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Between-Group Differences Among Victim Age-based Typologies of Juvenile Sexual Offenders

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Walden University

College of Social and Behavioral Sciences

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Jennifer Lynne Short

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Walden University
2018

Abstract

Between-Group Differences Among Victim Age-based Typologies of Juvenile Sexual

Offenders

by

Jennifer Lynne Short

MC, Campus Alberta Applied Psychology, 2008

BA, University of British Columbia, 1996

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Forensic Psychology

Walden University

May 2018

Abstract

Juveniles adjudicated for sexual offenses are often described as homogenous, collectively viewed as inherently dangerous, and subject to specialized legal and clinical interventions. However, empirical studies have identified several typologies suggesting that juveniles adjudicated for sexual offenses are a heterogeneous group with varying degrees of risk and treatment needs. The purpose of this non-experimental between-groups study was to compare family composition, abuse histories, mental health diagnosis, and offense type among a victim age-based typology of juvenile sexual offenders. The theoretical framework that guided this study was developmental-contextual theory. Archival data ($N = 105$) were collected from Alberta Health Services in Alberta, Canada. Results of chi-square analysis indicated a statistically significant difference among these 2 groups with respect to family composition and offense type. The groups did not differ with respect to abuse histories or mental health diagnosis. Findings may be used to expand the current knowledge base regarding risk factors for youths who offend sexually, to develop preventative programs and treatment programs, to increase community safety, and to reduce the stigma associated with juvenile sexual offending.

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Dedication

First and foremost, this project is dedicated to my husband, Mr. Mark Phillips. He is not only my partner; he is my best friend and my biggest support. Second, I would like to dedicate this project to Mr. Lawrence Deck. It was his motivation to pursue his own doctoral degree that propelled me forward in the same regard. I am proud to call him my friend and colleague. Last but not least, I would like to thank my family and friends. As always, they continue to support me through all of my crazy life adventures.

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Chapter 1: Introduction to the Study

In this study, I compared between-group differences among victim age-based typologies of juvenile sexual offenders. This study was important because it adds to the current knowledge base regarding victim age-based typologies (Aebi, Voght, Plattner, Steinhausen, & Bessler, 2012; Keelan & Fremouw, 2013; Leroux, Pullman, Motyne, & Seto, 2016; Stevens, Hutchin, French, & Craissati, 2013; van der Put & Asscher, 2015) and fills a gap in the literature by focusing on the differences between family composition, abuse histories, mental health diagnosis, and offense type of juveniles who offend against children and juveniles who offend against peers or adults in Alberta, Canada. Implications for positive social change include improved education and development of preventative programs and treatment programs that support the individual needs of juvenile sexual offenders. Increased community safety and the reduction of stigma associated with juvenile sexual offending are also areas of potential social change.

Chapter 1 contains background information related to the topic of study, the problem statement, the purpose of the study, the research questions and hypotheses, and the theoretical framework that guided the study. Chapter 1 also contains information on the nature of the study, a list of operational definitions, assumptions of the study, scope and delimitations, limitations of the study, and the significance of the study.

Background

The establishment of empirically based typologies of juvenile sexual offenders provides important information for clinical interventions through the identification of key constructs for assessment and through identification of possible etiological factors

specific to each subtype (Fanniff & Kolko, 2012; Seto & Lalumiere, 2010; Stevens et al., 2013). The development of empirically based typologies also assists in the identification of risks and needs for each subtype that should be targeted in treatment, thereby enhancing the effectiveness of treatment by offender subtype (Fanniff & Kolko, 2012; Keelan & Fremouw, 2013; Leroux et al., 2016; Seto & Lalumiere, 2010; Stevens et al., 2013). Additionally, research has suggested that the identification of relevant subtypes has the potential to improve risk assessment practices (Rajlic & Gretton, 2010; van der Put, van vugt, Stams, Dekovic, & van der Lann, 2013), possibly allowing social control interventions such as the inclusion of juveniles on public registries to be limited to those deemed to be the highest risk (Fanniff & Kolko, 2012). However, despite the identified need for increased knowledge of the subgroups of youth who sexually offend, there is a dearth of research in this regard (Aebi et al., 2012; Keelan & Fremouw, 2013; Leroux et al., 2016; Seto & Lalumiere, 2010; Stevens et al., 2013; Zeng, Chu, Koh, & Teoh, 2015).

Aebi et al. (2012) tested the validity of a victim age-based typology in a sample of 223 male adolescents who were convicted of a sexual offense between 2000 and 2008 in the Canton of Zurich, Switzerland. Aebi et al. found that juveniles who offended against children were younger at the time of first offense, showed less aggression, were less frequently of foreign nationality, and more frequently abused related male victims when compared to juveniles who offended against peers or adults. These findings were consistent with results from seminal studies (Hart-Kerkhoffs, Doreleijers, Jansen, van Wijk, & Bullens, 2009; Hendriks & Bijleveld, 2004; Hunter, Figueredo, Malamuth, & Becker, 2003). Aebi et al. also provided evidence that juveniles who sexually offend

against children represent a distinct type of juvenile sexual offender that differs substantially from other types of juvenile sexual offenders. Aebi et al. articulated the need to further examine relevant patterns of sexual offending characteristics among this age-based typology to better differentiate between juveniles who offend against children and juveniles who offend against peers or adults. Family problems and early exposure to various forms of abuse were identified as areas for further research relative to these offender groups (Aebi et al., 2012).

Fanniff and Kolko (2012) examined three subgroups based on victim age using a sample of 176 male adolescents adjudicated for a sexual offense and court-ordered to participate in a community-based intervention program. The three subgroups that were examined included juveniles who offended against children, juveniles who offended against peers or adults, and juveniles with victims in both age groups (Fanniff & Kolko, 2012). Mental health diagnosis and rates of physical, sexual, and emotional abuse were also compared among these three groups (Fanniff & Kolko, 2012). Fanniff and Kolko found both similarities and differences among the age-based typologies of juvenile sexual offenders. Juveniles who offended against children were more likely to have biologically related male victims than juveniles who offended against peers or adults or juveniles who had victims in both age groups (Fanniff & Kolko, 2012). Juveniles with peer or adult victims also had increased rates of arrests and were more likely to have experienced poor parental monitoring (Fanniff & Kolko, 2012). No differences were noted among the groups with respect to rates of mental health diagnosis or rates of physical abuse, sexual abuse, or emotional abuse (Fanniff & Kolko, 2012). In addition to the need for continued

studies on age-based typologies, Fanniff and Kolko reported that future studies should address variables such as criminal history.

Further support for the value of distinguishing juvenile sex offenders by victim age was provided by Leroux et al. (2016) and Stevens et al. (2013). In addition to examining juveniles who offended against children and juveniles who offended against peers or adults, Leroux et al. investigated juveniles who had victims in both age groups. Psychiatric diagnosis and rates of physical, sexual, and emotional abuse were also compared across each of these groups (Leroux et al., 2016). Leroux et al. found that juveniles who offended against children were less sexually experienced than juveniles who offended against peers or adults. Juveniles who offended against peers or adults inflicted more physical harm on their victims and were more likely to be under the influence of alcohol or drugs at the time of the offense (Leroux et al., 2016). Juveniles who offended against children were significantly less likely to have been diagnosed with conduct disorder, whereas the mixed victim group was significantly more likely to have received a diagnosis of attention deficit hyperactivity disorder (Leroux et al., 2016). Leroux et al. also found that juveniles who offended against peers or adults had the highest rates of physical abuse (44.9%), and juveniles with victims in both age groups had the highest rates of sexual abuse (63.6%). No differences were noted among the groups with respect to emotional abuse (Leroux et al., 2016). The results of the study supported the notion that research and practice with juveniles who sexually offend should consider victim age (Leroux et al., 2016). Victim gender was also noted as an important variable to consider for future studies (Leroux et al., 2016).

Stevens et al. (2013) also examined juveniles who offended against children, juveniles who offended against peers or adults, and juveniles who had victims in both age groups. Developmental variables that were investigated included victim gender, substance use at the time of the offense, and place of residence at the time of the offense (Stevens et al., 2013). Rates of physical abuse, sexual abuse, and emotional abuse were also examined (Stevens et al., 2013). Stevens et al. found that juveniles who offended against children typically knew their victims, engaged in more sex play with boys, had either male or both male and female victims, and were subject to allegations of abuse without convictions (Stevens et al., 2013). Juveniles who offended against children were also found to have difficulty sustaining friendships, to have histories of being bullied by peers, and to have higher rates of deviant sexual fantasies (Stevens et al., 2013). Juveniles who offended against children also had higher rates of sexual abuse (Stevens et al., 2013). Juveniles who offended against peers or adults had previous violent and general convictions, had increased rates of female stranger victims, engaged in alcohol or drug use at the time of the index offense, and were more likely to use verbal threats and physical coercion during their offenses (Stevens et al., 2013). Juveniles who offended against peers or adults were also more likely to have been convicted of their offenses (Stevens et al., 2013). The subgroup of juveniles who had victims in both age groups was too small to facilitate statistical analysis (Stevens et al., 2013). The findings of the study suggested that it is valid to distinguish juveniles who offend against children from juveniles who offend against peers or adults both from a theoretical perspective and a clinical perspective (Stevens et al., 2013). Stevens et al. further articulated that it is

imperative that additional studies be conducted to expand the current knowledge base regarding developmental and offense-related characteristics of these two offender groups.

Problem Statement

Juvenile sexual offending is a serious issue that exacts considerable personal and public costs and has severe and long-lasting consequences (Zeng et al., 2015).

Researchers have reported concerns about the escalating prevalence of these offenses over the previous two decades, which are at an all-time high (Caldwell, 2010). Juveniles adjudicated for sexual offenses are frequently described as homogenous, collectively viewed as inherently dangerous, and subject to specialized legal and clinical interventions (Chaffin, 2008; Harris, Walfield, Shields, & Letourneau, 2016; Letourneau & Miner, 2005). However, literature on juveniles who sexually offend suggested heterogeneity with varying degrees of risk and treatment needs (Aebi et al., 2012; Fanniff & Kimonis, 2014; Finkelhor, Ormrod, & Chaffin, 2009; Stevens et al., 2013). More specifically, empirically based studies about juvenile sexual offenders has identified several typologies, suggesting that juvenile sexual offenders are a heterogeneous group (Fanniff & Kolko, 2012; Joyal, Carpentier, & Martin, 2016; Keelan & Fremouw, 2013; Seto & Lalumiere, 2010; Stevens et al., 2013).

Several methods of subtyping offenders have been proposed, the validity of which is evaluated by determining whether subgroups differ on theoretically relevant constructs (Fanniff & Kolko, 2012; Joyal et al., 2016; Keelan & Fremouw, 2013; Seto & Lalumiere, 2010; Stevens et al., 2013). One typology identified in the literature that was the focus of this study was victim age type, whereby a distinction was made between juveniles who

offended against children and juveniles who offended against peers or adults (Aebi et al., 2012; Leroux et al., 2016; Stevens et al., 2013; van der Put & Asscher, 2015).

Researchers have identified differences between juveniles who offend against children and juveniles who offend against peers or adults (Aebi et al., 2012; Joyal et al., 2016; Keelan & Fremouw, 2013; Leroux et al., 2016; Stevens et al., 2013; van der Put & Asscher, 2015). However, research on this particular typology of juvenile sexual offenders is still in its infancy (Aebi et al., 2012; Leroux et al., 2016; Stevens et al., 2013; van der Put & Asscher, 2015). As such, researchers have recommended further examination of the characteristics of this typology of juvenile sexual offenders to better understand these distinct groups and to inform evidence-based assessment and treatment strategies (Aebi et al., 2012; Creeden, 2013; Fanniff & Kimonis, 2014; Joyal et al., 2016; Leroux et al., 2016; Martin & Tardif, 2014; Spice, Viljoen, Litzman, Scalora, & Ulman, 2012; Stevens et al., 2013; van der Put & Asscher, 2015). In addition to the need for further studies in this area, a review of the literature highlighted a lack of peer-reviewed studies that compared family composition such as single, intact, divorced or separated, blended families, and out-of-home placements, abuse histories, mental health diagnosis, and offense type of juveniles who offend against children and juveniles who offend against peers or adults in Canada.

Purpose of the Study

The purpose of this non-experimental quantitative study was to compare family composition, abuse histories, mental health diagnosis, and offense type of a sample of male juvenile sexual offenders ages 11 to 18 referred for assessment or treatment for

sexual offenses in the province of Alberta, Canada. I compared the differences between juveniles who offended against children and juveniles who offended against peers or adults. These subgroups were identified and defined based on their offense history at the time of referral. Family composition referred to where or with whom the youth was living at the time of the offense. The specific variables that were investigated included living with one biological parent, living with both biological parents, living in a blended family, living with extended family, living with an adoptive family, living in a group home, or living in foster care. Abuse history pertained to the presence or absence of physical abuse, sexual abuse, emotional abuse, and neglect. Exposure to domestic violence was also investigated. Mental health diagnosis included all of the diagnoses present at the time of referral. The specific variables of mental health diagnoses that were examined included anxiety, depression, attention deficit hyperactivity disorder, conduct disorder, fetal alcohol spectrum disorder, and oppositional defiance disorder. Offense type referred to all of the sexual offenses reported and documented at the time of referral. These included examination of hands-on sexual offenses and hands-off sexual offenses. The hands-on variables that were investigated included kissing, fondling, frottage, cunnilingus, fellatio, vaginal intercourse, and anal intercourse. The hands-off variables that were investigated were exhibitionism, voyeurism, fetishism, and obscene communication. This study provided researchers and practitioners with a more comprehensive understanding of the differences between juveniles who offend against children and juveniles who offend against peers or adults. The independent variables

were family composition, abuse history, mental health diagnosis, and offense type. The dependent variable was sex offender group.

Research Questions and Hypotheses

This research project addressed the following questions and hypotheses:

Research Question 1: Do juveniles who offend against children differ from juveniles who offend against peers or adults with respect to family composition?

H₀1: There is no significant difference between juveniles who offend against children and juveniles who offend against peers or adults with respect to family composition.

H_a1: There is a significant difference between juveniles who offend against children and juveniles who offend against peers or adults with respect to family composition.

Research Question 2: Do juveniles who offend against children differ from juveniles who offend against peer or adults with respect to rates of physical abuse?

H₀2: There is no significant difference between juveniles who offend against children and juveniles who offend against peers or adults with respect to rates of physical abuse.

H_a2: There is a significant difference between juveniles who offend against children and juveniles who offend against peers or adults with respect to rates of physical abuse.

Research Question 3: Do juveniles who offend against children differ from juveniles who offend against peer or adults with respect to rates of sexual abuse?

H₀₃: There is no significant difference between juveniles who offend against children and juveniles who offend against peers or adults with respect to rates of sexual abuse.

H_{a3}: There is a significant difference between juveniles who offend against children and juveniles who offend against peers or adults with respect to rates of sexual abuse.

Research Question 4: Do juveniles who offend against children differ from juveniles who offend against peer or adults with respect to rates of emotional abuse?

H₀₄: There is no significant difference between juveniles who offend against children and juveniles who offend against peers or adults with respect to rates of emotional abuse.

H_{a4}: There is a significant difference between juveniles who offend against children and juveniles who offend against peers or adults with respect to rates of emotional abuse.

Research Question 5: Do juveniles who offend against children differ from juveniles who offend against peers or adults with respect to rates of neglect?

H₀₅: There is no significant difference between juveniles who offend against children and juveniles who offend against peers or adults with respect to rates of neglect.

H_{a5}: There is a significant difference between juveniles who offend against children and juveniles who offend against peers or adults with respect to rates of neglect.

Research Question 6: Do juveniles who offend against children differ from juveniles who offend against peers or adults with respect to exposure to domestic violence?

H₀6: There is no significant difference between juveniles who offend against children and juveniles who offend against peers or adults with respect to exposure to domestic violence.

H_a6: There is a significant difference between juveniles who offend against children and juveniles who offend against peers or adults with respect to exposure to domestic violence.

Research Question 7: Do juveniles who offend against children differ from juveniles who offend against peers or adults with respect to rates of mental health diagnosis?

H₀7: There is no significant difference between juveniles who offend against children and juveniles who offend against peers or adults with respect to mental health diagnosis.

H_a7: There is a significant difference between juveniles who offend against children and juveniles who offend against peers or adults with respect to mental health diagnosis.

Research Question 8: Do juveniles who offend against children differ from juveniles who offend against peers or adults with respect to offense type?

H₀8: There is no significant difference between juveniles who offend against children and juveniles who offend against peers or adults with respect to offense type.

H_a8: There is a significant difference between juveniles who offend against children and juveniles who offend against peers or adults with respect to offense type.

Theoretical Framework for the Study

The theoretical framework that guided this study was developmental-contextual theory proposed by Ryan et al. (1993) and Ryan and Associates (1999). Developmental-contextual theory focuses on the interaction of an individual's developmental status within the context of life experiences that are thought to continually shape human functioning (Ryan, 2010). According to developmental-contextual theory, the accommodation and assimilation of a person's experiences from birth impact the individual's phenomenological perception (Ryan, 2010). Contextual theories refer to a person's view of the world or the individual's unique way of understanding and anticipating life experiences based on diverse life experiences and on the individual's beliefs and perceptions (Ryan, 2010). A developmental-contextual approach supports an individualized and holistic understanding of sexually abusive youths and is able to inform assessment, intervention, and treatment with various typologies of juvenile sexual offenders (Ryan, 2010). I present a more detailed description of developmental-contextual theory in Chapter 2.

Nature of the Study

The current study was quantitative in nature. The quantitative research design that best suited the research questions was a naturalistic or between-groups design (Creswell, 2013). A between-groups design was selected because the study was designed to examine the differences between family composition, abuse histories, mental health

diagnosis, and offense type of juveniles who offended against children and juveniles who offended against peers or adults. The study was archival in nature and included secondary data collected from historical records. I also relied on data collected at the time of referral for assessment or treatment. The independent variables included family composition, abuse history, mental health diagnosis, and offense type. The dependent variable was offender group. Data collection addressed the number of victims, sex of the victims, age at time of first offense, and victim age.

Definitions

Many terms used in the study have more than one definition in the seminal and current peer-reviewed literature. The following definitions were used for the purpose of this study.

Adult victim: A person who was legally an adult when he or she became the victim of a sexual offense (Ryan, 2010).

Anxiety: Excessive anxiety and worry about a number of activities or events such that the intensity, duration, and frequency of the anxiety is out of proportion to the actual likelihood or impact of the anticipated event (American Psychiatric Association, 2013).

Attention deficit hyperactivity disorder: A persistent pattern of inattention and/or hyperactivity and impulsivity that interferes with development or functioning (American Psychiatric Association, 2013).

Child victim: A victim who is 3 or more years younger than the individual who committed a sexual offense against them (Aebi et al., 2012; Seto & Lalumiere, 2010).

Conduct disorder: A repetitive and persistent pattern of behaviour in which the basic rights of others or major age-appropriate societal norms or rules are violated (American Psychiatric Association, 2013). Conduct disorder can be manifested in aggression toward people and animals, destruction of property, theft or deceitfulness, serious violations of rules, lack of concern with performance, and shallow or deficient affect (American Psychiatric Association, 2013).

Depression: The presence of sad, empty, or irritable mood that is accompanied by cognitive and somatic changes that significantly affect an individual's capacity to function (American Psychiatric Association, 2013).

Domestic violence: Violence committed by a spouse, ex-spouse, current or former boyfriend or girlfriend (Saltzman, Fanslow, McMahon, & Shelly, 2002). The violence can be physical, sexual, or psychological in nature (Saltzman et al., 2002). Domestic violence can be perpetrated among heterosexual couples or same-sex couples with no requirement of sexual intimacy (Saltzman et al., 2002).

Emotional abuse: Any form of emotional maltreatment that endangers the survival, safety, self-esteem, growth, or development of a child or adolescent (Royal Canadian Mounted Police, 2008).

Fetal alcohol spectrum disorder: A neurobehavioral disorder associated with prenatal alcohol exposure (American Psychiatric Association, 2013). Because the study included archival data, most of the participants would have received a diagnosis of fetal alcohol spectrum disorder, so this term was used for the study. Fetal alcohol spectrum disorder is the manifestation of impairment in neurocognitive, behavioural, and adaptive

functioning associated with prenatal alcohol exposure (American Psychiatric Association, 2013).

Hands-off sexual offense: A sexual offense that does not involve direct contact with the victim (Ryan, 2010). These offenses include exhibitionism, voyeurism, fetishism, and obscene communication (Ryan, 2010).

Hands-on sexual offense: A sexual offense that involves direct contact with the victim (Ryan, 2010). These offenses include kissing, fondling, frottage, fellatio, vaginal intercourse, and anal intercourse (Ryan, 2010).

Juvenile sexual offender: An individual between the ages of 11 and 18 referred for assessment or treatment for a sexual offense in the province of Alberta, Canada.

Mixed offender: An individual who has sexually offended against a child, as well as against a peer or adult (Stevens et al., 2013).

Neglect: A form of child abuse that includes negligence or maltreatment that endangers the health, survival, safety, self-esteem, growth, or development of a child or adolescent (Royal Canadian Mounted Police, 2008). Neglect includes failure to provide the basic necessities of life such as adequate food, clothing, shelter, health care, emotional nurturing, or supervision (Royal Canadian Mounted Police, 2008). Acts of abandonment or reckless endangerment also constitute neglect (Royal Canadian Mounted Police, 2008).

Oppositional defiance disorder: A pattern of angry/irritable mood, argumentative and defiant behaviour, or vindictiveness that lasts for at least six months (American Psychiatric Association, 2013).

Peer victim: A victim who is either the same age as the individual who committed a sexual offense against him or her, or a victim who is under the age of 18 but within 3 years of age of the individual who committed a sexual offense against them (Aebi et al., 2012; Seto & Lalumiere, 2010).

Physical abuse: Any form of physical maltreatment that endangers the survival, safety, self-esteem, growth, or development of a child or adolescent (Royal Canadian Mounted Police, 2008).

Sexual abuse: Any sexual interaction with person(s) of any age that is perpetrated (a) against the victim's will; (b) without consent; or (c) in an exploitive, aggressive, manipulative, or threatening manner (Ryan, 2010). Sexual abuse may involve one or more sexual behaviours, as well as more than one type of sexual deviancy (Ryan, 2010).

Assumptions

I assumed that the archival data that were used for this study were accurately collected. I also assumed that the client or participant files were complete and well maintained. These assumptions were necessary because it was not possible to confirm how the data were originally collected. It was also impossible to determine whether the files that were used for the study were complete in terms of the information they contained.

Scope and Delimitations

The scope of this study included between-group differences among juveniles who sexually offended against children and juveniles who sexually offended against peers or adults in Alberta, Canada. The archival sample consisted of male youths between 11 and

18 years of age. More specifically, the sampling frame consisted of male adolescents who were referred for assessment or treatment for sexual offenses in the province of Alberta, Canada. The sample was divided into two main groups: juveniles who had offended against children and juveniles who had offended against peers or adults. A juvenile sexual offender was defined as any individual between the ages of 11 and 18 who had been referred for assessment or treatment for a sexual offense in the province of Alberta, Canada. A child victim was defined as a victim who was 3 or more years younger than the individual who committed a sexual offense against him or her (Aebi et al., 2012; Seto & Lalumiere, 2010). A peer victim was defined as a victim who was either the same age as the individual who committed a sexual offense against him or her, or a victim who was under the age of 18 but within 3 years of age of the individual who committed a sexual offense against him or her (Aebi et al., 2012; Seto & Lalumiere, 2010). An adult victim was defined as a person who was legally an adult when he or she became the victim of a sexual offense (Ryan, 2010).

Assignment to each of these victim age-based groups was based on the index offense that prompted the referral to Alberta Health Services and on all prior sexual offenses documented in the file provided by Alberta Health Services. For example, a youth whose index offense was perpetrated against a child but who had a previously documented sexual offense against a peer was categorized as having victims in both age groups. As such, these youths were excluded from the study.

The inclusion criteria for the study included male youths between the ages of 11 and 18 who had been referred for assessment or treatment to Alberta Health Services for

a sexual offense perpetrated against a child, peer, or adult victim in the province of Alberta, Canada. Exclusion criteria for the study included female adolescents, male youths who fell outside of the stated age range, and male youths who had not been referred for assessment or treatment for a sexual offense in the province of Alberta, Canada. Individuals with non-victims such as child pornography offenders were also excluded from the sample, as were youths with child victims and peer or adult victims. More specifically, juveniles who had victims in both age groups were excluded from the study. These exclusions were made to answer each of the eight research questions that formed the basis of this study. The target population included all male juvenile sexual offenders ages 11 to 18 who reside in Canada.

