ABSTRACT

The purpose of this study was to investigate whether a history of child sexual abuse can impact Positive Mental Health in Canadian adults and how frequency of child sexual abuse as well as perceived social support impact Positive Mental Health scores for this population. Data was collected from the Canadian Community Health Survey- Mental Health 2012 and included a sample of 20,529 adults aged 18 and older, living across ten provinces. A one-way ANOVA showed a significant difference between Positive Mental Health scores for individuals reporting a history of child sexual abuse compared to those reporting no history of child sexual abuse. A regression analysis found that reported frequency of child sexual abuse did not significantly impact Positive Mental Health scores for individuals reporting child sexual abuse. It also found that perception of social support was positively related to Positive Mental Health scores and accounted for 25% of the variance in Positive Mental Health scores for individuals reporting child sexual abuse. The implications of these findings are discussed in this study.
ACKNOWLEDGEMENTS

Completion of this thesis would not have been possible without the encouragement and support of a large circle of individuals. With the most sincere gratitude, I offer acknowledgements to the following:

Dr. Jacqueline Hesson and Dr. Ken Fowler; your infinite guidance, support and patience along with your wealth of knowledge was immeasurably helpful throughout this process.

Mrs Shaina Jacob, Mrs Trudy White, Mrs Ros Bennett and Dr Lorraine Dicks were my eyes when my eyes could not longer see any grammatical errors. Thank you for all of your positive and proficient feedback.

My husband, Oliver, thank you for all of your love and encouragement throughout this very long process. My beautiful daughters; Brianna and Sofia; thank you for your unconditional love and optimism; both were a constant reminder that completion of this thesis was more than just a possibility. Finally, my parents, thank you for all of your love and encouragement throughout the years.
# Table of Contents

ABSTRACT.............................................................................................................ii

ACKNOWLEDGEMENTS......................................................................................iii

Table of Contents...............................................................................................iv

List of Tables....................................................................................................vi

List of Figures...................................................................................................vii

Chapter One: Introduction ...............................................................................1

Chapter Two: Literature Review ......................................................................3

  Defining Childhood Sexual Abuse.................................................................3
  Prevalence of Child Sexual Abuse in Canada................................................3
  Childhood Sexual Abuse and Adult Mental Health.......................................4
  Positive Mental Health as a Measure of Psychological Outcome...............7
  Factors Affecting Psychological Outcome.....................................................9
  Purpose of this Study......................................................................................13

Chapter Three: Methodology ..........................................................................14

  Participants.....................................................................................................14
  Data Collection..............................................................................................15
  Materials........................................................................................................16

Chapter Four: Results......................................................................................19

  Positive Mental Health and Childhood Sexual Abuse................................19
  Predictors of Positive Mental Health Scores.............................................20

Chapter Five: Discussion..................................................................................23

  Child Sexual Abuse and Positive Mental Health.......................................23
List of Tables

Table 1: Distribution of the sample by province 14

Table 2: Summary of hierarchical regression analysis for variables predicting 21

Positive Mental Health (continuous score) in adults reporting Childhood

Sexual Abuse
List of Figures

Figure 1: Distribution of mean Positive Mental Health score by reported frequency of Childhood Sexual Abuse. 19

Figure 2: PMH classifications of individuals reporting a history of Child Sexual Abuse compared to those reporting no history of Child Sexual Abuse. 20
CHAPTER I
INTRODUCTION

A review of police reports indicates that, on average, 207 per every 100,000 Canadian children report falling victim to sexual abuse every year (Sinha, 2013). Research using retrospective reports of child sexual abuse (CSA) have found that only one of every twenty cases of CSA will be brought to the attention of the authorities, implying that the exact number of CSA cases each year is likely to be significantly higher (Kellogg, 2005; World Health Organization [WHO], 2003). Health professionals agree that victims of CSA are vulnerable to increased mental health problems in childhood (Dube et al., 2005; Fergusson et al., 2013; Godbout, Briere, Sabourin, & Lussier, 2014; Hornor, 2010). Less well known, however, is how CSA affects victims’ mental health in adulthood as well how variables such as the frequency of CSA, and level of perceived social support can impact outcomes into adulthood.

Recently, researchers have suggested that the mental health impact of childhood sexual abuse (CSA) is long lasting with CSA victims reporting increased mental health concerns well into adulthood when compared to adults reporting no CSA (Bak-Klimek et al., 2014; Cutajar et al., 2010; Fergusson et al., 2013; Hillberg et al., 2011; Perez-Fuentes et al., 2013; Putnam, 2003). More specifically, studies have found that individuals who report suffering sexual abuse in childhood are at higher risk for development of major depressive disorders (Bak-Klimek et al., 2014; Dinwiddie et al., 2000; Fergusson et al., 2013; Hulme, 2011; Putnam, 2003), borderline personality disorders (Cutajar et al., 2010; Putnam, 2003), somatization disorders (Cutajar et al., 2010; Putnam, 2003), post-traumatic stress disorder (PTSD) (Afifi et al., 2014; Fergusson et al., 2013; Hulme, 2011; Putnam, 2003), conduct disorder (Dinwiddie et al., 2000), panic disorder (Afifi et al., 2014; Dinwiddie et al., 2000), alcoholism (Dinwiddie et al., 2000), and dissociative
identity disorders (Putnam, 2003). With the increased prevalence of these disorders in this victim group, the presumed impact of childhood sexual abuse on our health care system is no doubt extensive.

Many studies have cited increased rates of mental health disorders as evidence of poor mental health outcomes for individuals with a history of CSA. This study aims to look at mental health as something more than the presence or absence of such a mental health disorder. Instead of classifying CSA victims by diagnosis of mental health disorders, this study will measure mental health outcomes by evaluating Positive Mental Health (PMH) in this victim group. PMH, a relatively new term within the mental health field, has been described as an individualized subjective evaluation of how good a person feels and how well they see themselves functioning in life (Keyes & Simcoe, 2012). By using this measure the objective of this study is to look beyond diagnosed disorders as a measure of mental health, instead measuring mental health of the group on a PMH scale, to identify those who report prospering despite the sexual abuse suffered in childhood.

