

McGILL UNIVERSITY

**The Connection between Child Maltreatment and Juvenile Criminality:
Within a Canadian Context**

**A Thesis submitted to
School of Social Work
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ABSTRACT

Research has repeatedly demonstrated that maltreatment increases the likelihood of criminality when compared to a non-maltreated population. What remains unclear is how maltreatment directly or indirectly affects criminality. This study was conducted to delineate any existing relationships between age of onset, type, severity and chronicity of maltreatment and age of onset, type, severity and chronicity of criminality in a Canadian context. The possible impacts of gender, parental capacity impairments, and reduced child functioning were taken into account when examining this relationship. In addition, the characteristics of these children were examined to see if there were major differences within this group. This retrospective study examined the complete official youth protection and young offender dossiers of 87 subjects, involved with Batshaw Youth and Family Centres, who were maltreated and criminal during the period April 1, 2002 to March 31, 2003. A survey instrument was designed to collect quantifiable data on each child. Findings indicate that maltreated and criminal children are characterized as an extremely high needs population. Within this group, children who came to the attention of DYP in infancy had the highest likelihood of parental and personal functioning issues throughout their lifespan and committed their first official crime at the earliest age. Multiple regressions indicated that parent risk score and age of first known DYP involvement were significant predictors of criminality. These results confirm the important role parents play in determining their child's life outcomes, and suggest that parenting capacities should be fully evaluated, treatment plans should be comprehensive in nature and based on cognitive abilities of both parent and child, and focus should be placed on permanency planning.

RÉSUMÉ

La recherche a à plusieurs reprises, démontré que le mauvais traitement augmente la probabilité de la criminalité une fois comparé à une population non-maltraitée. Ce qui reste peu clair est comment le mauvais traitement affecte directement ou indirectement la criminalité. Cette étude a été entreprise pour tracer les rapports existants entre l'âge du début, le type, la sévérité et la chronicité de mauvais traitement avec l'âge du début, du type, de la sévérité et de la chronicité de criminalité dans un contexte canadien. L'impact possible du genre, des affaiblissements parentaux, et le fonctionnement réduit d'enfant ont été pris en considération en examinant ce rapport. En outre, les caractéristiques de ces enfants ont été examinées pour voir si elles différaient de quelque façon les uns des autres. Cette étude rétrospective a examiné la protection officielle complète de la jeunesse et les jeunes dossiers de contrevenant de 87 sujets, impliqués avec Batshaw Youth and Family Centres, qui ont été maltraités et criminels pendant la période du 1 avril, 2002 au 31 mars 31, 2003. Un instrument d'aperçu a été conçu afin de rassembler des données quantifiables sur chaque enfant. Les résultats indiquent que maltraité et des enfants criminels sont caractérisés, en tant que population extrêmement haute des besoins. Chez ce groupe, les enfants qui sont venus à l'attention de DYP dans la petite enfance ont eu une probabilité plus élevée des issues de fonctionnement parentales et personnelles tout au long de leur durée de vie et ont commis leur premier crime officiel à un âge plus jeune. Les régressions multiples ont indiqué que des points de risque de parent et l'âge de la première participation connue de DYP étaient les prédiseurs significatifs de la criminalité. Ces résultats confirment les conséquences du comportement parentale sur la vie de leur enfant et suggèrent que les capacités parentales devraient être évaluées, des plans de traitement devraient être complets en nature et être basés sur les capacités cognitives des parents et de l'enfant, et que l'emphase soit placé sur la planification de permanence.

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DEDICATION

To all the maltreated and criminal children:

You are not invisible

You touched my heart

You are worthy

1. INTRODUCTION

1.1 Problem

Children who have experienced maltreatment, at the hand of their parent(s), and who have committed criminal acts are an understudied and underserved population. Two dominant societal viewpoints, 'Save the Innocent' and 'Punish the Guilty', come into conflict when faced with both a maltreated and criminal child. Thus, maltreatment and criminality have historically remained studied and dealt with in isolation of one another. However, over the last twenty-five years, interest in the relationship between the two phenomena has steadily grown. Research has repeatedly demonstrated that maltreatment increases the likelihood of criminality when compared to a non-maltreated population (Alfaro, 1983; Sandberg, 1989; Stoff, Breiling, & Maser, 1997; Widom, 1989a, 1989b, 1989c). What remains unclear is how maltreatment directly or indirectly affects criminality (Lemmon, 1996; Widom, 1989a, 1989b). In addition, most of the research pertaining to this topic has been conducted within the United States using American residents as subjects. Although, there are many similarities between the United States and Canada, there are also many differences.

This study was conducted to delineate any existing relationships between age of onset, type, severity, and chronicity of maltreatment with age of onset, type, severity, and chronicity of criminality within a Canadian context. The possible impact of gender, parental capacity impairments, and reduced child functioning were taken into account when examining this relationship. The following is a review of relevant literature.

1.2 The Rights of the Child

For the most part, prior to the mid 1800s, the concept of *Patria Potestas* dominated society. *Patria Potestas*, an ancient Roman law, stated that parents had unconditional authority over their children. They could "sell, abandon, kill, offer in sacrifice, or otherwise dispose of" (Van Stolk, 1972, p. 93) them without sanction. In other words, children were parental slaves. However, a dramatic reduction in the necessity of child labor for immediacy of familial survival saw this concept challenged (Sutherland, 2000; Wharf, 1993). Parents began having children not out of need but out of want. Therefore,

they began investing more in their children, which in turn increased the chances for and amelioration of generational not just familial survival. The recognition that the provision of certain basic needs greatly enhanced children's lives altered the dominant way of thinking. Children were now seen as different from adults and in need of special care (Sutherland, 2000; Wharf, 1993). This gave way to the creation of protection agencies and specific laws for and differential treatment of young offenders.

1.3 The Evolution of Maltreatment

Intrinsic values, beliefs, emotions, and knowledge systems guide humanity in dictating right from wrong. Therefore, what constitutes childhood maltreatment is a highly subjective matter. In addition, "definitions of child abuse and neglect are not static phenomena, nor do they reflect issues that will be resolved in the decades to come" (Barnett, Miller-Perrin, & Perrin, 1997). The following is a historical glimpse of how the definition and response of maltreatment, in Canada, has evolved to date.

The North American plight of maltreated children is said to have begun with the case of Mary Ellen in the United States. Mary Ellen was a young girl living in absolute privation and facing daily torments from her caregivers. In her own words, Mary Ellen described her situation:

I don't know how old I am; my mother and father are both dead; I call Mrs. C ____ momma; I have never had but one pair of shoes, but can't recollect when that was; I have no shoes or stockings this winter; I have never been allowed to go out . . . except in the night time, and only in the yard [to use the outdoor privy]; my bed at night is only a piece of carpet stretched on the floor underneath a window and I sleep in my little undergarment with a quilt over me; I am never allowed to play with other children; momma has been in the habit of whipping me almost everyday; she used to whip me with a twisted whip -- a rawhide; the whip always left black and blue marks on my body; I have now on my head two black and blue marks which were made by momma with the whip, and a cut on the left side of my forehead which was made by a pair of scissors in momma's hand; she struck me with the scissors and cut me; I have no recollection of ever having been kissed and I have never been kissed by momma: I have never been taken on momma's lap or caressed or petted; I never dared speak to anybody, because if I did I would get whipped; I have never had . . . any more clothing than I have on at present; I have seen stockings and other clothes in our room, but I am not allowed to put them on; whenever momma went out, I was locked up in the bedroom;. . . I don't know for what I was whipped; momma never said anything when she whipped

me; I do not want to go back to live with momma because she beats me so
(Retrieved August 8th, 2005, from www.nyspcc.org).

In 1873 a woman named Eta Wheeler happened upon Mary Ellen and was deeply affected by her suffering. Eta Wheeler immediately began advocating that something be done to alter Mary Ellen's situation. As a result of her efforts, agencies and laws were created to protect children from maltreatment (Wharf, 1993).

News about her success quickly spread and child protection took root in Canada. A prominent journalist, J.J. Kelso, after, being said to have witnessed two destitute boys begging for money late at night, became the main advocate for maltreated children in Canada. In 1891, he established Canada's first Children's Aid Society in Toronto, Ontario and assisted in the formation of the 1893 Ontario Act for Prevention of Cruelty to and better Protection of Children (Bala, Vogl, & Hornick, 1991; Wharf, 1993). Shortly after, the rest of Canada followed suit with the creation of similar agencies and laws. These protection laws and agencies defined maltreatment, primarily in terms of neglect. The Ontario Act defined a neglected child as "a child who is found;

- begging or receiving alms,
- wandering about without any home or proper guardianship,
- associating or dwelling with a thief, drunkard, or vagrant, and growing up without salutary parental control,
- in any house of ill-fame or the company of a reputed prostitute,
- destitute, being an orphan or having a surviving parent undergoing punishment for crime" (Sullivan, 2000, p. 3).

Although other forms of maltreatment were known to exist, the public was not yet demanding that attention be paid to them. This is likely a result of a lingering belief in *Patria Potestas* (e.g., that parents who did take responsibility for their children – no neglect – could still do unto their children as they pleased). In reference to neglect, the Criminal Code of Canada, in section 215.1a, states that; "everyone is under legal duty as a parent, foster parent, guardian, or head of family, to provide necessities of life for a child, under the age of 16 years". However, what constitutes "necessaries" is not defined within the code and thus is open to interpretation. Albeit, "necessaries" is defined differently by professionals and researchers, there has, at least, over time, been an understanding that "although poverty has damaging effects on children, poverty alone does not constitute neglect" (Sullivan, 2000, p. 3). In addition, section 219. 1a and b,

states that “everyone is criminally negligent who in doing anything, or in omitting to do anything that is his duty to do, shows wanton reckless disregard for lives or safety of other persons”. In a recent and widely recognized, government of Canada funded study, entitled; Canadian Incidence Study of Reported Child Abuse and Neglect: Final Report (CIS), neglect was defined as “situations in which children have suffered harm, or their safety or development has been endangered as a result of the caregiver’s failure to provide for or protect them” (Trocme *et al.*, 2001). Specifically, the study recognized eight categories of neglect: 1) failure to supervise or protect leading to physical harm, 2) failure to supervise or protect leading to sexual abuse, 2) physical neglect, 3) medical neglect, 4) failure to provide treatment for mental, emotional or developmental problem, 5) permitting maladaptive/criminal behavior, 6) abandonment/refusal of custody, and 7) educational neglect (Trocme *et al.*, 2001).

Maltreatment remained defined primarily in terms of neglect until the 1960s. In 1962, an American, Henry Kempe and Ray Helfer published a book entitled ‘The Battered Child Syndrome’. This book described the devastating effects of physical abuse on the body. The contents of this book quickly became public knowledge and an outraged society demanded that improvements be made to better protect children from such atrocities. Maltreatment now became defined in terms of both neglect and abuse. Albeit, “neglect began to assume a lower profile as the public and social workers responded to this far more dramatic idea of maltreatment” (Sullivan, 2000, p. 3). This occurred primarily because of an emerging belief that neglect did not result in as severe of consequences as did physical abuse. On a Federal level, severe physical abuse of a child, now increasingly, although still infrequently, led to charges under the Criminal Code of Canada. The type of charge (such as assault, aggravated assault, etc.) varied depending on the circumstances of the incident. However, in Section 43 the Criminal Code of Canada denotes an exception that:

Every school teacher, parent or person standing in the place of a parent is justified in using force by way of correction toward a pupil or child, as the case may be, who is under his care, if the force does not exceed what is reasonable under the circumstances.

Since the line between reasonable and excess force goes undefined in the code, the presence of physical abuse is open to individual interpretation. Thus, for the most part, protection agencies dealt only with severe cases of physical abuse in which physical symptoms were apparent, long lasting, and caused injury. In 1972 a Canadian, Mary Van Stolk, published a book which advocated that Canadian Federal Laws prohibit the use of all corporal punishment against children. Specifically, Van Stolk advocated that “children should receive the same protection against physical attack as the law provides for adults” (Van Stolk, 1972). Despite her efforts and those to come after her, section 43 of the Criminal Code of Canada has remained unchanged. However, in January 2004, the Supreme Court of Canada ruled that the use of force is prohibited on children under the age of two and in May 2004, they also ruled that, for children aged 2-12; no instruments should be employed when using force against a child, that hitting of any kind anywhere on the head is prohibited and so is the use of all corporal punishment in schools (Retrieved August 8, 2005, www.repeal43.org). The CIS (2001) identified three types of physical abuse: shaken baby syndrome, inappropriate punishment, and other physical abuse (e.g., outside of corrective context).

In the 1970s detailed accounts of child sexual abuse were being more frequently disclosed to practitioners in the helping professions. As a result, there was a surge of interest in the topic. In 1981, the Canadian Government appointed a committee to examine the situation of and response to sexual abuse in Canada. Their findings were presented in a document entitled, *The Report of the Committee on Sexual Offences Against Children*, otherwise known as *The Badgley Report*.

The principle conclusion of the Report, (was) that sexual crimes against children and youth occur extensively, and the protection now afforded these victims by law and public services is inadequate. The Committee (considered) the problem of child sexual abuse in Canada to be so pervasive and deep-rooted that it (made) as its first recommendation the creation of a unique mechanism which will have as its responsibility the active initiation and coordination of the reforms that are required (Bagley, 1985).

This Report shocked the nation, especially considering the taboo nature of the act itself, and further propelled sexual abuse into the limelight. As a result, the definition of what constitutes sexual abuse is increasingly specific, with amendments and additions to the

Criminal Code occurring on a perpetual basis since 1988. Sexual abuse of a child, as an offence, progressed from being solely defined as intercourse to any type of unwanted sexual contact to also include; urging, forcing, and enabling children into sexual activities with another person, soliciting a child for sexual activities while offering anything as payment, exposing oneself to a child, and engaging in behaviors within a child's home that endangers the child's morals. The code does not allow for an accused person to claim that they believed the child was not a child unless the accused person made reasonable efforts to find out the actual age of the child. The code also does not allow children under the age of 14 to consent to any type of sexual activity unless the acts are with someone who is not more than two years older nor is in a position of power. In addition, the code does not allow sexual activities with anyone under the age of 18 if the other person is in a position of power. The Criminal Code leaves little, if any room, for subjective interpretation of that which constitutes sexual abuse. The CIS (2001) identified seven forms of sexual abuse: 1) sexual activity completed, 2) sexual activity attempted, 3) touching/fondling genitals, 4) adults exposing genitals to child, 5) sexual exploitation: involved in prostitution or pornography, 6) sexual harassment, and 7) voyeurism.

Recently, emotional abuse has been recognized as a separate and distinct form of maltreatment. The Criminal Code of Canada denotes some forms of emotional abuse as crimes. Specifically, section 423 states that:

(1) Every one is guilty of an indictable offence and liable to imprisonment for a term of not more than five years or is guilty of an offence punishable on summary conviction who, wrongfully and without lawful authority, for the purpose of compelling another person to abstain from doing anything that he or she has a lawful right to do, or to do anything that he or she has a lawful right to abstain from doing,

- (a) uses violence or threats of violence to that person or his or her spouse or common-law partner or children, or injures his or her property;
- (b) intimidates or attempts to intimidate that person or a relative of that person by threats that, in Canada or elsewhere, violence or other injury will be done to or punishment inflicted on him or her or a relative of his or hers, or that the property of any of them will be damaged;
- (c) persistently follows that person;
- (d) hides any tools, clothes or other property owned or used by that person, or deprives him or her of them or hinders him or her in the use of them;

- (e) with one or more other persons, follows that person, in a disorderly manner, on a highway;
- (f) besets or watches the place where that person resides, works, carries on business or happens to be.

In addition, section 264 states that:

- (1) Every one commits an offence who, in any manner, knowingly utters, conveys or causes any person to receive a threat
 - (a) to cause death or bodily harm to any person;
 - (b) to burn, destroy or damage real or personal property; or
 - (c) to kill, poison or injure an animal or bird that is the property of any person.

However, the CIS (2001) has further differentiated four forms of emotional maltreatment: emotional abuse, non-organic failure to thrive, emotional neglect, and exposed to family violence.