Limitations

There were several limitations in the study. These centered primarily on the use of archival data and the use of a convenience sample. The first limitation of the study was the use of archival data, which limited my control over the variables (see Frankfort-Nachmias, Nachmias, & Dewaard, 2015). A second limitation was the fact that I did not have control over the quality of the data (see Frankfort-Nachmias et al., 2015). In this regard, I operated under the assumption that the information provided to me was accurate and complete. A third limitation was that some of the data relied on self-report, and participants might not have been fully truthful with respect to the information provided (see Frankfort-Nachmias et al., 2015). Fourth, I used a convenience sample, which may not have been representative of the target population (see Frankfort-Nachmias et al., 2015). Last, use of a convenience sample limited generalizability of the results to other

populations (see Frankfort-Nachmias et al., 2015). More specifically, this study was limited by the fact that I was not able to examine all male juvenile sexual offenders ages 11 to 18 across Canada. As a result, findings are not fully representative of the target population I wished to make inferences about. For example, the archival sample comprised youths who need not have been charged or convicted of a sexual offense. Consequently, the results may not be generalizable to juveniles who had been adjudicated for sexual offenses. Furthermore, the results may not be generalizable to adolescents who have sexually offended but who have not been caught or otherwise identified as having committed a sexual offense. In this regard, the sampling frame was not representative of all of the individuals in the larger population who have sexually offended against children or who have sexually offended against peers or adults. I address each of the limitations in more detail in Chapter 5.

Significance

This study adds to the current knowledge base regarding victim age-based typologies (Aebi et al., 2012; Joyal et al., 2016; Keelan & Fremouw, 2013; Leroux et al., 2016; Stevens et al., 2013; van der Put & Asscher, 2015) and fills a gap in the literature by focusing on the differences between family composition, abuse histories, mental health diagnosis, and offense type of juveniles who offend against children and juveniles who offend against peers or adults within Alberta, Canada. This study was unique because it addressed an under-researched area of youths who have sexually offended (see Aebi et al., 2012; Joyal et al., 2016; Keelan & Fremouw, 2013; Leroux et al., 2016; Stevens et al., 2013; van der Put & Asscher, 2015). The results highlighted the risks and

needs of these two distinct offender groups (see Aebi et al., 2012; Fanniff & Kolko, 2012; Joyal et al., 2016; Keelan & Fremouw, 2013; Leroux et al., 2016; Stevens et al., 2013; Zeng et al., 2015) and provided information to inform evidence-based assessment and treatment strategies (see Creeden, 2013; Fanniff & Kimonis, 2014; Joyal et al., 2016; Martin & Tardif, 2014; Spice et al., 2012). The results may also be used to improve risk assessment practices (see Rajlic & Gretton, 2010; van der Put et al., 2013) and to inform public policy (see Fanniff & Kolko, 2012). One practical application of this study is the ability to identify and target youth who may be at-risk of sexually offending (see Rajlic & Gretton, 2010; van der Put et al., 2013).

Regarding positive social change, this study adds to the current knowledge base regarding risk factors for youths who sexually offend and provides important information for researchers and practitioners across a wide range of disciplines. Implications encompass a broad range of areas such as education and the development of preventative programs and treatment programs. Increased community safety and the reduction of stigma associated with juvenile sexual offending are also areas of social change.

Summary

In addition to background information related to the topic of study, Chapter 1 provided the problem statement, the purpose of the study, the research questions and hypotheses, and the theoretical framework that guided the study. I also described the nature of the study, provided a comprehensive list of operational definitions, and stated the assumptions, scope and delimitations, limitations, and significance of the study. In Chapter 2, I review the literature related to developmental-contextual theory, juvenile

sexual offending, family composition, physical abuse, sexual abuse, emotional abuse, neglect, and exposure to domestic violence. Mental health diagnosis and offense type are also discussed in Chapter 2.

Chapter 2: Literature Review

Juvenile sexual offending is a serious problem that exacts considerable personal and public costs and has severe and long-lasting consequences (Joyal et al., 2016; Keelan & Fremouw, 2013; Margari et al., 2015; Zeng et al., 2015). There has been escalating concern about the prevalence of these offenses, which are at an all-time high (Caldwell, 2010). Juveniles adjudicated for sexual offenses are frequently described as homogenous, collectively viewed as inherently dangerous, and subject to specialized legal and clinical interventions (Chaffin, 2008; Letourneau & Miner, 2005). However, literature on juveniles who sexually offend indicated heterogeneity in this group with varying degrees of risk and treatment needs (Aebi et al., 2012; Fanniff & Kimonis, 2014; Finkelhor et al., 2009; Joyal et al., 2016; Stevens et al., 2013; Zeng et al., 2015). Empirically based knowledge about juvenile sexual offenders has identified several typologies, suggesting that juvenile sexual offenders are a heterogeneous group (Fanniff & Kolko, 2012; Joyal et al., 2016; Keelan & Fremouw, 2013; Seto & Lalumiere, 2010; Stevens et al., 2013; Zeng et al., 2015).

Several methods of subtyping offenders have been proposed, the validity of which is evaluated by determining whether subgroups differ on theoretically relevant constructs (Fanniff & Kolko, 2012; Joyal et al., 2016; Keelan & Fremouw, 2013; Seto & Lalumiere, 2010; Stevens et al., 2013; Zeng et al., 2015). One typology identified in the current literature was victim age, and a distinction is made between juveniles who offend against children and juveniles who offend against peers or adults (Aebi et al., 2012; Leroux et al., 2016; Stevens et al., 2013; van der Put & Asscher, 2015; Zeng et al., 2015). Researchers

have identified differences between juveniles who offend against children and juveniles who offend against peers or adults (Aebi et al., 2012; Joyal et al., 2016; Keelan & Fremouw, 2013; Leroux et al., 2016; Stevens et al., 2013; van der Put & Asscher, 2015; Zeng et al., 2015). However, research on this particular typology of juvenile sexual offenders is still in its infancy (Aebi et al., 2012; Leroux et al., 2016; Stevens et al., 2013; van der Put & Asscher, 2015). As such, there was a need to further examine the characteristics of this typology of juvenile sexual offenders to better understand these distinct groups and to inform evidence-based assessment and treatment strategies (Aebi et al., 2012; Creeden, 2013; Fanniff & Kimonis, 2014; Joyal et al., 2016; Leroux et al., 2016; Martin & Tardif, 2014; Spice et al., 2012; Stevens et al., 2013; van der Put & Asscher, 2015; Zeng et al., 2015). In addition to the need for further studies in this area, a review of the current literature indicated a lack of peer-reviewed studies that compare family composition such as single, intact, divorced or separated, blended families, and out-of-home placements, abuse histories, mental health diagnosis, and offense type of juveniles who offend against children and juveniles who offend against peers or adults in Canada.

The purpose of this study was to compare family composition, abuse histories, mental health diagnosis, and offense type of a sample of male juvenile sexual offenders ages 11 to 18 referred for assessment or treatment for sexual offenses in the province of Alberta, Canada. I compared the differences between juveniles who offended against children and juveniles who offended against peers or adults. These subgroups were identified and defined based on their offense history at the time of referral. Family

composition referred to where or with whom the youth was living at the time of the offense. The variables that were investigated included living with one biological parent, living with both biological parents, living in a blended family, living with extended family, living with an adoptive family, living in a group home, or living in foster care. Abuse history pertained to the presence or absence of physical abuse, sexual abuse, emotional abuse, and neglect. Exposure to domestic violence was also investigated. Mental health diagnosis included all of the diagnoses present at the time of referral. The specific variables of mental health diagnoses that were examined included anxiety, depression, attention deficit hyperactivity disorder, conduct disorder, fetal alcohol spectrum disorder, and oppositional defiance disorder. Offense type referred to all of the sexual offenses reported and documented at the time of referral. These included examination of hands-on sexual offenses and hands-off sexual offenses. The hands-on variables that were investigated included kissing, fondling, frottage, cunnilingus, fellatio, vaginal intercourse, and anal intercourse. The hands-off variables that were investigated were exhibitionism, voyeurism, fetishism, and obscene communication. This study provided researchers and practitioners with a more comprehensive understanding of the differences between these two groups of juvenile sexual offenders. The independent variables were family composition, abuse history, mental health diagnosis, and offense type. The dependent variable was sex offender group.

This chapter presents a review of the literature related to the study topic. The major sections are developmental-contextual theory, juvenile sexual offending, family

composition, physical abuse, sexual abuse, emotional abuse, neglect, and exposure to domestic violence. Mental health diagnosis and offense type are also discussed.

Literature Search Strategy

To conduct a thorough review of the literature, I searched multiple databases including PsychInfo, PsycARTICLES, SocINDEX, ProQuest Central, ProQuest Criminal Justice, and Pubmed. Books and resources from the Association for the Treatment of Sexual Abusers were also used to identify articles for the literature review. Key words for these searches included the following: juvenile sexual offenders, adolescent sexual offenders, youth, adolescent sex offender, sexual offending, child abuse, childhood abuse, childhood maltreatment, sex offenses, mental disorders, risk factors, neglect, domestic violence, child victim, and adult victim. Combinations of key words included mental disorders and sexual offending, sex offenses and mental disorders, adolescents and sexual offending and risk factors, mental disorders and youth and offending, and subtypes and sexual offending. The literature review included peer-reviewed studies published between 2012 and 2016. Seminal research was also used as a basis for the literature review.

Developmental-Contextual Theory

Developmental-contextual theory emphasizes an individual's developmental status within the context of life experiences that are thought to continually shape human functioning (Ryan, 2010). Proposed by Ryan et al. (1993) and Ryan and Associates (1999), developmental-contextual theory integrates theories relevant to attachment (Steele, 1987), growth and development (Strayhorn, 1988), and phenomenology

(Yochelson & Samenow, 1976). A developmental-contextual approach supports an individualized and holistic approach to understanding all sexually abusive youth and is able to inform assessment, intervention, and treatment with various typologies of adolescent sexual offenders (Ryan, 2010).

Developmental-contextual theory adheres to four basic assumptions (Ryan & Associates, 1999). These assumptions include (a) the notion that each person is a unique individual with diverse life experiences; (b) the idea that development is epigenic, whereby each stage builds on previous stages and involves constant interaction and interplay between genetic attributes and individual experiences; (c) the idea that experience begins at birth in the interaction between an infant and his or her primary caregiver with respect to attachment; and (d) that in the relationship with the attachment figure, the infant develops an internal working model of the world and how best to adapt to survive (Ryan & Associates, 1999).

A review of the literature did not indicate any current peer-reviewed or seminal studies that applied developmental-contextual theory as described in my study. However, support for the application of developmental-contextual theory within the context of the current study is provided by numerous studies that cite a trend or movement towards a holistic and integrated approach to understanding and treating juvenile sexual offending (Leroux et al., 2016; Seto & Lalumiere, 2010; Spice et al., 2012; Stevens et al., 2013). The establishment of an empirically supported victim age-based typology of juvenile sexual offender warranted the use of a developmental-contextual approach relative to this

diverse population of juvenile offenders (see Creeden, 2013; Ryan, 2010; Ryan & Associates, 1999).

Developmental-contextual theory was chosen as the basis for the current study because it allows for consideration of a multitude of unique factors that are deemed relevant to juvenile sexual offending (Ryan, 2010). Developmental-contextual theory considers abusiveness, sexuality, and youth as three separate domains (Ryan, 2010). Each domain is represented in the problem and offers opportunities for understanding and change (Ryan, 2010). Developmental-contextual theory is based on the premise that interventions for juvenile sexual offenders have typically been motivated by the belief that there is a better prognosis for change if treatment occurs while these individuals are still growing and developing (Ryan, 2010). In this regard, a developmental perspective is particularly compelling (Ryan, 2010). As each element of developmental-contextual theory contributes to understanding differences in what might be relevant in the treatment of sexually abusive youth, each element also contributes to understanding what must be prevented to reduce the incidence and prevalence of juvenile sexual offending (Ryan, 2010). Developmental-contextual theory provides a framework that allows therapists and clinicians to provide different diagnoses and treatments to sexually abusive youth with individualized and carefully selected goals and objectives (Creeden, 2013; Ryan & Associates, 1999). Adoption of a developmental-contextual approach to juvenile sexual offending fosters respectful, empathic, and individualized care, as well as restorative habilitation through a new experience of relationship and of the world (Ryan & Associates, 1999).

Developmental-contextual theory was appropriate for the current study because the intent was to better understand the differences between juveniles who offend against children and juveniles who offend against peers or adults. The research questions addressed individual and family factors as well as offense-specific factors relative to juvenile sexual offending. A developmental-contextual approach provided an ideal framework to guide this study.

Juvenile Sexual Offenders

Although the issue of juvenile sexual offending has generated considerable controversy and debate over the past several decades (Caldwell, 2010; Fanniff & Kimonis, 2014; Finkelhor et al., 2009; Gunby & Woodhams, 2010), there has been increased public and professional interest in the incidence of sexual victimization of youths by other youths in more recent years (Fanniff & Kimonis, 2014; Finkelhor et al., 2009; Gunby & Woodhams, 2010; Joyal et al., 2016; Keelan & Fremouw, 2013; Margari et al., 2015; Zeng et al., 2015). Studies indicated that juvenile sexual offenders under the age of 18 account for approximately one fourth (25.8%) of all sexual offenses known to police (Finkelhor et al., 2009). Juvenile sexual offenders also account for more than one-third (35.6%) of individuals who have committed sexual offenses against minors (Finkelhor et al., 2009). Studies further indicated that juvenile sexual offenders accounted for 17% of all sexual crimes in 2011 (U.S. Department of Justice, Federal Bureau of Investigation, 2012). More than 90% of these individuals are male adolescents (Finkelhor et al., 2009).

Victim Age-based Typology

Support for a victim age-based typology was highlighted by Stevens et al. (2013). The intent of their study was to determine which, if any, developmental and offense-related characteristics would distinguish juveniles who offended against children from juveniles who offended against peers or adults (Stevens et al., 2013). Stevens et al. also examined juvenile offenders who had victims in both age groups and non-contact sexual offenders. The two non-contact sexual offenses that were examined included accessing Internet child pornography and indecent exposure (Stevens et al., 2013). The sample consisted of 184 male juvenile sexual offenders between the ages of 10 and 21 (Stevens et al., 2013). All participants were residents of Greater London who had been convicted of a sexual offense or were alleged to have committed a sexual offense (Stevens et al., 2013).

Stevens et al. (2013) found several important differences between juveniles who offended against children and juveniles who offended against peers or adults. Juveniles who offended against children were more likely to have difficulty sustaining friendships, to have histories of being bullied, to have engaged in sex play with boys, to be familiar with their victims, to have either male or both male and female victims, to have been subject to allegations of sexual abuse without convictions, and to have had deviant sexual fantasies at the time of the offense (Stevens et al., 2013). Juveniles who offended against children were also more likely to have had histories of sexual abuse or to have had a family member subject to sexual abuse (Stevens et al., 2013). When compared with juveniles who offended against children, juveniles who offended against peers or adults

had higher conviction rates at the time of referral, had previous violent and general convictions, were more likely to have female victims, were more likely to offend against strangers, were apt to have used alcohol or drugs at the time of the offense, and were more likely to have used verbal threats and physical coercion during their offenses (Stevens et al., 2013). The mean age of juveniles who offended against peers or adults was also found to be higher than that of juveniles who offended against children (Stevens et al., 2013). These results were consistent with results from Hendricks and Bijleveld (2004) who found that the average age of juveniles who offended against children was lower at the time of the offense than juveniles who offended against peers or adults.

The smaller subgroups of adolescents who had victims in both age groups and who engaged in non-contact sexual offenses were too small for statistical analysis (Stevens et al., 2013). Nonetheless, Stevens et al. (2013) documented several interesting observations regarding these subgroups. These observations included the fact that all seven individuals who had victims in both age groups reported friendship difficulties, had two or more childhood disturbances, and were residing with family at the time of the offense (Stevens et al., 2013). Childhood disturbances were defined as aggression, self-harm, stealing, running away from home, or having had contact with mental health services on at least one occasion (Stevens et al., 2013). Additionally, all but one of the youths in the study conducted by Stevens et al. who had victims in both age groups targeted female victims, used verbal threats and physical coercion during their offenses, and had previous convictions for general offending. All of the adolescents who engaged in internet child pornography were residing with family at the time of the offense

(Stevens et al., 2013). None of these adolescents had experienced abuse or neglect or an out-of-home placement (Stevens et al., 2013). Similarly, none of the adolescents who engaged in Internet child pornography had criminal histories, psychiatric histories, or disruptions in their education (Stevens et al., 2013). Adolescents who indecently exposed targeted female victims, were in school as the time of the offense, and were residing with family at the time of the offense (Stevens et al., 2013).

No significant associations between juveniles who offended against children and juveniles who offended against peers or adults and the type of re-offending in which they engaged were noted in the study conducted by Stevens et al. (2013). Further to this, there were no statistically significant differences in the time these individuals took to re-offend (Stevens et al., 2013). None of the adolescents who used Internet child pornography re-offended, sexually or otherwise (Stevens et al., 2013). Generally speaking, the high levels of early adversity, maltreatment, and psychosocial problems affecting this particular sample of juvenile sexual offenders were consistent with results from both current peer-reviewed studies (Joyal et al., 2016; Seto & Lalumiere, 2010), as well as seminal studies (Gunby & Woodhams, 2010; Hendricks & Bijleveld, 2004; Hunter et al., 2003).

As previously noted, the results of the study conducted by Stevens et al. (2013) were promising in terms of support for a victim aged based typology. However, the results of the study were limited in their generalizability to populations outside of the United Kingdom (Stevens et al., 2013). Accordingly, similar studies on Canadian populations would add to the current knowledge base, as would studies that examine the

developmental and offense-related characteristics noted in the study executed by Stevens et al. relative to male juvenile sexual offenders. More specifically, Stevens et al. noted that the developmental and offense-related characteristics that were selected as the basis for their study were chosen based on their empirical association with sexual offending among both adult and adolescent samples. Characteristics considered salient based on the clinical experience of the researchers were also examined within the context of the study (Stevens et al., 2013). Therefore, studies of a similar design and rationale utilizing exclusively adolescent populations would add to the existing empirical knowledge base and enhance our understanding of various developmental and offense-related characteristics relative to age-based typologies of juvenile sexual offenders.

Gunby and Woodhams (2010) investigated 43 juvenile sexual offenders from England and Wales to determine whether juveniles who offended against children would differ from juveniles who offended against peers. Participants in the study consisted of male adolescents aged 10 to 17 (Gunby & Woodhams, 2010). All of the participants had been found guilty of committing a sexual offense (Gunby & Woodhams, 2010). Sexual offenses committed by these youths included both hands-on offenses such as sexual touching and penetration, as well as hands-off offenses such as exposure and voyeurism (Gunby & Woodhams, 2010).

The results of the study conducted by Gunby and Woodhams (2010) found that juveniles who offended against children had fewer age appropriate friends and were more likely to have been the victims of bullying than were juveniles who offended against peers. Juveniles who offended against children were also more likely to know their

victims and to use less physical violence in their offenses when compared to juveniles who offended against peers (Gunby & Woodhams, 2010). Additionally, juveniles who offended against children had lower self-esteem and more frequently lived in chaotic households (Gunby & Woodhams, 2010). In contrast, juveniles who offended against peers were the more frequent recipients of inconsistent supervision from parents and caregivers, were apt to have family members involved in criminal activity, more frequently came from households characterized as deprived and dependent upon benefits, and were more likely to have been exposed to domestic violence (Gunby & Woodhams, 2010). There were no differences in the groups with respect to the prevalence of mental health diagnosis or having family members involved in alcohol or drug use (Gunby & Woodhams, 2010).

The findings from the studies conducted by Gunby and Woodhams (2010) and Stevens et al. (2013) paralleled the results from seminal studies (Hendriks & Bijleveld, 2004; Hunter et al., 2003) with respect to the distinction between juveniles who offend against children and juveniles who offend against peers or adults. The study conducted by Gunby and Woodhams confirmed that juveniles who offend against children experience greater levels of social isolation, have fewer age appropriate friends, have lower self-esteem, are more frequently the target of bullying, and demonstrate more profound deficits in social competency and self-esteem (Hendriks & Bijleveld, 2004; Hunter et al., 2003).

Gunby and Woodhams (2010) used archival data as the basis for their study. The researchers identified family background variables and family characteristics as a

potential risk factor for juvenile sexual offending (Gunby & Woodhams, 2010). Their research was based on the assertion that studies conducted by other researchers failed to investigate these risk factors relative to various subtypes of juvenile sexual offenders (Gunby & Woodhams, 2010). More specifically, Gunby and Woodhams identified a lack of previously conducted studies regarding attempts to distinguish between juveniles who offended against children and juveniles who offended against peers or adults relative to family background variables and family characteristics. Although the study conducted by Gunby and Woodhams provided important information regarding victim age-based typologies of juvenile sexual offenders, a major limitation of the study centered on the fact that the population consisted of juveniles who had been convicted of a sexual offense. As such, the results were limited in their generalizability to other populations such as community-based samples of juvenile sexual offenders (Gunby & Woodhams, 2010). It is therefore imperative for future studies to investigate family background variables and family characteristics among such samples.

Current research conducted by Joyal et al. (2016) further investigated a victim age-based typology of juvenile sexual offenders. The sample included retrospective data collected from a legal forensic center in Montreal, Quebec of 351 male juvenile sexual offenders (Joyal et al., 2016). All of the participants in the study had been assessed relative to a hands-on sexual offense against a child, peer, or adult (Joyal et al., 2016). Participants were divided into three victim age-based subgroups: juveniles who offended against children, juveniles who offended against peers or adults, and juveniles with victims in both age groups (Joyal et al., 2016). Participants were also categorized based

on relationship to the victim (Joyal et al., 2016). The two independent variables that were investigated were victim age, as described above, and family relation with the victim (Joyal et al., 2016). The dependent variables that were investigated included aggression, atypical sexual interests, delinquency, social abilities, neuropsychiatric history, and victimization history (Joyal et al., 2016). Victimization history included having been the victim of a hands-on sexual assault, having been the victim of violent victimization, parental neglect, lack of supervision or physical or sexual protection, medical neglect, physical neglect, failure to provide care, exposure to an exaggerated climate of sexuality, and exposure to sexual violence in the home (Joyal et al., 2016). All of the variables were dichotomous in nature.

According to Joyal et al. (2016), juveniles who offended against peers or adults were significantly more likely to have same aged friends, to have had consensual sex with a same age peer, to have targeted unknown victims, and to have female victims (86%) when compared with juveniles who offended against children or when compared with juveniles who had victims in both age groups. Juveniles who offended against peers or adults were also more likely to present with an antisocial profile, as characterized by (a) prior diverse criminality, (b) associations with delinquent peers, (c) engagement in criminal activity with peers, (d) engagement in alcohol or drug use, and (e) to have received a diagnosis of conduct disorder (Joyal et al., 2016). One unexpected result of the study centered on the lack of statistically significant differences in the rates of interpersonal violence perpetrated by the subgroups with different victim ages (Joyal et al., 2016). The researchers hypothesized that juveniles who offended against children would

engage in less physical violence during their offenses than juveniles who offended against peers or adults or when compared with juveniles with victims in both age groups (Joyal et al., 2016). In contrast, statistically significant rates of interpersonal violence were found across all three of these offender groups (Joyal et al., 2016). The results were also surprisingly similar across all three of these offender groups (Joyal et al., 2016).

Overall, the results of the study conducted by Joyal et al. (2016) further supported the legitimacy of distinguishing juveniles who offend against children from juveniles who offend against peers or adults (Leroux et al., 2016). The results of this study also provided support for distinguishing juveniles with victims in both age groups (Leroux et al., 2016). Last, the results of the study conducted by Joyal et al. identified the utility of classifying juvenile sexual offenders on the basis of family relation with the victim, thereby highlighting this as an area of future research. One of the major limitations of the study was the fact that the sample was limited to hands-on sexual offenses (Joyal et al., 2016).

