledge gain with shorter follow-up periods of up to 2 weeks (i.e., Bowman, 2007; Hébert et al., 2002; Kenny, 2009; Rheingold et al., 2007; Self-Brown et al., 2008), while the present studies indicates that this knowledge gain can be sustained for at least 3 months after taking the program.

This is the first study to attempt to measure actual behaviour change, rather than behavioural intentions. The results suggest that programs such as these are able to lead to desired behavioural

changes measured 3 months after taking the program. This is encouraging given that the *Prevent It!* program was designed using a theoretical base meant to initiate behavioural action.

Such findings suggest that if the goal of future programs is behaviour change, program developers may want to use a similar approach when designing their programs. It appears important that program developers structure programs in ways that are consistent with an accepted theory of behaviour change.

Previous studies have evaluated online versions of adult-targeted CSA education and determined that an online format is acceptable to most participants and organizations (Paranal et al., 2010; Rheingold et al., 2012). This is first study to compare the classroom format to the online format of a program using behavioural measures. Surprisingly, in this study, the classroom version and the online version results followed similar trends with the online version have only slightly smaller effect sizes. This finding is critical to this body of literature because it suggests that if a program is designed in a similar way to *Prevent It!* the online version can be almost as effective as the classroom, even though a live facilitator is not facilitating participation and engagement. However, organizations considering using an online approach will want to think critically about how best to engage their participants in an online format. They will also want to consider which groups may benefit most from this type of approach. Taken together, the results suggest that it may be beneficial to offer these types of educational programs in both online and classroom formats, as different approaches may better suit some groups, rather than offering only one type exclusively.

5.2 Future Research

5.2.1 Methodological Considerations

There are some methodological considerations recommended for future research. The current evaluation of the program did not include a control group. Future research will want to consider a design utilizing a control group to increase the certainty that the changes measured are due to the program itself and not other factors. Replication research (Deblinger et al., 2010) and reviews (Babatsikos, 2010) indicate that parental behaviours related to preventing child sexual abuse are consistent over time, and it is therefore likely that the changes observed in this study are the result of the program and not other factors. Nonetheless, longer-term follow-up periods beyond 3 months will allow clarity regarding the extent to which positive changes are maintained.

Finally, this area of research would benefit from more consistent and validated measurement tools to assess behavioural changes in regards to CSA prevention. In the present study we were required to use "ad-hoc" measures, as there are no current standard tools available. These could be developed to measure knowledge, behavioural intentions, and now behaviour. Without them it may be difficult to accurately determine the efficacy of any program to aide in this critical area., or to allow reliable comparisons between different approaches.

5.2.2 Considering Gender

Finally, it is important to recognize that relatively little is known about the experience and outcomes of CSA education programs in male subjects, since the large majority of participants in program evaluations have been women (Babasitkos, 2010), including in the present studies. There is one North American recent exception (Rheingold et al., 2007), suggesting that more men can be

included in this type of program if appropriate effort is taken to recruit them. However, we do not know if these types of programs work as well for men as for women. The issue of gender has implications for future programs because it may be necessary to tailor programs to address the needs and concerns of men specifically so that they gain the most from the program. For example, if fathers see themselves as protectors, perhaps providing them with tools that they could see themselves using could help ensure they take CSA training. Alternatively, there may be many other strategies that could be helpful in making such programs more accessible to men.

Such gender biases are important, since there are significant implications if male-dominated organizations, such as scouting groups and some sporting organizations, are not included in CSA training and awareness programs. A Canadian study looked at beliefs and perceptions about CSA and CSA organizational approaches in a sporting club in Québec, and found that most of the stakeholders and coaches rated the CSA as low importance, had little knowledge about CSA, CSA reporting processes, and admitted that the organization did not have any protocols in place to handle disclosures or occurrences of CSA (Parent & Demers, 2010). These findings also indicate that several attitude-based barriers exist preventing the implementation CSA education based programming. While such dispiriting findings need to be actively addressed, they clearly identify the need for appropriate programs. Future research, possibly utilizing the current *Prevent It!* program or something similar, should be studied in such male-dominated organizations to determine efficacy.

References:

Babatsikos, G. (2010). Parents' knowledge, attitudes, and practices about preventing child sexual abuse: A literature review. *Child Abuse Review, 19*(2), 107-129. doi: 10.1002/car.1102.

Bowman, R. A., Scotti, J. R., & Morris, T. L. (2010). Sexual abuse prevention: a training program for developmental disabilities service providers. *Journal of Child Sexual Abuse, 19*(2): 119-27. doi: 10.1080/10538711003614718.

Deblinger, E., Thakkar-Kolar, R. R., Berry, E. J., & Schoeder, C. M. (2010). Caregivers' efforts to educate their children about child sexual abuse. A replication study. *Child Maltreatment, 15*(1), 91-100. doi: 10.1177/1077559509337408.

Hébert, M., Lavoie, F., & Parent, N. (2002). An assessment of outcomes following parents' participation in a child abuse prevention program. *Violence and Victims, 17*(3), 355-372. DOI: http://dx.doi.org/10.1891/vivi.17.3.355.33664.

Kenny, M. C. (2009). Child sexual abuse prevention: Psychoeducational groups for preschoolers and their parents. *The Journal for Specialists in Group Work, 34*(1), 24-42. DOI: 10.1080/01933920802600824.

Paranal, R., Washington, T. K., & Derrick, C. (2012). Utilizing online training for child sexual abuse prevention: Benefits and limitations. *Journal of Child Sexual Abuse*, *21*(5), 507-520. doi: 10.1080/10538712.2012.697106.