Research has identified that social support can impact mental health in adulthood (Godbout et al., 2014; Lyons, Pitts & Grierson, 2013). As well, research specifically looking at individuals with a reported history of CSA has found that the frequency of CSA can impact mental health outcome for the victim. The purpose of this study is to examine the PMH of individuals with a history of CSA to determine if it differs from that of individuals without such a history and to determine the extent to which social support, and frequency of CSA influence the PMH of adults with a history of CSA.
Defining Child Sexual Abuse

The World Health Organization (WHO, 2003) has defined childhood sexual abuse as follows:

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. This may or may not be limited to: the inducement or coercion of a child to engage in any unlawful sexual activity; the exploitative use of a child in prostitution or other unlawful sexual practices; the exploitative use of children in pornographic performance and materials (WHO, 2003, p. 75).

There are a few characteristics that are known to be common to CSA and unique to this specific type of child abuse. First, physical force/violence is rarely used, instead the perpetrator is often a known and trusted caregiver who tries to gain the child’s trust and hide the abuse (WHO, 2003). Second, the abuse can occur over many weeks or even years during which the episodes typically become gradually more invasive (WHO, 2003).

Prevalence of Child Sexual Abuse in Canada

A recent meta-analysis of CSA studies conducted in a variety of settings have identified that CSA is an epidemiological concern worldwide (Barth, Bermetz, Heim, Trelle & Tonia,
of this type of abuse in the Canadian population are limited. As previously reported, a 2011 survey indicated that, on average, 207 per 100,000 children in Canada have reported being sexually abused (Sinha, 2013). This statistic is not necessarily representative of all sexual abuse cases as the progression of sexually abusive relationships is such that often the victims will keep this abuse secret for months, or even years, long after the abuse may have stopped (Kellogg, 2005; WHO, 2003). Literature in the area of CSA disclosure suggests that this abuse often goes un-reported for multiple reasons; most often due to the developmental vulnerability of the victim as well as the fact that they are often manipulated to feel guilty and responsible for the abuse (Murray, Nguyen & Cohen, 2014). An element of fear is often added to this dynamic as well, as victims are fearful for their well-being as well as that of their families (Murray et al, 2014).

A recent study using data from the Canadian Community Health Survey-Mental Health 2012, a nationally representative sample of the Canadian population, found that 10.1% of Canadians aged 18 years and older retrospectively reported having experienced sexual abuse in childhood (Afifi et al, 2014). This statistic raises important questions regarding the long term impact of this victim group on the mental health field. For example how many of these individuals will require long term mental health care as a result of the abuse? Additionally, are there any factors that would result in better mental health outcomes for this population?

**Childhood Sexual Abuse and Adult Mental Health**

Over the past 30 years, research in this area has repeatedly found a significant relationship between history of childhood sexual abuse and a range of mental health problems in adulthood (Barnes & Josefowitz, 2014; Cutajar et al., 2010; Dinwiddie et al., 2000; Putnam,
2003). A variety of research designs have been employed, all of which have produced similar findings.

Research studies based on retrospective reports of CSA are by far the most common methodological design. Recently researchers in the US, Canada and England have used census data representative of their respective countries to examine links between adult diagnosed psychiatric disorders and reports of sexual abuse in childhood. In the US, researchers have found that adults who report histories of CSA are 2.98 times more likely to have a psychiatric disorder sometime in their lifetime (Perez-Fuentes et al., 2013). In Canada, researchers similarly have found that adults who report sexual abuse in childhood are at greater odds of having the following interview diagnosed mental conditions: depression, bipolar disorder, generalized anxiety disorder, alcohol abuse/dependence, drug abuse/dependence, suicidal ideation, and suicide attempts (Afifi et al., 2014). Using results from the 2007 Adult Psychiatric Morbidity Survey in England, researchers similarly found obsessive-compulsive disorder, panic disorder, PTSD, generalized anxiety disorders, phobias, depressive disorders, eating disorders, drug dependence, and alcohol dependence to be strongly associated with CSA, with a high degree of significance (Jonas et al., 2011).

Prospective studies in this area are much less common due to the sensitive nature of CSA disclosure and the ethical need to protect the victim (Cutajar et al., 2010). This design, when used, can add some support to the findings of retrospective studies as it eliminates any recall error and bias. In one instance, researchers in Victoria, Australia were in a unique circumstance to explore this topic from a prospective perspective using forensic records as well as a public mental health database which records contact with public mental health services. Using forensic medical records from the Victorian Institute of Forensic Medicine, researchers reviewed files and
Identified 2,759 cases of children aged 16 years and younger who were sexually assaulted between 1964 and 1995. They matched these cases to a control group based on a random sample of Victorian residents from the electoral role. Researchers then linked their sample to the Victorian Psychiatric Case Register (VPCR) to examine the rates of psychiatric illnesses in their sample. They found that 12 to 43 years after the reported CSA occurred, individuals with a history of reported CSA were 3.65 times more likely to have had contact with public mental health services than the general population (Cutajar et al., 2010). Cutajar and colleagues also found that overall the victims of CSA were 3.01 times more likely to have received a clinical disorder diagnosis. More specifically, individuals with a reported history of CSA were 1.90 times more likely to have a psychotic disorder, 2.05 times more likely to have an affective disorder, 4.30 times more likely to have PTSD, 2.61 times more likely to have other anxiety disorders, 1.66 times more likely to have an eating disorder, 5.56 times more likely to have a known alcohol abuse problem, and 5.56 times more likely to have a known drug abuse problem in adulthood (Cutajar et al., 2010). Researchers similarly explored the link between CSA and DSM-IV Axis II Personality Disorders (PD) and found that individuals reporting CSA were 5.47 times more likely to receive a Axis II personality disorder diagnosis (Cutajar et al., 2010). 