The results of the literature review on victim age-based typologies of juvenile sexual offenders provided support for continued studies in this area. Nonetheless, there were a number of limitations noted in the existing literature that endorsed the current study and were addressed by the current study. These limitations included (a) a lack of studies on juvenile sexual offenders in Canada; (b) a lack of studies on exclusively male, adolescent sexual offenders; and (c) a lack of peer-reviewed studies that examined developmental and offense-related characteristics, as well as family background variables and family characteristics relative to age-based typologies of juvenile sexual offenders.

Consideration of both hands-on offenses and hands-off offenses regarding age-based typologies of juvenile sexual offenders relative to the issues noted above was also identified as an area warranting additional research.

The current study expanded the existing knowledge through examination of a Canadian sample of adolescent male juvenile sexual offenders. Specific developmental and offense-related variables that were addressed in the current study included abuse history, mental health diagnosis, and offense type. The family background variable that was investigated was family composition.

Family Composition

Family composition has changed dramatically over the course of the last several decades (Demuth & Brown, 2004; Schroeder, Osgood, & Oghia, 2010). High rates of divorce, increases in single-parent households, the propagation of stepfamilies, and the establishment of non-parent families that included grandparent's and non-parent guardians, as well as foster parents (Kennedy & Bumpass, 2008) now characterize contemporary family life (Schroeder et al., 2010). Family structures are extremely varied today not only due to high rates of divorce and the proliferation of complex stepfamilies, but also to increasing rates of cohabitation and non-marital childbearing (Demuth & Brown, 2004).

The dramatic shifts in family composition over the past twenty years have considerably altered the living arrangements of children and adolescents (Demuth & Brown, 2004). While research on the relationship between family composition and juvenile delinquency is not new, understanding of this relationship has historically been

limited by reliance on the dichotomous distinction between adolescents residing in broken homes versus adolescents residing in intact families (Demuth & Brown, 2004). Schroeder et al. (2010) identified that research on the study of family composition and juvenile delinquency has moved beyond the dichotomous distinction between broken homes versus intact families in order to investigate the impact of more complex and specific family structures on juvenile offending.

In addition to a lack of studies that examined the more complex and specific family structures now prevalent in modern society, the majority of studies have examined family composition within the context of general offending and juvenile delinquency (Demuth & Brown, 2004; Schroeder et al., 2010). In this regard, there was a dearth of research investigating the impact of family composition and structure relative to juvenile sexual offending (Demuth & Brown, 2004; Schroeder et al., 2010). As such, this literature review contained studies pertaining to family composition and general delinquency. This literature review also contained studies that examined family composition relative to juvenile sexual offending.

Research conducted by Demuth and Brown (2004) investigated the impact of family composition on juvenile delinquency. Family structure was divided into five categories (Demuth & Brown, 2004). These categories included a two-biological-parent married family structure, a single-father family structure, a single-mother family structure, a father-stepmother family structure, and a mother-stepfather family structure (Demuth & Brown, 2004). The researchers found that mean levels of juvenile delinquency were highest among adolescents residing in single-father families (Demuth

& Brown, 2004). Mean levels of delinquency were lowest among adolescents residing in two-biological-parent married families (Demuth & Brown, 2004).

The results of the study conducted by Demuth and Brown (2004) were consistent with those found by Apel and Kaukinen (2008) who identified that adolescents residing in traditional nuclear households showed the lowest levels of juvenile delinquency. Apel and Kaukinen also noted that adolescents from blended and intact cohabiting families were more antisocial than adolescents from two-biological-parent married households. Similarly, Manning and Lamb (2003) reported that adolescents who reside in cohabiting families are more likely to show a diverse range of behavioural problems than adolescents who reside in other two-parent family structures.

Schroeder et al. (2010) relayed that the impact of cohabitation on juvenile delinquency is particularly pronounced when the residential parent is the biological father. Schroeder et al. also conveyed that there is a large body of research that supports the notion that adolescents from non-intact homes show higher rates of juvenile delinquency than adolescents from intact homes. Adolescents in households where at least one biological parent is absent show significantly higher rates of juvenile offending than adolescents from two-biological parent households (Schroeder et al., 2010).

Stevens et al. (2013) conducted a study in order to determine which, if any, developmental and offense-related characteristics would distinguish juveniles who sexually offended against children from juveniles who sexually offended against peers or adults. The researchers also examined juvenile sexual offenders who had victims in both age groups, as well as non-contact sexual offenders (Stevens et al., 2013). The variables

that were addressed included whether or not the youth was living with family or in institutional care at the time of the offense (Stevens et al., 2013). Parental divorce and separation, as well as whether or not the youth was separated from one or both biological parents were also examined (Stevens et al., 2013).

Stevens et al. (2013) found that 81% of juveniles who offended against children were living with family at the time of the offense. Approximately 78% of juveniles who offended against children had experienced parental divorce or separation and 53% of these individuals reported being separated from one or both biological parents (Stevens et al., 2013). Among juveniles who offended against peers or adults, 82% were living with family at the time of the offense, 71% of these adolescents had experienced parental divorce or separation, and 65% reported being separated from one or both biological parents (Stevens et al., 2013). Among juvenile sexual offenders who had victims in both age groups, 100% of the participants were living with family at the time of the offense (Stevens et al., 2013). Approximately 42% of juveniles with victims in both age groups had experienced parental divorce or separation (Stevens et al., 2013). Similarly, 43% of these adolescents reported being separated from one or both biological parents at the time of the offense (Stevens et al., 2013). One limitation of this study was the small sample size regarding juveniles who had victims in both age groups (Stevens et al., 2013). There were only seven juvenile offenders noted in this category, thus limiting the generalizability of the results with respect to juveniles with victims in both age groups to other populations (Stevens et al., 2013).

A more recent study carried out by Margari et al. (2015) compared 31 juvenile sexual offenders, 31 juvenile non-sexual offenders, and 31 juvenile non-offenders. The intent of the study was to identify differences among offender profiles to better understand the motivation behind sexual offending and non-sexual offending (Margari et al., 2015). Family composition was among the variables that were investigated (Margari et al., 2015). Similar to seminal studies, family composition was defined, and limited to, family units consisting of either a nuclear family or a single-parent household (Margari et al., 2015).

Data collected from the study conducted by Margari et al. (2015) found that the majority of juvenile sexual offenders resided in single-parent homes (77%). In contrast, 29% of juvenile non-sexual offenders resided in single-parent homes (Margari et al., 2015). None of the participants in the juvenile non-offender group resided in single-parent homes (Margari et al., 2015). The findings supported previous research, suggesting that residing in a single-parent home may be a risk factor for juvenile sexual offending (Margari et al., 2015). However, the results of the study conducted by Margari et al. differed from the results obtained from the study conducted by Stevens et al. (2013), particularly with respect to whom the juvenile was living with as the time of the offense.

The lack of studies on family composition and juvenile sexual offending, combined with inconsistencies in the literature, highlighted the need for additional studies to further examine the relationship between juvenile sexual offending and family composition. More specifically, there was a gap in the current literature not only with respect to studies that examined family composition and juvenile sexual offending, but

also with respect to studies that investigated only male samples and samples of age-based typologies of juvenile sexual offenders. Additionally, the majority of the studies that were reviewed examined family structures consisting primarily of intact biological families, single-father or single-mother homes, father-stepmother family structures, and mother-stepfather family structures. Stevens et al. (2013) was one of the few studies that examined family composition in relation to age-based typologies of juvenile sexual offenders. Stevens et al. examined whether or not the youth was living with one or both biological parents, as well as whether or not the youth was residing in institutional care at the time of the offense. Nonetheless, the researchers did not adequately account for the more complex family structures present in society today (Demuth & Brown, 2004; Kennedy & Bumpass, 2008; Schroeder et al. 2010). The current study addressed this gap in the literature by examining a multitude of family structures in relation to age-based typologies of juvenile sexual offenders. The variables pertaining to family composition that were addressed by the current study included living with one biological parent, living with two biological parents, living in a blended family, living with extended family, living with an adoptive family, living in a group home, and living in foster care.

Physical Abuse

Physical abuse has been consistently identified as a risk factor for juvenile sexual offending (Burton, Duty, & Lebowitz, 2011; Seto & Lalumiere, 2010). For example, a meta-analysis of 20 studies examined by Seto and Lalumiere (2010) investigated the prevalence of physical abuse among juvenile sexual offenders and non-sexually offending juvenile delinquents. Seto and Lalumiere reported that the majority of the

studies they reviewed found a higher prevalence of physical abuse among juvenile sexual offenders when compared with non-sexually offending juvenile delinquents.

Marini, Leibowitz, Burton, and Stickle (2014) investigated the relationship between childhood victimization, substance use prior to the commission of a sexual offense, and the amount of aggression used during sexual offending. The participants included 573 residentially incarcerated male juvenile sexual offenders in the United States (Marini et al., 2014). Physical abuse was one of five types of victimization that was examined (Marini et al., 2014). Physical neglect, sexual abuse, emotional abuse, and emotional neglect were also investigated, as were the effects of cumulative victimization (Marini et al., 2014). Victim age was not one of the variables addressed in the study conducted by Marini et al.

Approximately 83.5% of the sample in the study conducted by Marini et al. (2014) reported having experienced some form of physical abuse. Sixty-three percent of the sample reported having experienced all five types of abuse, 16.7% of the sample relayed having experienced four types of abuse, 11.1% of the participants endorsed having experienced three types of abuse, and 6.5% of the participants endorsed two types of abuse (Marini et al., 2014). Only 2.5% of the sample endorsed only one form of abuse (Marini et al., 2014). The experience of multiple and varied childhood victimization experiences, as opposed to exposure to one particular type of trauma, was most highly related to both increased force used during the commission of a sexual offense and increased substance use prior to the commission of a sexual offense (Marini et al., 2014).

Joyal et al. (2016) investigated the prevalence of physical abuse in a sample of 351 male juvenile sexual offenders who had been assessed relative to hands-on sexual offenses. The research participants were divided into three victim age-based subgroups: juveniles who offended against children, juveniles who offended against peers or adults, and juveniles with victims in both age groups (Joyal et al., 2016). The research participants were also categorized based on their relationship to the victim (Joyal et al., 2016).

Joyal et al. (2016) reported that approximately one third of the sample (35.3%) reported a history of physical abuse. More specifically, 35.8% of juveniles who offended against children reported a history of physical abuse, 33.7% of juveniles who offended against peers or adults reported a history of physical abuse, and 37% of juveniles with victims in both age groups reported a history of physical abuse (Joyal et al., 2016). The effect sizes ranged from .02 to .08, which suggested a small effect size (Joyal et al., 2016). There were no statistically significant differences between the groups of juvenile sexual offenders with respect to rates of physical abuse (Joyal et al., 2016). With respect to the family relation-based categories, higher rates of physical abuse were found in the sibling incest group when compared to juvenile sexual offenders with extra-familial child victims and juveniles with extra-familial peer or adult victims (Joyal et al., 2016). In other words, Joyal et al. found that sibling incest offenders were more likely to have histories of physical abuse when compared to other subtypes of juvenile sexual offenders. Although the research conducted by Joyal et al. supported the findings of previous studies that identified physical abuse as a risk factor for juvenile sexual offending, the

researchers articulated the need for continued studies with respect to the relationship between physical abuse and juvenile sexual offending.

Several studies have examined the incidence of physical abuse among juvenile sexual offenders and non-sexually offending juvenile delinquents (Seto & Lalumiere, 2010). Collectively, researchers have identified a higher prevalence of physical abuse among juvenile sexual offenders when compared to non-sexually offending juvenile delinquents (Burton et al., 2011; Seto & Lalumiere, 2010), thereby identifying physical abuse as a risk factor for juvenile sexual offending (Burton et al., 2011). Nonetheless, there was a dearth of research regarding studies that examined rates of physical abuse among victim age-based typologies of juvenile sexual offenders (Joyal et al., 2016; Marini et al., 2014). There were also inconsistencies noted with respect to the results of the studies that were conducted on victim age-based typologies of juvenile sexual offenders (Joyal et al., 2016). For example, Joyal et al. (2016) did not find differences in rates of physical abuse among juveniles who offended against children, juveniles who offended against peers or adults, and juveniles who had victims in both age groups. Higher rates of physical abuse were however noted among incest offenders when compared to other subtypes of juvenile sexual offenders (Joyal et al., 2016). In this regard, the gap that provided justification for the current study centered on the need to expand on the existing literature regarding the occurrence of physical abuse among age-based typologies of juvenile sexual offenders within Canada.

Sexual Abuse

The relationship between childhood sexual abuse and juvenile sexual offending has been the subject of numerous studies (Joyal et al., 2016; Marini et al., 2014; Ogloff, Cutajar, Mann, & Mullen, 2012). Ogloff et al. (2012) reported that prior research on the connection between childhood sexual abuse and juvenile sexual offending has been limited by several factors including small sample sizes, an over reliance on self-report data, and a lack of studies pertaining to male juvenile offenders. In an attempt to address the limitations noted in seminal studies, Ogloff et al. examined the relationship between childhood sexual abuse and subsequent criminal offending and victimization. The purpose of the study was to determine whether or not victims of childhood sexual abuse were at increased risk of sexual offending and victimization (Ogloff et al., 2012). The sample consisted of 2,759 childhood sexual abuse victims and included both male and female participants (Ogloff et al., 2012).

Ogloff et al. (2012) found that childhood sexual abuse victims were approximately five times more likely than the general population to be charged with an offense compared to individuals without histories of childhood sexual abuse. The strongest correlations between childhood sexual abuses were for sexual offenses, as well as violent offenses (Ogloff et al., 2012). The results of the study conducted by Ogloff et al. were consistent with research conducted by Hendricks and Bijleveld (2004) who examined the prevalence of childhood abuse in juveniles who sexually offended against children and juveniles who sexually offended against peers or adults. Hendricks and Bijleveld found that approximately 16% of juveniles who sexually offended against

children reported being the victim of sexual abuse. Approximately 11% of juveniles who sexually offended against peers or adults reported being the victim of sexual abuse (Hendricks & Bijleveld, 2004). The results of the study conducted by Ogloff et al. highlighted the need for therapeutic interventions targeted at male adolescents with histories of sexual abuse. Interventions focused on healthy sexuality and addressing previous trauma were suggested as a means of reducing the increased risk posed by this particular group of adolescents (Ogloff et al., 2012).

DeLisi, Kosloski, Vaughn, Caudill, and Trulson (2014) examined the relationship between childhood sexual abuse and sexual offending relative to various other forms of serious antisocial behaviour such as serious person and property delinquency and homicide. The sample consisted of a sample of 2,520 adjudicated male adolescents (DeLisi et al., 2014). The results found the prevalence of childhood sexual abuse victimization to be nearly seven times higher among adolescents committed for sexual offenses when compared to adolescents committed for other serious crimes such as aggravated robbery and murder (DeLisi et al., 2014). More specifically, DeLisi et al. found that childhood sexual abuse increased the likelihood of juvenile sexual offending nearly six-fold (467%). Childhood sexual abuse was negatively associated with other serious crime, including aggravated robbery and homicide (DeLisi et al., 2014). Although the results of the study conducted by DeLisi et al. provided robust evidence between childhood sexual abuse and juvenile sexual offending, the researchers articulated the need for additional studies to further examine the relationship between childhood sexual abuse and juvenile sexual offending.

Marini et al. (2014) investigated the relationship between childhood victimization, substance use prior to the commission of a sexual offense, and the amount of aggression used during sexual offending. The participants included 573 residentially incarcerated male juvenile sexual offenders in the United States (Marini et al., 2014). Sexual abuse was one of five types of victimization that was examined (Marini et al., 2014). Physical abuse, physical neglect, emotional abuse, and emotional neglect were also investigated, as were the effects of cumulative victimization (Marini et al., 2014).

Approximately 72.4% of the participants in the study conducted by Marini et al. (2014) reported having experienced some form of sexual abuse. Sixty-three percent of the participants reported having experienced all five types of abuse, 16.7% of the sample relayed having experienced four types of abuse, 11.1% of the participants endorsed having experienced three types of abuse, and 6.5% of the participants endorsed two types of abuse (Marini et al., 2014). Approximately 2.5% of the sample endorsed only one form of abuse (Marini et al., 2014).

Joyal et al. (2016) investigated the relationship between sexual abuse and juvenile sexual offending. Their sample included 351 male juvenile sexual offenders that were divided by victim age and family relation to the victim (Joyal et al., 2016). One third of the victim age-based sample (32.5%) reported a history of sexual abuse (Joyal et al., 2016). There were no statistically significant differences found between juveniles who offended against children, juveniles who offended against peers or adults, or juveniles with victims in both age groups (Joyal et al., 2016). Higher rates of sexual abuse were found in the sibling incest group when compared to juvenile sexual offenders with extra-

familial child victims and juveniles with extra-familial peer or adult victims (Joyal et al., 2016).

In a meta-analysis of 31 studies investigating sexual abuse history in juvenile sexual offenders, all but two studies reported that juvenile sexual offenders had a higher prevalence of sexual abuse histories when compared with nonsexual offenders (Seto & Lalumiere, 2010). Accordingly, the consensus in the literature was that juvenile sexual offenders have high rates of sexual victimization histories when compared with nonsexual offenders (Seto & Lalumiere, 2010). Marini et al. (2014) identified that, historically, significant emphasis has been placed on examination of the sexual abuse histories of juvenile sexual offenders. They articulated that the results of the meta-analysis conducted by Seto and Lalumiere (2010) highlighted the need to consider the effects of other forms of abuse, as well as the cumulative effects of multiple types of abuse.

Similar to other forms of abuse, sexual abuse has been consistently identified as a risk factor for juvenile sexual offending (DeLisi et al., 2014; Joyal et al., 2016; Seto & Lalumiere, 2010). The gap in the current literature pertained to a lack of studies that examined sexual abuse and various populations of juvenile sexual offenders, including victim age-based typologies (DeLisi et al., 2014; Seto & Lalumiere, 2010). For example, Joyal et al. (2016) was one of the only recent studies located that examined sexual abuse history relative to a victim age-based typology of juvenile sexual offender. Researchers also identified the need to focus on exclusively male samples in examining the

relationship between sexual abuse history and juvenile sexual offending (Ogloff et al., 2012). The current study addressed both of these gaps.

Emotional Abuse

Physical and sexual abuse have been consistently identified throughout the literature as risk factors for juvenile sexually offending, yet very little is known about the impact of emotional abuse in relation to juvenile sexual offending (Marini et al., 2014; Zurbriggen, Gobin, & Freyd, 2010). Although emotional abuse has been significantly less studied than physical abuse or sexual abuse, emotional abuse has been consistently identified as a strong predictor of negative outcomes among adolescents (Zurbriggen et al., 2010). For example, studies that have examined multiple forms of abuse simultaneously have found that the effects of emotional abuse remain stable even when controlling for the presence of physical abuse and sexual abuse (Zurbriggen et al., 2010). Accordingly, researchers have identified the need to consider all forms of maltreatment in order to fully understand the long-term impact of multiple forms of abuse on the emotional and psychological well-being of adolescents (Zurbriggen et al., 2010).

Recently, researchers have begun to acknowledge the importance of taking into account a broader perspective that considers multiple forms of abuse and maltreatment when examining victimization profiles (Marini et al., 2014; Zurbriggen et al., 2010). Marini et al. (2014) and Zurbriggen et al. (2010) reported that there has been an increased interest in understanding the effects of emotional abuse relative to juvenile sexual offending. The sentiments of Marini et al. and Zurbriggen et al. echoed the concerns expressed by Finkelhor, Ormrod, and Turner (2007) who relayed that although previous

studies excluded emotional abuse from consideration, there is a need to account for all forms of abuse to better understand the unique contribution of specific types of abuse relative to mental health outcomes and social functioning of adolescents who sexually offend.

Zurbriggen et al. (2010) conducted a study in order to examine whether or not childhood emotional abuse would be positively associated with late adolescent sexual aggression victimization and late adolescent sexual aggression perpetration among both male and female college students after controlling for both childhood physical abuse and childhood sexual abuse. Childhood emotional abuse was found to be positively correlated with adolescent sexual aggression victimization, as well as with adolescent sexual perpetration (Zurbriggen et al., 2010). These results were true for both male and female adolescents (Zurbriggen et al., 2010). However, the correlation between adolescent sexual aggression victimization and adolescent sexual perpetration was stronger for males than for females (Zurbriggen et al., 2010). This effect was not only robust but held in most cases even after controlling for childhood physical abuse and childhood sexual abuse (Zurbriggen et al., 2010). The results of the study conducted by Zurbriggen et al. were largely consistent with results from a meta-analysis conducted by Seto and Lalumiere (2010) who found higher rates of emotional abuse among juvenile sexual offenders compared with non-sexually offending delinquent adolescents. Similarly, Burton et al. (2011) reported that perpetrators of child sexual abuse who had been victims of sexual abuse had higher rates of emotional abuse. The results of the study conducted by Zurbriggen et al. highlighted the importance of emotional abuse as a

risk factor for later sexual victimization and sexual perpetration, particularly among male survivors of childhood emotional abuse.

Marini et al. (2014) examined the relationship between childhood victimization, substance use prior to the commission of a sexual offense, and the amount of aggression used during sexual offending. The participants included 573 residentially incarcerated male juvenile sexual offenders in the United States (Marini et al., 2014). Emotional abuse was one of five types of victimization that was examined (Marini et al., 2014). Physical abuse, physical neglect, sexual abuse, and emotional neglect were also investigated, as were the effects of cumulative victimization (Marini et al., 2014). The researchers did not account for, or examine, victim age (Marini et al., 2014).

Approximately 79.6% of the sample in the study conducted by Marini et al. (2014) reported having experienced some form of emotional abuse. Sixty-three percent of the sample reported having experienced all five types of abuse, 16.7% of the sample relayed having experienced four types of abuse, 11.1% of the participants endorsed having experienced three types of abuse, and 6.5% of the participants endorsed two types of abuse (Marini et al., 2014). Only 2.5% of the sample endorsed only one form of abuse (Marini et al., 2014). Marini et al. found that the experience of multiple and varied childhood victimization experiences, rather than exposure to only form of trauma or abuse, was most highly related to both increased force used during the commission of a sexual offense and increased substance use prior to the commission of a sexual offense.

Although it has been less studied that other forms of abuse, emotional abuse has been identified as a strong predictor of negative outcomes among adolescents

(Zurbriggen et al., 2010). Accordingly, researchers have recently begun to acknowledge the importance of considering the relationship between emotional abuse and juvenile sexual offending (Marini et al., 2014; Zurbriggen et al., 2010). The research that has been conducted to date on the relationship between emotional abuse and juvenile sexual offending highlighted the need for continued studies in this area (Burton et al., 2011; Marini et al., 2014; Seto & Lalumiere, 2010; Zurbriggen et al., 2010). There were several limitations noted in the current literature that warrant mention.

Two major limitations noted in the existing literature on emotional abuse and juvenile sexual offending included a lack of studies pertaining to exclusively adolescent male juvenile sexual offenders (Marini et al., 2014; Seto & Lalumiere, 2010; Zurbriggen et al., 2010), as well as a lack of studies investigating the relationship between emotional abuse and various subtypes of juvenile sexual offenders (Marini et al., 2014). One such subtype was an age-based typology of juvenile sexual offenders. A lack of studies that examined emotional abuse and juvenile sexual offending among Canadian samples was found. The study addressed both of these limitations.

Neglect

Similar to all other forms of abuse, neglect has been identified as a risk factor for juvenile sexually offending (Marini et al., 2014; Seto & Lalumiere, 2010). For example, a meta-analysis conducted by Seto and Lalumiere (2010) found higher rates of neglect among juvenile sexual offenders when compared with non-sexually offending delinquent adolescents. Support for neglect as a risk factor for juvenile sexual offending was also reported by Gunby and Woodhams (2010) who examined the prevalence of neglect

among a victim age-based typology of 43 juvenile sexual offenders. Gunby and Woodhams found that juveniles who sexually offended against peers or adults were more frequently the recipients of inconsistent supervision from their primary caregivers and were more likely to come from households characterized as deprived and dependent upon benefits than juveniles who sexually offended against children.