To date, in Canada, maltreatment is defined in terms of neglect, physical abuse, sexual abuse, and or emotional abuse. Due to provincial and territorial administration of child protection the specific definitions of these terms vary, given that the Criminal Code is open to interpretation. In addition, each child protection worker then further interprets provincial definitions of maltreatment. What constitutes maltreatment for one person does not for another. Furthermore, each province and territory determines the cut-off age protection agencies use. The age varies from under 16 to under 18. As a result, inconsistencies occur in the declaration of a child in need of protection. Thus, any provincial statistics pertaining to the number of maltreated children, serviced by protective agencies, must be interpreted as not only estimates but rough estimates. This is especially true when considering that numerous maltreated children go undetected (Hunner & Walker, 1981; Lemmon, 1996; Sandberg, 1989; Trocme et al., 2001; Van Stolk, 1972; Wharf, 1993). As a result of the above, and because of “differences in counting cases, it is not possible to aggregate provincial and territorial statistics” to determine national rates of child maltreatment (Trocme et al., 2001).

The first and only published nation wide study of maltreatment, known as the CIS was conducted in the year 1998. This study, through examination of provincial and territorial legislation, defined maltreatment in a way applicable to everyone, in turn, creating a National perspective on what constitutes maltreatment. The CIS revealed that in 1998, pertaining to children under the age of 16:

An estimated 135,573 child maltreatment investigations were carried out...an annual incidence rate of 21.52 investigations per 1,000 children. An estimated 61,201 child maltreatment investigations (45%) were substantiated, an estimated 29,668 child investigations (22%) remained suspected, and an estimated 44,704 child investigations (33%) were unsubstantiated (Trocme et al., 2001).

Of substantiated and suspected investigations, the CIS reported that 39% involved situations of maltreatment that had been ongoing for more than 6 months. The CIS also revealed that, in 76% of investigations, children were alleged to have experienced one type of maltreatment whereas in 24% of investigations children were alleged to have experienced multiple types of maltreatment. Of these investigations, in which only one type of maltreatment was alleged, the CIS found that:

- 40% were for neglect, with 43% of these substantiated, 20% suspected and 37% unsubstantiated;
- 31% were for physical abuse, with 34% of these substantiated, 23% suspected and 43% unsubstantiated;
- 19% were for emotional abuse, with 54% of these substantiated, 29% suspected and 17% unsubstantiated; and
- 10% were for sexual abuse, with 38% of these substantiated, 22% suspected and 40% unsubstantiated (Trocme et al., 2001).

In an attempt to predict and thus prevent maltreatment, researchers have discovered numerous parental, child, and environmental factors that are associated with maltreatment. The literature reviewed for this thesis showed that those factors reported most frequently were:

- 1) parental history of: substance abuse, criminal activities, childhood maltreatment, mental illness, domestic violence, pregnancy as a minor, unwanted pregnancy, and being a single parent
- 2) child: low birthweight, health problems (physical or mental), difficult temperament
- 3) environment: poverty, loss of employment, and inadequate housing

The above list is by no means exhaustive but rather meant to provide insight into the causes of maltreatment as conclusive causal sequence of the occurrence of maltreatment has yet to be determined.

1.4 The Juvenile Criminal

In Canada, the invention of the juvenile delinquent and criminal occurred simultaneously with the advent of maltreatment protection systems (e.g., child saving movement). For, it was not just parents and guardians that children needed protection from, but also the evils of society. To protect children from these evils, it was believed that additional laws, over and above those designated criminal, needed to be created specifically for children (Griffiths & Verdun-Jones, 1993; Tanner, 1996). It was believed these laws should designate that which is considered delinquent but not necessarily criminal, such as alcohol consumption or not listening to one's parents. Reformers were also convinced that while adults could not be cured of criminality, children could (Griffiths & Verdun-Jones, 1993). Therefore, they began advocating for differential treatment of children who partake in delinquency and criminality. Specifically, they wanted separate institutions (Tanner, 1996). Their efforts lead to the creation of the Juvenile Delinquents Act (JDA) of 1908. Thus, juveniles were not only subject to the same laws as everyone else but also to additional law. Section 31 of the JDA stated that delinquent and criminal juveniles were to be "treated as misdirected and misguided child and one needing aid, encouragement and assistance" (Griffiths & Verdun-Jones, 1993, p. 604). This implied that these children were a certain way as a result of inadequate parenting. As a result, children who were in need of protection and deemed to be incorrigible could have this law applied to them in order to be detained and thus cured.

Beginning in the early 1960s, the JDA began to receive much criticism. The primary points of disrupt were as follows: 1) minimum age of 7 to low, 2) failure to "designate an upper age limit" as to what constitutes a juvenile allowing for variation across Canada, 3) failure of due process, 4) failure to specifically denote what were to be considered appropriate sentences for crime committed, and 5) allowance for

indeterminate sentencing. As a result, there were varying sentences and overall more punitive treatment than adults were receiving (Griffiths & Verdun-Jones, 1993).

In answer to criticism, the JDA was replaced, in 1984, with The Young Offenders Act (YOA). The YOA clearly denoted that the act would be applicable to, only, those persons ages 12-17 inclusive. The YOA also allowed for court diversion, legal rights, determinate, appropriate and specific sentences, and the elimination of status offences. Prior to and following its enactment, the YOA came under much criticism. The main points of disrupt were; 1) minimum age of responsibility was now too high, 2) responsibility of transfer to adult court on crown to prove need rather than on defence to prove why a transfer shouldn't occur, 3) frequent use of custody, 4) no clear distinction between serious violent offences and less serious offences, and 5) lack of recognition of victim concerns (Griffiths & Verdun-Jones, 1993).

Recently, between January 1, 2003 and April 1, 2003 (depending on the province/territory), the YOA was replaced with the CYJA. The later act is already under criticism and like the other acts will likely be replaced by something else. However, given that this current act was not in operation in the province of Quebec until April 1, 2003, and thus after the year in which this study occurred, it will not be discussed here in any detail. On a final note, it is important to clearly differentiate between delinquency and criminality. Often the two terms are erroneously used interchangeably. On the one hand, delinquency is any norm-violating behavior. Thus, delinquency is subject to the perception of others. On the other hand, criminality is more specific, occurring only when a person violates any official body of criminal law. Specifically in Canada, the body of criminal laws are as follows: CYJA, Narcotic Control Act, Bankruptcy Act, Municipal Laws, Securities Act, Provincial Acts, Customs and Excise Acts, Combines Act, Income Tax Act, Criminal Code, and other federal acts (Griffiths & Verdun-Jones, 1993).

In 2001, the Canadian Centre for Justice Statistics published a paper entitled, Children and Youth in Canada. It reported that; "in 1999, the National youth charge rate was 407 charges per 10,000 youth... Youths account for 21% of those charged with

Criminal Code offences in 1999 while representing 8% of the Canadian population....
...About half (49%) of youths charged in 1999 were accused of committing property offences (Such as theft, break and enter), 30% with “other” offences that were non-violent/non-property related (such as mischief, offences against the administration of justice), and 21% with violent offences (primarily common assault)”. However, much crime goes undetected (Griffiths & Verdun-Jones, 1993; Tanner, 1996).

In an attempt to predict and thus prevent juvenile delinquency and finally criminality, researchers have discovered numerous parental, child, and environmental factors that are associated with them. The literature review for this thesis found the most frequently reported factors to be:

- 1) parental history of: substance abuse, criminal activities, childhood maltreatment, mental illness, domestic violence
- 2) child history of: maltreatment, substance abuse, mental illness, academic difficulties, association with negative peer group, attachment issues,
- 3) environment: poverty

The above list is by no means exhaustive but rather meant to provide insight into the causes of criminality as conclusive causal sequence of the occurrence of delinquency and finally criminality has yet to be determined.

1.5 The Maltreatment Criminality Connection

Healthy childhood development is primarily dependent upon parental capacity to provide quality care *and* positive interactions. When parental capacity is impaired children suffer. For example, the 1998 CIS reported that, of children investigated for maltreatment, 26% had at least one presenting health issue and 33% had at least one presenting behavioral issue. Perry (2001) stated that “exposure to violence activates a set of threat-responses in the child’s developing brain; in turn, excess activation of the neural systems involved in the threat responses can alter the developing brain; finally, these alterations may manifest as functional changes in emotional, behavioral and cognitive functioning” (Perry, 2001, p. 5). He further stated that “abnormalities are more prominent

if the traumatic exposure is early in life, severe and chronic” (Perry, 2001, p. 10). Many of these abnormalities result in delinquent defined behaviors. For example, “difficulties with cognitive organization contribute to a more primitive, less mature style of problem solving – with aggression often being employed as a “tool” (Perry, 2001, p. 11). Thus, it should come as no surprise that numerous studies have indicated that maltreated children are more likely to become delinquent and finally criminal than non-maltreated children (Alfaro, 1983; Hunner & Walker, 1981; Lemmon, 1996; Sandberg, 1989; Widom, 1989a, 1989b, 1989c, 2001). However, researchers are using varying definitions of the terms maltreatment, delinquency, and criminality resulting in non-comparable data (Widom, 1989a). Research has also, typically, negated to differentiate between the various dimensions (e.g., type, severity, chronicity) of maltreatment, delinquency, and criminality (Lemmon, 1996; Widom, 1989a). Thus, limiting our understanding of *how* maltreatment directly or indirectly affects delinquency and criminality (Lemmon, 1996; Widom, 1989a).

Recently, a few researchers have provided insight into the possible connections that might exist between the two phenomena. The most notable, due to methodological design, are three prospective longitudinal studies conducted in differing locations in the United States. All of the studies had large sample sizes, employed matched comparison group designs and relied on official records for data collection purposes.

The first of these studies examined the theory of ‘the cycle of violence’ and was first initiated by Cathy Widom (1989b). The study consisted of all persons (n=908) with substantiated cases of maltreatment (prior to age 12 years) that were processed during the years 1967-1971 at one county juvenile court of a metropolitan area in the mid-west and 667 non-maltreated persons. Subjects were matched based on age, sex, race and approximate social economic status. Maltreatment was subdivided into three categories: neglect, physical, and sexual abuse. Subjects were followed through the criminal justice system to determine official records of offending. Results of the study indicated that, as of 1994,

- Being abused or neglected as a child increased the likelihood of arrest as a juvenile by 59%, as an adult by 28%, and for a violent crime by 30%,
- maltreated children were younger at the time of their first arrest, committed nearly twice as many offences, and were arrested more frequently,
- physically abused and neglected (versus sexually abused) children were the most likely to be arrested later for a violent crime (Widom, 2001).

The study has also revealed that placement did not impact frequency or severity of criminality. Although, it did find that as the number of placements increased so did the likelihood of arrest (Widom, 2001). In a separate analysis of the data, Widom and Ames (1994) found that, regardless of gender, those who had experienced childhood sexual abuse had higher rates of prostitution arrests than those who had experienced other types of maltreatment. Their results also seem to indicate that there is a relationship between physical abuse and crimes of a sexual and violent nature. When generalizing the above findings, it is important to consider that based on Widom's operationalization of her maltreatment categories and the law at the time, it is likely that, considering today's definitions, all of the cases in this study would be considered to have an extremely high level of severity.

The second study, by John Lemmon (1996), builds on Widom's design by using subjects identified as 'at risk for' but not necessarily maltreated and criminal. The sample consisted of only males (n=632), primarily minorities, born in 1975, residing in low-income families thus limiting its' generalizability but allowing these factors to be controlled for within the study. However, this design allowed for those who were officially maltreated and criminal to be matched on the above factors, to those clients who were criminal, but officially non-maltreated for the use of comparison. He also further differentiated between types of maltreatment by employing three categories of abuse and 15 categories of neglect. In addition, the study has, to date, examined only juvenile and not adult offending. In summary, Lemmon found that each of the aspects of maltreatment that he tested (presence, type, frequency, and severity) affected the

initiation and continuation of criminality. Of specific note: 1) of criminal children, those who had experienced any type of maltreatment were more likely to be chronic and violent offenders than those children who had not experienced maltreatment, 2) of maltreated children, those who were neglected were the most likely to become criminal followed by those who were physically abused, 3) increased frequency and severity of maltreatment lead to increased frequency and severity of offending, and 4) multi-type maltreated children were more likely to become criminal than single type maltreated children.

The final study, by Smith and Thornberry (1995) builds on Widom's and Lemmon's design by using not only official records for data collection but also self/caregiver reporting. The sample consisted of 1000 students attending public school in Rochester, New York. Of those children who were criminal, two comparison groups were created – those maltreated and those non-maltreated. Subjects were matched based on control variables such as gender, race, and residential location. However, the sample consisted of primarily males and minorities thus limiting generalizability. Each student was interviewed bi-yearly from 1988-1992 and annually from 1992-1996 regarding delinquent activities. Their primary findings indicated that as frequency and severity of maltreatment increased so did the frequency of committing delinquent and criminal acts. In addition, their finding suggest that those children with extensive maltreatment histories were more likely to be involved in more violent, serious, and frequent delinquency and criminality.

These studies provide an emerging picture of how maltreatment affects delinquency and criminality. However, there is still much to be discovered. Extensive review of the literature revealed serious gaps in knowledge. Three of the most poignant, were that: 1) there was a complete absence of research on the topic within a Canadian context, 2) studies that examined how maltreated and criminal children differ from one another, in regards to demographics and parent/child functioning issues, were non-existent, and 3) research on this topic rarely examined the impact of multiple types of maltreatment on criminality as compared to single types of maltreatment.

1.6 Objectives of Study

The objectives of this study were, within a Canadian context,

1) to identify:

- the number of juvenile criminals, at a particular agency, with an official history of maltreatment,

2) to describe:

- the above sample of maltreated children who were involved in juvenile criminality,

3) to examine:

- the impact of gender and age of first known DYP involvement on data collected, and

4) to test, whether:

- there were any parental and child risk factors that were associated with both maltreatment and criminality,
- age of onset, type, severity, and chronicity of lifespan maltreatment affected age of onset, type, severity, and chronicity of juvenile criminality within a context of gender, and
- gender, parent risk score, child risk score, type of maltreatment, age of first known DYP involvement, and chronicity of maltreatment can predict, any or all of, age of first known offence, type and chronicity of criminality (see Figure 1).