Putnam (2003) argued that one cannot infer a direct cause and effect model between CSA and mental health due to the impact of a variety of confounding factors. Researchers using twin samples have argued that their results are perhaps the most indicative of a link between childhood sexual abuse and adverse mental health outcomes (Dinwiddie et al., 2000). Twin studies examine the psychological outcomes of twin pairs in which only one twin retrospectively reports CSA. Previous research has identified that family factors such as parental alcohol problems, as well as family socio-economic status are often considered confounding variables.
affecting outcome for CSA victims (Dinwiddie et al., 2000; Kendler & Aggen, 2014; Nelson, et al, 2002). The impact of these variables is minimized in a twin study, since both twins are typically exposed to many of the same family variables, which means that differences in outcome can more reliably suggest a link between the sexual abuse and the mental health outcome. Twin studies looking at the link between CSA and psychiatric disorders found that when comparing twin pairs, in which one twin reports CSA and the other twin reports no such abuse, the abused twin was more likely to have a variety of psychiatric disorders including conduct disorder (Dinwiddie et al, 2000; Nelson et al., 2002) major depression (Dinwiddie et al, 2000; Kendlar & Aggen, 2014; Nelson et al., 2002), suicidal ideation and suicide attempt (Dinwiddie et al, 2000; Nelson et al., 2002), panic disorder (Dinwiddie et al, 2000), social anxiety (Nelson et al., 2002), and nicotine or alcohol dependence (Dinwiddie et al., 2000; Nelson et al., 2002).

Positive Mental Health as a Measure of Psychological Outcome

While rates of diagnosed mental disorders for victims of CSA are indicative of increased risk for mental disorders, this is not necessarily wholly representative of the mental health in this victim group. Proponents of PMH as a measure of mental health status argued that just as an absence of a physical health diagnosis is not necessarily representative of good physical health, the same can be said regarding mental health (Keyes & Simoes, 2012). PMH is still a relatively new concept within the field of psychology. It views mental health as an individualized subjective evaluation of how good a person feels and how well they see themselves functioning in life (Keyes & Simoes, 2012).

In a recent study Keyes et al. (2012) examined the relationship between mental health disorders and PMH in a sample of college students. They found that individuals with a mental
health disorder could still have moderate to flourishing levels of mental health. Conversely, it was also found that the absence of a mental health disorder did not mean that an individual had “good mental health”. These findings come more than 24 years after the publication of Health Canada’s *Mental Health for Canadians*, a document which proposed that “mental health is more than the absence of a mental disorder and that optimal mental health requires PMH” (Minister of National Health and Welfare, 1988).

A review of mental health services suggested that people who seek or accept help from mental health services are looking for more than disorder symptom remission (Lelliott, 2000). Often they are placing more emphasis on achieving improvements in other areas of their lives which are impacted by their mental disorder. Specifically, Lelliott (2000) found that individuals are looking for help in living a more active and full life, returning to work, engaging in other meaningful daytime activities, as well as in establishing and maintaining relationships.

For this reason it is suggested that PMH may act as a more accurate measure of psychological outcome for adults with a history of CSA. This mental health classification looks beyond a persons’ mental illness to include a person’s subjective evaluation of how good they really feel. By properly identifying the subset of those with a history of CSA that prosper from a mental health perspective in adulthood, we can begin to identify variables that lead to better outcomes for the mental health of this victim group.

**Factors affecting Psychological Outcome**

Any link between PMH in adulthood and CSA cannot be interpreted in isolation. In keeping with previous literature investigating PMH as well as literature looking at the effects of CSA on mental health in adulthood it is important to consider variables such as the frequency of
abuse history and the presence of social supports and the extent to which they can affect the outcome.

**Role of frequency of abuse.** Studies that have examined how the frequency of abuse affects psychological outcome in victims of CSA have found mixed results. Some studies have found a dose-response in which repeated occurrences of CSA are associated with increased risk for psychological disturbance (Cutajar et al., 2010; Yancey & Hansen, 2010). In looking at frequency of abuse, it was found that after adjusting for socio-demographic characteristics, other types of sexual abuse and number of types of sexual abuse as well as higher frequency of being touched by the perpetrator and having touched the perpetrators body, all increased the risk of past 12-month mood, anxiety and SUDs. Higher frequency of attempted or completed intercourse was associated with increased risk of lifetime history of suicide but not with increased odds of past 12 month mood, anxiety, or SUDs. There was a dose-response relationship between number of types of CSA and odds of 12-month mood, anxiety, or SUDs, as well as suicide attempts. (Perez-Fuentes et al., 2013). Similarly, Feiring, Rosenthal and Taska (2000) found that in studying adolescents’ who report CSA, those who experienced more abuse events were less likely to feel accepted by peers and less likely to feel they appealed to others, although these relationships did not reach significance. In contrast other studies have not substantiated these findings. For example Bak-Klimek et al. (2014) found no link between psychopathological outcome and the frequency of CSA. Using PMH as the measure of psychological outcome, this study will explore whether frequency of CSA impacts PMH.

**Role of social support.** Previous research looking at the link between CSA and mental health outcome frequently cites social support as a mediating factor in which higher levels of social support are associated with better outcomes.
CSA victims are thought to be particularly vulnerable to developing “insecure attachment representations, associated with relational problems” (Godbout et al., 2014, p.317). Theorists looking at the role of social support in overcoming the trauma of CSA have pointed to the relevance of Bowlby’s attachment theory (Alexander, 1992; Aspelmeier, Elliott & Smith, 2007). Central to Bowlby’s (1951) attachment theory is that parent-child attachment has a major influence in all future interpersonal relationships for the individual. If a child experiences abuse by a parent, caregiver, or another important person in their life, attachment theory would suggest that this affects their emotional closeness in future relationships. It could, therefore, contribute to patterns of cognitive and emotional dysfunction as they move through childhood and adolescence and could negatively influence adult close relationships (Caldwell, Shaver, Li & Minzenberg, 2011). A study looking at college women found that reports of childhood sexual abuse were consistently associated with higher levels of trauma-related symptoms and lower levels of attachment security in close-adult, parent-child and peer relations (Aspelmeier et al., 2007).