The results of the meta-analysis conducted by Seto and Lalumiere (2010) and the study conducted by Gunby and Woodhams (2010) supported the results from seminal studies. Hendricks and Bijleveld (2004) found that 28% of juveniles who sexually offended against children reported being the victim of neglect. Approximately 42% of juveniles who sexually offended against peers or adults reported being the victim of neglect (Hendricks & Bijleveld, 2004). Recent research conducted by Joyal et al. (2016) confirmed the results of previous studies in that more than half of the victim age-based participants (56.6%) reported a history of neglect.

Marini et al. (2014) investigated the relationship between childhood victimization, substance use prior to the commission of a sexual offense, and the amount of aggression used during sexual offending. The participants included 573 residentially incarcerated male juvenile sexual offenders in the United States (Marini et al., 2014). Physical neglect and emotional neglect were two forms of abuse examined by the researchers (Marini et al., 2014). Physical abuse, sexual abuse, and emotional abuse were also investigated, as were the effects of cumulative victimization (Marini et al., 2014). Victim age was not one of the variables addressed in the study (Marini et al., 2014).

Marini et al. (2014) found that 84.8% of the sample reported having experienced some form of physical neglect and 15.9% of the participants reported having experienced some form of emotional neglect. Sixty-three percent of the sample reported having experienced all five types of abuse, 16.7% of the sample endorsed having experienced four types of abuse, 11.1% of the participants reported having experienced three types of abuse, and 6.5% of the participants endorsed two types of abuse (Marini et al., 2014). Approximately 2.5% of the sample endorsed only one form of abuse (Marini et al., 2014). The experience of multiple and varied childhood victimization experiences, as opposed to exposure to one particular type of trauma, was most highly related to both increased force used during the commission of a sexual offense and increased substance use prior to the commission of a sexual offense (Marini et al., 2014).

Joyal et al. (2016) investigated a victim age-based typology in a sample of 351 male juvenile sexual offenders. The participants were divided into three victim age-based subgroups: juveniles who offended against children, juveniles who offended against peers or adults, and juveniles with victims in both age groups (Joyal et al., 2016). The participants were also categorized based on relationship to the victim (Joyal et al., 2016). Approximately half of the sample (56.6%) reported a history of neglect (Joyal et al., 2016). These results combined with the results of previous studies (Gunby & Woodhams, 2010; Henricks & Bijleveld, 2004; Marini et al., 2014; Seto & Lalumiere, 2010) supported the relationship between childhood neglect and juvenile sexual offending as an area requiring continued attention.

Neglect has been identified as a risk factor for juvenile sexual offending (Marini et al., 2014; Seto & Lalumiere, 2010). However, there were three major limitations noted in the current literature on neglect and juvenile sexual offending. First, most of the studies located in the literature compared rates of neglect among juvenile sexual offenders and non-sexually offending delinquent youth (Seto & Lalumiere, 2010). Second, very few studies examined neglect relative to an age-based typology of juvenile sexual offender (Marini et al., 2014; Seto & Lalumiere, 2010). Of the three studies reviewed that investigated the prevalence of neglect in relation to an age-based typology of juvenile sexual offender, one was limited by a small sample size (Gunby & Woodhams, 2010), and two were outdated (Gunby & Woodhams, 2010; Hendricks & Bijleveld, 2004). Last, the existing studies were limited in the generalizability of their results to Canadian populations of juvenile sexual offenders. The current study expanded on the results of previous studies and filled a gap in the literature through the examination of neglect relative to age-based typologies of juvenile sexual offenders in Canada.

Exposure to Domestic Violence

Over the past two decades, a substantial amount of empirical evidence has established a link between exposure to domestic violence and its detrimental impact on the emotional and psychological well-being of adolescents (Chan & Yeung, 2009). While it is generally accepted that exposure to domestic violence presents as a risk factor for adolescents, there is wide variability in adjustment outcomes related to exposure to domestic violence (Chan & Yeung, 2009). The results of seminal studies (El-Sheikh & Elmore-Staton, 2004; Guille, 2004; Stith, Smith, Penn, Ward, & Tritt, 2004), have

identified that exposure to domestic violence is similar to other contextual and psychosocial stressors, whereby adolescents who are exposed to domestic violence are usually at higher risk of living with multiple other adversities and difficulties that leave them vulnerable to the impact of negative life experiences such as domestic violence (Chan & Yeung, 2009).

Whether experienced directly or indirectly, adolescents who are exposed to domestic violence are at increased risk for a wide range of psychological and behavioural problems (Chan & Yeung, 2009). Exposure to domestic violence results in a range of adjustment problems that include, but are not limited to, anxiety, inattentiveness, intrusive thoughts, psychological disturbances, and behavioural difficulties (Chan & Yeung, 2009). Fear of separation or death, feelings of alienation and loneliness, lack of enjoyment in previously enjoyed activities, nightmares, and other sleep disturbances are also common among youths who have been exposed to domestic violence (Chan & Yeung, 2009).

Gunby and Woodhams (2010) investigated the prevalence of exposure to domestic violence in a sample of juvenile sexual offenders. The sample was composed of juveniles who offended against children and juveniles who offended against peers or adults in England and Wales (Gunby & Woodhams, 2010). The researchers reported that juveniles who offended against children were less likely to have been exposed to domestic violence than juveniles who offended against peers or adults (Gunby & Woodhams, 2010). More specifically, 23.8% of juveniles who offended against children reported exposure to domestic violence (Gunby & Woodhams, 2010). In contrast, 72.7%

of juveniles who offended against peers or adults reported exposure to domestic violence (Gunby & Woodhams, 2010).

The results of the study conducted by Gunby and Woodhams (2010) were similar to the results obtained by Hendricks and Bijleveld (2004) who also reported lower rates of exposure to domestic violence among juveniles who offended against children when compared to juveniles who offended against peers or adults. In the study conducted by Hendricks and Bijleveld, 13% of juveniles who offended against children reported exposure to domestic violence, whereas 28% of juveniles who offended against peers or adults reported a history of exposure to domestic violence. Although the results of the study conducted by Hendricks and Bijleveld were not statistically significant with respect to differences among the subgroups of juvenile sexual offenders based on victim age, the high prevalence of exposure to domestic violence reported by these offender groups was noted by the researchers as a risk factor for juvenile sexual offending.

A growing body of empirical evidence has established a link between exposure to domestic violence and its negative impact on the emotional and psychological well-being of adolescents (Chan & Yeung, 2009). However, the impact of exposure to domestic violence and juvenile sexual offending is far less established (Chan & Yeung, 2009). More specifically, very few studies were found that examined exposure to domestic violence and juvenile sexual offending, thereby highlighting a gap in the existing literature in this area.

Gunby and Woodhams (2010) and Hendricks and Bijleveld (2004) both examined exposure to domestic violence among victim age-based typologies of juvenile sexual

offenders. Although the results of both studies found high rates of exposure to domestic violence, there were discrepancies between the studies that warranted additional exploration. For example, Gunby and Woodhams found that juveniles who offended against children were less likely to have been exposed to domestic violence than juveniles who offended against peers or adults. In contrast, Hendricks and Bijleveld did not find differences in the prevalence rates of exposure to domestic violence between juveniles who offended against children and juveniles who offended against peers or adults. Furthermore, the study conducted by Gunby and Woodhams was limited by a small sample size. Both of these studies were outdated (Gunby & Woodhams, 2010; Hendricks & Bijleveld, 2004). Last, the existing studies were limited in the generalizability to Canadian populations of juvenile sexual offenders, thereby emphasizing an additional gap in the literature. The current study expanded on the results of the studies conducted by Gunby and Woodhams and Hendricks and Bijleveld, filling a gap in the literature through the examination of the prevalence of exposure to domestic violence relative to age-based typologies of juvenile sexual offenders in Canada.

Mental Health Diagnosis

Boonmann et al. (2015) conducted a meta-analysis to identify the prevalence of mental disorders among juvenile sexual offenders and non-juvenile sexual offenders. The researchers reviewed 21 studies (Boonmann et al., 2015). The results of the meta-analysis found that approximately 69% of juvenile sexual offenders met the criteria for at least one mental disorder (Boonmann et al., 2015). Comorbidity was present in

approximately 44% of these same individuals (Boonmann et al., 2015). Boonmann et al. found conduct disorder to be the most commonly reported externalizing disorder among juvenile sexual offenders (51%). The most commonly reported internalizing disorder was anxiety disorder, which was found in 18% of juvenile sexual offenders (Boonmann et al., 2015). Approximately 30% of juvenile sexual offenders had at least one substance use disorder (Boonmann et al., 2015). Although juvenile sexual offenders showed lower prevalence rates of externalizing disorders and substance use disorders than non-juvenile sexual offenders, the groups did not differ with respect to rates of internalizing disorders (Boonmann et al., 2015).

Boonmann et al. (2015) highlighted the importance of systematically examining the prevalence of mental health disorders in juvenile sexual offenders. More specifically, Boonmann et al. identified the need to focus on differences among subgroups of juvenile sexual offenders. These sentiments were based on the fact that the researchers used several different classification systems such as both the third and fourth editions of the *Diagnostic and statistical manual of mental disorders* and the *Internal classification of disease* (Boonmann et al., 2015). These sentiments were also based on the fact that very few of the studies that were reviewed reported on subgroups of juvenile sexual offenders (Boonmann et al., 2015). This limitation made it impossible for the researchers to examine the prevalence of mental disorders among various subgroups of offenders (Boonmann et al., 2015). Studies examining age-based typologies, hands-on and hands-off offenses, and offense history were also identified as areas of focus for future studies (Boonmann et al., 2015).

In addition to the sentiments expressed by Boonmann et al. (2015) regarding the need for additional studies investigating the relationship between mental health diagnosis and juvenile sexual offending, several other limitations were noted in their review. First, many of the studies were outdated. For example, all but one of the original studies was conducted prior to 2012 and most of the original studies were conducted prior to 2000. Second, only two of the studies were conducted in Canada. Third, the original studies were not all specific to juvenile sexual offenders. For example, many of the original studies examined both juvenile sexual offenders and non-sexually offending youth. Fourth, many of the studies reviewed by Boonmann et al. included both male and female participants. The current study added to the existing knowledge base by investigating exposure to domestic violence in age-based typologies of juvenile sexual offenders in Canada.

Similar to the study executed by Boonmann et al. (2015), Hart-Kerkhoffs et al. (2015) conducted a study in order to investigate the prevalence of mental disorders and their relationship to criminal re-referrals in a victim age-based typology of juvenile sexual offenders. In addition to the prevalence of mental disorders, Hart-Kerkhoffs et al. examined abuse history and level of functioning. Their sample included 106 juvenile sexual offenders (Hart-Kerkhoffs et al., 2015). The results of the study found that the subgroups did not differ with respect to the presence of any one specific mental disorder (Hart-Kerkhoffs et al., 2015). However, juveniles who offended against children had higher rates of affective disorders, attention deficit hyperactivity disorder, and internalizing disorders than group juvenile offenders (Hart-Kerkhoffs et al., 2015). When

compared to solo juvenile sexual offenders with peer or adult victims, juveniles who offended against children showed a higher prevalence of affective disorders (Hart-Kerkhoffs et al., 2015). Solo juvenile sexual offenders had higher rates of affective disorders, attention deficit hyperactivity disorder, and comorbidity than group juvenile sexual offenders (Hart-Kerkhoffs et al., 2015). Comorbidity was least present in juveniles who offended against peers or adults (Hart-Kerkhoffs et al., 2015).

With respect to global functioning, Hart-Kerkhoffs et al. (2015) found that juveniles who offended against children had an overall lower *Children's Global Assessment Scale* score when compared to both the solo and group juvenile sexual offenders with peer or adult victims. Juvenile sexual offenders who were re-referred for subsequent sexual offenses were more frequently diagnosed with an affective disorder and had higher incidents of sexual abuse (Hart-Kerkhoffs et al., 2015). Juveniles who were re-referred for subsequent sexual offenses also had lower levels of global functioning than juvenile sexual offenders who were not re-referred for subsequent sexual offenses (Hart-Kerkhoffs et al., 2015).

Overall, the results of the study conducted by Hart-Kerkhoffs et al. (2015) suggested that mental disorders are highly prevalent in juvenile sexual offenders. This was particularly true for juveniles who offend against children (Hart-Kerkhoffs et al., 2015). The results of the study conducted by Hart-Kerkhoffs et al. were somewhat consistent with a meta-analysis conducted by Seto and Lalumiere (2010). Seto and Lalumiere found that juvenile sexual offenders typically have more internalizing problems and show less antisocial behaviour problems such as substance abuse problems

than juveniles who offend non-sexually. Similarly, Gunby and Woodhams (2010) investigated the prevalence of mental health diagnosis in a sample of juvenile sexual offenders. Their sample was comprised of juveniles who offended against children and juveniles who offended against peers or adults (Gunby & Woodhams, 2010). Gunby and Woodhams did not find statistically significant associations among these subgroups of juvenile sexual offenders.

Despite conflicting results, recent research by Joyal et al. (2016) supported the need to further examine the prevalence of mental health diagnosis in juvenile sexual offenders. Joyal et al. investigated the validity of a victim age-based typology of juvenile sexual offenders. Their sample consisted of 351 male juvenile sexual offenders (Joyal et al., 2016). Participants had either offended against children or against peers or adults (Joyal et al., 2016). Thirty percent of the victim age-based participants had received a diagnosis of conduct disorder (Joyal et al., 2016). Approximately 22% of these same individuals had received medication for attention deficit hyperactivity disorder (Joyal et al., 2016). Statistically significant differences were noted among the age-based subgroups (Joyal et al., 2016). More specifically, Joyal et al. identified that significantly more juveniles who offended against peers or adults received a diagnosis of conduct disorder (45.9%) compared to juveniles who offended against children (24.5%). No other statistically significant differences were noted among the victim age-based subgroups with respect to mental health history (Joyal et al., 2016). With respect to the family relation-based categories, Joyal et al. found rates of conduct disorder to be the highest among juveniles with extra-familial victims who offended against peers or adults

(52.5%). No other statistically significant differences were noted among these subgroups of juvenile sexual offenders (Joyal et al., 2016).

Collectively, the literature highlighted the prevalence of mental health disorders among juveniles who sexually offend against children and juveniles who sexually offend against peers or adults (Boonmann et al., 2015; Hart-Kerkhoffs et al., 2015; Joyal et al., 2016; Seto & Lalumiere, 2010). The current literature also cited a need to further investigate the prevalence of mental disorders among a victim age-based typology of juvenile sexual offenders to better understand the diverse needs of this particular subtype of offenders (Boonmann et al., 2015; Hart-Kerkhoffs et al., 2015; Joyal et al., 2016; Seto & Lalumiere, 2010). The current study expanded on the existing literature by examining the prevalence of various mental health diagnoses among a Canadian sample of juveniles who offended against children and juveniles who offended against peers or adults. The mental health diagnosis that were examined in the current study included anxiety, depression, attention deficit hyperactivity disorder, conduct disorder, fetal alcohol spectrum disorder, and oppositional defiance disorder.

Offense Type

Stevens et al. (2013) examined juveniles who offended against children, juveniles who offended against peers or adults, and juveniles who had victims in both age groups. The sample was comprised of 184 juvenile sexual offenders between the ages of 10 and 21 (Stevens et al., 2013). All of the participants were male (Stevens et al., 2013). The study took place in the United Kingdom (Stevens et al., 2013). The sample was divided into juveniles who committed hands-on sexual offenses and juveniles who committed

hands-off sexual offenses (Stevens et al., 2013). Juveniles who committed hands-on sexual offenses were further divided according to victim age (Stevens et al., 2013). Juveniles who committed hands-off sexual offenses were divided into those who had used Internet child pornography and those who had indecently exposed (Stevens et al., 2013). Stevens et al. reported that the mean age of juveniles who engaged in hands-on offenses against children was 14.3 years and the mean age of juveniles who engaged in hands-on offenses against peers or adults was 15.3 years. The mean age of juveniles who had victims in both age groups, as well as juveniles who engaged in hands-off offenses was similar and fell between 16.4 and 16.8 years (Stevens et al., 2013). Thirty-seven percent of juveniles who engaged in hands-on sexual offenses against children engaged in some form of penetration with their victim (Stevens et al., 2013). Approximately 46% of juveniles who engaged in hands-on sexual offenses against peers or adults engaged in some form of penetration with their victim (Stevens et al., 2013). Twenty-nine percent of juveniles with victims in both age groups engaged in penetration during the commission of their index offense (Stevens et al., 2013).

One major limitation of the study executed by Stevens et al. (2013) was the fact that no distinctions were made with respect to various offense types other than hands-on versus hands-off sexual offenses and the presence or absence of penetration during the index offense. Stevens et al. noted this as a limitation because failure to include this information provided an exceptionally limited understanding of the specific types of behaviours committed by the research participants. For example, hands-on sexual offenses can range in severity and include a multitude of behaviours such as kissing,

fondling, frottage, cunnilingus, and vaginal and anal penetration. Information pertaining to the specific behaviours an adolescent engaged in during their offense would have provided a much more accurate understanding of the nature and severity of the sexual offense than a description limited to a hands-on or a hands-off offense. The researchers suggested that future studies address this limitation through utilization of similar research designs that continue to investigate the distinction of a victim age-based typology of juvenile sexual offenders (Stevens et al., 2013). The current study attended to this limitation by specifying both hands-on variables and hands-off variables. The specific hands-on variables that were investigated in the current study were kissing, fondling, frottage, cunnilingus, fellatio, vaginal intercourse, and anal intercourse. The specific hands-off variables that were examined in the current study were exhibitionism, voyeurism, fetishism, and obscene communication.

Marini et al. (2014) investigated the relationship between childhood victimization, substance use prior to the commission of a sexual offense, and the amount of aggression used during sexual offending. The participants were comprised of 573 residentially incarcerated male juvenile sexual offenders in the United States (Marini et al., 2014). Offense type was among the variables investigated by the researchers (Marini et al., 2014). Both hands-on sexual offenses and hands-off sexual offenses were examined (Marini et al., 2014). Marini et al. identified penetration, oral sex, exposure, and fondling (22.5%) to be the most commonly reported behaviours during the commission of a sexual offense. Fondling as the sole behaviour in the commission of a sexual offense was reported by 11.4% of the participants and penetration as the sole behaviour in the

commission of a sexual offense was reported by 8% of the participants (Marini et al., 2014).

Margari et al. (2015) compared 31 juvenile sexual offenders, 31 juvenile offenders, and 31 juvenile non-offenders. Offense type was among the variables that was examined (Margari et al., 2015). Offense type was defined by sexual touch, oral or genital contact, accessing pornographic material, physical aggression, and psychological and verbal offenses (Margari et al., 2015). Approximately 39% of the juvenile sexual offenders had engaged in a hands-on sexual touching offense, 48% had engaged in oral-genital contact, and 19% had accessed pornographic material (Margari et al., 2015). Furthermore, 29% of juvenile sexual offenders had engaged in physical aggression and psychological and verbal offenses (Margari et al., 2015).

Joyal et al. (2016) examined the sexual behaviours committed by juvenile sexual offenders who had either sibling victims, extra-familial victims, or peer victims. Sibling incest was associated with more severe sexual abuse than non-sibling incest (Joyal et al., 2016). The most notable distinction centered on juveniles who offended against extra-familial peers (Joyal et al., 2016). In this regard, Joyal et al. identified that juvenile sexual offender cases that were most likely to be associated with antisocial behaviours committed significantly less severe sexual acts than sibling-incest juvenile sexual offenders and, to a lesser extent, juvenile sexual offenders with extra-familial child victims. For example, significantly more sibling victims were undressed at the time of the index offense when compared with peer victims (Joyal et al., 2016).

Although recent studies have begun to examine the complex relationship between offense type and juvenile sexual offending (Joyal et al., 2016; Margari et al., 2015; Marini et al., 2014; Stevens et al., 2014), many of these studies are limited in scope and generalizability. For example, a review of current and seminal literature failed to locate any studies that investigated the diverse range of hands-on and hands-off sexual offenses among victim age-based typologies of juvenile sexual offenders that the current study investigated. Investigation of a more diverse range of sexual behaviours than has been addressed in previous studies was important for several reasons. First, both hands-on sexual offenses and hands-off sexual offenses include numerous behaviours that can range in severity. Second, many sexual offenses include a diverse range of behaviours (Joyal et al., 2016; Margari et al., 2015; Marini et al., 2014; Seto & Lalumiere, 2010; Stevens et al., 2014). Accordingly, information pertaining to the specific behaviours that an adolescent engaged in during their offense is essential in order to provide a complete and accurate understanding of the nature and severity of the sexual offense. This is true from both a legal and clinical perspective. A description of sexual offending that is limited to either a hands-on or a hands-off offense does not provide this information. This dearth in the research was noted, particularly in light of the fact that many of the studies reviewed cited a need for continued studies in this area (Joyal et al., 2016; Margari et al., 2015; Marini et al., 2014; Stevens et al., 2014).

Summary

Although mixed, the sentiments of researchers working in the field of juvenile sexual offending supported the need for continued examination and establishment of

victim age-based typologies of juvenile sexual offenders. Researchers also cited the need to further investigate family composition, abuse history, mental health diagnosis, and offense type regarding victim age-based typologies of juvenile sexual offenders. The present study filled a gap in the current literature by investigating the between-group differences among victim age-based typologies of juvenile sexual offenders. This was accomplished through the use of chi-square tests.

In Chapter 3, I provide detailed information about the research design and rationale for the study, as well as information about the research methodology, including the population and sampling strategy. I also provide information about the procedures for gaining access to the data set and outline the ethical procedures for the study.

Chapter 3: Research Method

The purpose of this quantitative study was to compare family composition, abuse histories, mental health diagnosis, and offense type of a sample of male juvenile sexual offenders ages 11 to 18 referred for assessment or treatment for sexual offenses in the province of Alberta, Canada. I compared juveniles who offended against children and juveniles who offended against peers or adults. These subgroups were identified and defined based on their offense history at the time of referral. Family composition referred to where or with whom the youth was living at the time of the offense. The variables that were investigated included living with one biological parent, living with both biological parents, living in a blended family, living with extended family, living with an adoptive family, living in a group home, or living in foster care. Abuse history pertained to the presence or absence of physical abuse, sexual abuse, emotional abuse, and neglect. Exposure to domestic violence was also investigated. Mental health diagnosis included all of the diagnoses present at the time of referral. The variables for mental health diagnoses that were examined included anxiety, depression, attention deficit hyperactivity disorder, conduct disorder, fetal alcohol spectrum disorder, and oppositional defiance disorder. Offense type referred to all of the sexual offenses reported and documented at the time of referral. This included examination of hands-on sexual offenses and hands-off sexual offenses. The hands-on variables that were examined included kissing, fondling, frottage, cunnilingus, fellatio, vaginal intercourse, and anal intercourse. The hands-off variables that were examined were exhibitionism, voyeurism, fetishism, and obscene communication. This study provided researchers and

practitioners with a more comprehensive understanding of the differences between juveniles who offend against children and juveniles who offend against peers or adults. The independent variables were family composition, abuse history, mental health diagnosis, and offense type. The dependent variable was sex offender group.

In addition to information about the research design and rationale for the study, this chapter includes information about the research methodology, including the population and sampling strategy. Chapter 3 also includes information about data collection, analysis, and the ethical procedures for the study.

Research Design and Rationale

I employed a non-experimental, archival, quantitative research design to examine the between-group differences among age-based typologies of juvenile sexual offenders (see Frankfort-Nachmias et al., 2015). I made comparisons between two pre-existing groups without the manipulation of variables or random assignment (see Frankfort-Nachmias et al., 2015). This type of research design was appropriate for several reasons. First, the use of secondary data provided the opportunity to incorporate and analyze a significant amount of data relative to the research questions (see Frankfort-Nachmias et al., 2015). Second, the use of archival data enabled the use of data collected at different time periods to answer the research questions (see Frankfort-Nachmias et al., 2015). Third, the use of archival data permitted comparisons between age-based typologies of juvenile sexual offenders (see Frankfort-Nachmias et al., 2015). Fourth, the use of secondary data reduced the ethical issues associated with conducting research on a

vulnerable population. Last, the use of secondary data provided opportunities for replication of the study (see Frankfort-Nachmias et al., 2015).