Parent, S., & Demers, G. (2009). Sexual abuse in sport: A model to prevent and protect athletes. *Child Abuse Review, 20*(2), 120-133. doi: 10.1002/car.1135.

Rheingold, A. A., Campbell, C., Self-Brown, S., Arellano de, M., Resnick, H., & Kilpatrick, D. (2007). Prevention of child sexual abuse: Evaluation of a community media campaign. *Child Maltreatment, 12*(4), 352-363. DOI: 10.1177/1077559507305994.

Rheingold, A. A., Zajac, K., & Patton, M. (2012). Feasibility and acceptability of a child sexual abuse prevention program for childcare professionals: Comparison of a web-based and in-person training. *Journal of Child Sexual Abuse, 21*(4), 422-436. doi: 10.1080/10538712.2012.675422.

Self-Brown, S., Rheingold, A. A., Campbell, C., & Arellano, M. A. (2008). A media campaign prevention program for child sexual abuse: Community members' perspectives. *Journal of Interpersonal Violence, 23*(6), 728-743. doi: 10.1177/0886260507313946.

Zwi, K., Woolfenden, S., Wheeler., D. M., O'Brien, T., Tait, P., & Williams, K. J. (2007). School-based education programmes for the prevention of child sexual abuse. *Cochrane Database of Systematic Reviews, 3*. Art. No.: CD004380. doi: 10.1002/14651858.CD004380.pub2.

Bibliography

Adams, J. A. (2001). Evolution of a classification scale: medical evaluation of suspected child sexual abuse. *Child Maltreatment, 6*(1), 31–36. doi:10.1177/1077559501006001003.

Adams, J. A., Starling, S. P., Frasier, L. D., Palusci, V. J., Shaprio, R. A., Finkel, M. A., et al. (2012). Diagnostic accuracy in child sexual abuse medical evaluation: role of experience, training, and expert case review. *Child Abuse and Neglect, 36*(5), 383–392. doi:10.1016/j.chiabu.2012. 01.004.

Alaggia , R. (2004). Many ways of telling: expanding conceptualizations of child sexual disclosure. *Child Abuse & Neglect, 28*(11), 1213-1227. doi:10.1016/j.chiabu.2004.03.016.

Alaggia, R. (2010). An ecological analysis of child sexual abuse disclosure: considerations for child and adolescent health. *Journal of the Canadian Academy of Child & Adolescent Psychiatry, 19*(1), 32–39.

Anda, R. F., Felitti, V. J., Bremner, D. J., Walker, J. D., Whitfield, C., Perry, B. D., Dube, S. R., & Giles, W. H. (2006). The enduring effects of abuse and related adverse experiences in childhood: A convergence of evidence from neurobiology and epidemiology. *European Archives of Psychiatry and Clinical Neuroscience, 256*(3), 174-189. doi: 10.1007/s00406-005-0624-4.

Anderson, J., Martin, J., Mullen, P., Roman, S., and Herbison, P. (1993). Prevalence of childhood sexual abuse experiences in a community sample of women. *Journal of American Academy of Child and Adolescent Psychiatry, 32*(5), 911–919.

Babatsikos, G. (2010). Parents' knowledge, attitudes, and practices about preventing child sexual abuse: A literature review. *Child Abuse Review, 19*(2), 107-129. doi: 10.1002/car.1102.

Bailey, J. A., and McCloskey, L. A. (2005). Pathways to adolescent substance use: among sexually abused girls. *Journal of Abnormal Child Psycholgy, 33*(1), 39–53. doi:10.1007/s10802-005- 0933-0 .

Barnett S. M., & Ceci, S. J. (2002). When and where do we apply what we learn? A taxonomy for far transfer. *Psychologocal Bulliten, 128*(4), 612-637.

Beitchman, J. H., Zucker, K. J., Hood, J. E., DaCosta, G. A., Akman, D., and Cassvia, E. (1992). A review of the long-term effects of child sexual abuse. *Child Abuse and Neglect. 16*(1), 101–108.

Belsky, J., & de Haan, M. (2011). Annual research review: Parenting and children's brain development: the end of the beginning. *The Journal of Child Psychology and Psychiatry, 52*(4), 409-428. doi: 10.1111/j.1469-7610.2010.02281.x.

Berliner, L., & Conte, J. R. (1990). The process of victimization: the victims' perspective. *Child Abuse and Neglect, 14*(1), 29-40.

Berrick, J. D. 1(988). Parental involvement in child abuse prevention training: What do they learn? *Child Abuse & Neglect, 12*(4), 543-553. doi:10.1016/0145-2134(88)90071-3.

Bolen, R. M. (2001). *Child Sexual Abuse: Its Scope and our Failure*. New York, NY: Kluwer Academic/Plenum Publishers.

Bolen, R. M., & Scannapieco, M. (1999). Prevalence of child sexual abuse: a corrective-meta-analysis. *Social Service Review, 73*(3), 281–313. doi:10.1086/514425.