In a theoretical model representing the process of healing after CSA, Draucker and colleagues (2011) argued that ongoing support is important in enabling movement from one stage of the healing process to the next. Kinnally and colleagues (2009) similarly suggested that “experiencing sexual abuse within the context of a positive family or social environment may be associated with a lower risk for adverse mental health outcomes” (Kinnally et al., 2009). As well, Tremblay, Hebert and Piche (2009) noted that familial support, especially parental belief in the sexual abuse allegation and support, can act as a strong buffer against the development of negative consequences for sexual abuse victims. Other studies have similarly highlighted the importance of social support, especially parental support, immediately following disclosure of CSA (Godbout et al., 2014; Tyler, 2002). These studies have found that support from parents,
friends, or helping professionals, or other influential role models have been associated with positive self-worth and fewer externalizing problems (Tyler, 2002). As well, previous research looking at PMH in middle-aged and older gay men found social support to be significantly related to better PMH (Lyons et al., 2013).

An earlier study acknowledged that social support can act as a buffer to high levels of stress, “protecting suffering individuals from developing symptoms and other maladaptive behaviors” (Cohen & Wills, 1985 as cited in Hyman, Gold & Cott, 2003, p.295). Less often, research has looked at the long term continuous impact of social support which is especially important considering that a large percentage of sexual abuse cases go unreported, and therefore supportive interventions may never be implemented (Hyman et al., 2003; Godbout et al., 2014).

Narratives from women survivors of this type of abuse indicated that by feeling loved and being treated sensitively by others, survivors may ultimately develop a positive sense of self and feel valued (Arias & Johnson, 2013). Similarly, a previous study, with a sample of 152 women with a history of childhood sexual abuse examined how CSA severity and social supports impacted psychological symptoms in adulthood based on the Global Severity Index (Jonzon & Lindblad, 2006). CSA severity was measured using type “weights” (1, non-contact; 2, contact but no penetration; and 3, penetration), how often it occurred (frequency), and the age that it started and ceased. An index of abuse was constructed by adding the number of perpetrators, the weights for type of abuse, frequency and total duration. Use of violence added one additional point. The results indicated that individuals who reported severe sexual abuse in conjunction with high social supports reported significantly less psychological symptoms when compared to those reporting severe sexual abuse with low levels of social support (Jonzon & Lindblad, 2006).
Canadian Institute for Health Information researchers examined data from the 2002 Canadian Community Health Survey to examine how tangible and emotional social support affects PMH in Canadian adults aged 15 and older. Respondents were said to have tangible support if they reported that, “all or most of the time, they have someone to give them help if they need it when confined to bed, when they need to go to the doctor, or to help prepare meals” (Canadian Institute for Health Information, 2009, p.41). Emotional support was defined as “having someone available to listen, give advice in a crisis, confide in, who understands problems and whose advice respondents really want” (Canadian Institute for Health Information, 2009, p.41). Compared to people who reported not always having tangible support, those who reported almost always having tangible support were significantly more likely to report high levels of life enjoyment, coping ability, emotional well-being, and social connectedness. In addition, compared to people who reported not always having emotional support, those who reported almost always having emotional support were significantly more likely to have high levels of all five PMH outcomes.

On a broad scale PMH is one of a variety of theoretical models proposed to measure well being and positive aspects of mental health (Feeney & Collins, 2015). A review of theoretical models found differences in how optimal well being was defined however the majority agree that deep and meaningful close relationships are strongly related to better mental health, higher levels of subjective well being and lower rates of morbidity and mortality in the general population (Feeney & Collins, 2015). While social support appears to lower the rates of mental health disorders in individuals with a history of CSA, as well as be linked to better mental health in the general population, how it affects PMH outcomes in adults with a history of CSA has yet to be examined.
Purpose of the Study

It has been well established that CSA has long-term effects on its victims and that both men and women with such a history are at higher risk for psychiatric disorders. Less understood is the relationship between childhood sexual abuse and PMH in adulthood and the influence that factors such as the frequency of CSA and level of perceived social support have on this relationship. Therefore the objective of this study is to answer the following questions: is PMH in adulthood impacted by reported history of CSA? Second, after controlling for the impact of demographic variables (age, gender, and socio-economic status), what is the impact of frequency of CSA on PMH? As well how does perceived social support impact PMH for adults with a history of CSA?
CHAPTER III
METHODOLOGY

Participants

For the purpose of this study, data was extracted from the Public Use Microdata File of the Canadian Community Health Survey- Mental Health (CCHS-MH) 2012 (Statistics Canada, 2013), a national mental health survey with a total sample of 25,113 Canadians, aged 15 and older, living across ten provinces. This survey excluded residents from the three territories, residents of indigenous communities, full time members of the Canadian forces as well as people living in institutions. Collectively the excluded individuals make up less than 3% of the entire Canadian population (Statistics Canada, 2013). Due to the sensitive nature of the child abuse questions, this portion of the survey was asked only to respondents aged 18 years and older. From this point forward, sample will refer to 20,529 individuals aged 18 and over who responded to the question regarding forced unwanted sexual activity as well as questions measuring PMH. Table 1 provides a summary of the distribution of the sample by province of residence.

Table 1

Distribution of the sample by province (N = 20,529 respondents)

<table>
<thead>
<tr>
<th>Province</th>
<th># of Respondents</th>
<th>% of Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Newfoundland and Labrador</td>
<td>1,161</td>
<td>5.7%</td>
</tr>
<tr>
<td>Prince Edward Island</td>
<td>894</td>
<td>4.4%</td>
</tr>
<tr>
<td>Nova Scotia</td>
<td>1,457</td>
<td>7.1%</td>
</tr>
<tr>
<td>New Brunswick</td>
<td>1,369</td>
<td>6.7%</td>
</tr>
<tr>
<td>Quebec</td>
<td>3,582</td>
<td>17.4%</td>
</tr>
<tr>
<td>Ontario</td>
<td>4,404</td>
<td>21.5%</td>
</tr>
<tr>
<td>Manitoba</td>
<td>1,434</td>
<td>7.0%</td>
</tr>
<tr>
<td>Province</td>
<td>Sample Size</td>
<td>Rate</td>
</tr>
<tr>
<td>-------------------</td>
<td>-------------</td>
<td>------</td>
</tr>
<tr>
<td>Saskatchewan</td>
<td>1,344</td>
<td>6.5%</td>
</tr>
<tr>
<td>Alberta</td>
<td>2,364</td>
<td>11.5%</td>
</tr>
<tr>
<td>British Columbia</td>
<td>2,520</td>
<td>12.3%</td>
</tr>
</tbody>
</table>