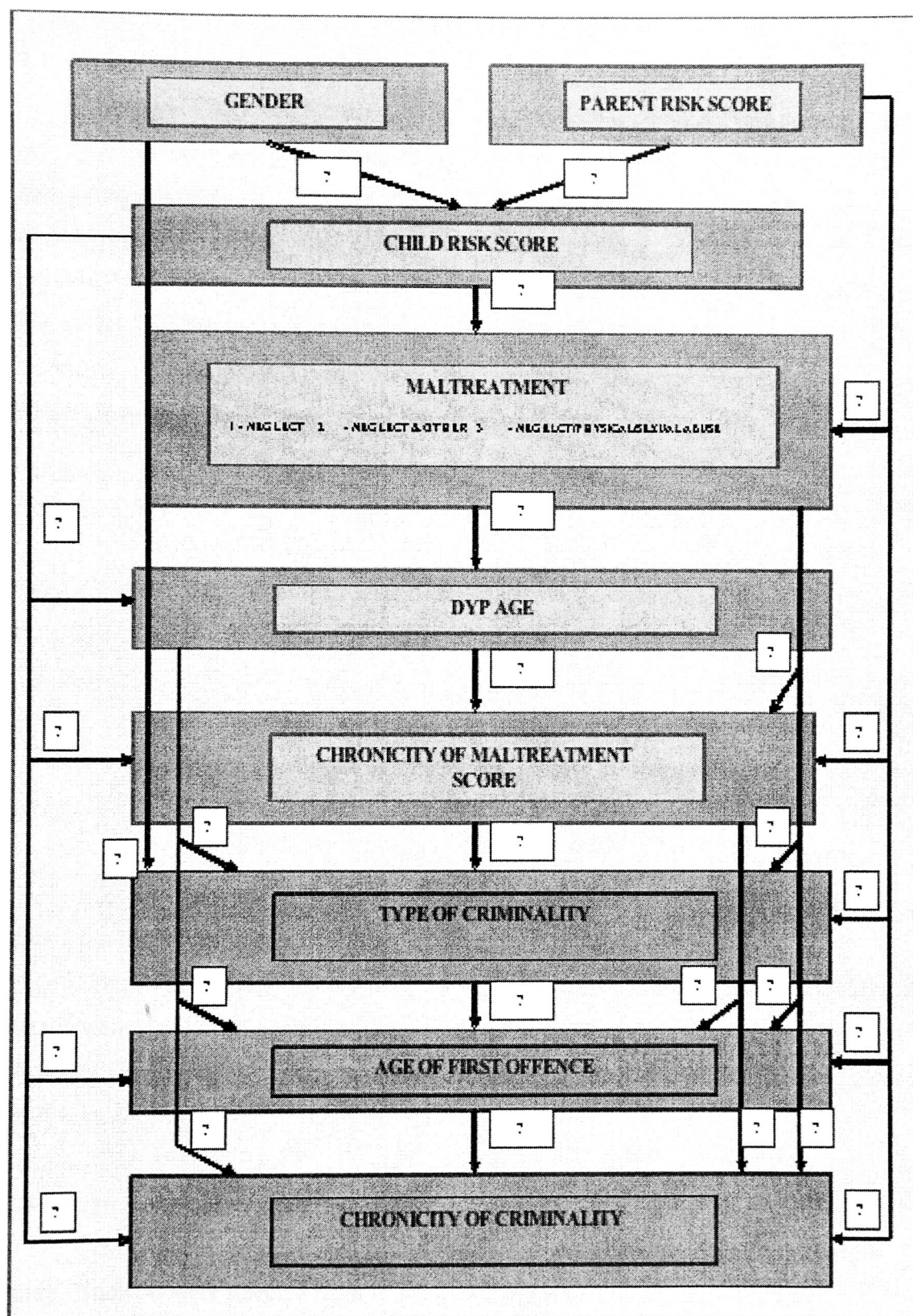


Figure 1 Path Theory Diagram - Predictors of Criminality

2.METHOD

2.1 Setting

Batshaw Youth and Family Services is a para-public social service agency. This agency is located in and services the city of Montreal. Batshaw services clients who's native tongue is English. However, the agency is also responsible to service all Jewish persons regardless of language. Youth protection services (e.g., child welfare) are provided by Batshaw's Department of Youth Protection (DYP) while juvenile criminals are serviced by Batshaw's Young Offender Services (YOS). Both divisions operate separately of one another. There is no comprehensive list that exists which indicates which clients have had contact with both divisions.

2.2 Ethics Approval

Prior to the commencement of this study, a research proposal was submitted to and approved by both McGill University and Batshaw Youth and Family Centre's Ethics Boards.

The McGill Board required the submission of a brief research proposal that was then reviewed by board members. Approval was granted by way of a certificate (see Appendix A).

The ethical approval by Batshaw's Department of Professional Services was a multi-step and stage process consisting of several submissions of research proposals, various meetings, and legal proceedings for rights to review dossiers. As methodological details were agreed upon, various levels of access to records, etc., were granted, until all phases of the research was complete. No certificate was issued but approval was provided both verbally and by way of email.

2.3 Design and Subject Selection

A non-experimental design with a single convenience sample was used for this study. Subjects were selected from Batshaw's client population. Subjects chosen consisted of those adolescents, 12 to 17 years of age, involved with the Department of

Youth Protection (DYP) and Young Offender Services (YOS), at any point(s) in time, during the fiscal year April 1, 2002 to March 31, 2003. To establish the exact number of subjects, a comprehensive list of individual YOS clients during that year ($n = 774$) was examined. Of these 774 clients, 490 had reached the age of majority meaning that any existing DYP dossier would have been destroyed under the law and were no longer accessible. As a result, these subjects were excluded. The remaining 284 clients were then cross-referenced with the DYP client database. It was determined that 119 of these clients were found to have had DYP dossiers at some point in their life, but only 92 had dual status during the year in question. Five of these cases were excluded because their DYP and/or YOS history for the year in study had been destroyed, under the law, for various reasons. The final subject pool for this study consisted of the remaining 87 clients.

2.4 Data Collection

Data collection took place between May 25th and October 25th, 2004. A survey instrument, The Functioning Maltreatment Criminality Questionnaire (FMC), was developed, for this study, in order to gather quantifiable information from official DYP and YOS files. See Appendix A for Instrument. In order to complete the questionnaire, any information contained within each child's personal record, prior to and including March 31, 2003, was examined. Official records were used to collect data due to ease of availability of information and limited impact on an already vulnerable population. In addition, it would have been too costly, in terms of both money and time, to interview each subject and/or their various and numerous workers.

2.5 Confidentiality

For confidentiality purposes, each client file was assigned an identification number and this number rather than the client's name was used on the FMC questionnaire. However, a master list linking client names to their identification numbers was kept and accessed only for the purpose of data collection and verification.

2.6 Measures

2.6.1 The Functioning Maltreatment Criminality Questionnaire

The FMC was developed following the random viewing of numerous DYP files to determine what information was kept on clients and whether that information could be easily quantified. The FMC was finalized prior to sample selection. It consisted of questions about basic demographics, biological parent functioning, child functioning, child maltreatment and child criminality.

Basic Demographics

Two variables, age and status of DYP/YOS file, were recorded as they were known to be on March 31, 2003. Given the dynamic nature of child protection families, all other variables were recorded based on the latest file information prior to April 1, 2003.

Biological Parent Functioning

Whether biological parents had, at any point(s) in time, been officially diagnosed with, repeatedly been observed by any involved party to have, and/or disclosed by the parent themselves, a history of functioning problems. For example, mental illness or substance abuse.

Child Functioning

Whether or not the child had, as an infant, pre-adolescent or adolescent, been officially diagnosed with, repeatedly been observed by any involved party to have, and/or disclosed by the parent themselves, a history of functioning problems. For example, mental illness or substance abuse.

Child Maltreatment

Maltreatment histories were recorded as they had occurred in each developmental stage. Precise knowledge pertaining to the actual age at which a child was first maltreated is nearly impossible to measure as a result of reliance on memory recall. Consequently, in this study the age of first known DYP referral (DYP Age) is measured and seen as reflective of the actual age at which a child was first maltreated. Type of maltreatment was measured by recording all articles of the Quebec Youth Protection Act that were applied to each child at each developmental stage. Following this, the articles of the law were categorized into specific types of maltreatment. Articles 38 A, B, C, D, E, F, H and 38.1A and B were recorded as Neglect. Article 38G(P) was recorded as physical abuse and article 38G(S) was recorded as sexual abuse. Given that articles 38G (P) and (S) require police intervention, minor forms of sexual and or physical abuse can result in the application of Article 38E of the Youth Protection Act. In addition, when a child becomes involved with youth protection, information about past and unknown maltreatment might surface and be recorded within a dossier but never officially coded under the YPA. To compensate for these facts, any physical and or sexual abuse that occurred for each child was noted and accounted for when recording type of maltreatment for that child.

Child Criminality

All crimes committed in which official charges were laid as well as YOS involvement and various crime characteristics were recorded based on information contained within the YOS file. Type of crime was measured by noting the total number of self, property, and person offences. These numbers were then examined to determine if children had a preference for one type over the others. Chronicity of official offending was measured by recording the total number of offences for which the child was charged.

2.6.2 Weighting Parent/Child Risk Factors

A survey was sent out to all workers at Batshaw who were conducting investigations of child abuse and neglect (n = 27) as of February 1, 2005 requesting that the survey be completed and returned on personal not company time. The survey contained questions pertaining to worker opinion about the effects of each of the parent

and child risk factors, contained in the FMC, on maltreatment. These risk factors are the ones that are typically examined during the completion of a maltreatment investigation.

Workers were also asked to rate certain DYP actions as representing level of chronicity of maltreatment. A scale of how little (1) to how much (5) was used. The mean of the worker's opinions were then used to weight each variable response. Where a variable was not present in the life of a child a weight of zero was pre-assigned. The weighting of each response then allowed for the calculation of a score per child per variable. For example, worker A believed that parental substance abuse does not contribute to the act of maltreatment and gave a score of 1, while workers B and C believed that it does contribute to the act of maltreatment assigning a score of 4. The mean score in this case is 3. Thus, if a child's parent did not abuse substances they would be assigned a risk score of 0 but if substance abuse was an issue, a score of 3 would be recorded.

Parental risk score

All parent risk factor variable scores were added together for each child to produce a summary score.

Child risk score

All child risk factor variable scores, for each stage of child development, were added together for each child to produce a summary score.

Chronicity of Maltreatment Score

Precise knowledge of actual chronicity is impossible to determine unless each act of maltreatment is not only witnessed and but recorded. Therefore, chronicity of maltreatment scores were calculated using the variables: length of DYP involvement time, length of DYP placement time. Since youth protection agencies are only involved with families as long as it is deemed necessary to stop maltreatment from continuing, these variables are seen to reflect actual chronicity of maltreatment. Scores for each variable were added together for each child to produce a summary score.

2.7 Statistical Analysis

2.7.1 Recoding

All parent risk factor variables were dichotomized into 1- No, and 2- Yes responses for the purpose of chi-square and correlation calculations. The variable DYP age was recoded into categories, 1 – Infant (0-4 years old), 2- Pre-adolescent (5-11 years old), and 3- Adolescent (12-17 years old). In addition, where it was deemed necessary, data reduction was used to improve analysis. Precise reduction depended on responses. Specifics are noted in the Findings section.

2.7.2 Scores

The mean and standard deviation was calculated for each of parent/child risk score and chronicity of maltreatment score.

2.7.3 Description of Sample

- Frequencies and percentages were used to describe the sample;
- All categorical variables crosstabulated by DYP age category, with chi-square tests of significance;
- Mean scores for DYP age categories compared using One-way Anova, with Bonferroni post hoc test at the $p < .05$ level.

2.7.3 Theoretical Model

- Correlations between all scores & dichotomous demographic variables;
- A series of multiple regression analyses to test the theoretical model in Figure 1.

3. FINDINGS

For a complete summary of raw questionnaire responses please see Appendix C. For analysis purposes, most variables were collapsed into smaller categories. These categories are mentioned when necessary.

This section summarizes notable questionnaire responses. Any significant differences among children who were first known to the DYP in infancy, pre-adolescence, or adolescence are mentioned. In addition, relationships between variables are examined.

Missing values and 'No' responses are not included in the table percentages. Therefore, the total percentages in each column will not equal 100%.

3.1 Sample Descriptives

The mean age of subjects was 15.45 years ($SD = .91$). There were 64 boys and 23 girls in the study. Subjects were primarily English speaking Caucasians and Blacks of Christian faith. For specifics refer to Table 1 in Appendix C.

Demographics

Of the children, 11.4% had at least one deceased parent and 6.9% of the children no longer had any type of parental contact. As of March 31, 2004, 17.2% of the children were no longer in the legal custody of either parent and 39% of the children were residing outside of their natural environment.

The mean number of siblings per child was 2.32 ($SD = 1.57$). Of the children, 58.6% had siblings with a history of DYP involvement and 18.4% also had siblings known to YOS.

Parent Risk Factors

For parent and child risk factors, missing responses were treated as an absence of risk factor (e.g., 1- No). The reason for this is that, in typical DYP/YOS dossiers only the

presence of a risk factor is recorded. However, in rare instances, the absence of a risk factor may be recorded. It is important to note that workers may vary in their judgments about what is and isn't important to ask a client. In addition, clients may not always tell the truth regarding their life histories. Thus, in some cases, a risk factor may actually be present but this fact goes unrecorded.

Each parental risk factor variable was collapsed into two categories; 1 – No and 2 – Yes. The response Yes indicates that at least one of the parents had a history of the measured risk factor. The mean number of parental risk factors per child was 2.01 (SD = 1.94). Seven of the twelve measured risk factors occurred with more than 10% frequency. Table 1 summarizes these risk factors.

Table 1. Frequent Parent Risk Factors

| | % |
|------------------------|------|
| Substance Abuse | 43.6 |
| Criminal Record | 33.3 |
| Domestic Violence | 33.3 |
| Mental Illness | 28.7 |
| Childhood Maltreatment | 22.9 |
| Suicidal Ideation | 10.3 |
| Physical Illness | 10.3 |

Note: n = 87 for all cases

The majority of parents suffering from mental illness were mothers. In addition, the majority of parents who experienced childhood maltreatment and domestic violence were also mothers. See Appendix C, Table 5 for specifics.

Child Risk Factors

Each child risk factor variable was collapsed into two categories; 1 – No and 2 – Yes. The mean number of childhood risk factors per child was 12.40 (SD = 6.85).

Infant

The mean number of infant risk factors per child was .59 (SD = 1.17). One of the twenty-four measured risk factors occurred with more than 10% frequency. The risk factor was stressed caregiver relationship, 19.5%.

Pre-Adolescent

The mean number of pre-adolescent risk factors per child was 3.33 (SD = 3.92). Twelve of the twenty-four measured risk factors occurred with more than 10% frequency.

Table 2. Frequent Pre-Adolescent Risk Factors

| | % |
|---|------|
| Academic Issues | 44.8 |
| Aggression | 40.2 |
| Stressed caregiver relationship | 40.2 |
| Mental Illness | 32.2 |
| Defiance of Authority | 32.2 |
| Non-sexual Crimes against known person(s) | 18.4 |
| Theft of property | 16.1 |
| Cognitive Impairment | 14.9 |
| Sexualized Behaviors | 11.5 |
| AWOL | 11.5 |
| Substance Abuse | 10.3 |
| Negative Peer Influence | 10.3 |

Note: n=87 for all cases

Adolescent

The mean number of adolescent risk factors per child was 8.49 (SD = 6.85). Seventeen of the twenty-four measured risk factors occurred with more than 10% frequency.

Table 3. Frequent Adolescent Risk Factors

| | % |
|---|------|
| Academic Issues | 94.3 |
| Aggression | 89.7 |
| Defiance of Authority | 83.9 |
| Stressed Caregiver Relationship | 78.2 |
| Substance Abuse | 65.5 |
| Non-Sexual Crimes Against Known Person(s) | 63.2 |
| Negative Peer Influence | 51.7 |
| Mental Illness | 43.7 |
| AWOL | 43.7 |
| Suicidal Ideation | 28.7 |
| Sexualized Behaviors | 24.1 |
| Destruction of Property | 24.1 |
| Cognitive Impairment | 20.7 |
| Physical Illness | 14.9 |
| Lack of Pro-Social Activity | 14.9 |
| Fire Setting | 13.8 |
| Non-Sexual Crimes Against Unknown Person(s) | 11.5 |

Note: n = 87 for all cases

Maltreatment

Infancy

In total, 26.4% of children were abused during infancy. In 69.6% of cases, the applied article(s) of YPA law pertained to pure neglect. See Appendix C, Table 12 for a distribution of all type(s) of abuse experienced by these children as infants. Length of DYP involvement time was over three years for 43.5% of these children. Length of DYP placement time was more than one year for 30.4% of these children. Adjudication was necessary in 65.2% of cases.

Pre-Adolescence

In total, 46% of children were abused during pre-adolescence. In 45% of cases, the applied article(s) of YPA law pertained to pure neglect. See Appendix C, Table 12 for a distribution of type(s) of abuse experienced by these children as infants. Length of DYP involvement time was over three years for 37.5% of these children. Length of DYP

placement time was more than one year for 35% of these children. Adjudication was necessary in 57.5% of cases.

Adolescence

All children were abused during adolescence. In 88.5% of cases, the applied article(s) of YPA law pertained to pure neglect. See Appendix C, Table 12 for a distribution of type(s) of abuse experienced by these children as infants. Length of DYP involvement time was over three years for 28.7% of these children. Length of DYP placement time was more than one year for 31% of these children. Adjudication was necessary in 57.5% of cases.

Lifespan

The mean age at which a child comes to the attention of DYP is 9.27 years. Children were first known to DYP in infancy 26.4%, in pre-adolescence 20.7%, and in adolescence 52.9%. In 69% of cases, applied article(s) of YPA law pertained to pure neglect. Physical abuse had been experienced by 25.3% of children while 5.7% had experienced sexual abuse and 6.9% had experienced both physical and sexual abuse. The mean number of separate involvements with DYP was 2.19 (SD = 1.90). Of children, 44.8% were involved with DYP for at least three years. The mean number of separate DYP placements was 1.46 (SD = 1.27). Of children, 82.4% had received some sort of DYP placement and 32.3% of children spent more than a year in placement. Adjudication was required in 81.6% of cases. Age of majority ruling was noted for 12.6% of children.