Bowman, R. A., Scotti, J. R., & Morris, T. L. (2010). Sexual abuse prevention: a training

program for developmental disabilities service providers. *Journal of Child Sexual Abuse, 19*(2): 119-27. doi: 10.1080/10538711003614718.
Briere, J., and Jordon, C. E. (2009). Childhood maltreatment, intervening variables, and adult psychological difficulties in women: an overview. *Trauma Violence Abuse, 10*(4), 375–388.
Briere, J., Kaltman, S., and Green, B. L. (2008). Accumulated childhood trauma and symptom complexity. *Journal of Traumatic Stress, 21*(2), 223–226. doi:10.1002/jts.20317.
Briggs, P., Simon, W. T., and Simonsen, S. (2011). An exploratory study of Internet-initiated sexual offenses and that chat room sex offender: has the Internet enabled a new typology of sex offender? *Sexual Abuse*, *23*(1), 71–91.
Canadian Centre for Child Protection Inc. (2008-2013). *Child Sexual Abuse: It Is Your Business*. Winnipeg, Manitoba, Canada.
Canadian Child Welfare Research Portal (n.d.). Retrieved from www.cwrp.ca.
Chen, L. P., Murad, M. H., Paras, M. L., Colbenson, K. M., Sattler, A. L., Goranson, E. N., Elamin, M. B., Seime, R. J., Shinozaki, G., Prokop, L. J., & Zirakzadeh, A. (2010). Sexual abuse and lifetime diagnosis of psychiatric disorders: Systemic review and meta-analysis. *Mayo Clinic Proceedings, 85*(7), 618-629. doi:10.4065/mcp.2009.0583.
Chen, X., & Eisenberg, N. (2012). Understanding cultural issues in child development: Introduction. *Child Development Perspectives, 6*(1), 1-4.
Cohen, J. (1992). A power primer. *Psychological Bulletin, 112*(1), 155-159. doi: 10.1037/0033-2909.112.1.155.
Cohen, J. (1994). The earth is round. *American Psychologist, 49*(12), 997-1003. doi: 10.1037/0003-066X.49.12.997.
Collin-Vézina, D., Daigneault, I., & Hébert, M. (2013). Lessons learned from child sexual abuse research: Prevalence, outcomes, and preventative strategies. *Child & Adolescent Psychiatry & Mental Health, 7*(22), 1-9.
Collin-Vézina, D., Hélie, S., & Trocmé, N. (2010). Is child sexual abuse declining in Canada? An analysis of welfare data. *Child Abuse & Neglect, 34*(11), 807-812. doi:10.1016/j.chiabu.2010.05.004.
Collings, S. J. 1(997). Development, reliability, and validity of the child sexual abuse myth scale. *Journal of Interpersonal Violence, 12*(5), 665-674. doi: 10.1177/088626097012005004.
Criminal Code, R.S.C. 1985, Section 152, p. 167–168.
Cromer, L. D., Goldsmith, R. E. (2010). Child sexual abuse myths: Attitudes, beliefs, and individual differences. *Journal of Child Sexual Abuse, 19*(6), 618-647. doi**:**10.1080/10538712.2010.522493.
Cutajar, M. C., Mullen, P. E., Ogloff, J. R. P., Thomas, S. D., Wells, D. L., and Spataro, J. (2010). Psychopathology in a large cohort of sexually abused children followed up to 43 years. *Child Abuse & Neglect, 34*(11), 813–822. doi:10.1016/j.chiabu.2010.04.004.
Danielson, C. K., and Holmes, M. M. (2004). Adolescent sexual assault: an update of the literature. *Current Opinion in Obstetric Gynecology, 16*(5), 383–388. doi:10.1097/00001703-200410000- 00005.
Davis, M. K., & Gidycz, C. A. (2000). Child sexual abuse prevention programs: A meta-analysis. *Journal of Clinical Child Psychology, 29*(2), 257-265. doi: org/10.1207/S15374424jccp2902_11.
De Bellis, M. D., Spratt, E. G., and Hooper, S. R. (2011). Neurodevelopmental biology associated with childhood sexual abuse. *Journal of Child Sexual Abuse, 20*(5), 548–587.

doi:10.1080/10538712.2011.607753.
Deblinger, E., Thakkar-Kolar, R. R., Berry, E. J., & Schoeder, C. M. (2010). Caregivers' efforts to educate their children about child sexual abuse. A replication study. *Child Maltreatment, 15*(1), 91-100. doi: 10.1177/1077559509337408.
Diamond, M., Jozifkova, E., Weiss, P. (2011). Pornography and sex crimes in the Czech Republic. *Archives of Sexual Behaviour*, 40(5), 1037-43; discussion 1045-50. doi: 10.1007/s10508-010-9696-y.
DiClemente, C. C., & Prochaska, J. O. (1998). Toward a comprehensive, transtheoretical model of change: Stages of change and addictive behaviors. In *Treating Addictive Behaviours*. (Eds) Miller & Heather. New York, NY.
Diclemente, C. C., Prochaska, J. O., Fairhurst, S. K., Velicer, W. F., Velasque, M. M., & Rossi, J. S. (1991). Process of smoking cessation: An analysis of precontemplation, contemplation, and preparation stages of change. *Journal of Consulting and Clinical Psychology, 59*(2), 295-304. doi: org/10.1037/0022-006X.59.2.295.
Divine, G., Norton, H. J., Hunt, R. & Dienemann, J. (2013). A review of analysis and sample size calculation considerations for Wilcoxon tests. *Economics, Education, and Policy, 117*(3), 699-710. doi: 10.1213/ANE.0b013e31827f53d7.
Dorahy, M. J., & Clearwater, K. (2012). Shame and guilt in men exposed to childhood sexual abuse: A qualitative investigation. *Journal of Child Sexual Abuse, 21*(2), 155-175. doi: 10.1080/10538712.2012.659803.
Dube, S. R., Anda, R. F., Whitfield, C. L., Brown, D. W., Felitti, V. J., Dong, M., et al. (2005). Longer- term consequences of childhood sexual abuse by gender of victim. *American Journal of Preventative Medicine,* 28, 430–438. doi:10.1016/j.amepre.2005.01.015
Eke, A. W., Seto, M. C., and Williamson, J. (2011). Examining the criminal history and future offending of child pornography offenders: an extended prospective follow- up study. *Law and Human Behavior, 35*(6), 466–478. doi:10.1007/s10979-010- 9252-2.
Elliot, M., Browne, L. K., & Kilcoyne, J. (1995). Child sexual abuse prevention: What offenders tell us. *Child Abuse and Neglect, 19*(5), 579-594.
Elrod J. M., & Rubin, R H. (1993). Parental involvement in sexual abuse prevention education. *Child Abuse & Neglect, 17*(4), 527-538.
Enlow, M. B., Egeland, B., Blood, E. A., Wright, R. O., and Wright, R. J. (2012). Interpersonal trauma exposure and cognitive development in children to age 8 years: a longitudinal study. *Journal of Epidemiological & Community Health, 66*(11), 1005–1010. doi:10.1136/jech-2011-200727.
Fallon, B., Trocmé, N., Flukec, J., MacLaurind, B., Tonmyre, L., and Yuan, Y. (2010). Methodological issues in measuring maltreatment. *Child Abuse &Neglect, 34(1)*, 70–79, doi: 10.1016/**j**.chiabu.2009.08.008.
Farley, M., Lynne, J., & Cotton, A. J. (2005). Prostitution in Vancouver: Violence and the Colonization of First Nations Women. *Transcultural Psychiatry, 42*(2), 242-271. doi: 10.1177/1363461505052667.
Faust, D., Bridges, A. J., and Ahern, D. C. (2009). "Methods for the identification of sexually abused children: issues and needed features for abuse indicators," in *The Evaluation of Child Sexual Abuse Allegations: A Comprehensive Guide to Assessment and Testimony*, eds K. Kuehnle, and M. Connell (New York: Wiley), 49–79.