The independent variables were family composition, abuse history, mental health diagnosis, and offense type. The variables that were examined with respect to family composition included living with one biological parent, living with two biological parents, living in a blended family, living with extended family, living with an adoptive family, living in a group home, and living in foster care. The variables that were examined with respect to abuse history included the presence or absence of physical abuse, sexual abuse, emotional abuse, neglect, and exposure to domestic violence. The variables that were examined with respect to mental health diagnosis included anxiety, depression, attention deficit hyperactivity disorder, conduct disorder, fetal alcohol spectrum disorder, and oppositional defiance disorder. Offense type included hands-on sexual offenses and hands-off sexual offenses. The variables that were investigated with respect to offense history included kissing, fondling, frottage, cunnilingus, fellatio, vaginal intercourse, anal intercourse, exhibitionism, voyeurism, fetishism, and obscene communication. The dependent variable was offender group. The offender groups included juveniles who offended against children and juveniles who offended against peers or adults.

All of the independent variables in this study were categorical in nature. The dependent variable was also categorical in nature. The analytical strategy that was used to investigate these variables was a chi-square test of independence. A chi-square test of independence was selected because it allowed for between-group comparisons with

respect to family composition, abuse history, mental health diagnosis, and offense history among the age-based typologies of juvenile sexual offenders. The research design included archival data. There were no time or resource constraints impacting the study. I chose this research design because the use of secondary data provided the opportunity to incorporate and analyze a significant amount of data that had been collected at different points and time, archival data permitted comparisons between age-based typologies of juvenile sexual offenders, the use of secondary data reduced the ethical issues associated with conducting research on a vulnerable population, and the use of secondary data provided opportunities for replication of the study (see Frankfort-Nachmias et al., 2015). The selected research design was consistent with research designs needed to advance knowledge in the discipline and fill a gap in the literature by providing a more comprehensive understanding of the differences between family composition, abuse histories, mental health diagnosis, and offense type of juveniles who offend against children and juveniles who offend against peers or adults in Alberta, Canada.

Population

The target population for this study included all male juvenile sexual offenders ages 11 to 18 who reside in Canada. The target population consisted of two main groups: juveniles who offended against children and juveniles who offended against peers or adults. The target population size was unknown.

Sampling and Sampling Procedures

The sampling frame for the current study consisted of male adolescents who had been referred for assessment or treatment for sexual offenses in the province of Alberta,

Canada. The sample included juveniles who offended against children and juveniles who offended against peers or adults. A juvenile sexual offender was defined as any individual between the ages of 11 and 18 who had been referred for assessment or treatment for a sexual offense in the province of Alberta, Canada. A child victim was defined as a victim who was 3 or more years younger than the individual who committed a sexual offense against him or her (see Aebi et al., 2012; Seto & Lalumiere, 2010). A peer victim was defined as a victim who was either the same age as the individual who committed a sexual offense against him or her or a victim who was under the age of 18, but within 3 years of age of the individual who committed a sexual offense against him or her (see Aebi et al., 2012; Seto & Lalumiere, 2010). An adult victim was defined as a person who was legally an adult when he or she became the victim of a sexual offense (Ryan, 2010).

Participants were assigned to each of the victim age-based groups based on the index offense that prompted the referral to Alberta Health Services, as well as on all prior sexual offenses documented within the file provided by Alberta Health Services. For example, a youth whose index offense was perpetrated against a child, but who had a previously documented sexual offense against a peer was categorized as having victims in both age groups. These individuals were excluded from the study.

The sampling strategy that was employed for this study was nonprobability convenience sampling. This sampling strategy was selected because archival data were used. Therefore, probability sampling was not an option. The use of nonprobability convenience sampling allowed me to use the data set that was available to me from

Alberta Health Services in Alberta, Canada. The specific procedure for how the sample was drawn was through the use of archival data.

The inclusion criteria for participants included male youth between the ages of 11 and 18 who had been referred for assessment or treatment to Alberta Health Services for a sexual offense perpetrated against a child, peer, or adult victim in the province of Alberta, Canada. Exclusion criteria for the current study included female adolescents, male youths who fell outside of the stated age range, and male youths who had not been referred for assessment or treatment for a sexual offense in the province of Alberta, Canada. Individuals with non-victims such as child pornography offenders were also excluded from the sample, as were youths with child victims and peer or adult victims.

When considering sample size, power is defined as the probability of appropriately rejecting the null hypothesis (Frankfort-Nachmias et al., 2015). A type II error occurs when the researcher fails to identify whether a difference exists between the original population and the study group of interest (Frankfort-Nachmias et al., 2015). Researchers are encouraged to set the false negative rate at a level they deem tolerable while ensuring that their study is sufficiently powered (Frankfort-Nachmias et al., 2015). In the behavioural sciences, 80% is considered an acceptable power, whereby a difference will be missed 20% of the time. Power for this study was set at 80%. Several factors influence power, but sample size is considered to be one of the most important factors (Frankfort-Nachmias et al., 2015). To determine the sample size necessary to detect statistically significant effects, an a priori G* power estimation was conducted (see Faul, Erdfelder, Buchner, & Lang, 2009). Given a medium effect size of 0.3, an alpha

probability level of .05, a nominal power of .08, and 2 df on a chi-square test family for a goodness of fit contingency table test, the total sample size required to detect statistically significant effects for the current study was 108 cases (see Faul et al., 2009).

Data Collection

Archival data were collected from Alberta Health Services in Alberta, Canada. The specific files that were accessed for the current study were those currently maintained by the Centerpoint Program. The Centerpoint Program provides therapeutic and assessment services for Alberta Health Services. The files held by the Centerpoint program contain information on youths referred for assessment or treatment for sexual offenses across the province of Alberta. Files that were obtained included those for male youths between the ages of 11 and 18 from across the province who had been referred for assessment or treatment for sexual offenses. Demographic information and information pertaining to each of the key variables addressed in the current study were collected from this data set. Demographic information that was obtained for the purposes of the current study included age at time of first offense, age of the victims, number of victims, and gender of the victims. Information was also obtained with respect to family composition, abuse history, mental health diagnosis, and offense type. The data set included information from multiple sources including, but not limited to, notes and reports generated by Alberta Health Services, self-reports from the youths and/or their family members, prior psychological and forensic assessments, documentation from therapists and other professionals who had contact with the youths and/or their family members, information from police reports, including victim and witness statements, documentation

and reports from probation officers, documentation and reports from applicable forensic institutions, documentation and reports from medical institutions, and documentation and reports from applicable out-of-home placements.

Operationalization

The independent variables included family composition, abuse history, mental health diagnosis, and offense type. All of the independent variables were operationalized as categorical data using chi-square tests of independence. The dependent variable was offender group. This variable was operationalized as categorical in nature and was analyzed using a chi-square test of independence.

Independent Variables

Family Composition

The specific variables that were examined with respect to family composition included living with one biological parent, living with two biological parents, living in a blended family, living with extended family, living with an adoptive family, living in a group home, and living in foster care. Participants were coded as falling into one of these categories. A code of “0” indicated that the youth did not fall into a particular category. A code of “1” indicated that the youth did fall into a particular category.

The family composition variable was coded based on whom the youth was living with at the time of the index offense. This information was obtained from a number of sources present in the file obtained from Alberta Health Services. These sources included, but were not limited to, notes and reports generated by Alberta Health Services, self-reports from the youths and/or their family members, information from prior

psychological and forensic assessments, documentation from therapists and other professionals who had contact with the youths and/or their family members, information from police reports, documentation and reports from probation officers, documentation and reports from applicable forensic institutions, documentation and reports from medical institutions, and documentation and reports from applicable out-of-home placements.

Abuse History

The variables that were examined with respect to abuse history included the presence or absence of physical abuse, sexual abuse, emotional abuse, neglect, and exposure to domestic violence. Coding numbers included “0” and “1” for each of these variables. A code of “0” indicated non-exposure. A code of “1” indicated the presence of the specific type of abuse.

The presence or absence of each form of abuse was determined based on information obtained from a variety of sources contained in data set. These sources included, but were not limited to, notes and reports generated by Alberta Health Services, self-reports from the youths and/or their family members, prior psychological and forensic assessments, documentation from therapists and other professionals who had contact with the youths and/or their family members, information from police reports, documentation and reports from probation officers, documentation and reports from applicable forensic institutions, documentation and reports from medical institutions, and documentation and reports from applicable out-of-home placements. The presence or absence of any one form of abuse was coded based on historical accounts and on information documented at the time of index offense and/or at the time of referral for

assessment or treatment for a sexual offense. The abuse need not have been documented as having occurred at the time of the index offense.

Mental Health Diagnosis

The specific variables that were examined with respect to mental health diagnosis included anxiety, depression, attention deficit hyperactivity disorder, conduct disorder, fetal alcohol spectrum disorder, and oppositional defiance disorder. Coding numbers included “0” and “1” for each of these variables. A code of “0” indicated that the youth had not received a diagnosis that corresponded with a particular variable or mental health diagnosis. A code of “1” indicated that the youth had received a diagnosis that corresponded with a particular variable or mental health diagnosis.

The presence or absence of a mental health diagnosis was determined based on information obtained from a variety of sources contained in the data set. These sources included, but were not limited to, notes and reports generated by Alberta Health Services, self-reports from the youths and/or their family members, prior psychological and forensic assessments, documentation from therapists and other professionals who had contact with the youths and/or their family members, information from police reports, documentation and reports from probation officers, documentation and reports from applicable forensic institutions, documentation and reports from medical institutions, and documentation and reports from applicable out-of-home placements. The presence or absence of a mental health diagnosis was coded based on historical accounts and on information documented at the time of index offense and/or at the time of referral for assessment or treatment for a sexual offense. The mental health diagnosis did not have to

correspond with the index offense. The presence of a mental health diagnosis was coded based on a formal diagnosis.

Offense History

The specific variables that were investigated with respect to offense history included kissing, fondling, frottage, cunnilingus, fellatio, vaginal intercourse, anal intercourse, exhibitionism, voyeurism, fetishism, and obscene communication. Similar to the other independent variables, the coding numbers for offense history included “0” and “1.” A code of “0” indicated that the youth had not engaged in a particular behaviour. A code of “1” indicated that the youth had engaged in the identified behaviour. For example, a youth who engaged in vaginal intercourse and frottage would have received a code of “1” for each of these variables. All of the other variables would have been coded as “0.”

The presence or absence of each of the variables that were investigated relative to offense history was determined based on information obtained from a variety of sources contained in data set. These sources included, but were not limited to, notes and reports generated by Alberta Health Services, self-reports from the youths and/or their family members, prior psychological and forensic assessments, documentation from therapists and other professionals who had contact with the youths and/or their family members, information from police reports, including victim and witness statements, documentation and reports from probation officers, documentation and reports from applicable forensic institutions, documentation and reports from medical institutions, and documentation and reports from applicable out-of-home placements. Each of these variables was coded

based on information pertaining to the index offense and information obtained regarding prior sexual offenses. More specifically, this variable was coded based on available information for all known sexual offenses for a particular youth. In other words, this variable was coded based on the index offense that prompted the referral to Alberta Health Services, as well as on all prior sexual offenses documented within the file provided by Alberta Health Services.

Demographic Information

Demographic information that was collected included age at time of first offense, age of the victims, number of victims, and gender of the victims.

Dependent Variable

The dependent variable was categorical in nature. The two categories that comprised the dependent variable included juveniles who offended against children and juveniles who offended against peers or adults. The coding numbers for the dependent variable included “0” and “1.” A code of “0” was assigned to juveniles who offended against children. A code of “1” was assigned to juveniles who offended against peers or adults. For example, a juvenile who offended against a child would have received a code of “0.”

The dependent variable was coded based on information obtained from a variety of sources contained within the data set. These sources included, but were not limited to, notes and reports generated by Alberta Health Services, self-reports from the youths and/or their family members, prior psychological and forensic assessments, documentation from therapists and other professionals who had contact with the youths

and/or their family members, information from police reports, including victim and witness statements, documentation and reports from probation officers, documentation and reports from applicable forensic institutions, documentation and reports from medical institutions, and documentation and reports from applicable out-of-home placements.

Participants were divided into two main groups. These groups included juveniles who offended against children and juveniles who offended against peers or adults. Participants were assigned to the victim age-based groups based on the index offense that prompted the referral to Alberta Health Services, as well as on all prior sexual offenses documented within the file provided by Alberta Health Services.

Data Analysis Plan

The software that was used to clean and analyze the data set is SPSS (IBM Corp., 2013). Prior to analysis, the data was stripped of identifying information, assigned a number, and coded using a data collection coding form that was developed specifically for this study. Listed below are the research questions that were used to further analyze the above-mentioned analyses. More specifically, this study answered the following questions and hypotheses:

Research Question 1: Do juveniles who offend against children differ from juveniles who offend against peers or adults with respect to family composition?

H₀1: There is no significant difference between juveniles who offend against children and juveniles who offend against peers or adults with respect to family composition.

H_{a1}: There is a significant difference between juveniles who offend against children and juveniles who offend against peers or adults with respect to family composition.

Research Question 2: Do juveniles who offend against children differ from juveniles who offend against peer or adults with respect to rates of physical abuse?

H₀₂: There is no significant difference between juveniles who offend against children and juveniles who offend against peers or adults with respect to rates of physical abuse.

H_{a2}: There is a significant difference between juveniles who offend against children and juveniles who offend against peers or adults with respect to rates of physical abuse.

Research Question 3: Do juveniles who offend against children differ from juveniles who offend against peer or adults with respect to rates of sexual abuse?

H₀₃: There is no significant difference between juveniles who offend against children and juveniles who offend against peers or adults with respect to rates of sexual abuse.

H_{a3}: There is a significant difference between juveniles who offend against children and juveniles who offend against peers or adults with respect to rates of sexual abuse.

Research Question 4: Do juveniles who offend against children differ from juveniles who offend against peer or adults with respect to rates of emotional abuse?

H₀4: There is no significant difference between juveniles who offend against children and juveniles who offend against peers or adults with respect to rates of emotional abuse.

H_a4: There is a significant difference between juveniles who offend against children and juveniles who offend against peers or adults with respect to rates of emotional abuse.

Research Question 5: Do juveniles who offend against children differ from juveniles who offend against peers or adults with respect to rates of neglect?

H₀5: There is no significant difference between juveniles who offend against children and juveniles who offend against peers or adults with respect to rates of neglect.

H_a5: There is a significant difference between juveniles who offend against children and juveniles who offend against peers or adults with respect to rates of neglect.

Research Question 6: Do juveniles who offend against children differ from juveniles who offend against peers or adults with respect to exposure to domestic violence?

H₀6: There is no significant difference between juveniles who offend against children and juveniles who offend against peers or adults with respect to exposure to domestic violence.

H_a6: There is a significant difference between juveniles who offend against children and juveniles who offend against peers or adults with respect to exposure to domestic violence.

Research Question 7: Do juveniles who offend against children differ from juveniles who offend against peers or adults with respect to rates of mental health diagnosis?

H₀7: There is no significant difference between juveniles who offend against children and juveniles who offend against peers or adults with respect to mental health diagnosis.

H_a7: There is a significant difference between juveniles who offend against children and juveniles who offend against peers or adults with respect to mental health diagnosis.

Research Question 8: Do juveniles who offend against children differ from juveniles who offend against peers or adults with respect to offense type?

H₀8: There is no significant difference between juveniles who offend against children and juveniles who offend against peers or adults with respect to offense type.

H_a8: There is a significant difference between juveniles who offend against children and juveniles who offend against peers or adults with respect to offense type.

All of the hypotheses for this study were tested using chi-square tests of independence. A chi-square test of independence is used in situations where there are two or more nominal variables, each with two or more possible values (see Frankfort-Nachmias et al., 2015). A chi-square test of independence helps to determine whether the proportions for one variable will be different among values of the other variables (see Frankfort-Nachmias et al., 2015). For example, the purpose of this study was to

determine whether or not juveniles who offended against children differed from juveniles who offend against peers or adults with respect to family composition.

Measures of effect included the chi-square values and the probability of error (p). A higher chi-square value reflects a greater likelihood that a significant effect was found. There are two assumptions for a chi-square test of independence (see Frankfort-Nachmias et al., 2015). The first assumption is that the individual observations are independent (see Frankfort-Nachmias et al., 2015). The second assumption is that the cell counts must be greater than five (see Frankfort-Nachmias et al., 2015).

Descriptive Statistics

Descriptive statistics that were conducted included the mean age of the juvenile offenders at the time of the index offense, the mean age of the victims, the number of victims, and the sex of the victims.

Threats to Validity

This study contained threats to external validity, as well as threats to internal validity. The major threat to the external validity of the study centered on the representativeness of the sample (see Frankfort-Nachmias et al., 2015). More specifically, this study was limited by the fact that I was not able to examine all male juvenile sexual offenders ages 11 to 18 across Canada. In this regard, the study is not fully representative of the target population that I wished to make inferences to, based on the results. For example, the participants did not have to have been charged or convicted of a sexual offense. Accordingly, the results of the study may not be generalizable to juveniles who have been adjudicated for sexual offenses. Further to this, the results of

the study may not be generalizable to adolescents who have sexually offended, but who have not been caught or otherwise identified as having committed a sexual offense. In this regard, the sampling frame is not representative of all of the individuals in the larger population who have sexually offended against children or who have sexually offended against peers or adults.

The major threat to the internal validity of the current study was potential confounding. Confounding variables are brought about by the existence of extraneous factors or variables (see Frankfort-Nachmias et al., 2015). Confounding variables have the potential to distort the association or relationship between the independent variables and the dependent variables (see Frankfort-Nachmias et al., 2015). Examples of confounding variables that could have influenced the outcome of the study included geographical location and Child Welfare status. In experimental studies, the effects of confounding variables can be mitigated through random assignment (see Frankfort-Nachmias et al., 2015). However, in non-experimental, archival studies, random assignment is not possible (see Frankfort-Nachmias et al., 2015). The inability to randomly assign participants presents as a threat to the internal validity of the study (see Frankfort-Nachmias et al., 2015).

Ethical Procedures

This study was a non-experimental quantitative secondary data analysis of archival data that were obtained from Alberta Health Services in Alberta, Canada. The use of an existing archival data set minimized ethical concerns and eliminated the need to obtain consent from the original participants (see Frankfort-Nachmias et al., 2015).

However, consent was obtained from Alberta Health Services. More specifically, written permission from Alberta Health Services was obtained, thereby granting me permission to access to the required data set. A copy of this letter of permission is included in the Appendix. Prior to data collection and analysis, this study was subject to review by the Walden University Institutional Review (IRB). The study commenced after the Walden University Institutional Review Board granted approval for the study to take place. This included the collection and analysis of data from the existing data set.

In order to protect the privacy and confidentiality of the research participants, all of the identifying information collected for the purposes of this study was removed from the data set during the collection process, thus protecting the confidentiality and anonymity of the research participants. More specifically, prior to analysis, the data was stripped of all identifying information, assigned a number, and coded using the data collection coding form that was developed specifically for this study. Data files created for this study will be maintained in a password protected file for a minimum period of five years, at which time the data will be destroyed. Institutional Review Board approval was obtained prior to data collection. There are no ethical issues with respect to conflict of interest.

Summary

In Chapter 3, I described the research design and the rationale for the study, as well as the research methodology, population, and sampling strategy. I also provided information about the procedures for gaining access to the data set and outlined the

ethical procedures for the study. In Chapter 4, I will provide a more detailed explanation of the study, including data collection. I will also include the results of the study.

Chapter 4: Results

The purpose of this quantitative study was to compare family composition, abuse histories, mental health diagnosis, and offense type in a sample of male juvenile sexual offenders ages 11 to 18 referred for assessment or treatment for sexual offenses in the province of Alberta, Canada. I compared juveniles who offended against children and juveniles who offended against peers or adults. These subgroups were identified and defined based on their offense history at the time of referral.

The eight research questions presented in Chapter 3 were chosen to determine whether differences existed among these two subgroups of juvenile sexual offenders. The research questions addressed whether statistically significant differences existed between juveniles who offended against children and juveniles who offended against peer or adults with respect to family composition, abuse histories, mental health diagnosis, and offense type. Each of these variables was analyzed using a chi-square test of independence. In Chapter 4, I provide a detailed explanation of the study, including data collection and data analysis and a detailed description of the results of the study.

Data Collection

Data were reviewed one case file at a time, with approximately 10-15 minutes of time spent determining whether all of the significant data were present. To determine the sample size necessary to detect statistically significant effects, I conducted an a priori G* power estimation (see Faul et al., 2009). Given a medium effect size of 0.3, an alpha probability level of .05, a nominal power of .08, and 2 df on a chi-square test family for a goodness of fit contingency table test, the sample size required to detect statistically

significant effects was 108 cases (see Faul et al., 2009). Approximately 200 cases were reviewed to obtain the 105 cases included in the data set.

Exclusion criteria included female adolescents, male youths who fell outside of the stated age range, and male youths who had not been referred for assessment or treatment for a sexual offense in the province of Alberta, Canada. Individuals with non-victims such as child pornography offenders were also excluded from the sample, as were youths with child victims and peer or adult victims. Out of the 95 cases that were excluded from the study, 23 involved female offenders, 29 were male offenders who fell outside of the stated age range, and 43 involved juveniles who had victims in both age groups.

Data collection took place over the course of 4 days. The dates on which data collection took place were December 11, 2017; December 12, 2017; December 18, 2017; and December 19, 2017. The date range for the cases was from January 2000 to November 2017. There was no time frame specified in terms of the dates of referrals for this study. The date range for the 105 cases that were included met the criteria outlined in Chapter 3. The approximately 32 hours necessary to compile the data were approximately the amount of time expected. The data collection process went as planned. There were no adverse events encountered, no additional protocols needed, and no deviations from the research plan presented in Chapter 3.

Descriptive Statistics

The archival data for this study were obtained from Alberta Health Services in Alberta, Canada. The specific files that were accessed for the study were those currently

maintained by the Centerpoint Program. The files held by the Centerpoint program contain information on youths referred for assessment or treatment for sexual offenses across the province of Alberta. The files that were obtained included those for male youths between the ages of 11 and 18 from across the province that had been referred for assessment or treatment for sexual offenses.

Table 1 presents the frequencies and percentages for the sample with respect to the number of victims and the sex of the victims. There were 105 cases in the sample. Regarding the number of reported victims, 78.1% of the cases had one victim, 14.3% of the cases had two victims, 5.7% of the cases had three victims, and 1.9% of the cases had four or more victims. With respect to the sex of the victim, 20.0% of the cases involved male victims, 72.4% of the cases involved female victims, and 7.6% of the cases involved both male and female victims.

Table 1

Frequencies and Percentages, Study Variables

	Frequency	Percent
Number of victims		
1	82	78.1%
2	15	14.3%
3	6	5.7%
4 or more	2	1.9%
Victim sex		
Male	21	20.0%
Female	76	72.4%
Both	8	7.6%
<i>n</i>	105	100.0%

Table 2 presents the frequencies and percentages for the number of victims and the sex of the victims relative to juveniles who offended against children and juveniles

who offended against peers or adults. Seventy-five of the cases involved juveniles who offended against children and 30 involved juveniles who offended against peers or adults. Among juveniles who offended against children, 76.0% of the cases had one victim, 16.0% had two victims, 6.7% had three victims, and 1.3% had four or more victims. Regarding the number of reported victims among juveniles who offended against peers or adults, 83.3% of the cases had one victim, 10.0% had two victims, 3.3% had three victims, and 3.3% had four or more victims. The results did not indicate significant differences in the frequencies among the two offender groups with respect to the number of reported victims.

With respect to the sex of the victim, significant differences in the frequencies were noted among the two offender groups regarding male versus female victims. There was a higher frequency of male victims among juveniles who offended against children (26.7%) compared to juveniles who offended against peers or adults (3.3%). Similarly, only 65.3% of the cases of juveniles who offended against children involved female victims, whereas 90.0% of the cases involving juveniles who offended against peers or adults had female victims. The offender groups did not differ in terms of the frequency for both male and female victims.

Table 2

Frequencies and Percentages, Child Group and Peer/Adult Group

	Child group		Peer/adult group	
	Frequency	Percent	Frequency	Percent
Number of victims				
1	57	76.0%	25	83.3%
2	12	16.0%	3	10.0%
3	5	6.7%	1	3.3%
4 or more	1	1.3%	1	3.3%
Victim sex				
Male	20	26.7%	1	3.3%
Female	49	65.3%	27	90.0%
Both	6	8.0%	2	6.7%
<i>n</i>	75	100.0%	30	100.0%

Table 3 presents the descriptive statistics for the sample with respect to the age of the juvenile offender and the victim age. The average age of the juvenile offenders was 14.72 years. The average victim age was 9.26 years.