Criminality

The mean age of first offence was 13.77 years (SD = 1.02). The mean number of total crimes per child was 2.23 (SD = 1.72). Combined, these children committed a total of 359 infractions and 194 separate offences. Time involved with YOA was more than one year for 52.9% of children. A total of 34.8% of children spent time in YOA placement. The majority of these children were in placement for six months or less. The

mean number of separate YOS placements was .61 (SD = 1.33). At least 35.6% of children committed crimes against someone known to them.

3.2. Gender Differences

Table 4 summarizes significant gender differences for demographics, parent risk factors, child risk factors, and maltreatment histories. There were no significant gender differences for criminality variables.

Table 4. Significant Gender Differences

| | n | Boys (n = 64) | | Girls (n = 23) | | df | χ^2 |
|-------------------------------|----|---------------|------|----------------|------|----|----------|
| | | n | % | n | % | | |
| DEMOGRAPHICS | | | | | | | |
| Ethno-racial group | 80 | | | | | 2 | 6.75* |
| Caucasian | | 29 | 50.9 | 10 | 43.5 | | |
| Black | | 20 | 35.1 | 4 | 17.4 | | |
| Other | | 8 | 14.0 | 9 | 39.1 | | |
| PARENT RISK FACTORS | | | | | | | |
| Substance Abuse | 87 | 23 | 35.9 | 15 | 65.2 | 1 | 5.89** |
| PRE-ADOLESCENT RISK FACTORS | | | | | | | |
| Aggression | 87 | 30 | 46.9 | 5 | 21.7 | 1 | 4.44* |
| ADOLESCENT RISK FACTORS | | | | | | | |
| Suicidal Ideation | 87 | 13 | 20.2 | 12 | 52.2 | 1 | 8.38** |
| Aggression | 87 | 60 | 93.8 | 18 | 78.3 | 1 | 4.37* |
| Fire Setting | 87 | 12 | 18.8 | - | - | 1 | 5.00* |
| Maternal Pregnancy as Minor | 87 | 1 | 1.6 | 3 | 13.0 | 1 | 5.08* |
| Unofficial Crimes of any Kind | 87 | 58 | 90.6 | 14 | 60.9 | 1 | 10.49** |
| MALTREATMENT | | | | | | | |
| Age of Majority Ruling | 87 | 5 | 7.8 | 6 | 26.1 | 1 | 5.11* |

Note: For all variables, with the exception of ethno-racial group, chi-squares were calculated for a crosstab of yes/no responses.

* $p < .05$, ** $p < .01$

There were significantly more girls than boys:

- who were of ‘other’ ethno-racial groups,
- with at least one parent with a history of parental substance abuse,
- who experienced adolescent suicidal ideation,
- who conceived a child during adolescence, and
- who received an age of majority court ruling as a result of maltreatment.

There were significantly more boys than girls:

- who exhibited aggression during pre-adolescence and adolescence, and
- who committed known unofficial criminal activities during adolescence.

In addition, only boys were known to be fire-setters during adolescence.

3.3. DYP Age Differences

Demographics

Table 5 summarizes the frequencies of demographic variables that were significantly different among children first referred to DYP in infancy, in pre-adolescence, and adolescence.

Table 5. Demographics by DYP Age

| | Infant (n = 23) | | Pre-Adolescent (n = 18) | | Adolescent (n = 46) | |
|--------------------------------|-----------------|-------|----------------------------|-------|------------------------|------|
| | n | % | n | % | n | % |
| Primary Language | | | | | | |
| English | 23 | 100.0 | 18 | 100.0 | 38 | 82.6 |
| Other | - | - | - | - | 8 | 17.4 |
| Other Siblings known to DYP | 21 | 91.3 | 14 | 82.4 | 16 | 36.4 |
| Legal Custody | | | | | | |
| Neither Parent | 10 | 43.5 | 3 | 16.7 | 2 | 4.4 |
| One Parent | 11 | 47.8 | 10 | 55.6 | 24 | 53.3 |
| Both Parents | 2 | 8.7 | 5 | 27.8 | 19 | 42.2 |
| Primary Residence | | | | | | |
| Natural Environment | 9 | 39.1 | 11 | 61.1 | 33 | 71.7 |
| Other | 14 | 60.9 | 7 | 38.9 | 13 | 28.3 |
| SES | | | | | | |
| Welfare | 4 | 57.1 | 1 | 16.7 | 3 | 13.6 |
| Earnings | 1 | 14.3 | 2 | 33.3 | 19 | 86.4 |
| Combined | 1 | 14.3 | 3 | 50.0 | - | - |
| No Income | 1 | 14.3 | - | - | - | - |

Table 6. Significant Demographic DYP Age Differences

| | n | df | χ^2 |
|--------------------------------|----|----|----------|
| Primary Language | 87 | 2 | 7.85* |
| Other Siblings known to DYP | 87 | 2 | 23.29*** |
| Legal Custody | 86 | 4 | 19.14*** |
| Primary Residence | 87 | 2 | 6.84* |
| SES | 35 | 6 | 24.28*** |

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

Note: For the variable, other siblings known to DYP, chi-square was calculated for a crosstab of yes/no responses. Interpret SES with caution given small cell sizes.

Children first referred to DYP in infancy had more siblings that were also known to DYP than did children first referred in pre-adolescence or adolescence. They were also less likely to be in the legal custody of their parents and more likely to be living in placement. For those children first referred in infancy, who were residing in their natural environments, they had a higher rate of parents on welfare than did those children first referred in pre-adolescence and adolescence.

Parent Risk Factor

Table 7 summarizes the frequencies of parent risk factor variables that were significantly different among children first referred to DYP in infancy, in pre-adolescence, and adolescence.

Table 7. Significant Parental Risk Factor DYP Age Differences

| | Infant (n = 23) | | Pre- Adolescent (n = 18) | | Adolescent (n = 46) | | χ^2 |
|--------------------------------|---------------------|------|--------------------------------|------|------------------------|------|----------|
| | n | % | n | % | n | % | |
| Substance Abuse | 17 | 73.9 | 13 | 72.2 | 8 | 17.4 | 27.42*** |
| Maltreatment | 14 | 60.9 | 4 | 22.2 | 2 | 4.3 | 27.67*** |
| Domestic Violence | 10 | 43.5 | 12 | 66.7 | 7 | 15.2 | 16.85*** |
| Sexual Abuser | 4 | 17.4 | - | - | - | - | 11.66** |
| Criminal Record | 15 | 65.2 | 11 | 61.1 | 3 | 6.5 | 31.65*** |
| Maternal Pregnancy as Minor | 3 | 13.0 | 1 | 5.6 | - | - | 5.99* |

Notes: n=87 and df=2 for all cases

For all variables, chi-squares were calculated for a crosstab of yes/no responses.

*p<.05, **p<.001, ***p<.001

Children first referred to DYP as infants and pre-adolescents had higher rates of all parental risk factors than did children first referred in pre-adolescence and adolescence.

There were significant differences between children first referred to DYP in infancy (M = 3.61, SD = 1.82), pre-adolescence (M = 3.00, SD = 1.57), and adolescence (M = .83, SD = 1.24) in regards to the total number of parental risk factors,

$F(2, 84) = 32.15, p < .001$. Specifically, children first referred to DYP in infancy and pre-adolescence have higher rates of parental risk factors than did children first abused in adolescence.

Child Risk Factors

Infant

Data collected for this section were extremely limited and thus not worthy of further analysis.

Pre-Adolescent

The variables cognitive impairment, physical disability and physical illness were collapsed into a new variable termed health problem. Health problems had two categorical responses 1 – No and 2 – Yes. Table 8 summarizes pre-adolescent risk factor variables that were significantly different among children first referred to DYP in infancy, pre-adolescence, and adolescence. However, due to small cell size caution must be used in interpretation of results.

Table 8. Significant Pre-Adolescent Risk Factor DYP Age Differences

| | Infant (n = 23) | | Pre- Adolescent (n = 18) | | Adolescent (n = 46) | | χ^2 |
|------------------------------------|--------------------|------|--------------------------------|------|------------------------|------|----------|
| | n | % | n | % | n | % | |
| Health (excl. mental illness) | 11 | 47.8 | 2 | 11.1 | 4 | 8.7 | 15.95*** |
| Substance Abuse | 6 | 26.1 | 2 | 11.1 | 1 | 2.2 | 9.46 ** |
| Suicidal Ideation | 5 | 21.7 | 2 | 11.1 | 1 | 2.2 | 7.12* |
| Sexualized Behaviors | 9 | 39.1 | 1 | 5.6 | - | - | 23.86*** |
| Sexual Identity Issues | 2 | 8.7 | - | - | - | - | 5.69* |
| AWOL | 6 | 26.1 | 1 | 5.6 | 3 | 6.5 | 6.55* |
| Academic Issues | 17 | 73.9 | 8 | 44.4 | 14 | 30.4 | 11.72** |
| Aggression | 16 | 69.6 | 6 | 33.3 | 13 | 28.3 | 11.32** |
| Negative Peers | 6 | 26.1 | 2 | 11.1 | 1 | 2.2 | 9.46** |
| No Peers | 4 | 17.4 | - | - | 2 | 4.3 | 5.74* |
| Stressed Caregiver Relationship | 18 | 78.3 | 9 | 50.0 | 8 | 17.4 | 24.52*** |
| Defiance of Authority | 14 | 60.9 | 6 | 33.3 | 8 | 17.4 | 13.29*** |
| Unofficial Criminal Activity | 11 | 47.8 | 7 | 38.9 | 4 | 8.7 | 14.64*** |

Note: n = 87 and df = 2 for all cases

For all variables, chi-square was calculated using a crosstab of no/yes responses.

In summary, children first referred to DYP in infancy and pre-adolescence had higher rates of all risk factors during pre-adolescence than did children first referred in pre-adolescence and adolescence.

Adolescent

Table 9 summarizes adolescent risk factor variables with statistically significant DYP age differences.

Table 9. Significant Adolescent Risk Factor DYP Age Differences

| | Infant (n = 23) | | Pre- Adolescent (n = 18) | | Adolescent (n = 46) | | χ^2 |
|----------------------------------|--------------------|------|--------------------------------|------|------------------------|------|----------|
| | n | % | n | % | n | % | |
| Health (excl. mental illness) | 15 | 65.2 | 3 | 16.7 | 12 | 26.7 | 13.58*** |
| Substance Abuse | 11 | 47.8 | 10 | 55.6 | 36 | 78.3 | 7.28* |
| Sexualized Behaviors | 13 | 56.5 | 3 | 16.7 | 5 | 10.9 | 18.14*** |

Note: n = 87 and df = 2 for all cases

For all variables, chi-square was calculated using a crosstab of no/yes responses.

During adolescence, children first referred to DYP in infancy had higher rates of poor health and sexualized behaviors than did children first referred as pre-adolescence and adolescence. However, children first referred in adolescence had a higher rate of substance abuse than did children first referred in infancy or pre-adolescence.

Lifespan Total Risk Factors

There were significant differences between children first referred to DYP in infancy (M = 17.96 SD = 8.82), pre-adolescence (M = 11.56, SD = 5.02), and adolescence (M = 9.96, SD = 4.47) in regards to the total number of child risk factors, $F(2, 84) = 13.80, p < .001$. Specifically, post hoc test revealed that children first referred to DYP in infancy have a higher rate of risk factors than do children first referred in pre-adolescence and adolescence.

Maltreatment

Table 10 summarizes lifespan maltreatment histories by DYP age.

Table 10. Maltreatment Variables by DYP Age

| | Infant (n = 23) | | Pre-Adolescent (n = 18) | | Adolescent (n = 46) | |
|---|--------------------|------|----------------------------|------|------------------------|------|
| | n | % | n | % | n | % |
| Type of Abuse | | | | | | |
| Neglect | 7 | 30.4 | 9 | 50.0 | 40 | 87.0 |
| Neglect and Other | 10 | 43.5 | 8 | 44.4 | 6 | 13.0 |
| Neglect/Physical and Sexual Abuse | 6 | 26.1 | 1 | 5.6 | - | - |
| Total length of DYP involvement time | | | | | | |
| 12 months or less | | | 2 | 12.5 | 13 | 28.9 |
| 13-35 months | 1 | 4.3 | 5 | 31.3 | 24 | 53.3 |
| 36 months or more | 22 | 95.7 | 9 | 56.3 | 8 | 17.8 |
| Total length of DYP placement time | | | | | | |
| None | 2 | 9.1 | 4 | 25.0 | 14 | 31.1 |
| 12 months or less | 4 | 18.2 | 9 | 56.3 | 22 | 48.9 |
| 13-35 months | 2 | 9.1 | - | - | 8 | 17.8 |
| 36 months or more | 14 | 63.6 | 3 | 18.8 | 1 | 2.2 |
| Court Necessary | 23 | 100 | 14 | 77.8 | 34 | 73.9 |
| Age of Majority Ruling | 8 | 34.8 | 2 | 11.1 | 1 | 2.2 |

In summary, children first referred to DYP in infancy and pre-adolescence were more likely to experience multiple forms of abuse than children first referred in adolescence. They also spent more time involved with DYP and more time in DYP placements. In addition, they had higher rates of adjudication and age of majority rulings.

Table 11 summarizes maltreatment variables that were significantly different among children first referred to in infancy, pre-adolescence, and adolescence. However, due to small cell size caution must be used when interpreting results.

Table 11. Maltreatment Variables with Significant DYP Age Differences

| | n | df | χ^2 |
|--------------------------------------|----|----|----------|
| Articles of Law Applied | 87 | 3 | 28.97*** |
| Victim of Abuse types | 87 | 6 | 28.31*** |
| Total length of DYP involvement time | 84 | 4 | 38.05*** |
| Total length of DYP placement time | 83 | 6 | 36.30*** |
| Court Necessary | 87 | 2 | 7.17* |
| Age of Majority Ruling | 87 | 2 | 14.81*** |

Note: For the variables court necessary and age of majority ruling, chi-square was calculated using a crosstab of no/yes responses.

* $p < .05$, ** $p < .01$, *** $p < .001$

There were significant differences between children first referred to DYP in infancy ($M = 2.95$, $SD = 2.17$), pre-adolescence ($M = 3.69$, $SD = 2.60$), and adolescence ($M = 1.30$, $SD = .591$) in regards to total number of separate DYP involvement, $F(2, 84) = 15.894$, $p < .001$. Specifically, post hoc test revealed that children first referred in infancy and pre-adolescence had a higher total number of separate DYP involvement than did children first referred in adolescence. There were also significant differences between children first referred in infancy ($M = 2.14$, $SD = 1.457$), pre-adolescence ($M = 1.38$, $SD = 1.204$), and adolescence ($M = 1.16$, $SD = 1.086$) in regard to total number of separate DYP placements, $F(2, 84) = 4.854$, $p < .01$. Specifically, post hoc test revealed that children first referred in infancy have a higher rate of DYP placements than do children first abused in adolescence.

Criminality

There were significant differences between children first referred to DYP in infancy ($M = 13.30$, $SD = .926$), pre-adolescence ($M = 13.61$, $SD = 1.092$), and adolescence ($M = 14.07$, $SD = .952$) in regard to child's age at first officially known offence, $F(2, 84) = 4.965$, $p < .01$. Specifically, post hoc tests revealed that children first referred in infancy are younger when they commit their first official offence than children who are first referred in adolescence.

3.4 Scores

Scores for each child were calculated based on worker opinion survey results as outlined in Section 2. See Appendix D for a summary of worker opinion raw data.

Table 12 reports the mean and standard deviation of parental risk factor score, child risk factor score, and chronicity of maltreatment score.