Feiring, C., & Taska, L. S. (2005). The persistence of shame following sexual abuse: A longitudinal look at risk and recovery. *Child Maltreatment, 10*(4), 337-349. DOI: 10.1177/1077559505276686.

Felliti, V. J., Anda, R. R., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., et al. (1998). Relationship of child- hood abuse and household dysfunction to many leading causes of death in adults. *American Journal of Preventative Medicine,* 14, 245–258. doi:10.1016/S0749- 3797(98)00017-8

Fergusson, D. M., Lynskey, M. T., and Horwood, J. L. (1996). Childhood sexual abuse and psychiatric disorder in young adulthood: I. Prevalence of sexual abuse and factors associated with sexual abuse. *Journal of American Academy of Child and Adolescent Psychiatry,* 34, 1355–1365. doi:10.1097/00004583- 199610000-00023

Field, A. *Discovering Statistics Using SPSS (and sex and drugs and rock 'n' roll). Third Edition.* London: Sage Publications.

Finkelhor, D. (1994a). The international epidemiology of child sexual abuse. *Child Abuse & Neglect, 18(5)*, 409–417. doi:10.1016/j.chiabu.2008.07.007.

Finkelhor, D. (1994b). Current information on the scope and nature of child sexual abuse. *Future of Children. 4*, 31–53. doi:10.2307/1602522.

Finkelhor, D. (2009). The prevention of childhood sexual abuse. *The Future of Children, 19*(2), 169-194.

Finkelhor, D., Jones, L., and Shattuck, A. (2010a). Updated trends in child maltreatment. *Crimes Against Children Research Centre.* Available at: http://unhinfo.unh.edu/ccrc/ pdf/CV203_Updated%20trends% 202010%20FINAL_12- 19- 11.pdf

Finkelhor, D., Ormrod, R. K., and Turner, H. A. (2007). Poly-victimization: a neglected component in child victimization. *Child Abuse & Neglect, 31*(1), 7–26. doi: 10.1016/j.chiabu.2006.06.008.

Finkelhor, D., Ormrod, R., Turner, H., and Hamby, S. (2005). The victimization or children and youth: a comprehensive, national survey. *Child Maltreatment, 10*(1), 5–25. doi:10.1177/1077559504271287.

Finkelhor, D., Turner, H., Ormrod, R., and Hamby, S. (2010b). Trends in childhood violence and abuse exposure: evidence from two national surveys. *Archives of Pediatric.and Adolescent Medicine,* 164, 238–242. doi:10.1001/archpediatrics.2009.283

Fricker, A. E., Smith, D. W., Davis, J. L., and Hanson, R. (2003). Effects of context and question type on endorsement of childhood sexual abuse. *Journal of Traumatic Stress, 16*(3), 265–268. doi:10.1023/A:1023748124626.

Fryda C. M., & Hulme, P. A. (2015). School-based child sexual abuse prevention programs: An integrative review. *The Journal of School Nursing*, 31(3), 167-182. doi: 10.1177/1059840514544125.

Gilbert, R., Widom, C. S., Browne, K., Fergusson, D., Webb, E., and Janson, S. (2009a). Burden and consequences of child maltreatment in high-income countries. *Lancet, 373*, 68–81. doi:10.1016/S0140- 6736(08)61706-7.

Gilbert, R., Kemp, A., Thoburn, J., Sidebotham, P., Radford, L., Glaser, D., et al. (2009b). Recognizing and responding to child maltreatment. *Lancet, 373*, 167–180. doi:10. 1016/S0140-6736(09)60725-X.

Gorey, K. M., and Leslie, D. R. (1997). The prevalence of child sexual abuse: integrative review adjustment for potential response and measurement biases. *Child Abuse & Neglect, 21*(4), 391–398.