Table 3

Means and Standard Deviations, Scale Variables

Variable	<i>M</i>	<i>SD</i>	Min	Max
Offender's age	14.72	1.69	11	18
Victim's age	9.26	4.40	1	23

Note: $n = 105$.

Table 4 presents the descriptive statistics for each of the offender groups with respect to the age of the juvenile offender and the victim age. The average age of juveniles who offended against children was 14.75 years and the average age of the juveniles who offended against peers or adults was 14.67 years. The results did not indicate significant differences in the mean ages of the two offender groups.

The average victim age for juveniles who offended against children was 7.20 years and the average victim age for juveniles who offended against peers or adults was 14.40 years. The mean age of the victims was lower among juveniles who offended against children. However, the mean age of the victims for juveniles who offended against children was impacted by the presence of one victim who was one year of age, thereby increasing the standard deviation for this offender group. Without this one outlier, the mean age of the victims among juveniles who offended against children would have more closely resembled the mean victim age for juveniles who offended against peers or adults.

Table 4

Means and Standard Deviations, Child Group and Peer/Adult Group

Variable	Child group (<i>n</i> =75)				Peer/adult group (<i>n</i> = 30)			
	<i>M</i>	<i>SD</i>	Min	Max	<i>M</i>	<i>SD</i>	Min	Max
Offender's age	14.75	1.66	11	18	14.67	1.79	12	18
Victim's age	7.20	2.97	1	13	14.40	2.91	10	23

Evaluation of Statistical Assumptions

There are two assumptions necessary for conducting a chi-square test of independence (Frankfort-Nachmias et al., 2015). The first assumption is that the individual observations are independent (Frankfort-Nachmias et al., 2015). The second assumption is that the cell counts must be greater than 5 (Frankfort-Nachmias et al., 2015). Both assumptions were met in the first seven chi-square tests of independence.

With regard to the last hypothesis related to offense type, two cells (33.3%) had an expected count of less than 5.

Results of Research Question 1

Research Question 1: Do juveniles who offend against children differ from juveniles who offend against peers or adults with respect to family composition?

H₀1: There is no significant difference between juveniles who offend against children and juveniles who offend against peers or adults with respect to family composition.

H_a1: There is a significant difference between juveniles who offend against children and juveniles who offend against peers or adults with respect to family composition.

To test Hypothesis 1, I conducted a chi-square test of independence to determine whether the groups differed with respect to family composition. All expected cell frequencies were greater than 5. Prior to data analysis, the seven separate categories of family composition were collapsed into three different categories. This was done primarily to account for lower cell counts in some of the categories. The variables that were included in the first collapsed category included one biological parent and blended family compositions. The variable that was included in the second collapsed category was a composition involving two-biological parents. The variables that were included in the third collapsed category included extended family, adopted family, group home, and foster care family compositions.

As shown in Table 5, the results of this analysis supported rejection of the null hypothesis. There was a statistically significant difference between juveniles who offended against children and juveniles who offended against peers or adults with respect to family composition $X^2(2, N = 105) = 8.240, p = .016$. Examination of the associated frequencies revealed that the presence of one biological parent or a blended family composition resulted in a higher frequency with respect to juveniles who offended against children (61.30%) compared to juveniles who offended against peers or adults (60.00%). The presence of two biological parents resulted in a lower frequency with respect to juveniles who offended against children (13.30%) compared to juveniles who offended against peers or adults (33.30%). Any other type of family composition was found to result in a higher frequency with respect to juveniles who offended against children (25.30%) compared to juveniles who offended against peers or adults (6.70%).

Table 5

Crosstabulation of Offender Group by Family Composition

	One biological parent and blended families		Two biological parents		Other	
	<i>n</i>	%	<i>N</i>	%	<i>n</i>	%
Offender group						
Child	46	61.32	10	13.35	19	25.32
Peer/adult	18	60.00	10	33.30	2	6.70
Whole sample	64	60.95	20	19.05	21	20.00
Model χ^2						8.240
Model <i>p</i>						0.016
Model <i>df</i>						2

Note: *N* = 105. Zero cells (0.0%) have expected counts of less than 5.

Results of Research Question 2

Research Question 2: Do juveniles who offend against children differ from juveniles who offend against peer or adults with respect to rates of physical abuse?

H₀2: There is no significant difference between juveniles who offend against children and juveniles who offend against peers or adults with respect to rates of physical abuse.

H_a2: There is a significant difference between juveniles who offend against children and juveniles who offend against peers or adults with respect to rates of physical abuse.

To test Hypothesis 2, I conducted a chi-square test of independence to determine whether the groups differed with respect to rates of physical abuse. All expected cell frequencies were greater than 5.

As shown in Table 6, the results of this analysis supported the null hypothesis. There was no statistically significant difference between juveniles who offended against children and juveniles who offended against peers or adults with respect to rates of physical abuse $X^2(1, N = 105) = 0.067, p = .796$. As such, decomposition of effects within the crosstabulation table is rendered moot.

Table 6

Crosstabulation of Offender Group by Physical Abuse

	No physical abuse		Physical abuse present	
	<i>n</i>	%	<i>N</i>	%
Offender group				
Child	48	64.00	27	36.00
Peer/adult	20	66.70	10	33.30
Whole sample	68	64.76	37	35.24
Model χ^2				0.067
Model <i>p</i>				0.796
Model <i>df</i>				1

Note: *N* = 105. Zero cells (0.0%) have expected counts of less than 5.

Results of Research Question 3

Research Question 3: Do juveniles who offend against children differ from juveniles who offend against peer or adults with respect to rates of sexual abuse?

H₀3: There is no significant difference between juveniles who offend against children and juveniles who offend against peers or adults with respect to rates of sexual abuse.

H_a3: There is a significant difference between juveniles who offend against children and juveniles who offend against peers or adults with respect to rates of sexual abuse.

To test Hypothesis 3, I conducted a chi-square test of independence to determine whether the groups differed with respect to rates of sexual abuse. All expected cell frequencies were greater than 5.

As shown in Table 7, the results of this analysis supported the null hypothesis. There was no statistically significant difference between juveniles who offended against children and juveniles who offended against peers or adults with respect to rates of sexual

abuse $X^2(1, N = 105) = 0.913, p = .339$. As such, decomposition of effects within the crosstabulation table is rendered moot.

Table 7

Crosstabulation of Offender Group by Sexual Abuse

	No sexual abuse		Sexual abuse present	
	<i>n</i>	%	<i>N</i>	%
Offender group				
Child	56	74.70	19	25.30
Peer/adult	25	83.30	5	16.70
Whole sample	81	77.14	24	22.86
Model χ^2				0.913
Model <i>p</i>				0.339
Model <i>df</i>				1

Note: $N = 105$. Zero cells (0.0%) have expected counts of less than 5.

Results of Research Question 4

Research Question 4: Do juveniles who offend against children differ from juveniles who offend against peer or adults with respect to rates of emotional abuse?

H₀4: There is no significant difference between juveniles who offend against children and juveniles who offend against peers or adults with respect to rates of emotional abuse.

H_a4: There is a significant difference between juveniles who offend against children and juveniles who offend against peers or adults with respect to rates of emotional abuse.

To test Hypothesis 4, I conducted a chi-square test of independence to determine whether the groups differed with respect to rates of emotional abuse. All expected cell frequencies were greater than 5.

As shown in Table 8, the results of this analysis supported the null hypothesis. There was no statistically significant difference between juveniles who offended against children and juveniles who offended against peers or adults with respect to rates of emotional abuse $X^2(1, N = 105) = 1.512, p = .219$. As such, decomposition of effects within the crosstabulation table is rendered moot.

Table 8

Crosstabulation of Offender Group by Emotional Abuse

	No emotional abuse		Emotional abuse present	
	<i>n</i>	%	<i>N</i>	%
Offender group				
Child	51	68.00	24	32.00
Peer/adult	24	80.00	6	20.00
Whole sample	75	71.43	30	28.57
Model χ^2				1.512
Model <i>p</i>				0.219
Model <i>df</i>				1

Note: *N* = 105. Zero cells (0.0%) have expected counts of less than 5.

Results of Research Question 5

Research Question 5: Do juveniles who offend against children differ from juveniles who offend against peers or adults with respect to rates of neglect?

H₀₅: There is no significant difference between juveniles who offend against children and juveniles who offend against peers or adults with respect to rates of neglect.

H_{a5}: There is a significant difference between juveniles who offend against children and juveniles who offend against peers or adults with respect to rates of neglect.

To test Hypothesis 5, I conducted a chi-square test of independence to determine whether the groups differed with respect to rates of neglect. All expected cell frequencies were greater than 5.

As shown in Table 9, the results of this analysis supported the null hypothesis. There was no statistically significant difference between juveniles who offended against children and juveniles who offended against peers or adults with respect to rates of neglect $X^2(1, N = 105) = .165, p = .685$. As such, decomposition of effects within the crosstabulation table is rendered moot.

Table 9

Crosstabulation of Offender Group by Neglect

	No neglect		Neglect present	
	<i>n</i>	%	<i>n</i>	%
Offender group				
Child	52	69.33	23	30.67
Peer/adult	22	73.33	8	26.67
Whole sample	74	70.48	31	29.52
Model χ^2				0.165
Model <i>p</i>				0.685
Model <i>df</i>				1

Note: $N = 105$. Zero cells (0.0%) have expected counts of less than 5.

Results of Research Question 6

Research Question 6: Do juveniles who offend against children differ from juveniles who offend against peers or adults with respect to exposure to domestic violence?

H₀6: There is no significant difference between juveniles who offend against children and juveniles who offend against peers or adults with respect to exposure to domestic violence.

H_a6: There is a significant difference between juveniles who offend against children and juveniles who offend against peers or adults with respect to exposure to domestic violence.

To test Hypothesis 6, I conducted a chi-square test of independence to determine whether the groups differed with respect to exposure to domestic violence. All expected cell frequencies were greater than 5.

As shown in Table 10, the results of this analysis supported the null hypothesis. There was no statistically significant difference between juveniles who offended against children and juveniles who offended against peers or adults with respect to exposure to domestic violence $X^2(1, N = 105) = 0.062, p = .804$. As such, decomposition of effects within the crosstabulation table is rendered moot.

Table 10

Crosstabulation of Offender Group by Domestic Violence

	No domestic violence		Domestic violence present	
	<i>n</i>	%	<i>n</i>	%
Offender group				
Child	42	56.00	33	44.00
Peer/adult	16	53.30	14	46.70
Whole sample	58	55.24	47	44.76
Model χ^2				0.062
Model <i>p</i>				0.804
Model <i>df</i>				1

Note: $N = 105$. Zero cells (0.0%) have expected counts of less than 5.

Results of Research Question 7

Research Question 7: Do juveniles who offend against children differ from juveniles who offend against peers or adults with respect to rates of mental health diagnosis?

H₀7: There is no significant difference between juveniles who offend against children and juveniles who offend against peers or adults with respect to mental health diagnosis.

H_a7: There is a significant difference between juveniles who offend against children and juveniles who offend against peers or adults with respect to mental health diagnosis.

To test Hypothesis 7, I conducted a chi-square test of independence to determine whether the groups differed with respect to rates of mental health diagnosis. All expected cell frequencies were greater than 5. Prior to data analysis, the six separate categories pertaining to mental health diagnosis were collapsed into two categories. The first collapsed category stipulated no mental health diagnosis. The second collapsed category stipulated the presence of at least one mental health diagnosis. The mental health diagnoses that were examined included anxiety, depression, attention deficit hyperactivity disorder, conduct disorder, fetal alcohol spectrum disorder, and oppositional defiance disorder.

As shown in Table 11, the results of this analysis supported the null hypothesis. There was no statistically significant difference between juveniles who offended against children and juveniles who offended against peers or adults with respect to mental health diagnosis $X^2(1, N = 105) = .004, p = .951$. As such, decomposition of effects within the crosstabulation table is rendered moot.

Table 11

Crosstabulation of Offender Group by Mental Health Diagnosis

	No diagnosis		Diagnosis present	
	<i>n</i>	%	<i>n</i>	%
Offender group				
Child	38	50.67	37	49.33
Peer/adult	15	50.00	15	50.00
Whole sample	53	50.48	52	49.52
Model χ^2				0.004
Model <i>p</i>				0.951
Model <i>df</i>				1

Note: *N* = 105. Zero cells (0.0%) have expected counts of less than 5.

Results of Research Question 8

Research Question 8: Do juveniles who offend against children differ from juveniles who offend against peers or adults with respect to offense type?

H₀8: There is no significant difference between juveniles who offend against children and juveniles who offend against peers or adults with respect to offense type.

H_a8: There is a significant difference between juveniles who offend against children and juveniles who offend against peers or adults with respect to offense type.

To test Hypothesis 8, I conducted a chi-square test of independence to determine whether the groups differed with respect offense type. Two cells (33.3%) had an expected frequency count of less than 5. This is not thought to have impacted the results. Prior to data analysis, the 11 separate offense types were collapsed into three different categories. The three collapsed categories included hands-off sexual offenses, minor sexual offenses, and major sexual offenses. The variables that were included in the first collapsed category involving hands-off sexual offenses included exhibitionism, voyeurism, fetishism, and obscene communication. The variables that were included in

the second collapsed category involving minor sexual offenses included kissing, fondling, and frottage. The variables that were included in the third collapsed category involving major sexual offense included cunnilingus, fellatio, vaginal intercourse, and anal intercourse.

As shown in Table 12, the results of this analysis supported rejection of the null hypothesis. There was a statistically significant difference between juveniles who offended against children and juveniles who offended against peers or adults with respect to offense type $X^2(1, N = 105) = 13.329, p = .001$. As such, decomposition of effects within the crosstabulation table can proceed. The results of the analysis revealed that none of the juveniles who offended against children committed a hands-off sexual offense (0.00%). In contrast, 16.70% of juveniles who offended against peers or adults committed a hands-off sexual offense. The rates of minor sexual offenses committed by juveniles who offended against children (38.70%) were comparable to the rates of minor sexual offenses committed by juveniles who offended against peers or adults (36.70%). With respect to major sexual offenses, juveniles who offended against children were found to have higher rates of major sexual offenses (61.30%) compared to juveniles who offended against peers or adults (46.70%).

Table 12

Crosstabulation of Offender Group by Offense Type

	Hands-off sex offense		Minor sex offense		Major sex offense	
	<i>n</i>	%	<i>N</i>	%	<i>n</i>	%
Offender group						
Child	0	0.00	29	38.70	46	61.30
Peer/adult	5	16.70	11	36.70	14	46.70
Whole sample	5	4.76	40	38.10	60	57.14
Model χ^2						13.329
Model <i>p</i>						0.001
Model <i>df</i>						2

Note: *N* = 105. Two cells (33.30%) have expected counts of less than 5.

Summary

In Chapter 4, I provided a detailed explanation of the study, including data collection and data analysis. I also provided a detailed description of the results of the study. Each of the eight research questions were investigated using chi-square tests of independence. The results of the analysis for the first research question found a statistically significant difference between juveniles who offended against children and juveniles who offended against peers or adults with respect to family composition. The analysis for research question eight also found a statistically significant difference between juveniles who offended against children and juveniles who offended against peers or adults with respect to offense type. The results of the analyses for the other six research questions found no statistically significant difference between juveniles who offended against children and juveniles who offended against peers or adults with respect to abuse histories or mental health diagnosis. In Chapter 5, I will include a thorough interpretation of the results of the study, discuss the limitations of the study, provide recommendations for future research, and highlight the implications for social change.

Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of this non-experimental quantitative study was to compare the differences between juveniles who offended against children and juveniles who offended against peers or adults with respect to family composition, abuse histories, mental health diagnosis, and offense type using a sample of male juvenile sexual offenders ages 11 to 18 who had been referred for assessment or treatment for sexual offenses in the province of Alberta, Canada. Each of the eight research questions was answered using a chi-square test of independence. The results indicated that there was a statistically significant difference between juveniles who offended against children and juveniles who offended against peers or adults with respect to family composition. A statistically significant difference among these two subgroups of juvenile sexual offenders was also found with respect to offense type. However, the results indicated no statistically significant differences between juveniles who offended against children and juveniles who offended against peers or adults with respect to abuse histories or mental health diagnosis.

Interpretation of the Findings

Analysis and Interpretation of Research Question 1

The results indicated a statistically significant difference between juveniles who offended against children and juveniles who offended against peers or adults with respect to family composition $X^2 (2, N = 105) = 8.240, p = .016$. The results confirmed findings from previous studies that addressed family composition relative to general offending and juvenile delinquency, as well as juvenile sexual offending. Most studies in the current literature addressed family composition in the context of general offending and juvenile

delinquency (Apel & Kaukinen, 2008; Demuth & Brown, 2004; Schroeder et al., 2010). Demuth and Brown (2004) investigated the impact of family composition on general offending and juvenile delinquency. The results indicated that mean levels of juvenile delinquency were highest among adolescents residing in single-father families (Demuth & Brown, 2004). Mean levels of juvenile delinquency were lowest among adolescents residing in families with two biological married parents (Demuth & Brown, 2004). These results were consistent with those found by Apel and Kaukinen (2008) who identified that adolescents residing in traditional nuclear households showed the lowest levels of juvenile delinquency compared to adolescents residing in households with only one biological parent. Schroeder et al. (2010) identified a large body of research that supports the notion that adolescents from non-intact homes show higher rates of juvenile delinquency than adolescents from intact homes. Adolescents in households where at least one biological parent was absent showed significantly higher rates of juvenile offending than adolescents from two-biological parent households (Schroeder et al., 2010). The results of these studies were consistent with the results from the current study in which the presence of one biological parent or a blended family composition resulted in a higher frequency of juvenile sexual offending. This was found to be true for juveniles who offended against children and for juveniles who offended against peers or adults. More specifically, 61.30% of juveniles who offended against children in the current study were residing in a one biological parent or a blended family composition. Similarly, 60.00% of juveniles who offended against peers or adults in the current study were residing in a one biological parent or blended family composition. In contrast,

13.30% of juveniles in the current study who offended against children were residing in a two-biological parent family composition and 33.30% of juveniles who offended against peers or adults were residing in a two-biological parent family composition.

Stevens et al. (2013) and Margari et al. (2015) conducted the only studies found that included juvenile sexual offenders in their sample, and Stevens et al. conducted one of the few studies that addressed family composition in relation to age-based typologies of juvenile sexual offenders. Margari et al. compared 31 juvenile sexual offenders, 31 juvenile non-sexual offenders, and 31 juvenile non-offenders. The intent of their study was to identify differences among offender profiles to better understand the motivation behind sexual offending and non-sexual offending. Family composition was one of the variables that was addressed by Margari et al. As in other seminal studies, family composition was limited to family units consisting of either a nuclear family or a single-parent household (Margari et al., 2015). Margari et al. found that most juvenile sexual offenders (77%) resided in single-parent homes. In contrast, 29% of juvenile non-sexual offenders resided in single-parent homes (Margari et al., 2015). Margari et al.'s findings supported previous research, suggesting that residing in a single-parent home may be a risk factor for juvenile sexual offending. This same trend was noted in the current study.

Stevens et al. (2013) conducted a study to determine which offense-related characteristics distinguished juveniles who sexually offended against children from juveniles who sexually offended against peers or adults. Family composition was defined as residing with family at the time of the offense or residing in institutional care at the time of the offense (Stevens et al., 2013). Stevens et al. also identified youths whose

parents were divorced or separated, as well as youth who were separated from one or both biological parents. Stevens et al. found that 81% of juveniles who offended against children were living with family at the time of the offense. Approximately 78% of juveniles who offended against children had experienced parental divorce or separation and 53% of these individuals reported being separated from one or both biological parents (Stevens et al., 2013). Among juveniles who offended against peers or adults, 82% were living with family at the time of the offense, 71% of these adolescents had experienced parental divorce or separation, and 65% reported being separated from one or both biological parents (Stevens et al., 2013).

Findings from the current study indicated that 13.30% of juveniles who offended against children were residing in a two-biological parent family composition at the time of the offense and 61.30% were residing in a one biological parent or a blended family composition at the time of the offense. Approximately 25.3% of juveniles who offended against children in the current study were residing in other family compositions. These family compositions included extended family, adopted family, group home, and foster care family compositions. In the current study, 53.33% of youths who offended against children were residing with some form of family at the time of the offense, and 61.90% of these adolescents had been separated from at least one biological parent. Regarding juveniles who offended against peers or adults, 33.30% were residing in a two-biological-parent family composition at the time of the offense, and 60.00% were residing in a one-biological-parent family composition or a blended family composition at the time of the offense. Less than seven percent (6.7%) of these individuals were residing in other

family compositions that included extended family, adopted family, group home, and foster care family compositions. In addition, 26.67% of juveniles who offended against peer or adults in the current study were residing with some form of family at the time of the offense and 19.05% of these youths had been separated from at least one biological parent. The literature on general delinquency indicates that youth from non-intact homes are at greater risk for general delinquency than youth from intact home (Apel & Kaukinen, 2008; Demuth & Brown, 2004; Schroeder et al., 2010). The results from the Stevens et al. (2013) study and the results from the current study indicated that youths from non-intact homes are at greater risk for juvenile sexual offending than youths from intact homes.

The purpose of the current study was to extend knowledge in the discipline pertaining to an age-based typology of juvenile sexual offenders and to account for the more complex family structures present in society (Demuth & Brown, 2004; Kennedy & Bumpass, 2008; Schroeder et al. 2010). Margari et al. (2015) limited their definition of family composition to nuclear families and single-family households. Stevens et al. (2013) defined family composition as residing with family at the time of the offense or residing in institutional care at the time of the offense. Stevens et al. also identified youths whose parents were divorced or separated, as well as youths who were separated from one or both biological parents. The specific variables that were examined with respect to family composition in the current study were more diverse and included living with one biological parent, living with two biological parents, living in a blended family, living with extended family, living with an adoptive family, living in a group home, and

living in foster care. The current study also adds to the current literature in terms of the utilization of an exclusively Canadian sample of juvenile sexual offenders.

Analysis and Interpretation of Research Question 2

The results of the current study indicated no statistically significant difference between juveniles who offended against children and juveniles who offended against peers or adults with respect to rates of physical abuse $X^2 (1, N = 105) = 0.067, p = .796$. These results were consistent with those from Joyal et al.'s (2016) study in terms of the rates of physical abuse noted among juvenile sexual offenders, and were inconsistent with the results of other studies in which physical abuse was found to be present in most juvenile sexual offenders (Marini et al., 2014; Seto & Lalumiere, 2010). Joyal et al. investigated the prevalence of physical abuse in a sample of 351 male juvenile sexual offenders who had been assessed relative to hands-on sexual offenses. The research participants were divided into three victim age-based subgroups: juveniles who offended against children, juveniles who offended against peers or adults, and juveniles with victims in both age groups (Joyal et al., 2016). Joyal et al. found that approximately one third of the sample (35.3%) reported a history of physical abuse. More specifically, 35.8% of juveniles who offended against children reported a history of physical abuse and 33.7% of juveniles who offended against peers or adults reported a history of physical abuse (Joyal et al., 2016). These findings were similar to the results from the current study in which no statistically significant differences were found between juveniles who offended against children and juveniles who offended against peers or adults with respect to rates of physical abuse.

The rates of physical abuse noted in the study conducted by Joyal et al. (2016) were similar to those found in the current study. This was true for juveniles who offended against children and juveniles who offended against peers or adults. More specifically, 36% of juveniles who offended against children in the current study had a history of physical abuse and 33.30% of juveniles who offended against peers or adults in the current study had a history of physical abuse. There were no notable differences in the composition of either of the offender groups in the study conducted by Joyal et al. and in the current study. Approximately 71% of the sample in the study conducted by Joyal et al. (2016) was composed of juveniles who offended against children, and 29% of the sample was composed of juveniles who offended against peers or adults. These numbers were virtually identical to those noted in the current study, in which 71.42% of the sample consisted of juveniles who offended against children and 28.57% of the sample consisted of juveniles who offended against peers or adults. No trends were noted in the current study regarding higher rates of abuse in one group over another.