Of the sample, 7.3% (1,491) reported experiencing some degree of CSA. Of those reporting CSA; 54.9% (818 individuals) indicated that they had experienced this type of sexual abuse 1-2 times before the age of 16; 16.0% (238 individuals) had experienced this type of sexual abuse 3-5 times before the age of 16; 7.2% (107 individuals) had experienced this type of sexual abuse 6-10 times before the age of 16; and 22.0% (328 individuals) had experienced this type of sexual abuse 10 or more times before the age of 16.

**Data Collection**

The majority of the interviews (87%) for the CCHS-MH were conducted in person by trained interviewers using computer assisted interviewing. The remaining interviews were completed via telephone. Interviews were conducted by individuals hired by Statistics Canada and trained by representatives from Statistics Canada’s Collection Planning and Management Division. The computer-assisted personal interviewing (CAPI) method was used to customize interviews to each respondent based on their personal characteristics and responses. This ensured that questions were not asked to individuals to whom they did not apply. Overall household-level response rate was 79.8%, and the household and person response rate was 68.9%. Voluntary consent was required to participate in this survey. All respondents were informed that participation in the survey was voluntary, not mandatory, and informed of the privacy and confidentiality of responses. Data was collected between January and December 2012.
Materials

Assessment of self-reported CSA. Within this survey, self-reports of child abuse were assessed using questions from the Childhood Experiences of Violence Questionnaire, a valid and reliable tool created to measure youth victimization (Walsh, MacMillan, Trocme, Jamieson & Boyle, 2008). This Childhood Experiences of Violence Questionnaire assesses a variety of child abuse experiences. For the purpose of this study, only the question used to assess CSA experiences was used. This question asked respondents aged 18 and older if before the age of 16 anybody had ever “forced (them) or attempted to force (them) into any unwanted sexual activity, by threatening (them), holding (them) down or hurting (them) in some way” (Walsh et al. 2008). Responses were scored on an ordinal scale, representing frequency of occurrence (never, 1-2 times, 3-5 times, 6-10 times or more than 10 times).

Assessment of PMH. PMH was assessed using the Mental Health Continuum-Short Form (MHC-SF). The MHC-SF was derived from the Mental Health Continuum- Long Form (MHC-LF) in an effort to measure this variable in a shorter amount of time, while still keeping its validity intact. The original MHC-LF consisted of seven items measuring emotional well-being, six 3-item scales (18 items total) that measured the six dimensions of Ryff’s (1989) model of psychological well-being, and five 3-item scales (15 items total) that measure the five dimensions of Keyes’ (1998) model of social well-being. The original measure has been validated and used with individuals aged 12 years and older. In total the MHC-LF consisted of 40 items. Fourteen of those items were chosen as “the most prototypical items representing the construct definition for each facet of well-being” to create the MHC-SF. Three items were chosen to represent emotional well-being (happy, interested in life, and satisfied), six items were chosen to represent psychological well-being (one item from each of the six dimensions) and 5
items were chosen to represent social well-being (one from each of the 5 dimensions). Within each item, response options are given to measure the frequency with which respondents experience each “symptom” of PMH. As measured by the MHC-SF, positive mental health is a combination of feeling good about and functioning well in life. When measured on a continuum scores range from 0-70 with higher scores indicating higher levels of PMH. As well PMH scores can be represented by classification of three types; flourishing (indicating high positive emotions and high psychological/social functioning), languishing (indicating low positive emotions, and low psychological/social functioning), and moderate (neither languishing nor flourishing).

Assessment of social support. Social support was assessed using the Social Provisions Scale (SPS). The original SPS is made up of 24 items and was developed by Cutrona and Russell (1987) and later validated in French by Quebec researcher Dr. Caron. A shortened version of the SPS was created for use in the Community Mental Health Survey with 10 items measuring five main areas social provisions; attachment (emotional closeness), guidance (advice or information), reliable alliance (assurance that others can be counted on in times of stress), social integration (sense of belonging to a group of friends), and reassurance of worth (recognition of one’s competence). Responses to items within this scale were rated on a 4-point scale ranging from 1 (strongly agree) to 2 (agree), 3 (disagree), and 4 (strongly disagree). Overall scores on the SPS range from 10-40, with higher scores reflecting a higher level of perceived social support.

Socio-demographic variables (age, gender and socio-economic status). Previous research has found differences in the frequency of mental health disorders, as well as the types of disorders presenting for men and women who report a history of CSA (Cutajar et al., 2010; Dinwiddie et al., 2000). As well, gender differences have been found across the five mental
health outcomes measuring PMH (Canadian Health Initiative, 2009). Research looking at the effect of age on PMH indicates that PMH initially increases with age, reaches a plateau and then declines (Canadian Institute for Health Information, 2009). Finally, socio-economic status (SES), as represented by personal income is a known influence on mental health in the general population. Financial strain has been identified as a predictor of increased psychological distress and diminished life satisfaction (Ahnquist & Wamala, 2011; Marum, Clench-Aas, Ned & Raanaas, 2014). For these reasons these variables will be controlled in the analysis to minimize their influence on the results. Socio-demographic variables were categorical and included gender (male, female), age (18-19, 20-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50-54, 55-59, 60-64, 65-69, 70-74, 75-79, >80), and personal income in Canadian dollars (less than $10,000, $10,000-$19,000, $20,000-$29,999, $30,000-$39,999, $40,000-$49,999 and $50,000 and above).
CHAPTER IV
RESULTS