Gries, L. T., Goh, D. S., Andrews, M. B., Gilbert, J., Praver, F., & Stelzer, D. N. (2000). Positive reaction to disclosure and recovery from child sexual abuse. *Journal of Child Sexual Abuse, 9*(1), 29-51.

Hébert, M., Lavoie, F., & Parent, N. (2002). An assessment of outcomes following parents' participation in a child abuse prevention program. *Violence and Victims, 17*(3), 355-372.

Heger, A., Ticson, L., Velasquez, O., and Berliner, R. (2002). Children referred for possible sexual abuse: medical findings in 2384 children. *Child Abuse and Neglect.* 26, 645–659.

Herman, J. (2011). "Posttraumatic stress disorder as a shame disorder". in *Shattered States: Disorganized Attachment and Its Repair,* eds J Yellin and K White. (London: Bowlby Centre). 261-275.

Horner, G. (2009). Common conditions that mimic findings of child sexual abuse. *Journal of Pediactic Health Care, 23*(5), 283–288. doi:10.1016/j.pedhc.2008.05.003.

Howard, D. E., and Wang, M. Q. (2005). Psychosocial correlates of U.S. adolescents who report a history of forces sexual intercourse. *Journal of Adolescent Health, 36*(5), 372–379. doi: doi:10.1016/j.jadohealth.2004.07.007.

Jaudes, P. K., & Mackey-Bilaver, L. (2008). Do chronic conditions increase young children's risk of being maltreated? *Child Abuse and Neglect*, 32, 671–681.

Jenson, T. K., Gulbrandsen, W., Mossige, S., Reichelt, S., Tjersland, O. A. (2005). Reporting possible child sexual abuse: A qualitative study on children's perspectives and the context for disclosure. *Child Abuse & Neglect, 29*(12), 1395-1415. doi:10.1016/j.chiabu.2005.07.004.

Jones, L. M., Mitchell, K. J., and Finkelhor, D. (2012). Trends in youth Internet victimization: findings from three youth inter- net safety survey 2000-2010. *Journal of Adolescent Health, 50*(2), 179–186. doi:10.1016/j.jadohealth.2011.09.015.

Jonson, E., & Lindbald, F. (2005). Adult female victims of child sexual abuse: Multitype maltreatment and disclosure characteristics related to subjective health. *Journal of Interpersonal Violence, 20*(6), 651-666.

Kauffman, A. (2009). The silent epidemic of neurodevelopmental injuries. *Biological Psychiatry, 66*(7), 624-626. doi: 10.1016/j.biopsych.2009.08.002.

Kenny, M. C. (2007). Web-based training in child maltreatment for future mandated reporters. *Child Abuse & Neglect, 31*(6), 671-678.

Kenny, M. C. (2009). Child sexual abuse prevention: Psychoeducational groups for preschoolers and their parents. *The Journal for Specialists in Group Work, 34*(1), 24-42. DOI: 10.1080/01933920802600824.

Keppel, G. (1991). *Design and analysis: A researchers' handbook*. New Jersey: Prentice-Hall Inc.

Kingston, D. A., Fedoroff, P., Firestone, P., Curry, S., and Bradford, J. M. (2008). Pornography use and sexual aggression: the impact of frequency and type of pornography use on recidivism among sexual offenders. *Aggressive Behavior, 34*(4), 341–351. doi:10.1002/ab.20250.

Kolb, D. A (1974). Toward an applied theory of experiential learning. In C. Cooper (Ed.), *Studies of Group Process* (pp. 33-57). New York: John Wiley.

Krase, K. S. (2013). Educational personnel as reporters of suspected child maltreatment. *Children & Schools*. Published June 28, 2013.

La Bash, H., & Papa, A. (2014). Shame and PTSD Symptoms. *Psychological Trauma: Theory, Research, Practice, and Policy, 6*(2), 159-166. doi:org/10.1037/a0032637.

Lacelle,C., Hébert,M., Lavoie,F., Vitaro, F., and Tremblay, R. E. (2012). Child sexual abuse and women's sexual health: the contribution of CSA severity and exposure to multiple forms of childhood victimization. *Journal of Child Sexual Abuse, 21*(5), 571–592. doi:10.1080/10538712.2012.688932.

Lagerberg, D. (2001). Parents' observations of sexual behaviour in preschool children. *Acta Paediatrica, 90*, 367-369.

Lavergne, C., Dufour, S., Trocmé, N., & Larrivée. M. (2008). Visible minority, Aboriginal, and Caucasian children investigated by Canadian Protective Services. *Child Welfare League of America*, *87*(2), 59-76.

Leventhal, J. M. (1998). Epidemiology of sexual abuse of children: old problems, new directions. *Child Abuse & Neglect*, *22*(6), 481–491.

Lewis, H. B. (1971). Shame and guild in neurosis. *Psychoanalytic Review, 58*(3), 419-438.

Liu, R. T., Jager-Hyman, S., Wagner, C. A., Alloy, L. B., and Gibb, B. E. (2012). Number of childhood abuse perpetrators and the occurrence of depressive episodes in adulthood. *Child Abuse & Neglect, 36*(4), 323–332. doi:10.1016/j.chiabu.2011.11.007.

Livingstone, S., Smith, P. K. (2014). Annual research review: Harms experienced by child users of online and mobile technologies: the nature, prevalence and management of sexual and aggressive risks in the digital age. Journal Child Psychology and Psychiatry, 55(6), 635-654. doi: 10.1111/jcpp.12197.

London, K., Bruck, M., Wright, D. B., and Ceci, S. J. (2008). Review of the contemporary literature on how children report sexual abuse to others: findings, methodological issues, and implications for forensic interviewers. *Memory, 16*(1), 29–47. doi:10.1080/09658210701725732.