Marini et al. (2014) investigated the relationship between childhood victimization and juvenile sexual offending in a sample of 573 residentially incarcerated male juvenile sexual offenders in the United States. Approximately 83.5% of the sample reported having experienced some form of physical abuse (Marini et al., 2014). The sample for the study conducted by Marini et al. was distinguished from the sample for the current study in that Marini et al. did not differentiate between juveniles who offended against children and juveniles who offended against peers or adults. The rates of physical abuse noted in the study conducted by Marini et al. were higher than those found in the current

study. This was true for juveniles who offended against children and juveniles who offended against peers or adults. Thirty-six percent of juveniles who offended against children in the current study had a history of physical abuse and 33.30% of juveniles who offended against peers or adults in the current study had a history of physical abuse. Approximately 35.24% of the total sample in the current study had a history of physical abuse.

Several factors may account for the discrepancy between findings from Marini et al. (2014) and those from the current study regarding rates of physical abuse. The first factor is the sample in the study conducted by Marini et al. was much larger than the sample for the current study. The second factor that may account for the discrepancy is the participants in the study undertaken by Marini et al. were residential offenders, whereas the inclusion criteria for the current study included male youth who had been referred for assessment or treatment. Youths in the current study need not have been charged or convicted of a sexual offense. Therefore, participants in the study conducted by Marini et al. may have represented a higher risk group or a more chronic offending group than youth in the current study. Third, Marini et al. did not differentiate between juveniles who offended against children and juveniles who offended against peers or adults. In this regard, there were notable differences in the composition of the samples between the current study and the study undertaken by Marini et al. Last, the way in which physical abuse was operationalized in each of these studies may further account for the fact that there was no statistically significant difference between juveniles who offended against children and juveniles who offended against peers or adults with respect

to rates of physical abuse in the current study. Marini et al. operationalized physical abuse through the use of the Childhood Trauma Questionnaire, which is a 34-item scale that screens for five different types of traumatic experiences in childhood (Bernstein & Fink, 1998). Physical abuse in the current study was defined through the use of a standard definition and operationalized via information in the client files in accordance with this definition. Accordingly, the way in which physical abuse was operationalized in the study undertaken by Marini et al. was potentially more sensitive than the way physical abuse was operationalized in the current study, thereby accounting for the discrepancy in the results.

Collectively, researchers have identified a higher prevalence of physical abuse among juvenile sexual offenders when compared to non-sexually offending juvenile delinquents (Burton et al., 2011; Seto & Lalumiere, 2010), as well as in relation to other populations (Joyal et al., 2016; Marini et al., 2014). However, a dearth of research has been identified regarding studies that examined rates of physical abuse among victim age-based typologies of juvenile sexual offenders. The study conducted by Joyal et al. (2016) was one of the only studies found that investigated the prevalence of physical abuse in relation to age-based typologies of juvenile sexual offenders. As such, the current study extends the knowledge base in the discipline by addressing this deficit among an age-based typology of juvenile sexual offenders in Canada. Although not statistically significant, the results of the current study are in some ways consistent with, and lend further support to, previous findings. For example, the study conducted by Joyal et al. and the current study both identified similar rates of physical abuse among

juveniles who offended against children and juveniles who offended against peers or adults. Therefore, while neither the study conducted by Joyal et al. nor the current study produced statistically significant results, both of these studies were unique in the fact that they examined age-based typologies of juvenile sexual offenders. In contrast, the results of the study conducted by Marini et al. (2014) were statistically significant regarding rates of physical abuse among juvenile sexual offenders. However, Marini et al. did not differentiate between juveniles who offended against children and juveniles who offended against peers or adults.

As previously noted, there are several factors that may account for the discrepancy noted between the study conducted by Marini et al. (2014), the current study, and the study conducted by Joyal et al. (2016) regarding rates of physical abuse. First, the participants in the study conducted by Marini et al. were residential offenders. The inclusion criteria for the current study included male youths who had been referred for assessment or treatment. The participants in the study undertaken by Joyal et al. had also been assessed relative to sexual offenses. Therefore, youth in the current study and in the study conducted by Joyal et al. need not have been charged or convicted of a sexual offense. As such, the participants in both of these studies may have represented lower risk groups and less chronic offending groups when compared to youth in the study conducted by Marini et al. Second, Marini et al. did not differentiate between juveniles who offended against children and juveniles who offended against peers or adults. As such there were notable differences in the composition of the sample between the study undertaken by Marini et al. relative to both the current study and the study conducted by

Joyal et al., both of which were similar in terms of the composition of the sample. Last, the way in which physical abuse was operationalized in each of these studies may further account for the fact that there was no statistically significant difference between juveniles who offended against children and juveniles who offended against peers or adults with respect to rates of physical abuse in the current study and in the study conducted by Joyal et al. Marini et al. operationalized physical abuse through the use of the Childhood Trauma Questionnaire (Bernstein & Fink, 1998). Physical abuse in the current study was defined through the use of a standard definition and operationalized via information in the client files in accordance with this definition. Joyal et al. operationalized physical abuse in a manner similar to the current study. Accordingly, the way in which Marini et al. operationalized physical abuse was potentially more sensitive than the way physical abuse was operationalized in the current study and in the study conducted by Joyal et al. Given the similarities in the current study and the study conducted by Joyal et al. in terms of examination of age-based typologies of juvenile sexual offenders, and relative to the consistency regarding rates of physical abuse among these typologies across both of these studies, there appears to be merit in continued exploration of rates of physical abuse among these two offender groups.

Analysis and Interpretation of Research Question 3

The results of the current study indicated no statistically significant difference between juveniles who offended against children and juveniles who offended against peers or adults with respect to rates of sexual abuse $X^2(1, N = 105) = 0.913, p = .339$. The results confirmed the results of a study conducted by Joyal et al. (2016), whereby

there were no statistically significant differences noted with respect to juveniles who offended against children and juveniles who offended against peers or adults with respect to rates of sexual abuse. However, the results of the current study disconfirmed the results of several other studies, whereby statistically significant results were obtained with respect to rates of sexual abuse among juvenile sexual offenders when compared with juvenile nonsexual offenders (DeLisi et al., 2014; Ogloff et al., 2012) and among juvenile sexual offenders (Marini et al., 2014; Stevens et al., 2013). The results of the current study also disconfirmed the results of a meta-analysis in which 31 studies investigating sexual abuse histories in juvenile sexual offenders found a higher prevalence of sexual abuse histories when compared with nonsexual offenders (Seto & Lalumiere, 2010).

With the exception of the study conducted by Joyal et al. (2016), not all of these studies examined exclusively male samples of juvenile sexual offenders or samples exclusive to juvenile sexual offending. Nonetheless, each of these studies obtained statistically significant results with respect to rates of sexual abuse among juvenile sexual offenders when compared to other populations. Although the results of the current study did not find a statistically significant difference between juveniles who offended against children and juveniles who offended against peers or adults with respect to rates of sexual abuse, some interesting trends were noted within the existing literature relative to the results of the current study. These trends are discussed below.

DeLisi et al. (2014) found that the prevalence of childhood sexual abuse victimization was nearly seven times higher among adolescents committed for sexual

offenses compared to adolescents committed for other serious crimes such as aggravated robbery and murder. Similarly, the results of the study by Ogloff et al. (2012) found that childhood sexual abuse victims were approximately five times more likely than the general population to be charged with a sexual offense when compared to individuals without histories of childhood sexual abuse. Approximately 72.4% of the participants in the study conducted by Marini et al. (2014) reported having experienced some form of sexual abuse. In contrast, only 22.86% of juveniles in the current study had a history of sexual abuse. Marini et al. did not differentiate between juveniles who offended against children and juveniles who offended against peers or adults in their study.

Stevens et al. (2013) found that juveniles who offended against children were more likely to have histories of sexual abuse (55%) than juveniles who offended against peers or adults (15%). Although the results of the current study were not statistically significant, a trend was noted in the study conducted by Stevens et al. and in the current study with respect to a higher rate of sexual abuse histories among juveniles who offended against children compared to juveniles who offended against peers or adults. Furthermore, the rates of sexual abuse among juveniles who offended against peers or adults were virtually identical in the study conducted by Stevens et al. and the current study. The results of the current study found that 25.30% of juveniles who offended against children had a history of sexual abuse and 16.70% of juveniles who offended against peers or adults had a history of sexual abuse. This trend was not noted in the study conducted by Joyal et al. (2016) in which similar rates of sexual abuse were noted

among juveniles who offended against children (35.8%) and juveniles who offended against peers or adults (33.7%).

There is little doubt that sexual abuse has been consistently identified as a risk factor for juvenile sexual offending (DeLisi et al., 2014; Joyal et al., 2016; Seto & Lalumiere, 2010). However, a gap was identified in the current literature with respect to a lack of studies that examined sexual abuse and various populations of juvenile sexual offenders, including victim age-based typologies (DeLisi et al., 2014; Joyal et al., 2016; Seto & Lalumiere, 2010), as well as exclusively male samples (Ogloff et al., 2012). For example, the study conducted by Joyal et al. (2016) was one of the only recent studies found that examined sexual abuse history relative to an exclusively male, victim age-based typology of juvenile sexual offender. The current study addressed both of these gaps.

Although not statistically significant, the results of the current study are in some ways consistent with the findings of, and lend further support to, previous findings (Joyal et al., 2016; Stevens et al., 2013). For example, the study conducted by Stevens et al. (2013) and the current study were similar in that juveniles who offended against children were found to have higher rates of sexual abuse histories compared to juveniles who offended against peers or adults. The rates of sexual abuse among juveniles who offended against peers or adults were also found to be almost identical in the study executed by Stevens et al. and in the current study. Both of these studies examined exclusively male samples of age-based typologies of juvenile sexual offenders. While neither the study conducted by Joyal et al. (2016) or the current study found statistically

significant results regarding rates of sexual abuse among juveniles who offended against children and juveniles who offended against peers or adults, both of these studies examined age-based typologies of juvenile sexual offenders, thereby extending the knowledge in the discipline in this regard.

Two primary factors may account for the discrepancies noted between the current study and the studies that found statistically significant results regarding rates of sexual abuse among juvenile sexual offenders compared with juvenile nonsexual offenders (DeLisi et al., 2014; Ogloff et al., 2012) and among studies that found statistically significant results regarding rates of sexual abuse among juvenile sexual offenders (Marini et al., 2014; Stevens et al., 2013). First, youths in the study conducted by DeLisi et al. (2014) and youths in the study conducted by Marini et al. (2014) were residentially incarcerated male juvenile sexual offenders. Sixty-eight percent of the youth in the study conducted by Stevens et al. (2013) had also been incarcerated for a sexual offense. In contrast, youth in the study conducted by Ogloff et al. (2012) and youth in the current study need not have been charged or convicted of a sexual offense. The participants in the study executed by Ogloff et al. and the current study may therefore have represented lower risk groups and less chronic offending groups when compared to youth in the other studies (DeLisi et al., 2014; Marini et al., 2014; Stevens et al., 2013).

A second factor that may account for the lack of statistically significant results regarding rates of sexual abuse among juvenile sexual offenders compared with juvenile nonsexual offenders in the current study compared to previous studies was the fact that all of the samples in the previous studies were larger than the sample for the current study

(DeLisi et al., 2014; Marini et al., 2014; Ogloff et al., 2012; Stevens et al., 2013).

Stevens et al. (2013) and the current study both examined rates of sexual abuse using an exclusively male sample of age-based typologies of juvenile sexual offenders. The similarities that were noted in these two studies regarding the rates of sexual abuse histories among juveniles who offended against children and juveniles who offended against peers or adults provided support for continued examination of rates of sexual abuse among these two distinct offender groups.

Analysis and Interpretation of Research Question 4

The results of the current study indicated no statistically significant difference between juveniles who offended against children and juveniles who offended against peers or adults with respect to rates of emotional abuse $X^2(1, N = 105) = 1.512, p = .219$. The results disconfirmed the results of previous studies in which statistically significant results were obtained with respect to rates of emotional abuse among juvenile sexual offenders when compared with other populations (Marini et al., 2014; Seto & Lalumiere, 2010; Zurbriggen et al., 2010).

Approximately 79.6% of the U.S. sample of residentially incarcerated male juvenile sexual offenders in the study conducted by Marini et al. (2014) reported having experienced emotional abuse. In contrast, only 28.57% of youths in the current study had a history of emotional abuse. Zurbriggen et al. (2010) examined whether or not childhood emotional abuse would be positively associated with late adolescent sexual aggression victimization and late adolescent sexual aggression perpetration among both male and female college students. The results indicated that childhood emotional abuse

was positively correlated with adolescent sexual aggression victimization, as well as with adolescent sexual perpetration (Zurbriggen et al., 2010). These results were true for both male and female adolescent sexual offenders, but the correlation between adolescent sexual aggression victimization and adolescent sexual perpetration was stronger for males than for females (Zurbriggen et al., 2010). The results of the study conducted by Zurbriggen et al. were consistent with the results of a meta-analysis conducted by Seto and Lalumiere (2010) who found higher rates of emotional abuse among juvenile sexual offenders compared with non-sexually offending delinquent adolescents.

In both the study conducted by Marini et al. (2014) and the study conducted by Zurbriggen et al. (2010), emotional abuse was operationalized differently than it was in the current study. Marini et al. operationalized emotional abuse through the use of the Childhood Trauma Questionnaire (Bernstein & Fink, 1998). Zurbriggen et al. operationalized emotional abuse through the use of the Brief Betrayal Trauma Survey (Goldberg & Freyd, 2006). In contrast, emotional abuse in the current study was defined through the use of a standard definition and operationalized via information in the client files in accordance with this definition. The way in which emotional abuse was operationalized by Marini et al. and Zurbriggen et al. were potentially more sensitive than the way in which emotional abuse was operationalized in the current study. This difference may account for the lack of a statistically significant difference between juveniles who offended and children and juveniles who offended against peers or adults in the current study regarding rates of emotional abuse.

A second factor that may account for the discrepancies in the current study relative to the study conducted by Marini et al. (2014) and the study conducted by Zurbriggen et al. (2010) is the fact that there were notable differences in the compositions of all three of these studies. The study undertaken by Marini et al. was composed of an all-male sample of adjudicated juvenile sexual offenders. Marini et al. did not differentiate between juveniles who offended against children and juveniles who offended against peers or adults. The study undertaken by Zurbriggen et al. included both male and female college students, whereby adolescent sexual aggression was measured through the utilization of a modified version of the Sexual Experiences Survey (Koss, Gidycz, & Wisniewski, 1987). The current study was composed of male youth who had been referred for assessment or treatment relative to sexual offenses. Youth in the current study did not have to have been convicted of a sexual offense.

The current study extends the knowledge in the discipline by addressing two major limitations noted within the existing literature on emotional abuse and juvenile sexual offending. These limitations included a lack of studies pertaining to exclusively adolescent male juvenile sexual offenders (Marini et al., 2014; Seto & Lalumiere, 2010; Zurbriggen et al., 2010), as well as a lack of studies investigating the relationship between emotional abuse and various subtypes of juvenile sexual offenders (Marini et al., 2014). A lack of studies that examined emotional abuse and juvenile sexual offending among Canadian samples was also noted in the literature and was subsequently addressed via the current study. The current study is unique in that it examined rates of emotional abuse among an exclusively male, Canadian, age-based typology of juvenile sexual

offenders. No other studies were found within the current literature that addressed these gaps.

Analysis and Interpretation of Research Question 5

The results of the current study indicated no statistically significant difference between juveniles who offended against children and juveniles who offended against peers or adults with respect to rates of neglect $X^2 (1, N = 105) = .165, p = .685$. The results disconfirmed the results of previous studies in which statistically significant results were found with respect to rates of neglect among juvenile sexual offenders when compared with other populations (Gunby & Woodhams, 2010; Hendricks & Bijleveld; Joyal et al., 2016; Marini et al., 2014; Seto & Lalumiere, 2010).

Gunby and Woodhams (2010) examined the prevalence of neglect among a victim age-based typology of 43 juvenile sexual offenders. Gunby and Woodhams found higher rates of neglect among juveniles who sexually offended against peers or adults (72.7%) compared to juveniles who offended against children (23.8%). These results were consistent with the results of a seminal study carried out by Hendricks and Bijleveld (2004) who found higher rates of neglect among juveniles who sexually offended against peers or adults (42%) compared to juveniles who sexually offended against children (28%).

A recent research conducted by Joyal et al. (2016) found that 54.3% of juveniles who offended against children had a history of neglect and 58.8% of juveniles who offended against peers or adults had a history of neglect. The trend that was noted in each of these studies with respect to higher rates of neglect among juveniles who

offended against peers or adults was not noted in the current study, whereby juveniles who offended against children were found to have higher rates of neglect (30.70%) compared to juveniles who offended against peers or adults (26.70%). Although Marini et al. (2014) did not distinguish between juveniles who offended against children and juveniles who offended against peers or adults, the results of the study conducted by Marini et al. found that 84.8% of the sample had experienced some form of physical neglect. In contrast, only 29.52% of youths in the current study had a history of neglect. Last, a meta-analysis conducted by Seto and Lalumiere (2010) found higher rates of neglect among juvenile sexual offenders compared with non-sexually offending delinquent adolescents.

There are two main factors that may account for the discrepancies regarding the results of previous studies and the current study regarding rates of neglect. The first factor is the way in which each of the studies defined the parameters of the offending groups. For example, there were differences in terms of how each of the studies defined a child victim. In the study conducted by Gunby and Woodhams (2010) and in the study conducted by Hendricks and Bijleveld (2004), a child victim was defined as someone who was 5 or more years younger than the individual who sexually offended against him or her. In the current study and in the study conducted by Joyal et al. (2016), a child victim was defined as someone who was 3 or more years younger than the individual who committed a sexual offense against him or her. This distinction would have created variations in victim characteristics, including the age of the victims. However, most of the previous studies did not report on the age of the victims (Gunby & Woodhams, 2010;

Hendricks & Bijleveld, 2004; Joyal et al., 2016; Marini et al., 2014), making comparisons to the current study impossible regarding victim age.

A second factor that may account for the discrepancies regarding the results of previous studies and the current study regarding rates of neglect pertains to the composition of the studies. For example, two of the studies were similar in that they had relatively the same numbers of youth in each of the offending groups (Gunby & Woodhams, 2010; Hendricks & Bijleveld, 2004). The study conducted by Gunby and Woodhams had 21 juveniles who offended against children and 22 juveniles who offended against peers or adults. Hendricks and Bijleveld (2004) had 58 juveniles who offended against children and 54 juveniles who offended against peers or adults. In contrast, the study conducted by Joyal et al. (2016) and the current study both had higher numbers of juveniles who offended against children. Joyal et al. had 208 juveniles who offended against children and 85 juveniles who offended against peers or adults. The current study had 75 juveniles who offended against children and 30 juveniles who offended against peers or adults. Each of the studies varied in sample size from 43 in the study conducted by Gunby and Woodhams to 573 in the study conducted by Marini et al. (2014).

The purpose of the current study was to extend the knowledge in the discipline by addressing three major limitations noted in the current literature on neglect and juvenile sexual offending. The first limitation centered on the fact that the majority of studies located within the literature compared rates of neglect among juvenile sexual offenders and non-sexually offending delinquent youth (Seto & Lalumiere, 2010). Second, very

few studies examined neglect relative to an age-based typology of juvenile sexual offender (Marini et al., 2014; Seto & Lalumiere, 2010). Of the three studies reviewed that investigated the prevalence of neglect relative to an age-based typology of juvenile sexual offender, one was limited by a small sample size (Gunby & Woodhams, 2010), and two were outdated (Gunby & Woodhams, 2010; Hendricks & Bijleveld, 2004). Last, the existing studies were limited in the generalizability of their results to Canadian populations of juvenile sexual offenders, as well as to samples that were comprised primarily of youth who had been convicted of a sexual offense (Gunby & Woodhams, 2010; Hendricks & Bijleveld, 2004; Marini et al., 2014). As such, the current study expanded on the results of existing studies and filled a gap in the literature through the examination of neglect relative to an age-based typology of juvenile sexual offenders in Canada. This sample was also unique in that it was a community-based sample of juvenile sexual offenders. The current study also added to the current knowledge base in that it provided information regarding victim age.

Analysis and Interpretation of Research Question 6

The results of the current study indicated no statistically significant difference between juveniles who offended against children and juveniles who offended against peers or adults with respect to exposure to domestic violence $X^2(1, N = 105) = 0.062, p = .804$. The results were inconsistent relative to previous studies regarding rates of domestic violence among juvenile sexual offenders (Gunby & Woodhams, 2010; Hendricks & Bijleveld, 2004).

Gunby and Woodhams (2010) investigated the prevalence of exposure to domestic violence in a sample of 43 juvenile sexual offenders. The sample included juveniles who offended against children and juveniles who offended against peers or adults in England and Wales. The researchers found that juveniles who offended against children were less likely to have been exposed to domestic violence than juveniles who offended against peers or adults (Gunby & Woodhams, 2010). More specifically, 23.8% of juveniles who offended against children reported exposure to domestic violence (Gunby & Woodhams, 2010). In contrast, 72.7% of juveniles who offended against peers or adults reported exposure to domestic violence (Gunby & Woodhams, 2010). The results of the study conducted by Gunby and Woodhams were statistically significant. Similarly, in a study conducted by Hendricks and Bijleveld (2004), the researchers found that 13% of juveniles who offended against children reported exposure to domestic violence and 28% juveniles who offended against peers or adults reported a history of exposure to domestic violence. Although the results of the study conducted by Hendricks and Bijleveld were not statistically significant with respect to differences among the subgroups of juvenile sexual offenders based on victim age, the results of the study conducted by Hendricks and Bijleveld were similar to the results of the study conducted by Gunby and Woodhams in that a higher prevalence of exposure to domestic violence was noted among juveniles who offended against children compared to juveniles who offended against peers or adults.

The results of the studies conducted by Gunby and Woodhams (2010) and Hendricks and Bijleveld (2004) were inconsistent with the results of the current study

with respect to the prevalence of exposure to domestic violence among juveniles who offended against children and juveniles who offended against peers or adults. Of particular note in the current study was the fact that juveniles who offended against children were found to have similar rates of exposure to domestic violence (44%) compared to juveniles who offended against peers or adults (46.70%).

Not only were the studies conducted by Gunby and Woodhams (2010) and Hendricks and Bijleveld (2004) outdated and limited in the generalizability of their results to Canadian populations of juvenile sexual offenders, the study conducted by Gunby and Woodhams was limited by a small sample size. Accordingly, the current study added to the existing knowledge base in that it provided updated results that pertain to a Canadian sample of juvenile sexual offenders. The current study also added to the existing knowledge base in that it provided reference to a community-based sample of juvenile sexual offenders and provided information regarding victim age. The differences noted in the current study relative to previous studies, provided additional support for research that examines exposure to domestic violence among juveniles who offend against children and juveniles who offend against peers or adults.

Analysis and Interpretation of Research Question 7

The results of the current study indicated no statistically significant difference between juveniles who offended against children and juveniles who offended against peers or adults with respect to rates of mental health diagnosis $X^2(1, N = 105) = .004, p = .951$. While collectively, the literature highlighted the prevalence of mental health disorders among juveniles who sexually offended against children and juveniles who

sexually offended against peers or adults, there were some discrepancies among the prevalence of specific mental health disorders among these two subgroups of juvenile sexual offenders and in relation to other populations (Boonmann et al., 2015; Gunby & Woodhams, 2010; Hart-Kerkhoffs et al., 2015; Joyal et al., 2016).

Boonmann et al. (2015) conducted a meta-analysis in order to identify the prevalence of mental health disorders among juvenile sexual offenders and non-juvenile sexual offenders. The researchers reviewed a total of 21 studies (Boonmann et al., 2015). The results of the meta-analysis executed by Boonmann et al. indicated that approximately 69% of juvenile sexual offenders met the criteria for at least one mental health disorder. Comorbidity was present in approximately 44% of these same individuals (Boonmann et al., 2015). In the current study, only 49.52% of the youths met the criteria for at least one mental health disorder.