Table 12. Score Results

| | M | SD |
|----------------------------|-------|-------|
| Parental Risk Factor Score | 10.60 | 6.60 |
| Child Risk Factor Score | 40.28 | 22.40 |
| Chronicity of Maltreatment | 5.48 | 1.81 |

Note: Higher scores indicate more risk and increased agency involvement

3.5 Relationships

Gender was coded as 1 – Boys and 2- Girls. DYP age was coded as 1- Infant, 2- Pre-Adolescent, and 3- Adolescent.

3.5.1. Correlations

Summary Variable Connections

Table 13 reports inter-correlations between summary variables. These data indicate that girls have higher parental risk scores than boys. As parental risk score increased so did child risk and chronicity of maltreatment scores whereas ages of first

known DYP involvement and age of first known offence decreased. In addition, as parental risk score increased so did the chance of a child experiencing multiple forms of abuse. As the child risk score increased age of first known DYP involvement and age of first known offence decreased. As child risk score increased so did the chronicity of maltreatment score and the chance of experiencing multiple types of abuse. Children who experienced multiple forms of abuse have higher chronicity of maltreatment scores than those who have not. They also commit their first offence at a younger age. As the chronicity of maltreatment score increased the age at which a child commits their first offence decreased.

Table 13. Inter-Correlations of Summary Variables

| | Gender | Parent Risk Score | Child Risk Score | DYP Age | Type of Maltreat | Chronic Maltreat Score | Age of First Offence | Total Offences |
|------------------------|--------|-------------------|------------------|---------|------------------|------------------------|----------------------|------------------|
| Gender | | .24* | -.12 | -.17 | .14 | .15 | -.02 | -.09 |
| Parent Risk Score | | | .42** | -.66*** | .40*** | .48*** | .22** | .08 |
| Child Risk Score | | | | -.51*** | .39*** | .50*** | -.36** | .14 |
| DYP Age | | | | | -.61*** | -.62*** | .37*** | -.10 |
| Type of Maltreat | | | | | | .53*** | -.26* | .10 |
| Chronicity of Maltreat | | | | | | | -.34*** | .21 ^a |
| Age of First Offence | | | | | | | | -.16 |
| All Offences | | | | | | | | - |

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

Note: a is close to significant at p = .056

Parental Risk Factors Connection to Both Maltreatment and Criminality

Re-occurring parental risk factor variables were correlated with selected maltreatment and criminality variables to determine if any of the risk factors had an affect on both maltreatment and criminality. Table 14 reports the correlation coefficients of these results.

Table 14. Parental Risk Factor Correlations with Maltreatment and Criminality

| | Mental Illness | Substance Abuse | Maltreat - ment | Domestic Violence | Criminal Record |
|---------------------------------------|-------------------|--------------------|--------------------|----------------------|--------------------|
| MALTREATMENT | | | | | |
| Age of first known DYP involvement | -.27* | -.46*** | -.53*** | -.36*** | -.54*** |
| Type of Abuse | .25* | .17 | .42*** | .32** | .35*** |
| Length of DYP involvement | .20 | .34** | .41*** | .27* | .35** |
| Length of DYP placement | .39*** | .30** | .42*** | .19 | .12 |
| Adjudication | .17 | .18 | .19 | .09 | .09 |
| Age of Majority Ruling | .14 | .15 | .29** | .25* | .17 |
| CRIMINALITY | | | | | |
| Age of first known offence | -.09 | -.23* | -.23* | -.12 | -.26* |
| # of property offences | .17 | .09 | .07 | .12 | .05 |
| # of person offences | -.03 | -.05 | .00 | .10 | .18 |
| # of total offences | .16 | -.06 | .04 | .14 | .14 |
| Length of YOA involvement | -.12 | -.02 | -.05 | .07 | .12 |
| Length of YOA placement | .06 | -.10 | -.08 | .10 | .06 |

Three risk factors were correlated with at least one of both maltreatment and criminality variables. These factors were substance abuse, maltreatment, and criminal record.

Maltreatment and Criminality Connection

Table 15 reports significant correlations between maltreatment variables and child's age at time of first known criminal offence. As age of first known DYP referral increased so did age of first known offence. As all other selected maltreatment variables increased age of first known offence decreased.

Table 15. Significant correlations between Maltreatment Variables and Age of First Known Offence

| | Age of First Known Offence |
|------------------------------------|----------------------------|
| Age of First Known DYP Involvement | .37*** |
| # of Separate DYP Involvement | -.23* |
| Type of Abuse | -.22* |
| Time Involved with DYP | -.41*** |
| Placement Time with DYP | -.30** |

In addition, the number of separate DYP involvements was significantly correlated with the total number of person offences, $r = .272$, $p < .01$, the number of separate DYP placements was significantly correlated with the total number of property offences, $r = .288$, $p < .01$, and DYP adjudication was significantly correlated with the total number of separate YOS placements. There were no other significant results to report.

3.5.2 Multiple Regressions

In general, children did not commit enough offences to be able to determine whether they had a preference for committing one kind of crime over another. As a result type of criminality was excluded from this model. Table 16 reports the results for the multiple regression analysis of gender and parental risk score on child risk score. These data suggest that: boys have higher parent risk scores than girls, and as parent risk score increased so did child risk score.

Table 16. Predicting Child Risk Score

| Independent Variable | <i>B</i> | <i>SE B</i> | β |
|----------------------|----------|-------------|---------|
| Gender | -9.87 | 4.98 | -.20* |
| Parent Risk Score | 1.57 | .34 | .46*** |

Note: $R^2 = .22$

* $p < .05$, *** $p < .001$

Overall, the model was significant, $F(2, 84) = 11.48$, $p < .001$. The value of R^2 suggests that this 2-variable model can explain 22 percent of the variation in the dependent variable, child risk score.

Table 17 reports the results for the multiple regression analysis of gender, parental risk score, and child risk score on type of maltreatment. These data suggest that: as both parent and child risk scores increased so did the chance the child would experience multiple forms of maltreatment.

Table 17. Predicting Type of Maltreatment

| Independent Variable | <i>B</i> | <i>SE B</i> | β |
|----------------------|----------|-------------|---------|
| Gender | .10 | .12 | .07 |
| Parent Risk Score | .03 | .01 | .29** |
| Child Risk Score | .01 | .00 | .47*** |

Note: $R^2 = .43$

** $p < .01$, *** $p < .001$

Overall, the model was significant, $F(3, 83) = 20.53$, $p < .001$. The value of R^2 suggests that this 3-variable model can explain 43 percent of the variation in the dependent variable, type of maltreatment.

Table 18 reports the results for the multiple regression analysis of gender, parental risk score, child risk score, and type of maltreatment on age of first known DYP referral. These data suggest that: as parent risk score increased age of first known DYP referral decreased and as children experienced multiple forms of maltreatment age of first known DYP referral decreased.

Table 18. Predicting DYP Age

| Independent Variable | <i>B</i> | <i>SE B</i> | β |
|----------------------|----------|-------------|---------|
| Gender | -1.15 | .93 | -.10 |
| Parental Risk Score | -.35 | .07 | -.43*** |
| Child Risk Score | -.04 | .02 | -.17 |
| Type of Maltreatment | -2.35 | .81 | -.28** |

Note: $R^2 = .56$

** $p < .01$, *** $p < .001$

Overall, the model was significant, $F(4, 82) = 26.00$, $p < .001$. The value of R^2 suggests that this 2-variable model can explain 56 percent of the variation in the dependent variable, DYP age.

Table 19 reports the results for the multiple regression analysis of gender, parental risk score, child risk score, type of maltreatment and age of first known DYP referral on chronicity of maltreatment score. These data suggest that as age of first known DYP referral decreased chronicity of maltreatment score increased.

Table 19. Predicting Chronicity of Maltreatment Score

| Independent Variable | <i>B</i> | <i>SE B</i> | β |
|----------------------|----------|-------------|---------|
| Gender | .33 | .36 | .08 |
| Parental Risk Score | .01 | .03 | .04 |
| Child Risk Score | .02 | .01 | .20 |
| Type of Maltreatment | .45 | .33 | .16 |
| DYP Age | -.13 | .04 | -.38** |

Note: $R^2 = .45$

** $p < .01$

Overall, the model was significant, $F(5, 79) = 12.93$, $p < .001$. The value of R^2 suggests that this 2-variable model can explain 45 percent of the variation in the dependent variable, chronicity of maltreatment score.

Table 20 reports the results for the multiple regression analysis of gender, parental risk score, child risk score, type of maltreatment, age of first known DYP referral, chronicity of maltreatment score on age of first offence. These data suggest that as age of first known DYP referral increased so did age of first offence.

Table 20. Predicting Age of First Offence

| Independent Variable | <i>B</i> | <i>SE B</i> | β |
|----------------------------|----------|-------------|---------|
| Gender | -.05 | .24 | -.02 |
| Parental Risk Score | -.01 | .02 | .06 |
| Child Risk Score | -.01 | .01 | -.22 |
| Type of Maltreatment | .19 | .22 | .12 |
| DYP Age | .06 | .03 | .34* |
| Chronicity of Maltreatment | -.06 | .07 | -.11 |

Note: $R^2 = .21$

* $p < .05$

Overall, the model was significant, $F(6, 78) = 3.45$, $p < .01$. The value of R^2 suggests that this 2-variable model can explain 21 percent of the variation in the dependent variable, age of first offence.

Table 21 reports the results for the multiple regression analysis of gender, parental risk score, child risk score, type of maltreatment, chronicity of maltreatment score, and age of first offence on total number of offences. These data suggest that as parent risk score increased so did the total number of offences.

Table 21. Predicting Total Number of Offences

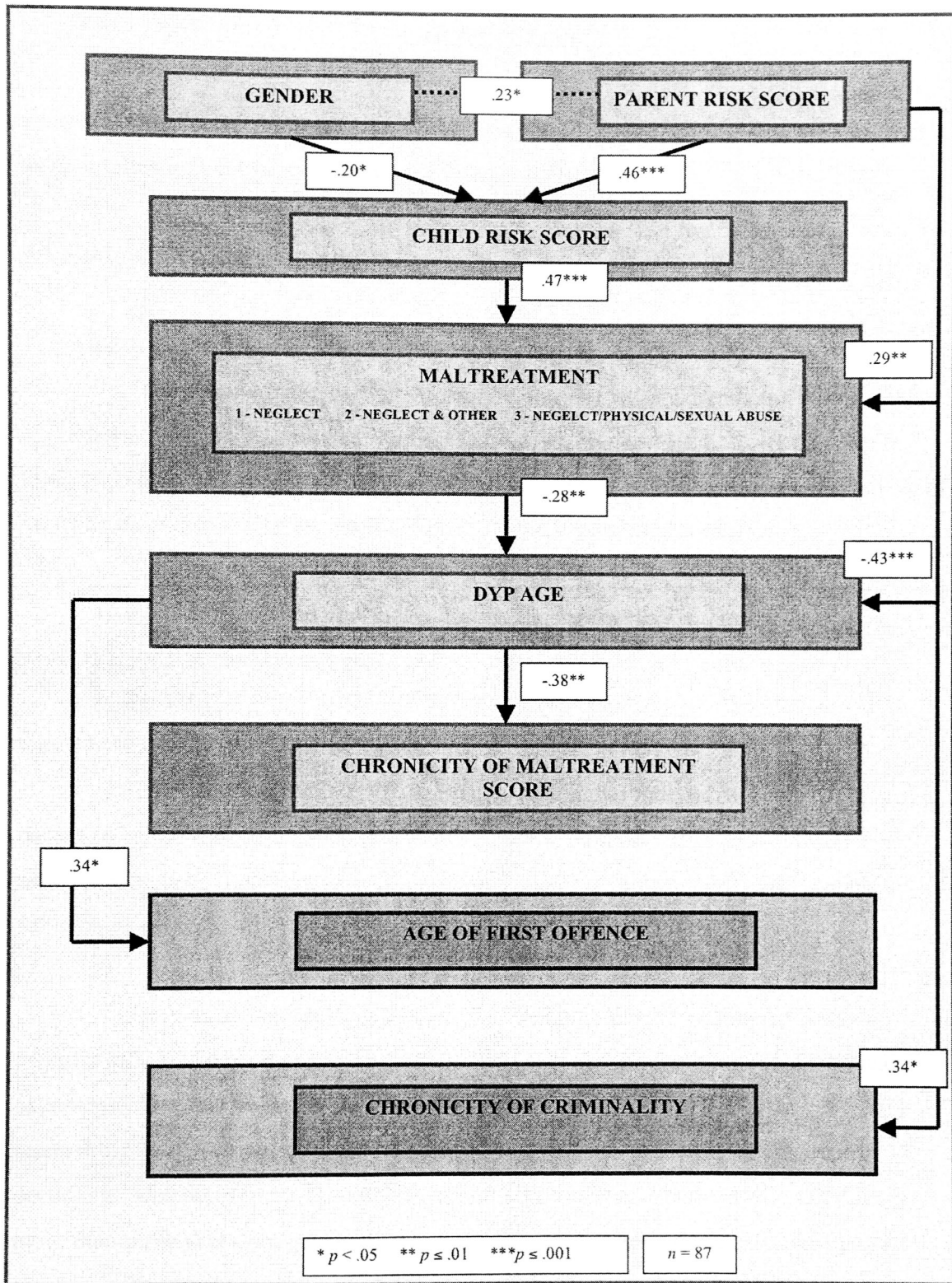
| Independent Variable | <i>B</i> | <i>SE B</i> | β |
|----------------------------|----------|-------------|---------|
| Gender | -.72 | .44 | -.18 |
| Parental Risk Score | .09 | .04 | .34* |
| Child Risk Score | -.01 | .01 | -.13 |
| Type of Maltreatment | .53 | .40 | .20 |
| DYP Age | .09 | .06 | .29 |
| Chronicity of Maltreatment | .16 | .14 | .17 |
| Age of First Offence | -.22 | .21 | -.13 |

Note: $R^2 = .16$

* $p < .05$

Overall, this model was close to significant, $F(7, 77) = 2.06$, $p = .059$. The value of R^2 suggests that this 2-variable model can explain 16 percent of the variation between the dependent and independent variables.

For a summary of above model, please see Figure 2.



4. DISCUSSION

This chapter summarizes the study's key findings, limitations, strengths, as well as its implications for practice and future research directions.

4.1 Summary of Key Findings

Prevalence of Dual Status Youth

Of 284 young offenders, with accessible dossiers, who were serviced by Batshaw YOS, between April 1, 2003 and March 31, 2004, 41.1% (n=119) had, at one point in time, been involved with DYP. This corroborates Widom's (1989a, b, c & 2001) cycle of violence theory, in that, maltreated children are likely to also become criminal.

Only 32.2% (92) had dual status during the study year. Of these, 87 individuals were used for this study.

Characteristics of Dual Status Youth

Children first known to DYP, as infants, had higher rates of each of the measured parent and child functioning issues when compared to children first known to DYP as pre-adolescents or adolescents. In addition, they also had higher total parent and child functioning scores.

It is particularly interesting that a third of all children studied had at least one parent with a criminal record and a third of them also had at least one parent who had experience domestic violence. Again, this corroborates Widom's (1989a, b, c & 2001) research, in that, intergenerational transmission of violence is seen to be frequently occurring. Also fascinating, is that 45% of children had been involved with DYP for more than three years, suggesting that the children who receive the most severe and chronic maltreatment are the ones more likely to become criminal. In addition, their criminality appears to be of a more severe and chronic nature given that 53% of them were involved with YOS for more than a year.

Parental Functioning Issues Associated with both Maltreatment and Criminality

Three functioning issues were correlated with at least one of the varying aspects of maltreatment and the criminality variable, age of first known offence. These factors were substance abuse, childhood maltreatment and criminal record. This too, corroborates Widom's (1989a, b, c, & 2001) cycle of violence theory.

The Maltreatment Criminality Connection

The various aspects of maltreatment seemed to have the largest impact on the age at which a child committed their first offence. Specifically,

- Children who experienced multiple maltreatment committed their first official offence at a younger age when compared to children who a single form of maltreatment,
- As the following variables increased: chronicity of maltreatment, the number of separate DYP involvements, time involved with DYP, and placement time the age at which a child committed their first official offence decreased,
- As the age at which a child was first known to DYP increased so did the age at which the child committed their first offence.