Lumley, V. A., & Miltenberger, R. G. (1997). Sexual abuse prevention for persons with mental retardation. *American Journal of Mental Retardation, 101*(5), 459-472.

Lutz-Zois, C. J., Roecker Pehlps, C. E., & Reichle, A. C. (2011). Affective, behavioral, and social-cognitive dysregulation as mechanisms for sexual abuse revictimization. *Violence and Victims, 26*(2), 159-175. doi: 10.1891/0886-6708.26.2.159.

Lyon, T. D., and Ahern, E. C. (2011). "Disclosure of child sexual abuse," in *The APSAC Handbook on Child Maltreatment: Third Edition*, ed. J. E. B. Myers (Newbury Park, CA: Sage), 233–252.

MacMillan, H., Feming, J., Trocmé, N., Boyle, M., Wong, M., Racine, Y., et al. (1997). Prevalence of child physical and sexual abuse in a com- munity sample: results from the Ontario health supplement. *Journal of the American Medical Association, 278*(2), 131–135.

MacMillan, H., Wathen, C. N., Barlow, J., Fergusson, D. M., Lenethal, J. M., Taussig, H. N. (2009). Interventions to prevent child maltreatment and associated impairment. *Lancet, 373*. 250-266. doi:10.1016/S0140- 6736(08)61708-0.

Maniglio, R. (2009). The impact of child sexual abuse on health: A systematic review of reviews. *Clinical Psychology Review, 29*, 647-657. doi:10.1016/j.cpr.2009.08.003.

Martin, E. K. & Silverstone, P. H. (2013). How much Child Sexual Abuse is "below the surface", and can we help adults identify it early?. *Frontiers in Psychiatry*, *4*(58). doi: 10.3389/fpsyt.2013.00058.

Martin, J., Anderson, J., Romans, S., Mullen, P., and O'Shea, M. (1993). Asking about child sexual abuse: methodological implications of a two stage survey. *Child Abuse Negl.* 17, 383–393.

Martin, K. E., & Silverstone, P. H. (2013). How much child sexual abuse if "below the surface" and how can we help adults identify it early? *Frontiers in Psychiatry, 4*(58), 1-10 doi: 10.3389/fpsyt.2013.00058.

Martin, E. K., & Silverstone, P. H. (2016). An evidence-based education program for adults about child sexual abuse ("Prevent It!") that significantly improves attitudes, knowledge, and behaviour". *Frontiers in Psychology*, *7*(1177), 1-13.

McElvaney, R., Greene, S., & Hogan, D. (2011). Containing the secret of child sexual abuse. *Journal of Interpersonal Violence, 27*(6), 1155-1175.

McGee, H., O'Higgins M., Garavan, R., & Conroy, R. (2011). Rape and child sexual abuse: What beliefs persist about motives, perpetrators, and survivors? *Journal of Interpersonal Violence, 26*(17). 3580-3593. DOI: 10.1177/0886260511403762

McKee, A., Albury, K., Dunne, M., Grieshaber, S., Hartley, J., Lumby, C., & Mathews, B. (2010). Healthy sexual development: a multidisciplinary framework for research. *International Journal of Sexual Health, 22*(1), 14-19.

Merikangas, K. R., and McClair, V. L. (2012). Epidemiology of sub- stance use disorders. *Hum. Genet.* 131, 779–789. doi:10.1007/s00439012-1168-0

Messman-Moore, T. L., Long, P. J. (2003). The role of childhood sexual abuse sequlae in the sexual revictimization of women: An empirical review and theoretical reformulation. *Clinical Review, 23*(4), 537-571.

Murphy, N. A., & Elias, E. R. (2006). Sexuality of children and adolescents with developmental disabilities. *Pediatrics, 118*(1), 398-403.

Nielssen, O., Dea, J., Sullivan, D., Rodriquez, M., Bourget, D., and Large, M. (2011). Child pornography offenders detected by surveillance of the Internet and by other methods. *Criminal Behaviour and Mental Health, 21*(3), 215–224. doi:10.1002/cbm.809.

Niveau, G. (2010). Cyber-pedocriminality: characteristics of a sample of internet child pornography offenders. *Child Abuse & Neglect, 34*(8), 570–575.

O'Leary, P., Coohey, C., & Easton, S. D. (2010). The effect of severe child sexual abuse and disclosure on mental health in adulthood. *Journal of Child Sexual Abuse, 19*, 275-289.

Paine, M. L., & Hansen, D. J. (2002). Factors influencing children to self-disclose sexual abuse. *Clinical Pscyhoglogy Review, 22*, 271-295.

Paranal, R., Washington, T. K., & Derrick, C. (2012). Utilizing online training for child sexual abuse prevention: Benefits and limitations. *Journal of Child Sexual Abuse*, *21*(5), 507-520. doi: 10.1080/10538712.2012.697106.

Parent, S., & Demers, G. (2009). Sexual abuse in sport: A model to prevent and protect athletes. *Child Abuse Review, 20*(2), 120-133. doi: 10.1002/car.1135.

Pereda, N., Guilera, G., Forns, M., & Gómez-Benito, J. (2009). The international epidemiology of child sexual abuse: A continuation of Finkelhor (1994). *Child Abuse & Neglect, 33*(6), 331-342. doi:10.1016/j.chiabu.2008.07.007.

Perneger, T. V. (1998). What's wrong with Bonferroni adjustments. *BMJ, 316*(7139), 1236-1238. doi: org/10.1136/bmj.316.7139.1236.

Petty, T.,& Thomas, C. C. (2014). Approaches to a successful adult education program *College Student Journal, 3*(48), 473-480.