There are several factors that may account for the discrepancy noted with respect to the results of current study and the study conducted by Boonmann et al. (2015). First, the meta-analysis executed by Boonmann et al. contained a diverse range of studies in terms of the populations in which they examined. For example, there were studies that had both male and female offenders (Boonmann et al., 2015). Further to this, the samples in the meta-analysis conducted by Boonmann et al. included community offenders, youths in residential treatment settings, outpatient offenders, and youths who had been convicted relative to a sexual offense. In contrast, youths in the current study need not have been convicted of a sexual offense. As such, the participants in some of the studies in the meta-analysis executed by Boonmann et al. may have represented higher risk

groups and more chronic offending groups when compared to youth in the current study. Further to this, very few of the studies that were examined by Boonmann et al. examined the prevalence of mental health diagnosis among age-based typologies of juvenile sexual offenders. Last, the definition of mental health and the way in which mental health was operationalized also differed across the studies that were examined by Boonmann et al. and may have contributed to the differences in findings between prior studies and the current study regarding rates of mental health diagnosis. More specifically, the way in which mental health diagnosis was operationalized in some of the studies examined by Boonmann et al. were potentially more sensitive than the way in which mental health diagnosis was operationalized in the current study, thereby accounting for the discrepancy in the results. The results of the meta-analysis conducted by Boonmann et al. highlighted the need for further studies to examine the prevalence of mental health disorders in age-based typologies of juvenile sexual offenders and in relation to offense characteristics such as offense type.

Gunby and Woodhams (2010) investigated the prevalence of mental health diagnosis in a sample of juvenile sexual offenders. Their sample included juveniles who offended against children and juveniles who offended against peers or adults. Similar to the results of the current study, Gunby and Woodhams found no statistically significant difference with respect to the prevalence of mental health diagnosis between juveniles who offended against children and juveniles who offended against peers. However, Gunby and Woodhams did find a higher rate of mental health diagnosis among juveniles who offended against children (76.2%) compared to juveniles who offended against peers

or adults (40.9%). This same trend was not noted in the current study in which similar rates of mental health diagnosis were found among the two offender groups.

Several factors may account for the discrepancy in the results of the current study and the study conducted by Gunby and Woodhams (2010) regarding rates of mental health diagnosis among juveniles who offended against children and juveniles who offended against peers or adults. The first factor is the way in which each of these studies defined the parameters of the offending groups. For example, Gunby and Woodhams defined a child victim as someone who was 5 or more years younger than the individual who sexually offended against him or her. In the current study, a child victim was defined as someone who was 3 or more years younger than the individual who committed a sexual offense against him or her. This distinction would have created variations in victim characteristics such as the age of the victims. However, Gunby and Woodhams did not report on victim age, which makes comparisons to the current study impossible. Second, youths in the study conducted by Gunby and Woodhams were all guilty of a sexual offense, whereas not all of the youths in the current study were guilty of a sexual offense. This difference may have accounted for the differences in the study conducted by Gunby and Woodhams and the current study in that youths in the study conducted by Gunby and Woodhams may have represented a higher risk, and more chronic offending, group when compared to youths in the current study. Third, the composition of the offender groups in the study executed by Gunby and Woodhams differed from the composition of the offender groups in the current study. The study conducted by Gunby and Woodhams had 21 juveniles who offended against children and 22 juveniles who

offended against peers or adults. The current study had 75 juveniles who offended against children and 30 juveniles who offended against peers or adults. In this regard, the current study had a greater number of juveniles who offended against children when compared to juveniles who offended against peers or adults.

Hart-Kerkhoffs et al. (2015) conducted a study in order to investigate the prevalence of mental health disorders and their relationship to criminal re-referrals in a victim age-based typology of juvenile sexual offenders. The sample consisted of 106 juvenile sexual offenders (Hart-Kerkhoffs et al., 2015). The results indicated that the subgroups of juvenile sexual offenders did not differ with respect to the presence of any one specific mental disorder (Hart-Kerkhoffs et al., 2015). However, when compared to juveniles who offended against peers or adults, juveniles who offended against children showed a higher prevalence of affective disorders (Hart-Kerkhoffs et al., 2015). Comorbidity was found to be least present in juveniles who offended against peers or adults (Hart-Kerkhoffs et al., 2015). Overall, the results of the study conducted by Hart-Kerkhoffs et al. suggested that mental disorders are highly prevalent in juvenile sexual offenders. This was found to be particularly true for juveniles who offended against children (Hart-Kerkhoffs et al., 2015). This trend was not noted in the current study in which similar rates of mental health diagnosis were found among juveniles who offended against children (49.30%) and juveniles who offended against peers or adults (50%).

There are a number of differences between the study conducted by Hart-Kerkhoffs et al. (2015) and the current study that may account for the discrepancy in the results of the current study and the study conducted by Hart-Kerkhoffs et al. regarding

rates of mental health diagnosis among juveniles who offended against children and juveniles who offended against peers or adults. The first factor that may account for this discrepancy centers on the composition of the sample in each of these studies. The study conducted by Hart-Kerkhoffs et al. included both male and female offenders, whereas the sample in the current study was composed of male offenders. A second factor that may account for the discrepancy in the study conducted by Hart-Kerkhoffs et al. and the current study is the way in which these studies defined the parameters of the offending groups. For example, in the study conducted by Hart-Kerkhoffs et al., the subgroups of juvenile sexual offenders were defined as those with child victims, solo juvenile sexual offenders, and group offenders. In the current study, the subgroups of juvenile sexual offenders were defined as juveniles who offended against children and juveniles who offended against peers or adults. Third, Hart-Kerkhoffs et al. defined a child victim as anyone who was 4 or more years younger than the individual who committed a sexual offense against him or her, whereas the current study defined a child victim as someone who was 3 or more years younger than the individual who committed a sexual offense against him or her. These distinctions may have created variations in victim characteristics such as the age of the victims. However, Hart-Kerkhoffs et al. did not report on victim age, which makes comparisons to the current study impossible regarding victim age. Last, the way in which mental disorders were operationalized in the study conducted by Hart-Kerkhoffs et al. appears to have been more sensitive than the way in which mental disorders were operationalized in the current study, which may account for the lack of statistically significant results in the current study regarding rates of mental

health diagnosis among juveniles who offended against children compared to juveniles who offended against peers or adults.

Joyal et al. (2016) examined the prevalence of mental health diagnosis among a victim age-based typology of 351 male juvenile sexual offenders who had either offended against children or against peers or adults. The mental health diagnoses that were examined by Joyal et al. included attention deficit hyperactivity disorder and conduct disorder. In contrast, the current study examined the prevalence of several mental health diagnoses. These diagnoses included anxiety, depression, attention deficit hyperactivity disorder, conduct disorder, fetal alcohol spectrum disorder, and oppositional defiance disorder. Approximately 30% of the victim age-based participants in the study conducted by Joyal et al. received a diagnosis of conduct disorder. Furthermore, statistically significant differences were found among these age-based subgroups (Joyal et al., 2016). More specifically, Joyal et al. found that significantly more juveniles who offended against peers or adults received a diagnosis of conduct disorder (45.9%) compared to juveniles who offended against children (24.5%). No other statistically significant differences were noted among the victim age-based subgroups with respect to mental health diagnosis (Joyal et al., 2016). In the current study, the category of mental health diagnosis was collapsed to include only the presence or absence of a mental health diagnosis. As such, this makes it impossible to make direct comparisons between the current study and the study conducted by Joyal et al. However, the current study and the study conducted by Joyal et al. were both unique in that they examined rates of mental

health diagnosis among juveniles who offended against children and juveniles who offended against peers or adults.

The current study contributed to the existing literature through examination of the rates of mental health diagnosis among an exclusively male, Canadian, age-based typology of juvenile sexual offenders. Although the results were not statistically significant, the current study was one of the few studies found in the current literature that examined mental health diagnosis relative to this specific population. As such, it represents the foundation from which other studies can build upon.

Analysis and Interpretation of Research Question 8

The results of the current study indicated a statistically significant difference between juveniles who offended against children and juveniles who offended against peers or adults with respect to offense type $X^2(1, N = 105) = 13.329, p = .001$. The results produced mixed results relative to previous studies regarding offense type among juvenile sexual offenders when compared with other populations (Margari et al., 2015; Marini et al., 2014; Stevens et al., 2014).

Margari et al. (2015) compared 31 juvenile sexual offenders, 31 juvenile offenders, and 31 juvenile non-offenders. Offense type was defined by sexual touch, oral or genital contact, accessing pornographic material, physical aggression, and psychological and verbal offenses (Margari et al., 2015). Approximately 39% of the juvenile sexual offenders were reported to have engaged in a hands-on sexual touching offense and 48% had engaged in oral-genital contact (Margari et al., 2015). The results of the study conducted by Margari et al. are somewhat similar to the results obtained in

the current study in terms of the prevalence of reported hands-on offenses. However, a direct comparison regarding the sexual touch and oral or genital contact was not possible due to the fact that these two offense types were grouped together in the study conducted by Margari et al., whereas in the current study, these two variables were categorized separately. Due to the fact that the current study examined a more comprehensive and diverse range of sexual offending behaviours, the current study extended and refined the current knowledge by providing a more in-depth understanding of these variables relative to the study conducted by Margari et al.

In addition to differences regarding the categorization of offense type, another methodological difference that may have impacted the results of the current study in relation to the study conducted by Margari et al. (2015) centered on the fact that Margari et al. did not differentiate between juveniles who offended against children and juveniles who offended against peers or adults, as was done in the current study. Last, all of the youths in the study executed by Margari et al. were convicted of a sexual offense, whereas youth in the current study did not have to have been convicted of a sexual offense. Both of these differences may have impacted the results of the current study regarding offense type when compared to the results of the study conducted by Margari et al. The most commonly reported behaviours with respect to the commission of a sexual offense in the study conducted by Marini et al. (2014) included penetration, oral sex, exposure, and fondling. This information is somewhat inconsistent with the information obtained from the current study in which the most commonly reported behaviours during the commission of a sexual offense included cunnilingus, fellatio, vaginal intercourse,

and anal intercourse. This was true for both victim age-based groups of juvenile offenders. More specifically, the current study noted a higher prevalence of major sexual offenses among juveniles who offended against children and juveniles who offended against peers or adults. There were no hands-off offenses committed by juveniles who offended against children, whereas 16.70% of juveniles who committed a hands-off offense offended against peers or adults. Approximately 38.70% of juveniles who committed a minor sexual offense offended against children and 36.70% of juveniles who committed a minor sexual offense offended against peers or adults. Approximately 61.30% of juveniles who committed a major sexual offense offended against children and 46.70% of juveniles who committed a major sexual offense offended against a peer or adult.

In the study conducted by Marini et al. (2014), offense type was operationalized differently than it was in the current study. Marini et al. operationalized offense type through the use of the perpetration severity scale that was developed specifically for the study and through self-reports. In the current study offense type was defined through the use of a standard definition and operationalized via information in the client files in accordance with this definition. However, it is not believed that this difference impacted the results of the current study relative the results of the study conducted by Marini et al.

Factors that may have impacted the results of the current study relative to the results of the study conducted by Marini et al. (2014) include the fact that the study conducted by Marini et al. was composed of adjudicated male juvenile sexual offenders. In contrast, youths in the current study did not have to have been convicted of a sexual

offense. Therefore, youths in the current study may have comprised a lower risk and less chronic offending, group when compared to youths in the study conducted by Marini et al. However, the fact that youth in the current study may represent a lower risk group when compared youth in the study executed by Marini et al. is surprising given the fact that youth in the current study had higher rates of cunnilingus, fellatio, vaginal intercourse, and anal intercourse when compared to youths in the study conducted by Marini et al. One additional difference between the current study and the study conducted by Marini et al. was that Marini et al. did not differentiate between juveniles who offended against children and juveniles who offended against peers or adults.

The current study extended knowledge in the discipline through examination of a more complex and diverse range of hands-off versus hands-on sexual offenses in an attempt to provide a more accurate understanding of the nature and severity of the sexual offenses among age-based typologies of juvenile sexual offenders. The current study also extended knowledge in the discipline through continued investigation of offense type relative to an exclusively Canadian sample. Last, the results of the current study further refined the existing knowledge in the discipline through examination of offense type relative to a community-based sample of juvenile sexual offenders.

Developmental-Contextual Theory

The focus of developmental-contextual theory is on the interaction of an individual's developmental status within the context of their unique life experiences that are thought to continually shape human functioning (Ryan, 2010). A developmental-contextual approach supports a holistic and integrated approach to understanding and

treating juvenile sexual offending (Leroux et al., 2016; Seto & Lalumiere, 2010; Spice et al., 2012; Stevens et al., 2013). This is accomplished through the integration of theories relevant to attachment (Steele, 1987), growth and development (Strayhorn, 1988), and phenomenology (Yochelson & Samenow, 1976).

Developmental-contextual theory was chosen as the basis for the current study because it allowed for consideration of a multitude of unique factors deemed relevant to juvenile sexual offending (Ryan, 2010). More specifically, developmental-contextual theory considers abusiveness, sexuality, and youth as three separate domains (Ryan, 2010). Each domain is represented in the problem and offers opportunities for understanding and change (Ryan, 2010). Developmental-contextual theory is based on the premise that interventions for juvenile sexual offenders have typically been motivated by the belief that there is a better prognosis for change if treatment occurs while these individuals are still growing and developing (Ryan, 2010). In this regard, a developmental perspective is particularly compelling (Ryan, 2010), specifically when viewed within the context of the current study.

Developmental-contextual theory related to the current study in that the intent of the current study was to better understand the differences between juveniles who offended against children and juveniles who offended against peers or adults from a multifaceted perspective. This is important because the establishment of an empirically supported victim age-based typology of juvenile sexual offender highlights the need to consider utilization of a developmental-contextual approach relative to this diverse population of juvenile offenders (Creeden, 2013; Ryan, 2010; Ryan & Associates, 1999).

The variables that were examined in the current study provided an indirect way of looking at a variety of experiences that have the potential to negatively impact the development of youth. For example, the results of the current study found a significant difference between juveniles who offended against children and juveniles who offended against peers or adults with respect to family composition. The results of the current study confirmed the results of previous studies indicating that youth are adversely impacted by virtue of being raised in non-intact families. Similarly, the results of the current study regarding offense type highlighted the scope of diverse sexual offending behaviours exhibited among age-based typologies of juvenile sexual offenders.

While the results of the current study did not find statistically significant results among juveniles who offended against children and juveniles who offended against peers or adults with respect to abuse histories or mental health diagnosis, the results of the current study still provide support for the need for continued exploration of the impact of these experiences on youth as potential risk factors for age-based typologies of juvenile sexual offenders. It is through a more comprehensive understanding of each of these experiences that we will come to better understand the risk factors for juvenile sexual offending. We may also come to better understand the factors that may serve as protective factors for age-based typologies of juvenile sexual offenders. In this regard, developmental-contextual theory contributes to our understanding of potential risk factors and of what must ultimately be prevented in order to reduce the incidence and prevalence of juvenile sexual offending (Ryan, 2010).

Limitations of the Study

There were several limitations noted with respect to the current study. These limitations included the use of archival data and the use of a convenience sample. The first limitation of this study centered on the use of archival data, which limited my control over the variables (see Frankfort-Nachmias et al., 2015). More specifically, I was limited in terms of the nature and type of data that was used to measure my variables. I was also limited in terms of the data that were available to me. For example, very few of the files that I reviewed contained information on the ethnicity of the offenders or the victims. As such, I was unable to include this information in the descriptive statistics for my study. The second limitation was the fact that I did not have control over the quality of the data (see Frankfort-Nachmias et al., 2015). A third limitation was that some of the variables relied on self-report data, whereby the participants may not have been fully truthful with respect to the information that they provided (see Frankfort-Nachmias et al., 2015). This may have been especially problematic for abuse history and offense type in which much of the data in the files were based on self-reports of the offenders, as well as on information provided by family members. Information regarding offense type was provided primarily by police reports and by self-reports of the victims. Reliance on self-report data may also have meant that data was missing in the files that were utilized for this study. For example, some forms of abuse may not have been reported on. Fourth, I used a convenience sample, which may not be fully representative of the target population (see Frankfort-Nachmias et al., 2015). The use of a convenience sample limited the generalizability of the results to other populations (see Frankfort-Nachmias et

al., 2015). More specifically, this study was limited by the fact that I was not able to examine all male juvenile sexual offenders ages 11 to 18 across Canada. In this regard, the current study may not be representative of the target population that I wished to make inferences from. For example, the archival sample consisted of youths who had not necessarily been charged or convicted of a sexual offense. As such, these individuals may have represented lower risk offenders. Accordingly, the results may not be generalizable to juveniles who have been adjudicated for sexual offenses. Further to this, the results may not be generalizable to adolescents who have sexually offended, but who have not been caught or otherwise identified as having committed a sexual offense. In this regard, the sampling frame is not representative of all individual's in the larger population who have sexually offended against children or who have sexually offended against peers or adults.

Recommendations for Future Research

The results of the current study highlight a number of potential areas for future research. The first area identified for future research centers on examination of a broader and more diverse range of juvenile sexual offenders. This study examined youth who had been referred for assessment or treatment for sexual offenses. These individuals did not have to have been charged or convicted of a sexual offense. As such, future studies may wish to examine youths who have been charged or convicted of a sexual offense. Incarcerated youth would also be a population of interest in this regard. A second area identified for future research involves additional exploration of juveniles who offend against children and juveniles who offend against peers or adults with regard to their

sexual histories, particularly the use of pornography and its influence on sexual offending behaviour. A third area identified for future research centers on studies pertaining to female offenders. This study utilized an exclusively male sample of juvenile sexual offenders. Therefore, the results of this study can not be generalized to female offenders. Accordingly, this remains an area that warrants examination. Fourth, replication of the current study with a larger sample size or studies that consider comparisons of juvenile offenders that have victims in both age groups would serve to enhance the generalizability of the research results, as would studies that examine youth in other geographical locations. Fifth, future studies may want to look at more sensitive measures and operationalization of variables, such as the various types of abuse and mental health diagnosis. Last, it may be helpful for future studies in this particular area to use research methodologies that examine cause and effect among the identified variables.

Implications for Positive Social Change

In terms of implications for positive social change, this study added to the current knowledge base regarding the risk factors for youths who sexually offend. The implications for social change center on the ability for early intervention for at-risk youth and education for family members and others who are connected to the youth such as teachers and school counsellors. For example, youths from non-intact homes can be identified and connected to resources that have the potential to mitigate risk for sexually offending behaviour. The results also provide important information for researchers and practitioners across a wide range of disciplines. In this regard, the implications for positive social change encompass a broad range of areas such as education and the

development of preventative programs and treatment programs for sexually abusive youth. Increased community safety and the reduction of stigma associated with juvenile sexual offending are also areas of potential social change. Attorneys and judges may also benefit from the information obtained from the study.

Conclusion

Juvenile sexual offending is a serious societal issue that has significant personal and public costs and severe and long-lasting consequences (Zeng et al., 2015). These consequences impact not only the victims and their families, but also the offenders and their families. Historically, juveniles adjudicated for sexual offenses have been described as homogenous, collectively viewed as inherently dangerous, and subject to specialized legal and clinical interventions (Chaffin, 2008; Harris, Walfield, Shields, & Letourneau, 2016; Letourneau & Miner, 2005). However, literature on juveniles who sexually offend suggests heterogeneity with varying degrees of risk and treatment needs (Aebi et al., 2012; Fanniff & Kimonis, 2014; Finkelhor et al., 2009; Stevens et al., 2013). The results of the current study add to the existing knowledge base by increasing our knowledge and understanding of the differences between juveniles who offend against children and juveniles who offend against peers or adults. The results of the current study also provide much needed insight into the risk factors that contribute to juvenile sexual offending among these two distinct subgroups, thereby enhancing our understanding and appreciation of the unique treatment needs and risk management strategies for these offender groups from a developmental-contextual perspective.

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Appendix A: Data Use Agreement

DATA USE AGREEMENT

This Data Use Agreement (“Agreement”), effective as of September 11, 2017 (“Effective Date”), is entered into by and between Jennifer Lynne Short (“Data Recipient”) and Alberta Health Services (“Data Provider”). The purpose of this Agreement is to provide Data Recipient with access to a Limited Data Set (“LDS”) for use in scholarship/research **in accord with laws and regulations of the governing bodies associated with the Data Provider, Data Recipient, and Data Recipient’s educational program.** In the case of a discrepancy among laws, the agreement shall follow whichever law is more strict.

1. **Definitions.** Due to the project’s affiliation with Laureate, a USA-based company, unless otherwise specified in this Agreement, all capitalized terms used in this Agreement not otherwise defined have the meaning established for purposes of the USA “HIPAA Regulations” and/or “FERPA Regulations” codified in the United States Code of Federal Regulations, as amended from time to time.
2. **Preparation of the LDS.** Data Provider shall prepare and furnish to Data Recipient a LDS in accord with any applicable laws and regulations of the governing bodies associated with the Data Provider, Data Recipient, and Data Recipient’s educational program.
1. **Data Fields in the LDS.** **No direct identifiers such as names may be included in the Limited Data Set (LDS).** In preparing the LDS, Data Provider shall include the data fields specified as follows, which are the minimum necessary to accomplish the project: age at time of first offense, number of victims, age of the victims, gender of the victims, victim relationship, family composition, abuse history, mental health diagnosis, and offense type.
2. **Responsibilities of Data Recipient.** Data Recipient agrees to:
 - a. Use or disclose the LDS only as permitted by this Agreement or as required by law;
 - b. Use appropriate safeguards to prevent use or disclosure of the LDS other than as permitted by this Agreement or required by law;
 - c. Report to Data Provider any use or disclosure of the LDS of which it becomes aware that is not permitted by this Agreement or required by law;
 - d. Require any of its subcontractors or agents that receive or have access to the LDS to agree to the same restrictions and conditions on the use and/or disclosure of the LDS that apply to Data Recipient under this Agreement; and
 - e. Not use the information in the LDS to identify or contact the individuals who are data subjects.

3. Permitted Uses and Disclosures of the LDS. Data Recipient may use and/or disclose the LDS **for the present project's activities only.**

4. Term and Termination.

- a. Term. The term of this Agreement shall commence as of the Effective Date and shall continue for so long as Data Recipient retains the LDS, unless sooner terminated as set forth in this Agreement.
- b. Termination by Data Recipient. Data Recipient may terminate this agreement at any time by notifying the Data Provider and returning or destroying the LDS.
- c. Termination by Data Provider. Data Provider may terminate this agreement at any time by providing thirty (30) days prior written notice to Data Recipient.
- d. For Breach. Data Provider shall provide written notice to Data Recipient within ten (10) days of any determination that Data Recipient has breached a material term of this Agreement. Data Provider shall afford Data Recipient an opportunity to cure said alleged material breach upon mutually agreeable terms. Failure to agree on mutually agreeable terms for cure within thirty (30) days shall be grounds for the immediate termination of this Agreement by Data Provider.
- e. Effect of Termination. Sections 1, 4, 5, 6(e) and 7 of this Agreement shall survive any termination of this Agreement under subsections c or d.

5. Miscellaneous.

- a. Change in Law. The parties agree to negotiate in good faith to amend this Agreement to comport with changes in federal law that materially alter either or both parties' obligations under this Agreement. Provided however, that if the parties are unable to agree to mutually acceptable amendment(s) by the compliance date of the change in applicable law or regulations, either Party may terminate this Agreement as provided in section 6.
- b. Construction of Terms. The terms of this Agreement shall be construed to give effect to applicable federal interpretative guidance regarding the HIPAA Regulations.
- c. No Third Party Beneficiaries. Nothing in this Agreement shall confer upon any person other than the parties and their respective successors or assigns, any rights, remedies, obligations, or liabilities whatsoever.

- d. Counterparts. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.
- e. Headings. The headings and other captions in this Agreement are for convenience and reference only and shall not be used in interpreting, construing or enforcing any of the provisions of this Agreement.

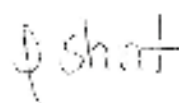
IN WITNESS WHEREOF, each of the undersigned has caused this Agreement to be duly executed in its name and on its behalf.

DATA PROVIDER

Signature: 
Name: Roy Frenzel, PhD-~~RP~~Psych

Title: Psychologist

DATA RECIPIENT

Signature: 

Name: Jennifer L. Short

Title: Registered Psychologist, Ph.D. Candidate in Forensic Psychology: Walden University

Appendix B: Data Collection Template

Client name/ID number: Client names will be changed to an ID number during data collection.

Age: The age of the youth at the time of the index offense will be recorded.

Family composition: With whom the youth was living with at the time of the index offense will be recorded.

Abuse history: yes or no; if yes, the type of abuse will be recorded.

Mental health diagnosis: yes or no; if yes, all of the formal diagnosis will be recorded.

Offense(s): All of the types of sexual offenses will be recorded.

Number of victims:

Age of victim(s):

Sex of victim(s):