These facts are particularly interesting, in that children who were involved in criminality at an earlier age are more likely to continue to be criminal in their adult years. In addition, as the number of separate DYP involvement and separate DYP placements increased so did the total number of property offences. This appears to indicate that children who move in and out of the system are less likely to have respect for others' belongings.

Predictors of Criminality

Multiple regressions indicated that, of the variables studied, only parent risk score and age of first known DYP involvement were significant predictors of criminality. Specifically,

- Parent risk score predicts chronicity of criminality

- Age of first known DYP involvement predicts age of first official criminal offence.

4.2 Limitations of the Study

There are several limitations to this study.

Sample Selection – Lack of Randomization

Subjects were selected based on specific criteria. Specifically, subjects came from one youth protection agency serving a specific region and population of Quebec (e.g., primarily English speaking Montrealers). Subjects were also chosen based on their involvement with the agency during a specific year. It is possible that these subjects have had different involvement than those persons who were involved with other agencies due to varying agency practices and regional location. It is also possible that English-speaking Montrealers experience and perceive the world differently than French or Other speaking Montrealers. In addition, the world is continually changing and what might have been the case in one year might not be in the next. For the above reasons, the generalizability of the results is limited.

Retrospective Design

Retrospective designs are weak by nature, because they rely on the availability of previously recorded or remembered information. It is entirely possible, that due to YPA and YOA destruction laws, the full extent of maltreatment and criminal histories are under-reported. Given the numbers of different workers involved with a child during youth protection involvement, the subjective nature of protection work, and the fact that youth protection laws and practice have changed significantly over the years, there is also a high likelihood of inconsistencies within each dossier. In addition, this study did not involve any features that allowed for worker clarifications of materials contained within dossiers.

Lack of Comparison Group

Originally, it was thought to use two comparison groups: children who were maltreated but not criminal, and children who were criminal but who had not been maltreated. However, numerous factors proved this to be most difficult. Foremost, was that time was a factor. The agency did not have any official measures to differentiate between clients who were: maltreated and criminal, criminal but not maltreated, and maltreated but not criminal. Thus, it would have been a tedious and time-consuming process, requiring the file review of each client served by the agency during the year in question. There was also agency pressure to focus on only those clients maltreated and criminal so that a comprehensive picture of this group could be obtained. Finally, given the scarce resources of any government funded agency, there was pressure to extremely limit the amount of assistance needed, by agency employees, to conduct this study.

Narrow differentiation of types of Maltreatment

Originally, it was thought to define maltreatment as done by the CIS (2001). However, due to the small number of cases with dual status in the study year, defining maltreatment in this way would have created groups that would have been too small from which to obtain meaningful analysis. In addition, the coding of maltreatment under the YPA does not clearly indicate cases of emotional maltreatment. As a result of the above, maltreatment was differentiated only by three typologies: neglect, physical, and sexual abuse.

Exclusive Use of Official Records

This study relied, exclusively, on the information contained within official DYP and YOS files. It is well known, that acts of both maltreatment (Trocme, 2001) and criminal offences (Griffiths & Jones, 1994) are under-reported. It is then likely, that the actual number of maltreated and criminal youth is much higher than estimated as a result of this study. In addition, persons who come into contact with the system may over or under report their actual situations depending on their perceptions of authority and personal goals. For example, perhaps a child did not experience just a single incident of physical abuse but rather multiple incidents however they were not stated due to fear of

how the ‘system’ would react. Thus, the results of this study must be interpreted with caution.

4.3 Strengths of the Study

Albeit, the above noted limitations there are three notable strengths in this study.

Use of Lifespan Maltreatment

This study takes into account children’s lifespan maltreatment histories rather than just recording one reported incidence of maltreatment. This allowed for a more comprehensive look at how the varying aspects of maltreatment may be affecting criminality.

Inclusion of Multi-type Maltreated Children

Children who were found to have experienced more than one type of maltreatment remained included in the study. As a result, it was possible to examine whether multi-type maltreated children were more likely to engage in certain aspects of criminality than single type maltreated children.

Insider Information of Agency

Being an employee of the agency from which the data was collected was beneficial. As a result, insider information assisted in all stages of the research process. Foremost, it assisted in locating dossier materials. At the time of data collection, the agency did not have a fully operative central filing system. As a result, information concerning clients was scattered in different locales depending on client involvement history. Awareness of this fact and knowledge as to how to determine where information on each client was being kept assisted in improving the chances that all dossier materials were included in data collection. Secondly, an awareness that, on occasion and depending on unique circumstances, a child who had experienced minor sexual abuse, was coded under Article 38E (e.g., neglect) of the YPA instead of Article 38GP (e.g., sexual abuse). Thirdly, an awareness that, when a child becomes involved with youth protection, information about past unknown maltreatment might surface and be recorded within a

dossier. However, maltreatment that is no longer occurring would not be officially coded under the YPA. As a result of an awareness of these latter two facts, data collection was improved in that all aspects of the files were examined not just the coding schemas.

4.4 Implications for Practice and Policy

These results confirm the important role parents play in determining their child's life outcomes, and suggest that parenting capacities should be fully evaluated, treatment plans should be comprehensive in nature and based on cognitive abilities of both parent and child, and focus should be placed on permanency planning. Findings also indicate that reductions in maltreatment may reduce criminality.

Mandatory Criminal Record Check of Parents

Given that a parental history of criminal activity is associated with both maltreatment and criminality, youth protection agencies should conduct mandatory criminal record checks of parents and/or guardians being investigated for the maltreatment of children and young offender services should do the same for those parents and/or guardians whose children are charged with a crime. This may provide insight that might otherwise go undetected.

Parents should be part of the process

The findings of this study indicate that parent risk score is the biggest determining factor in the chronicity of juvenile criminality. Laws need to be changed so that parents are more responsible for their children's actions. This is not to say that I am a proponent of the recent laws that allow parents to be sued as a means to collect damages for crimes committed by their children. What I am implying is that parents need to be legally part of the treatment process to resolve those issues that are contributing to their child's partaking in criminal behavior.

Comprehensive Treatment Programs

This study details the extensive array of problems faced by maltreated and criminal children. These children require multi-component programming, so that the whole of the individual can be addressed and treated in one place by one primary professional rather than done in piecemeal by many professionals. One such promising program, created by Scott Henggler, is Multisystemic Therapy (MST). MST

is an intensive family- and community-based treatment that addresses the multiple determinants of serious antisocial behavior in youth. MST addresses the multiple known factors related to delinquency across the key settings, or systems, within which the youth live (e.g., family, peers, school, neighborhood). MST strives to promote behavior change within the youth's natural environment, using the strengths of each system to facilitate change (Retrieved on September 19th, 2005 at www.mstservices.com).

Treatment based on Cognitive Abilities

The findings of this study appear to corroborate Perry's (2001) statement that children who are exposed to violence may be faced with brain restructuring resulting in abnormalities and that these abnormalities are likely to affect the individual to a higher extent if the violence occurred at an early age, was chronic and was severe. Given this knowledge, complete assessments pertaining to cognitive abilities should be conducted prior to, and with results used in, the development of treatment plans. This will reduce the chance of setting the client up to fail. For example, rather than requiring these types of children to continue with mainstream or even modified educational program it may be more beneficial to focus on life and trade skills so that we can improve the likelihood that they will become productive self-sufficient members of society.

Permanency Planning

This research corroborates that of Widom (1989a & b, and 2001), which indicated that placement instability, not placement itself, appears to be associated with increased criminality. These results support the contention for the immediacy of permanency planning upon the recognition of a child in need of protection. This requires increased funding to protection agencies so that children are not just placed anywhere because there

is an available bed. Rather there should be more focus placed on matching placement environment to the specific and possibly long-term needs of the child.

Crime Prevention Efforts should Focus on the Reduction of Maltreatment

Given that varying aspects of maltreatment appear to influence criminality, either directly or indirectly, and that numerous maltreated children commit criminal acts, crime prevention efforts should focus on reducing the prevalence and incidence of maltreatment through primary, secondary, and tertiary measures. In addition, Protection and Young Offender agencies should work together as well as communicate with other child and family service agencies to ensure that efforts are not duplicated but rather adequate and comprehensive.

Increased Worker Education

Workers should be educated about the connection between maltreatment and criminality as well as the characteristics of this dual status population. In other words, university and college programs should incorporate this content into their curricula. As well, protection and young offender agencies should provide specific training on this topic prior to an employee taking on the specific responsibilities of their position. This would enable improved identification of those deemed high risk.

4.5 Implications for Research

There is a need to improve upon methodological design when examining the connection between maltreatment and criminality. New studies should be conducted with the following in mind. First, it is important that sample sizes be large enough to minimize Type II errors and allow for further differentiation of the varying aspects of maltreatment and criminality. Second, the sample pool from which subjects are drawn should be more representative (e.g., subjects from various agencies, regions, etc) and the sample selection should be as randomized as possible. This will increase the ability to generalize results. Third, data should be collected using various means and not just through reliance on official records. This would allow for a more in-depth and comprehensive analysis. Fourth, matched comparison group designs should be employed – both to control for

various factors and differentiate between groups of persons. Last but not least, in addition to retrospective studies, prospective longitudinal research, extending from conception to death, using continuous cohorts should be undertaken.

Specifically, researchers should first focus on examining the prevalence and incidence rate of dual status children in Canada to determine the scope of the problem. Secondly, qualitative studies need to be conducted to better operationalize the terms frequency, chronicity, and severity of both maltreatment and criminality. Thirdly, research should attempt to replicate the results and expand on this study (using methodological improvements) to gain further insight into the connection between the varying aspects of maltreatment and criminality. Prospective longitudinal studies are needed to explore developmental pathways to determine if the connection is direct or indirect. There is also a need to examine how maltreated and criminal children may differ from those who are maltreated but not criminal and those who are criminal but have not been maltreated. Research should also examine any differences that may exist within those children who are maltreated and criminal. Both nature and nurture factors should be given attention. It will be imperative to separate out those factors that promote criminality from those that protect against it.

4.6 Conclusions

Maltreated and criminal children are characterized as an extremely high needs population. Within this group, children who came to the attention of DYP in infancy have a higher likelihood of parental and personal functioning issues throughout their lifespan and commit their first official crime at an earlier age than those children who came to the attention of DYP in pre-adolescence or adolescence. This suggests that maltreatment may in fact cause brain restructuring that in turn results in abnormalities that can limit functioning. Placement instability was also found to be associated with increased criminality, specifically property offences, thus supporting the contention of the immediacy of permanency planning. This study seems to suggest that the varying aspects of maltreatment affect primarily the age at which a child first commits an official criminal act while parent risk score is the only predictor of chronic criminality. In conclusion, increased methodologically sound research is needed to further understand the connection between the maltreatment and criminality and to determine if this connection is direct or more likely than not indirect.

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APPENDIX B
FMC SURVEY INSTRUMENT

IDENTIFICATION NUMBER: _____

A. Basic Client Information Section (last known info as of March 31, 2003)

| | CODE |
|--|------|
| AGE: | |
| GENDER 1. Male 2. Female | |
| BIRTHPLACE 1. Canada 2. Other: _____ | |
| ETHNO-RACIAL GROUP 1. Caucasian 2. Black 3. Malato 4. Native 5. Asian 6. Arabic 7. Bi-racial (exlcused malato) 8. Other: _____ | |
| PRIMARY LANGUAGE SPOKEN 1. English 2. Other: _____ | |
| RELIGION 1. Catholic 2. Protestant 3. Jewish 4. Muslim 5. Other: _____ 6. None 7. Other Christian | |
| BIOLOGICAL PARENTS IDENTIFIED 1. Mother 2. Father 3. Both 4. Neither | |
| CONTINUOUS LIFE CONTACT WITH BIOLOGICAL PARENTS 1. Mother 2. Father 3. Both 4. Neither | |
| SIBLINGS # of biological: _____ # of maternal: _____ # of paternal: _____ # of step: _____ # of adoptive: _____ Total # _____ | |
| Have other children in family been involved with DYP? 1. No 2. Yes | |
| Have other children in family been involved with YOA? 1. No 2. Yes | |
| LEGAL CUSTODY OF CHILD 1. mother/father 2. mother/father joint 3. mother 4. mother/partner 5. father 6. father/partner 7. other family member: _____ 8. DYP 9. adoptive parent(s) 10. other: _____ 11. unknown | |
| PRIMARY RESIDENCE 1, Natural Environment 2. Specific Foster Care 3. Foster Care 4. Group Home Community 5. Group Home Campus 6. Locked 7. Independent Living 8. Treatment Center If child is in natural environment, please indicate family composition; 1. two parent biological 2. two parent blended 3. single parent 4. single parent/partner | |
| If child is in natural environment, specific or regular foster care, please indicate social economic status of caregiver(s); 1. welfare 2. Earnings 3. Welfare/earnings combined 4. none | |
| DEPARTMENT OF YOUTH PROTECTION STATUS 1. active 2. inactive | |
| YOUNG OFFENDERS ACT STATUS 1. active 2. inactive | |

B. Basic Biological Family History Section

| HISTORY OF (diagnosed, observed or disclosed): | CODE |
|--|------|
| Mental illness 1. maternal only 2. paternal only 3. both 4. None 5. Unknown 6. maternal/unknown 7. paternal/unknown | |
| Cognitive Impairment 1. maternal only 2. paternal only 3. both 4. None 5. Unknown 6. maternal/unknown 7. paternal/unknown | |
| Physical – Illness 1. maternal only 2. paternal only 3. both 4. None 5. Unknown 6. maternal/unknown 7. paternal/unknown | |
| Physical – Disability 1. maternal only 2. paternal only 3. both 4. None 5. Unknown 6. maternal/unknown 7. paternal/unknown | |
| Substance Abuse 1. maternal only 2. paternal only 3. both 4. None 5. Unknown 6. maternal/unknown 7. paternal/unknown | |
| Childhood Maltreatment 1. maternal only 2. paternal only 3. both 4. None 5. Unknown 6. maternal/unknown 7. paternal/unknown | |
| Physical 1. maternal only 2. paternal only 3. both 4. None 5. Unknown 6. maternal/unknown 7. paternal/unknown | |
| Emotional 1. maternal only 2. paternal only 3. both 4. None 5. Unknown 6. maternal/unknown 7. paternal/unknown | |
| Sexual 1. maternal only 2. paternal only 3. both 4. None 5. Unknown 6. maternal/unknown 7. paternal/unknown | |
| Neglect 1. maternal only 2. paternal only 3. both 4. None 5. Unknown 6. maternal/unknown 7. paternal/unknown | |
| Spousal Violence 1. maternal only 2. paternal only 3. both 4. None 5. Unknown 6. maternal/unknown 7. paternal/unknown | |
| Suicidal Ideation 1. maternal only 2. paternal only 3. both 4. None 5. Unknown 6. maternal/unknown 7. paternal/unknown | |
| <i>Has anyone completed suicide?</i> 1. maternal only 2. paternal only 3. both 4. None 5. Unknown 6. maternal/unknown 7. paternal/unknown | |
| Sexual Abuse of Minors 1. maternal only 2. paternal only 3. both 4. None 5. Unknown 6. maternal/unknown 7. paternal/unknown | |
| Criminal History 1. maternal only 2. paternal only 3. both 4. None 5. Unknown 6. maternal/unknown 7. paternal/unknown | |
| Maternal Pregnancy as Minor 1. No 2. Yes | |
| SUMMARY INFO Total # of Risk Factors: | |

C. CHILD FUNCTIONING (disclosed, observed, diagnosed)

| PRESENCE OF: 1 – NO 2 – YES | 0-4yrs | 5-11yrs | 12-18yrs |
|--------------------------------------|--------|---------|----------|
| HEALTH | | | |
| Mental Illness Type: _____ | | | |
| Cognitive Impairment Type: _____ | | | |
| Physical – ailment Type: _____ | | | |
| Physical – disability Type: _____ | | | |
| | | | |
| BEHAVIORS | | | |
| Substance Abuse | | | |
| Suicidal Ideation | | | |
| Sexualized Behaviors | | | |
| Sexual Identity Issues | | | |
| AWOL | | | |
| Academic Difficulties | | | |
| Aggression | | | |
| Fire Setting | | | |
| Pregnancy of self/partner | | | |
| | | | |
| RELATIONSHIPS | | | |
| Negative peers | | | |
| No peers | | | |
| Stressed caregiver(s) relationship | | | |
| Defiance of authority | | | |
| Lack of Pro-social Activities | | | |
| | | | |
| UNOFFICIAL CRIMINAL ACTIVITY | | | |
| <i>Against Others – non-sexual</i> | | | |
| Victim(s) known to child | | | |
| Victim(s) unknown to child | | | |
| <i>Against Others – Sexual</i> | | | |
| Victim(s) known to child | | | |
| Victim(s) unknown to child | | | |
| <i>Against Property</i> | | | |
| Destruction | | | |
| Theft | | | |
| | | | |
| TOTAL NUMBER OF RISK FACTORS | | | |