Poole, D. A., & Wolfe, M. (2009). Child development: Normative sexual and nonsexual behaviors that may be confused with symptoms of sexual abuse. In K. Kuehnle & M. Connell (Eds)., *The Evaluation of Child Sexual Abuse Allegations: A Comprehensive Guide to Assessment and Testimony*, (101-128). New York: Wiley.

Public Health Agency of Canada. (2010). *Canadian Incidence Study of Reported Child Abuse and Neglect – 2008: Major Findings*. Ottawa, ON: Minister of Public Works and Government Services Canada.

Public Health Agency of Canada. *Canadian Incidence Study of Reported Child Abuse and Neglect – 2008: Major Findings.* Ottawa, ON, 2010.

Ramírez, C., Pinzón-Rondón, A. M., & Botero, J. C. (2011). Contextual predictive factors of child sexual abuse: The role of parent-child interaction. *Child Abuse & Neglect, 35*, 1022-1031.

Rheingold, A. A., Campbell, C., Self-Brown, S., Arellano de, M., Resnick, H., & Kilpatrick, D. (2007). Prevention of child sexual abuse: Evaluation of a community media campaign. *Child Maltreatment, 12*(4), 352-363. doi: 10.1177/1077559507305994.

Rheingold, A. A., Zajac, K., & Patton, M. (2012). Feasibility and acceptability of a child sexual abuse prevention program for childcare professionals: Comparison of a web-based and in-person training. *Journal of Child Sexual Abuse, 21*(4), 422-436. doi: 10.1080/10538712.2012.675422.

Rheingold, A. A., Zajac, K., Chapman, J. E., Patton, M., de Arellana, M., Saunders, B., & Kilpatrick, D. (2015). Child sexual abuse training for childcare professionals: An independence multi-site randomized controlled trail of Stewards of Children. *Prevention Science, 16*(3), 374-385.

Saewyc, E. M., Skay, C. L., Pettingell, S. L., Reis, E. A., Bearinger, L., Resnick, M., et al. (2006). Hazards of stigma: the sexual and physical abuse of gay, lesbian, and bisexual adolescents in the United States and Canada. *Child Welfare, 85*(2), 195–213.

Sarafino, E. P. (1979). An estimate of nationwide incidence of sexual offences against children. *Child Welfare, 58*(2), 127–134.

Sedlak, A. J. (1991). *National Incidence Study of Child Abuse and Neglect: 1988, Revised Report*. Rockville, MD: National Clearinghouse on Child Abuse and Neglect Information.

Sedlak, A. J. (2001). *A History of the National Incidence Study of Child Abuse and Neglect*. Rockville, MD: Westat Inc.

Sedlak, A. J., and Broadhurst, D. D. (1996). *Third National Incidence Study of Child Abuse and Neglect. Executive Summary*. Washington, DC: U.S. Department of Health and Human Services.

Sedlak, A. J., Mettenburg, J., Basena, M., Petta, I., McPherson, K., Greene, A., et al. (2010). *Fourth National Incidence Study of Child Abuse and Neglect (NIS–4): Report to Congress*. Washington, DC: U.S. Department of Health and Human Services, Administration for Children and Families.

Self-Brown, S., Rheingold, A. A., Campbell, C., & Arellano, M. A. (2008). A media campaign prevention program for child sexual abuse: Community members' perspectives. *Journal of Interpersonal Violence, 23*(6), 728-743. doi: 10.1177/0886260507313946.

Shaffer, A., Huston, L., and Egeland, B. (2008). Identification of child maltreatment using prospective and self-report methodologies: a comparison of maltreatment incidence and relation to later psychopathology. *Child Abuse & Neglect, 32*(7), 682–692. doi:10.1016/j.chiabu.2007. 09.010.

Sherrill, A., Renk, K., Sims, V., and Culp, A. (2011). Undergraduate students' attributions of depicted adult-adolescent and adolescent- adolescent sexual interactions. *Journal of Child Sexual Abuse, 20*(2), 157–181. doi:10.1080/10538712.2011.554342.

Spicer, P., LaFramboise, T., Markstrom, C., Niles, M., West, A., Fehringer, K., Grayson, L., & Sarche, M. (2012). Toward an applied developmental science for Native children, families, and communities. *Child Development Perspectives, 6*(1), 49-54.

Spring, F. E., and Friedrich, W. N. (1992). Health risk behaviors and medical sequelae of childhood sexual abuse. *Mayo Clinic Proceedings. 67*(6), 527–532. doi:10.1016/S0025-6196(12)60458-3.

Staller, K. M., & Nelson-Gardell, D. (2005). "A burden in your heart": Lessons of disclosure from female pre-adolescent and adolescent survivor's of sexual abuse. *Child Abuse & Neglect, 29*(12), 1415-1432.

Sullivan, P. M., & Knutson, J. F. (1998). The association between child maltreatment and disabilities in a hospital-based epidemiological study. *Child Abuse & Neglect, 22*(4), 271–288.

Talbot, J. A., Talbot, N., & Tu, X. (2004). Shame-proneness as a diathesis for dissociation in women with histories of child sexual abuse. *Journal of Traumatic Stress, 17*(5), 445.448. doi: 10.1023/B:JOTS.0000048959.29766.ae

Tangeny, J. P. (1996). Conceptual and methodological issues in the assessment of shame and guilt. *Behaviour Research and Therapy, 34*(9), 741-754.

Tangney, J. P. Miller, R. S., Flicker, L., & Barlow, D. H. (1996). Are shame, guilt, and embarrassment distinct emotions? *Journal of Personality and Social Psychology, 70*(6), 1256-1269.