Positive Mental Health and Childhood Sexual Abuse

A one-way between subjects ANOVA yielded significant between-group differences for PMH scores with frequency of reported CSA ($F_{(4, 20524)} = 78.990$, $p < 0.000$). Tukey HSD tests were conducted on all possible pairwise contrasts. The mean PMH score for individuals reporting no CSA ($M= 54.26$, $SD= 10.90$) was significantly different ($p < 0.001$) than the mean for all groups reporting any CSA (CSA 1-2 times ($M= 50.08$, $SD=12.87$), CSA 3-5 times ($M= 49.23$, $SD= 13.72$), CSA 6-10 times ($M=46.50$, $SD= 13.772$), and CSA more than 10 times ($M= 47.47$, $SD=14.626$)). PMH scores for individuals reporting CSA 1-2 times differed significantly from individuals reporting CSA 6-10 and 10 or more times. There were no significant difference between individuals reporting CSA 1-2 times and those reporting CSA 3-5 times. There was also no significant difference between individuals reporting CSA 6-10 times and those reporting CSA 10 or more times. See Figure 1 for distribution of means by frequency of CSA.

![Figure 1](image.png)

Figure 1. Distribution of mean Positive Mental Health score by reported frequency of Childhood Sexual Abuse.
Respondents reporting no history of CSA were compared to those reporting any history of CSA. A chi-square analysis examined the relationship between a respondent’s report of child abuse and PMH classification. This analysis found a significant difference when comparing these groups \( (\chi^2 = 221.754, p < 0.001) \) indicating that individuals reporting any CSA were at risk for lower PMH scores than those with no history of CSA. Figure 2 shows classification of PMH for individuals reporting CSA compared to those reporting no CSA.

![Figure 2](chart.png)

*Figure 2. PMH classifications of individuals reporting a history of Child Sexual Abuse compared to those reporting no history of Child Sexual Abuse.*

**Predictors of Positive Mental Health scores**

A 3 step hierarchical multiple regression was conducted to assess the extent to which frequency of CSA and social support predict PMH scores in the overall sample. With PMH as the dependent variable, demographic variables (SES, age, gender) were entered at Step 1 of the analysis to control for their influence on PMH, the frequency of childhood sexual abuse was
entered at Step 2 and perceived level of social support using total scores from the Social 
Provisions Scale were entered at Step 3. Statistics for the resulting model are shown in Table 2.

Table 2

Summary of hierarchical regression analysis for variables predicting Positive Mental Health (continuous score) in adults reporting Childhood Sexual Abuse

<table>
<thead>
<tr>
<th>Variable</th>
<th>R</th>
<th>R²</th>
<th>R² Change</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Block 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>0.228</td>
<td>0.052</td>
<td></td>
<td>0.438</td>
<td>0.117</td>
<td>0.099***</td>
<td>3.751</td>
</tr>
<tr>
<td>Sex</td>
<td>0.228</td>
<td>0.052</td>
<td></td>
<td>0.683</td>
<td>0.729</td>
<td>0.025</td>
<td>0.936</td>
</tr>
<tr>
<td>Income</td>
<td>0.228</td>
<td>0.052</td>
<td></td>
<td>1.638</td>
<td>0.210</td>
<td>0.209***</td>
<td>7.807</td>
</tr>
<tr>
<td>Block 2</td>
<td></td>
<td></td>
<td>0.000</td>
<td>-0.030</td>
<td>0.272</td>
<td>-0.003</td>
<td>-0.110</td>
</tr>
<tr>
<td>Frequency of CSA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Block 3</td>
<td>0.551</td>
<td>0.304</td>
<td>0.251</td>
<td>1.293</td>
<td>0.058</td>
<td>0.522***</td>
<td>22.39</td>
</tr>
<tr>
<td>Social Provisions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. *p < .05; **p < .01, ***p < .001

The hierarchical multiple regression revealed that at Stage 1 the demographic variables (age, gender, SES) contributed significantly to the regression model, F (3, 1390) = 25.498, p < 0.001, accounting for 5% of the variance in PMH scores. Within this block; personal income was positively related to PMH scores (β = .209, p < 0.001); higher personal income was associated with higher PMH scores. Similarly, age was positively related (β = .099, p < 0.001), with older individuals recording higher PMH scores. Gender was not significantly predictive of PMH scores for this sample. The addition of the frequency of CSA variable in Step 2 did not add to the total variance explained by the model (R² Change = 0.000). In Step 3 the total score from the Social Provisions Scale was entered as a predictor variable. This accounted for an additional
25.1% of the variance in PMH scores ($F_{(5, 1388)} = 121.032, p < 0.001$) and in conjunction with the demographic variables resulted in a total variance accounted for of 30%.
CHAPTER V
DISCUSSION

Due to the sensitive nature of CSA, its prevalence is very hard to quantify. A review of police reported abuse found that on average, every year, 207 per every 100,000 Canadian children reported sexual abuse (Sinha, 2013). A second study, which conducted a review of retrospective reports based on results from a Statistics Canada survey found that 10.1% of Canadians aged eighteen and over report having experienced CSA (Afifi et al., 2014). Previous studies investigating the long-term effects of CSA have indicated that individuals with a history of CSA are at higher risk for diagnosis of a variety of psychiatric illnesses (Afifi et al., 2014; Bak-Klimek et al., 2014; Fergusson et al., 2013; Putnam, 2003). The purpose of this study was to examine the long-term outcome for this population from a more positive perspective by looking at self-reported mental health, instead of mental illness, using PMH as a measure of psychological outcome. Using data from a nationally representative sample of the Canadian population, this study was the first to examine the association between CSA and PMH in adulthood. Second, this study aimed to examine factors related to better mental health, specifically, how does the frequency of reported CSA affect victims’ PMH in adulthood, and can social support predict a better outcome for PMH in adulthood?