D. MALTREATMENT

| | CODE | | |
|--|-----------------|----------|-----------|
| | 0-4 YRS | 5-11 YRS | 12-18 YRS |
| Was there involvement? 1. No 2. Yes | | | |
| Which Articles of law were applied? | | | |
| Signalement(s) Only? 1- Yes 2- No | | | |
| Total # of separate DYP involvement | | | |
| Total length of combined DYP involvement time 1- < 3 months 2- 3-6 months 3. 7-11 months 4. 1 yrs 5. 1-2 yrs 6. 2 yrs 7. 2-3 yrs 8. 3 yrs 9. 3-4 yrs 10. 4 yrs 11. 4 + yrs | | | |
| Placement Needed? 1. No 2. Yes | | | |
| If Yes, # of total separate placements | | | |
| If Yes, total length of combined placements 1- < 3 months 2- 3-6 months 3. 6-11 months 4. 1 yrs 5. 1-2 yrs 6. 2 yrs 7. 2-3 yrs 8. 3 yrs 9. 3-4 yrs 10. 4 yrs 11. 4 + yrs | | | |
| Court Necessary? 1. No 2. Yes | | | |
| | | | |
| SUMMARY INFO | 0-18 YRS | | |
| | | | |
| Age of first known DYP involvement? | | | |
| Article(s) law applied? | | | |
| Any indications of: 1. physical abuse 2. sexual abuse 3. both 4. neither | | | |
| Total # of separate DYP involvement | | | |
| Total length of combined DYP involvement time 1- < 3 months 2- 3-6 months 3. 6-11 months 4. 1 yrs 5. 1-2 yrs 6. 2 yrs 7. 2-3 yrs 8. 3 yrs 9. 3-4 yrs 10. 4 yrs 11. 4 – 5 yrs 12. > 5 yrs < 9 yrs 13. > 9 yrs | | | |
| Placement Needed? 1. No 2. Yes | | | |
| If Yes, # of total separate placements | | | |
| If Yes, total length of combined placements 1- < 3 months 2- 3-6 months 3. 6-11 months 4. 1 yrs 5. 1-2 yrs 6. 2 yrs 7. 2-3 yrs 8. 3 yrs 9. 3-4 yrs 10. 4 yrs 11. 4 – 5 yrs 12. > 5 yrs < 9 yrs 13. > 9 yrs | | | |
| Court Necessary 1. No 2. Yes | | | |
| Age of Majority Ruling 1. No 2. Yes | | | |
| Ever fled youth protection 1. No 2. Yes | | | |
| Ever open to DYP outside this agency 1. No 2. Yes | | | |
| Came to QC from other province/country 1. No 2. Yes | | | |

E. OFFICIAL CRIMINALITY

| | CODE |
|--|------|
| SUMMARY INFO FOR ALL OFFENCES | |
| Age of first offence | |
| Total number of infractions | |
| Total number of self offence incident(s) | |
| Total number of property offence incident(s) | |
| Total number of person offence incident(s) | |
| Total number of all offence incident(s) | |
| Total number of times involved with Alternative Measures? | |
| Total number of times before the court (not incl. breach) ? | |
| Breached? 1. no 2. yes/acute 3. yes/chronic | |
| Total length of time involved with YOS 1- < 3 months 2- 3-6 months 3. 6-11 months 4. 1 yrs 5. 1-2 yrs 6. 2 yrs 7. 2-3 yrs 8. 3 yrs 9. 3-4 yrs 10. 4 yrs 11. 4 – 5 yrs 12. > 5 yrs < 9 yrs 13. > 9 yrs | |
| Total number of placements | |
| Total length of time spent in placement? 0 - none 1- < 3 months 2- 3-6 months 3. 6-11 months 4. 1 yrs 5. 1-2 yrs 6. 2 yrs 7. 2-3 yrs 8. 3 yrs 9. 3-4 yrs 10. 4 yrs 11. 4 – 5 yrs 12. > 5 yrs < 9 yrs 13. > 9 yrs | |
| Primary offense type: 1. self 2. property 3. person 4. varied | |
| Primarily carried out 1. alone 2. with accomplice 3. varied | |
| Victim(s) primarily 0. n/a 1. Unknown 2. Known 3. Store 4. Self 5. varied | |
| Typical Characteristics of crime(s): | |
| If self, 0. N/A 1. narcotics use/possession 2. prostitution 3. other | |
| If property, 0. n/a 1. Theft 2. Theft/person 3. Destruction 4. Destruction/person 5. Both 6. Both/person 7. unknown 8. varied | |
| If person, 0. n/a 2. narcotics trafficking 3. Threats/harrassment 4. violence 5. violence/injury 6. violence/injury req. treatment 7. violence varied 8. Sexual violence (no contact) 9. Sexual violence (contact) 10. Varied | |

APPENDIX C

EMC SURVEY INSTRUMENT RAW DATA

List of Tables

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Note: Missing values are not included in tables.

Demographics

Table 1. Children's Personal situation

| | Infant(n = 23) | | Pre-Adolescent (n = 18) | | Adolescent (n = 46) | |
|---------------------------|----------------|-------|----------------------------|-------|------------------------|------|
| | n | % | n | % | n | % |
| BIRTHPLACE | | | | | | |
| Canada | 23 | 100.0 | 17 | 94.4 | 40 | 87.0 |
| Other | - | - | 1 | 5.6 | 6 | 13.0 |
| LANGUAGE | | | | | | |
| English | 23 | 100.0 | 18 | 100.0 | 38 | 82.6 |
| Other | - | - | - | - | 8 | 17.4 |
| ETHNO-RACIAL GROUP | | | | | | |
| Caucasian | 9 | 39.1 | 8 | 44.4 | 22 | 47.8 |
| Black | 9 | 39.1 | 5 | 27.8 | 10 | 21.7 |
| Mulatto | 3 | 13.0 | 4 | 22.2 | 3 | 6.5 |
| Native | - | - | 1 | 5.6 | 1 | 2.2 |
| Arabic | - | - | - | - | 1 | 2.2 |
| Other Bi-racial | 2 | 8.7 | - | - | 2 | 4.3 |
| Other | - | - | - | - | 7 | 15.2 |
| RELIGION | | | | | | |
| Catholic | 4 | 17.4 | 6 | 33.3 | 19 | 41.3 |
| Protestant | 5 | 21.7 | 2 | 11.1 | 3 | 6.5 |
| Other Christian | 2 | 8.7 | 3 | 16.7 | 4 | 8.7 |
| Other | 1 | 4.3 | 2 | 11.1 | 3 | 6.5 |
| Jewish | - | - | 1 | 5.6 | 4 | 8.7 |
| Muslim | - | - | - | - | 3 | 6.5 |
| Atheist | - | - | - | - | 1 | 2.2 |
| DYP STATUS | | | | | | |
| Active | 22 | 95.7 | 13 | 72.2 | 39 | 84.8 |
| YOA STATUS | | | | | | |
| Active | 15 | 65.2 | 11 | 61.1 | 36 | 78.3 |

Table 2. Familial Situation

| | Infant (n = 23) | | Pre-adolescent (n = 18) | | Adolescent (n = 46) | |
|-----------------------|-----------------|------|----------------------------|------|------------------------|------|
| | n | % | n | % | n | % |
| IDENTITY KNOWN | | | | | | |
| Mother | 2 | 8.7 | 2 | 11.1 | 4 | 8.7 |
| Father | - | - | - | - | 1 | 2.2 |
| Both | 21 | 91.3 | 16 | 88.9 | 41 | 89.1 |
| CONTINUOUS CONTACT | | | | | | |
| Mother | 9 | 39.1 | 5 | 27.8 | 13 | 28.3 |
| Father | 1 | 4.3 | - | - | - | - |
| Both | 10 | 43.5 | 12 | 66.7 | 31 | 67.4 |
| Neither | 3 | 13.0 | 1 | 5.6 | 2 | 4.3 |
| DECEASED | | | | | | |
| Mother | 1 | 4.3 | - | - | - | - |
| Father | 3 | 13.0 | 2 | 11.1 | 2 | 4.3 |
| Both | 1 | 4.3 | 1 | 5.6 | - | - |
| SIBLINGS KNOWN TO DYP | 21 | 91.3 | 14 | 77.8 | 16 | 34.8 |
| SIBLINGS KNOWN TO YOA | 6 | 26.1 | 3 | 16.7 | 7 | 15.2 |
| LEGAL CUSTODY | | | | | | |
| Mother | 8 | 34.8 | 9 | 50.0 | 22 | 47.8 |
| Father | 3 | 13.0 | 1 | 5.6 | 2 | 4.3 |
| Both | 2 | 8.7 | 5 | 27.8 | 19 | 41.3 |
| Neither | 10 | 43.5 | 3 | 16.7 | 2 | 4.3 |
| PRIMARY RESIDENCE | | | | | | |
| Natural Environment | 9 | 39.1 | 11 | 61.1 | 33 | 71.7 |
| Specific Foster Care | 1 | 4.3 | - | - | 1 | 2.2 |
| Foster Care | 2 | 8.7 | 1 | 5.6 | - | - |
| Group Home Community | 4 | 17.4 | 1 | 5.6 | 6 | 13.0 |
| Group Home Campus | 6 | 26.1 | 2 | 11.1 | 3 | 6.5 |
| Locked Unit | 1 | 4.3 | 3 | 16.7 | 2 | 4.3 |
| Independent Living | | | | | 1 | 2.2 |

Table 3. Characteristics of Natural Environment

| | INFANT (n = 9) | | PRE- ADOLESCENT (n = 11) | | ADOLESCENT (n = 33) | |
|-----------------------|----------------|------|--------------------------------|------|------------------------|------|
| | n | % | n | % | n | % |
| FAMILY COMPOSITION | | | | | | |
| Two parent biological | 2 | 22.2 | 3 | 27.3 | 11 | 33.3 |
| Two parent blended | 1 | 11.1 | 2 | 18.2 | 4 | 12.1 |
| Single Parent | 5 | 55.6 | 5 | 45.5 | 15 | 45.5 |
| Single Parent/Partner | 1 | 11.1 | 1 | 9.1 | 1 | 6.1 |
| FAMILY INCOME | | | | | | |
| Welfare | 4 | 44.4 | 1 | 9.1 | 3 | 9.1 |
| Earnings | 1 | 11.1 | 2 | 18.2 | 19 | 57.6 |
| Combined | 1 | 11.1 | 3 | 27.3 | - | - |
| None | 1 | 11.1 | - | - | - | - |

Table 4. Number of Siblings

| | Infant (n = 23) | | Pre-adolescent (n = 18) | | Adolescent (n = 46) | |
|-----------------------|-----------------|------|----------------------------|------|------------------------|------|
| | M | SD | M | SD | M | SD |
| BIOLOGICAL | 1.26 | 1.29 | 1.11 | .76 | 1.09 | 1.07 |
| MATERNAL | 1.30 | 1.33 | .78 | 1.00 | .57 | 1.09 |
| PATERNAL | .26 | .54 | .33 | .84 | .22 | .55 |
| STEP | .00 | .00 | .06 | .24 | .20 | .50 |
| ADOPTED | .00 | .00 | .00 | .00 | .02 | .15 |
| TOTAL OF ALL SIBLINGS | 2.83 | 1.59 | 2.28 | 1.78 | 2.09 | 1.46 |

Parent Risk Factors**Table 5. Parental Health**

| | Infant (n = 23) | | Pre-adolescent (n = 18) | | Adolescent (n = 46) | |
|-----------------------|-----------------|------|----------------------------|------|------------------------|------|
| | N | % | N | % | N | % |
| MENTAL ILLNESS | | | | | | |
| Mother | 9 | 39.1 | 6 | 33.3 | 7 | 15.2 |
| Father | 1 | 4.3 | - | - | 2 | 4.3 |
| COGNITIVE IMPAIREMENT | | | | | | |
| Mother | 1 | 4.3 | - | - | - | - |
| Father | 1 | 4.3 | - | - | - | - |
| Both | 1 | 4.3 | - | - | - | - |
| PHYSICAL ILLNESS | | | | | | |
| Mother | 1 | 4.3 | 2 | 11.1 | 2 | 4.3 |
| Father | - | - | 1 | 5.6 | - | - |
| Both | 1 | 4.3 | - | - | 2 | 4.3 |
| PHYSICAL DISABILITY | | | | | | |
| Mother | - | - | - | - | 1 | 2.2 |
| Father | 1 | 4.3 | - | - | 1 | 2.2 |

Table 6. Parental Functioning Issues

| | Infant (n = 23) | | Pre-adolescent (n = 18) | | Adolescent (n = 46) | |
|-------------------------------|-----------------|------|----------------------------|------|------------------------|------|
| | N | % | N | % | N | % |
| SUBSTANCE ABUSE | | | | | | |
| Mother | 4 | 17.4 | 3 | 16.7 | 2 | 4.3 |
| Father | - | - | 1 | 5.6 | 3 | 6.5 |
| Both | 13 | 56.5 | 9 | 50.0 | 3 | 6.5 |
| SUICIDAL IDEATION | | | | | | |
| Mother | 4 | 17.4 | 2 | 11.1 | 1 | 2.2 |
| Father | - | - | 1 | 5.6 | 1 | 2.2 |
| SUICIDE | | | | | | |
| Father | - | | 1 | 5.6 | 1 | 2.2 |
| SEXUAL ABUSER | | | | | | |
| Father | 4 | 17.4 | - | - | - | - |
| CRIMINAL RECORD | | | | | | |
| Mother | 4 | 17.4 | 1 | 5.6 | 1 | 2.2 |
| Father | 4 | 17.4 | 7 | 38.9 | 2 | 4.3 |
| Both | 7 | 30.4 | 3 | 16.7 | - | - |
| MATERNAL PREGNANCY AS A MINOR | 3 | 13.0 | 1 | 5.6 | - | - |
| CHILDHOOD MALTREATMENT | | | | | | |
| Mother | 9 | 39.1 | 3 | 16.7 | 1 | 2.2 |
| Father | 2 | 8.7 | 1 | 5.6 | 1 | 2.2 |
| Both | 3 | 13.0 | - | - | - | - |
| DOMESTIC ABUSE | | | | | | |
| Mother | 10 | 43.5 | 12 | 66.7 | 7 | 15.2 |

Table 7. Parental Total Risk Factors

| | Infant | | Pre-adolescent | | Adolescent | |
|-----------------------|--------|------|----------------|------|------------|------|
| | M | SD | M | SD | M | SD |
| PARENTAL RISK FACTORS | 3.61 | 1.83 | 3.00 | 1.57 | .83 | 1.24 |

Child Risk Factors

Table 8. Infant Functioning Issues

| | Infant (n = 23) | | Pre-adolescent (n = 18) | | Adolescent (n = 46) | |
|---|-----------------|------|----------------------------|-----|------------------------|-----|
| | n | % | n | % | n | % |
| Mental Illness | 3 | 13.0 | - | - | - | - |
| Cognitive Impairment | 3 | 13.0 | - | - | 1 | 2.2 |
| Physical Illness | 1 | 4.3 | 1 | 5.6 | 1 | 2.2 |
| Physical Disability | - | - | - | - | - | - |
| Suicidal Ideation | 1 | 4.3 | - | - | - | - |
| Sexualized Behaviors | 1 | 4.3 | - | - | 1 | 2.2 |
| Academic Issues | 4 | 17.4 | - | - | 3 | 6.5 |
| Aggression | 3 | 13.0 | - | - | 3 | 6.5 |
| No Peers | - | - | - | - | 1 | 2.2 |
| Stressed Caregiver Relationship | 15 | 65.2 | - | - | 2 | 4.3 |
| Defiance of Authority | 2 | 8.7 | 1 | 5.6 | 1 | 2.2 |
| Against person/ non-sexual/ victim unknown | 1 | 4.3 | - | - | - | - |
| Against person/ sexual / victim known | 1 | 4.3 | - | - | - | - |
| Against person/ sexual / victim unknown | 1 | 4.3 | - | - | - | - |