Taylor, E. W., & Laros, A. (2014). Researching the practice of fostering transformative learning: Lessons learned from the study of andragogy. *Journal of Transformative Education, 12*(2), 134-147. doi: 10.1177/1541344614548589.

Trocmé, N., Fallon, B., MacLaurin, B., Daciuk, J., Felstiner, C., Black, T., et al. (2005). *Canadian Incidence Study of Reported Child Abuse and Neglect – 2003: Major Findings*. Ottawa, ON: Minister of Public Works and Government Services Canada.

Trocmé, N., MacLaurin, B., Fallon, B., Daciuk, J., Billingsley, D., Tourigny, M., Mayer, M., Wright, J., Barter, K., Burford, G., Hornick, J., Sullivan, R., & McKenzie, B. (2001). *Canadian Incidence Study of Reported Child Abuse and Neglect: Final Report*. Ottawa, ON: Minister of Public Works and Government Services Canada.

U.S. Department of Health and Human Services. (1981). *Study Findings: National Incidence and Severity of Child Abuse and Neglect*. Washing- ton: U.S. Department of Health and Human Services. [DHHS Publication No. (OHDS) 81-30325]. U.S. Department of Health and Human Services. (2009). *Administration on Children, Youth and Families. Child Maltreatment 2007*. Washington, DC: U.S. Government Printing Office.

Ullman, S. E., & Vasquez, A. L. (2015). Mediators of sexual revictimization risk in adult sexual assault victims. *Journal of Child Sexual Abuse, 24*(3), 300-314. Doi: 10.1080/10538712.2015.1006748.

Ungar, M., Tutty, L. M., McConnel, S., Barter, K., & Fairholm, J. (2009). What Canadian youth tell us about disclosing abuse. *Child Abuse & Neglect, 33*, 699-708.

Veltman, M. W. M., and Browne, K. D. (2001). Three decades of child maltreatment research: implications for the school years. *Trauma Violence Abuse, 2*(3), 215–239.

Walsch, K., Rassafiani, M., Mathews, B., Farell, A., & Butler, W. (2012). Assessment and prevention: Exploratory factor analysis and psychometric evaluation of the teacher reporting attitude scale of child sexual abuse. *Journal of Child Sexual Abuse, 21*(5), 489-506. doi: 10.1080/10538712.2012.689423.

Watts-English, T., Fortson, B. L., Gibler, N., Hooper, S. R., & De Bellis, M. D. (2006). The Psychobiology of Maltreatment in Childhood. *Journal of Social Issues,* 62(4), 717-736.

Weiss, E. L., Longhurst, L. G., and Mazure, C. M. (1999). Childhood sexual abuse as a risk factor for depression in women: psychosocial and neurobiological correlates. *American Journal of Psychiatry, 156*(6), 816–828.

Wolak, J., Finkelhor, D., Mitchell, K. J., & Ybarro, M. L. (2008). Online "predators" and their victims: Myths, Realities, and implications prevention and treatment. *American Psychologist, 63*(2), 111-128. http://dx.doi.org/10.1037/0003-066X.63.2.111.

World Health Organization. (2003). *Guidelines for Medico-Legal Care for Victims of Sexual Violence. Gender and Women's Health, Family and Community Health Injuries and Violence Prevention, Noncommunicable Diseases and Mental Health*. Available at: http://whqlibdoc.who.int/ publications/2004/924154628X.pdf

World Health Organization. (2004). *Managing Child Abuse: A Handbook for Medical Officers*. World Health Organization, Regional office for South East Asia. Available at: http://www.scribd.com/doc/545430 22/Managing-Child-Abuse- Handbook-for-Medical-Officers.

Wurtele, S. K. (2009). Preventing sexual abuse of children in the twenty-first century: preparing for challenges and opportunities. *Journal of Child Sexual Abuse, 18*(1), 1-18. doi: 10.1080/10538710802584650.

Wurtele, S. K., & Kenny, M. C. (2010). Partnering with parents to prevent childhood sexual abuse. *Child Abuse Review, 19*(2), 130-15. doi: 10.1002/car.1112.

Yancey, T. C., Hansen, D. J., & Naufel, K. Z. (2011). Heterogeneity of individuals with a history of child sexual abuse: An examination of children presenting to treatment. *Journal of Child Sexual Abuse, 20*(2), 111-127. doi: 10.1080/10538712.2011.554341.

Zerubavel, N., & Messman-Moore, T. L. (2013). Sexual victimization, fear of sexual powerlessness, and cognitive emotion dysregulation as barriers to sexual assertiveness in college women. *Violence Against Women, 19*(12), 1518-1537. doi: 10.1177/1077801213517566.

Zeuthen, K., & Hagelskjær, M. (2013). Prevention of child sexual abuse: Analysis and discussion of the field. *Journal of Sexual Abuse, 22*(6), 742-60. doi: 10.1080/10538712.2013.811136.

Zink, T., Klesges, L., Stevens, S., and Decker, P. (2009). The development of a sexual abuse severity score: characteristics of child- hood sexual abuse associated with trauma symptomatology, somatization, and alcohol abuse. *Journal of Interpersonal Violence, 24*(4), 537–546. doi:10.1177/0886260508317198.

Zwi, K., Woolfenden, S., Wheeler., D. M., O'Brien, T., Tait, P., & Williams, K. J. (2007). School-based education programmes for the prevention of child sexual abuse. *Cochrane Database of Systematic Reviews, 3*. Art. No.: CD004380. doi: 10.1002/14651858.CD004380.pub2.