Child Sexual Abuse and Positive Mental Health

Results of this study demonstrate that individuals who report a history of CSA are at a significantly higher risk for lower PMH when compared to individuals that report no history of CSA. However, a preliminary analysis of the 22,601 individuals responding to both questions regarding CSA as well as questions regarding PMH found some positive results. It was found that of those individuals reporting a CSA history, 64% reported themselves to be “flourishing” in
terms of their mental well being, while 30.3% reported “moderate” levels of PMH. Only 5.7% reported themselves to be “languishing” with respect to PMH. This indicates that while the difference between those reporting CSA and those reporting no CSA is significant, 94.3% of individuals with a history of CSA are still reporting moderate to flourishing levels of PMH. This finding provides a positive outlook for individuals recovering from CSA.

Previous studies looking at the long-term effect of frequency of CSA on mental health have found mixed results. Perez-Fuentes and colleagues (2013) found a dose-response effect between CSA and odds of 12-month mood, anxiety, or SUDs, as well as suicide attempts. Other studies have negated these findings (Bak-Klimek et al., 2014). In the current study a Pearson product-moment correlation found a significant negative relationship between the frequency with which an individual experienced CSA and their PMH scores. This supports the dose-response hypothesis suggesting that experiencing sexual abuse more frequently as a child is associated with lower mental health outcomes in adulthood. However the results from the hierarchical regression analysis indicated that after controlling for demographic variables, frequency of CSA did not account for any additional variance in PMH scores, a finding that has also been supported in previous research. In a 2014 study, Bak-Klimek and colleagues identified a positive correlation between CSA and levels of psychopathology based on the Symptom Checklist 90 (SCL-90). It was found that the relationship between psychopathology and CSA was not impacted by frequency of abuse, as reported by the 303 patients included in this study. Results of this study can be interpreted very differently. For example it could suggest that individuals reporting very severe histories of CSA are capable of positive outcomes, or alternatively, it could indicate that one CSA encounter could result in irrevocable damage.
Frequency of CSA is one of multiple abuse characteristics that has been found to contribute to psychopathological outcome for the victims. It is suggested that future studies examine the impact of other abuse characteristics on PMH outcome for adults with a history of CSA including age of onset of abuse, duration of abuse, relationship to perpetrator(s), number of perpetrators, co-occurring physical or emotional abuse and presence of familial support after abuse (Bak-Klimek et al., 2014). While previous studies have found that these variables often impact rates of mental illness, few have examined the relationship to mental well-being. While the focus has been on one side of the spectrum, there may be a lot to learn from the other side.

**Role of Social Support**

After controlling for age, gender, SES and frequency of CSA, perceived social support was found to account for 25% of the variance in PMH scores. The positive correlation between social support and mental health and well-being is a finding that has been supported in past CSA research. In one study examining the link between PTSD symptomology in women with a history of CSA, researchers found that women who perceived feeling valued by others as well as those who reported having someone to go to for advice when coping with problems, presented with less PTSD symptoms (Hyman et al., 2003). Another study using a sample of 152 women aged 20-60 reporting CSA found higher levels of social support to be predictive of lower psychological symptoms as measured by the Global Severity Index (Jonzon & Lindblad, 2006). Both studies indicate that social support predicts better outcome for women reporting a history of CSA. The current study adds to this literature by including both men and women. By controlling for any effect of gender differences, findings of this study in conjunction with results of Jonzon and Lindblad (2006) and Hyman et al. (2003) studies suggest that social support may be
particularly important for the psychological health of adults in both men and women who report a history of CSA.

This was the first study to use PMH as a measure of psychological well being in adults reporting CSA, however the relationship between social support and PMH has been supported in a previous study in which researchers found social support to be significantly related to better PMH in middle-aged and older gay men (Lyons et al., 2013). Lyons et al. (2013) suggest that gay men are often faced with challenges related to discrimination, fear of discrimination as well as internalized challenges related to the stigma of being homosexual male. Similarly, CSA survivors are faced with stress related to the abuse itself, as well as long term struggles related to problems with affect regulation, impulse control, somatization, sense of self, cognitive distortions and problems with socialization (Putnam, 2003). Like adults with a history of CSA, research suggests that gay men are at higher risk for mental illness compared to the general population (Lyons et al., 2013). In both marginalized groups, social support was found to mediate this risk and was linked to better PMH.

In explanation of this relationship, researchers often refer to Cohen and Wills’ (1985) stress buffering hypothesis which posits that social support can act as a buffer in the presence of high levels of stress. Cohen and Wills suggest that large social networks are associated with “regular positive experiences and a set of stable, socially rewarded roles in the community” (Cohen & Wills, 1985). These experiences provide positive affect as well as a sense of predictability and stability in one’s life and recognition of self-worth. They suggest that stress arises when one appraises a situation as threatening or otherwise demanding and do not know the appropriate coping response (Cohen & Wills, 1985). Appraised stress is often related to feelings of helplessness and loss of self-esteem (Cohen & Wills, 1985), both traits that are often found in
children reporting CSA (Dube et al., 2005). According to Cohen and Wills, adequate support following the experience of stress can reduce physiological processes and reduce the likelihood of a pathological outcome. Results of this study support the stress-buffering hypothesis, with social support being linked to better mental health outcome.

Research focusing on mental health instead of mental illness is growing with psychological researchers and practitioners beginning to recognize the importance of studying those reporting good mental health as a plateau for understanding interventions and treatment approaches for those reporting mental illness. Results of this study suggest that social support is especially important for achieving good mental health for adults reporting CSA. It has been acknowledged that many studies in the area of CSA outcomes have focused on static factors (demographic characteristics, frequency) and do not collect as much data on factors that are malleable (Yancey & Hansen, 2010). The advantage to understanding the role of malleable factors such as social support is that they can help guide the development of interventions. These findings support interventions aimed at increasing effective social networks for individuals who are languishing, possibly as a result of CSA.

Previous research examining the short term consequences of CSA have noted that externalizing and internalizing behaviors that often result from this abuse can lead to difficulty in creating friendships in childhood (Dube et al., 2005; Godbout et al., 2014). Beyond childhood, victims of CSA often have difficulty seeking and creating healthy secure relationships into adulthood (Kwako et al., 2010). Bowlby’s attachment theory suggests that when an individual suffers abuse at the hands of someone they trust, they are at risk of developing insecure attachments schemas. Within this study details of the relationship between the perpetrator and victim are unknown however results indicate that social support is more predictive of PMH than
frequency of abuse. For helping professionals these findings suggest that if a victim of CSA is presenting with poor mental health, perception of social support should be examined and interventions should be aimed at developing individuals’ ability to develop supportive social networks.

Alexander (1992) created a model for health care professionals based in part on Bowlby’s (1951) attachment theory, which specified that cessation of abuse does not automatically change the survivor’s working model of relationships. He added to Bowlby’s theory and said that internal working models of relationships are not simply determined by past relationships but also by current relationships. For this reason Alexander posits that mental health professionals working with CSA victims should focus on current relationships and allow for an opportunity to examine any implicit expectations about relationships as well as about themselves. Further research should be conducted on specific intervention strategies aimed at enhancing social support to determine most effective approaches for this particular population.

This study identified perceived social support as measured by the Social Provisions scale to be associated with higher levels of PMH for individuals reporting a history of CSA. Further research should investigate the role of specific sub-types of social support as identified in the Social Provisions scale (attachment, guidance, social integration, reliable alliance, and reassurance of worth) to assess the influence of each sub-type on CSA victims’ PMH. This research will add to an understanding of what type of interventions would be most effective for this population. As well, further research should also examine whether the relationship between types of social support and PMH are affected by the gender of the CSA victim.
Strengths and Limitations

For this study, CSA was measured by asking respondents aged 18 and older if before the age of 16 anybody had ever “forced (them) or attempted to force (them) into any unwanted sexual activity, by threatening (them), holding (them) down or hurting (them) in some way”. The sample of individuals reporting CSA was therefore quantified based on self- retrospective reports. While some researchers have argued that using samples based on retrospective reports of CSA is subject to recall bias, it has been argued that it may give the most representative sample for this group of individuals since many cases of CSA go unreported, making longitudinal data incomplete (Nelson, Lynskey, Heath, Madden & Martin, 2010; Putnam, 2003). In a review of research examining the validity of retrospective reports of adverse childhood experiences it was determined that false negatives are likely more common than false positive reports (Hardt & Rutter, 2004). Overall there were 1614 Canadians living across 10 provinces, 386 men and 1228 women retrospectively reporting CSA. The benefit to using this data was that it allowed for an analysis of a large group of Canadians, and is representative of both genders. This is beneficial for multiple reasons, first; previous literature looking at the long term impact of CSA on the Canadian population is limited. Second, the number of men included in this sample is especially relevant with many previous studies focusing on the impact of CSA on female survivors (Dube et al., 2005).

Social support as measured within this study using the Social Provisions scale is representative of a subjective evaluation of attachment (emotional closeness), guidance (ability to get advice or information), social integration (a sense of belonging to a group of friends), reliable alliance (assurance that others can be counted on in times of stress), and reassurance of worth (recognition of one’s competence). With scores for the individual items based on self-
evaluated rankings, overall scores are considered to reflect perceived social support. Perception of social support is a valuable measure, with previous research suggesting that an individuals’ perception of social support is more important than the measure of quantity of individuals comprising a social support network; that is, the quality of social support is more influential than the quantity of supports (Hyman et al., 2003).

One of the primary limitations of this study is that it is correlational in nature. While it is clear that there is a relationship between PMH and history of CSA as well as social support and PMH in individuals reporting CSA, it cannot be concluded that these variables cause variations in PMH. Similarly, there are additional variables that were not included here but are known to effect individuals reporting CSA. It has been argued that in terms of child abuse, data collected years after the occurrence of CSA makes it difficult to attribute findings to the sexual abuse versus the many other events in the victim’s life since the abuse occurred (Yancey & Hansen, 2010). There are factors related to CSA that this data base does not account for; including the relationship to the CSA perpetrator, other forms of abuse co-occuring and presence of family dysfunction. These are variables which research has identified as influential on the outcome for the victim (Dube et al., 2005). In a previous study using the same data set, Afifi and colleagues (2014) suggested that in using this database, there are a lot of unknown variables, and that inferences cannot be made about the relationship between child abuse and later mental health. They suggest that future research using longitudinal data can provide more insight into confounding variables underlying long-term problems associated with child abuse. It is also important to consider the limitations incurred because CSA was quantified using retrospective self-reports. Even though previous studies have suggested that this gives the most representative sample for this group of individuals, since many cases of this type of abuse can go un-reported
(Putnam, 2003), there is no way to confirm the accuracy of individuals’ self-reports. For those individuals who are accurately reporting CSA, the frequency of CSA is also hard thing to quantify retrospectively. Finally, data used for the current study was cross-sectional, which limits conclusions regarding causality.

**Conclusion**

Children are a vulnerable population, often victims of circumstances with little to no control over the people and situations to which they are exposed. Sadly, traumatic events such as abuse often precede any intervention by police and/or social workers. Further exacerbating the problem, abuse can go unnoticed and unreported, leaving the child vulnerable to repeated abuse. Much of the research has indicated that long after any physical scars may have healed, psychological wounds remain. An individual with a history of childhood abuse is at increased risk for both mental health disorders and physical ailments.

From the perspective of a helping professional it would seem that the impact of CSA on the health care system can be long lasting. The intent of this research was to provide more insight into the long-term psychological consequences of CSA. After the trauma, are there any factors which can protect the individual and ameliorate the outcome?

For this study PMH was chosen as the measure of psychological outcome in an effort to look past the negative labels that can be construed by mental health diagnoses. Despite the limitations, this research found that although individuals with a history of CSA were at risk for lower PMH scores, the majority of individuals who report CSA are functioning at “moderate” to “flourishing” levels of PMH, including those who reported being victim to ten or more instances of this type of abuse. This finding highlights the fact that it is possible to overcome negative consequences of this type of abuse. It is a foundation for helping professionals working with
CSA victims and provides a basis for interventions aimed at supporting CSA victims’ ability to build positive social supports.
References