Table 9. Pre-Adolescent Functioning Issues

| | Infant (n = 23) | | Pre-adolescent (n = 18) | | Adolescent (n = 46) | |
|---|-----------------|------|----------------------------|------|------------------------|------|
| | n | % | n | % | n | % |
| Mental Illness | 10 | 43.5 | 4 | 22.2 | 14 | 30.4 |
| Cognitive Impairment | 8 | 34.8 | 1 | 5.6 | 4 | 8.7 |
| Physical Illness | 4 | 17.4 | 1 | 5.6 | - | - |
| Physical Disability | 1 | 4.3 | - | - | - | - |
| Substance Abuse | 6 | 26.1 | 2 | 11.1 | 1 | 2.2 |
| Suicidal Ideation | 5 | 21.7 | 2 | 11.1 | 1 | 2.2 |
| Sexualized Behaviors | 9 | 39.1 | 1 | 5.6 | - | - |
| AWOL | 2 | 8.7 | - | - | - | - |
| Academic Issues | 6 | 26.1 | 1 | 5.6 | 3 | 6.5 |
| Aggression | 17 | 73.9 | 8 | 44.4 | 14 | 30.4 |
| Fire Setting | 16 | 69.6 | 6 | 33.3 | 13 | 28.3 |
| Negative Peers | 3 | 13.0 | 1 | 5.6 | 1 | 2.2 |
| No Peers | 6 | 26.1 | 2 | 11.1 | 1 | 2.2 |
| Stressed Caregiver Relationship | 4 | 17.4 | - | - | 2 | 4.3 |
| Defiance of Authority | 18 | 78.3 | 9 | 50.0 | 8 | 17.4 |
| Lack of Pro-Social Activities | 14 | 60.9 | 6 | 33.3 | 8 | 17.4 |
| Against person/ non-sexual / victim known | 6 | 26.1 | 2 | 11.1 | 1 | 2.2 |
| Against person/ non-sexual / victim unknown | 5 | 21.7 | 2 | 11.1 | 1 | 2.2 |
| Against person/ sexual / victim known | 4 | 17.4 | 1 | 5.6 | - | - |
| Against person/ sexual / victim unknown | 1 | 4.3 | - | - | - | - |
| Destruction of Property | 3 | 13.0 | 1 | 5.6 | - | - |
| Theft of Property | 7 | 30.4 | 6 | 33.3 | 1 | 2.2 |

Table 10. Adolescent Functioning Issues

| | Infant (n = 23) | | Pre-adolescent (n=18) | | Adolescent (n = 46) | |
|---|-----------------|------|-----------------------|-------|---------------------|------|
| | n | % | n | % | n | % |
| Mental Illness | 11 | 47.8 | 7 | 38.9 | 20 | 43.5 |
| Cognitive Impairment | 9 | 39.1 | 1 | 5.6 | 8 | 17.4 |
| Physical Illness | 7 | 30.4 | 2 | 11.1 | 4 | 8.7 |
| Physical Disability | 1 | 4.3 | 1 | 5.6 | 1 | 2.2 |
| Substance Abuse | 11 | 47.8 | 10 | 55.6 | 36 | 78.3 |
| Suicidal Ideation | 9 | 39.1 | 6 | 33.3 | 10 | 21.7 |
| Sexualized Behaviors | 13 | 56.5 | 3 | 16.7 | 5 | 10.9 |
| Sexual Identity Issues | 2 | 8.7 | - | - | 1 | 2.2 |
| AWOL | 11 | 47.8 | 5 | 27.8 | 22 | 47.8 |
| Academic Issues | 22 | 95.7 | 18 | 100.0 | 42 | 91.3 |
| Aggression | 20 | 87.0 | 17 | 94.4 | 41 | 89.1 |
| Fire Setting | 2 | 8.7 | 4 | 22.2 | 6 | 13.0 |
| Pregnancy of Self/Partner | 2 | 8.7 | - | - | 2 | 4.3 |
| Negative Peers | 15 | 65.2 | 8 | 44.4 | 22 | 47.8 |
| No Peers | 2 | 8.7 | 3 | 16.7 | 2 | 4.3 |
| Stressed Caregiver Relationship | 21 | 91.3 | 13 | 72.2 | 34 | 73.9 |
| Defiance of Authority | 19 | 82.6 | 14 | 77.8 | 40 | 87.0 |
| Lack of Pro-social activities | 4 | 17.4 | 3 | 16.7 | 6 | 13.0 |
| Against person/ non-sexual / victim known | 14 | 60.9 | 14 | 77.8 | 27 | 58.7 |
| Against person/ non-sexual / victim unknown | 4 | 17.4 | 2 | 11.1 | 4 | 8.7 |
| Against person/ sexual / victim known | 3 | 13.0 | - | - | 4 | 8.7 |
| Against person/ sexual / victim unknown | 1 | 4.3 | - | - | - | - |
| Destruction of Property | 7 | 30.4 | 5 | 27.8 | 9 | 19.6 |
| Theft of Property | 12 | 52.2 | 11 | 61.1 | 23 | 50.0 |

Table 11. Number of Child Risk Factors

| | Infant (n = 23) | | Pre-Adolescent (n = 18) | | Adolescent (n = 46) | |
|----------------|-----------------|------|-------------------------|------|---------------------|------|
| | M | SD | M | SD | M | SD |
| INFANT | 1.57 | 1.47 | .11 | .47 | .28 | .89 |
| PRE-ADOLESCENT | 6.78 | 4.81 | 3.28 | 3.36 | 1.61 | 2.22 |
| ADOLESCENT | 9.65 | 4.06 | 8.17 | 2.55 | 8.04 | 2.55 |

Maltreatment

Table 12. Lifespan Maltreatment

| | Infant (n = 23) | | Pre-Adolescent (n = 18) | | Adolescent (n = 46) | |
|-----------------------------------|-----------------|-------|----------------------------|------|------------------------|------|
| | n | % | n | % | n | % |
| ARTICLE(S) OF LAW APPLIED | | | | | | |
| Neglect | 8 | 34.8 | 9 | 50.0 | 43 | 93.5 |
| Neglect/Physical Abuse | 7 | 30.4 | 7 | 38.9 | 3 | 6.5 |
| Neglect/Sexual Abuse | 3 | 13.0 | 1 | 5.6 | - | - |
| Neglect/Physical/Sexual Abuse | 5 | 21.7 | 1 | 5.6 | - | - |
| VICTIM OF | | | | | | |
| Physical Abuse | 8 | 34.8 | 8 | 44.4 | 6 | 13.0 |
| Sexual Abuse | 3 | 13 | 1 | 5.6 | 1 | 2.2 |
| Both | 5 | 21.7 | 1 | 5.6 | - | - |
| LENGTH OF INVOLVEMENT | | | | | | |
| < 3 months | - | - | 1 | 6.3 | 3 | 6.7 |
| 3 – 6 months | - | - | - | - | 3 | 6.7 |
| 7- 11 months | - | - | 1 | 6.3 | 7 | 15.6 |
| 12 months | - | - | 1 | 6.3 | - | - |
| > 1 yr < 2yr | 1 | 4.3 | 1 | 6.3 | 18 | 40.0 |
| > 2 yr < 3 yr | - | - | 3 | 18.8 | 6 | 13.3 |
| > 3yr < 4 yr | 3 | 13 | 3 | 18.8 | 6 | 13.3 |
| > 4 yr < 5 yr | - | - | 4 | 25.0 | 2 | 4.4 |
| 5 – 9 years | 6 | 26.1 | 2 | 12.5 | - | - |
| More than 9 years | 13 | 56.5 | - | - | - | - |
| LENGTH OF PLACEMENT | | | | | | |
| < 3 months | 1 | 4.5 | 2 | 12.5 | 13 | 28.9 |
| 3 – 6 months | 1 | 4.5 | 3 | 18.8 | 6 | 13.3 |
| 7- 11 months | 2 | 9.1 | 4 | 25 | 3 | 6.7 |
| > 1 yr < 2yr | 1 | 4.5 | - | - | 7 | 15.6 |
| > 2 yr < 3 yr | 1 | 4.5 | - | - | 1 | 2.2 |
| > 3yr < 4 yr | - | - | 2 | 12.5 | 1 | 2.2 |
| > 4 yr < 5 yr | 2 | 9.1 | - | - | - | - |
| 5 – 9 years | 5 | 22.7 | 1 | 6.3 | - | - |
| More than 9 years | 7 | 31.8 | - | - | - | - |
| ADJUDICATION | 23 | 100.0 | 14 | 77.8 | 34 | 73.9 |
| AGE OF MAJORITY RULING | 8 | 34.8 | 2 | 11.1 | 1 | 2.2 |
| EVER FLED DYP | - | - | 1 | 5.6 | - | - |
| EVER INVOLVED OTHER DYP AGENCY | 2 | 8.7 | 4 | 22.2 | 5 | 10.9 |
| EVER LIVED OUTSIDE QUEBEC | 3 | 13.0 | 4 | 22.2 | 7 | 15.2 |

Table 13. Total Number of Separate DYP involvements and Placements

| | Infants | | Pre-adolescents | | Adolescents | |
|--------------------------------|---------|------|-----------------|------|-------------|------|
| | M | SD | M | SD | M | SD |
| # OF SEPARATE DYP INVOLVEMENTS | 2.95 | 2.17 | 3.69 | 2.60 | 1.30 | .59 |
| # OF SEPARATE DYP PLACEMENTS | 2.14 | 1.46 | 1.38 | 1.20 | 1.16 | 1.09 |

Criminality

Table 14. Criminality

| | Infant | | Pre-adolescent | | Adolescent | |
|--|--------|------|----------------|------|------------|------|
| | M | SD | M | SD | M | SD |
| Age of First Offence | 13.30 | .93 | 13.61 | 1.09 | 14.07 | .95 |
| Infractions | 3.96 | 5.19 | 4.67 | 3.96 | 4.00 | 2.97 |
| Self Crimes | .04 | .21 | .17 | .51 | .17 | .44 |
| Property Crimes | 1.43 | 1.88 | 1.22 | 1.11 | 1.02 | 1.20 |
| Person Crimes | .87 | 1.14 | 1.17 | 1.30 | .80 | .83 |
| Total Crimes | 2.35 | 1.87 | 2.56 | 2.06 | 2.04 | 1.51 |
| Separate Times before Alternative Measures | .83 | .65 | .44 | .51 | .80 | .65 |
| Separate Times before Court | 1.96 | 2.16 | 2.28 | 2.24 | 1.65 | 1.70 |
| Total # of Separate Placements | .35 | .71 | .83 | .99 | .65 | 1.65 |

Table 15. Involvement with YOS

| | Infant (n = 23) | | Pre-Adolescent (n = 18) | | Adolescent (n = 46) | |
|----------------------|-----------------|------|-------------------------|------|---------------------|------|
| | n | % | n | % | n | % |
| TIME INVOLVED | | | | | | |
| < 3 months | 1 | 4.3 | 1 | 5.6 | - | - |
| 3 – 6 months | 4 | 17.4 | 1 | 5.6 | 10 | 21.7 |
| 7- 11 months | 5 | 21.7 | 4 | 22.2 | 12 | 26.1 |
| 12 months | 1 | 4.3 | - | - | 2 | 4.3 |
| > 1 yr < 2yr | 7 | 30.4 | 5 | 27.8 | 13 | 28.3 |
| > 2 yr < 3 yr | 5 | 21.7 | 6 | 33.3 | 7 | 15.2 |
| > 3yr < 4 yr | - | - | - | - | 2 | 4.3 |
| TIME IN PLACEMENT(S) | | | | | | |
| < 3 months | 4 | 17.4 | 7 | 38.9 | 12 | 26.1 |
| 3 – 6 months | 1 | 4.3 | - | - | 1 | 2.2 |
| 7- 11 months | - | - | 2 | 11.1 | 2 | 4.3 |
| > 2 yr < 3 yr | - | - | 1 | 5.6 | 1 | 2.2 |

Table 16. Primary Crime Characteristics

| | Infant (n = 23) | | Pre-adolescent | | Adolescent (n = 46) | |
|--|-----------------|------|----------------|------|------------------------|------|
| | n | % | n | % | n | % |
| OFFENCE TYPE | | | | | | |
| Self | - | - | - | - | 1 | 2.2 |
| Property | 13 | 56.5 | 8 | 44.4 | 21 | 45.7 |
| Person | 8 | 34.8 | 5 | 27.8 | 16 | 34.8 |
| Varied | 2 | 8.7 | 5 | 27.8 | 8 | 17.4 |
| IMPLICATED | | | | | | |
| Alone | 6 | 26.1 | 5 | 27.8 | 18 | 39.1 |
| Accomplice | 7 | 30.4 | 6 | 33.3 | 12 | 26.1 |
| Varied | 3 | 13 | 2 | 11.1 | 8 | 17.4 |
| VICTIM TYPE | | | | | | |
| Unknown | 3 | 13 | 3 | 17.6 | 8 | 17.4 |
| Known | 6 | 26.1 | 6 | 35.3 | 18 | 39.1 |
| Store | 7 | 30.4 | 1 | 5.9 | 5 | 10.9 |
| Self | - | - | - | - | 1 | 2.2 |
| Varied | 3 | 13 | 3 | 17.6 | 10 | 21.7 |
| SELF OFFENCES | | | | | | |
| Narcotics use/possession | 1 | 4.3 | 2 | 11.1 | 4 | 8.7 |
| PROPERTY OFFENCES | | | | | | |
| Theft | 8 | 34.8 | 8 | 44.4 | 15 | 32.6 |
| Theft/person present | - | - | 3 | 16.7 | 4 | 8.7 |
| Destruction | - | - | 1 | 5.6 | 1 | 2.2 |
| Destruction/person present | 1 | 4.3 | - | - | - | - |
| Both destruction/theft – no person present | 2 | 8.7 | - | - | 3 | 6.5 |
| Varied | 3 | 13 | 1 | 5.6 | 5 | 10.9 |
| PERSON OFFENCES | | | | | | |
| Narcotics Trafficking | - | - | - | - | 1 | 2.2 |
| Violence | 3 | 13 | 4 | 22.2 | 13 | 28.3 |
| Violence/injury | 5 | 21.7 | 5 | 27.8 | 5 | 10.9 |
| Violence/injury requiring treatment | - | - | - | - | 1 | 2.2 |
| Violence Varied | 1 | 4.3 | 1 | 5.6 | - | - |
| Sexual Violence (no contact) | 1 | 4.3 | - | - | - | - |
| Sexual Violence (contact) | - | - | - | - | 1 | 2.2 |
| Violence/Sexual | - | - | - | - | 2 | 4.3 |

APPENDIX D
Worker Opinion Survey Responses

List of Tables

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Table 1. Parental Risk Factor Worker Weightings

| | N | M | SD |
|---------------------------|----|------|------|
| MENTAL ILLNESS | | | |
| Mother | 9 | 3.00 | .87 |
| Father | 9 | 2.78 | .67 |
| Both | 9 | 3.78 | .83 |
| COGNITIVE IMPAIREMENT | | | |
| Mother | 9 | 2.89 | .93 |
| Father | 9 | 2.67 | .71 |
| Both | 9 | 3.22 | .83 |
| PHYSICAL ILLNESS | | | |
| Mother | 9 | 2.00 | .71 |
| Father | 10 | 2.00 | .67 |
| Both | 10 | 2.30 | 1.06 |
| PHYSICAL DISABILITY | | | |
| Mother | 9 | 1.67 | .50 |
| Father | 9 | 1.67 | .50 |
| Both | 9 | 2.11 | .78 |
| SUBSTANCE ABUSE | | | |
| Mother | 10 | 4.10 | .99 |
| Father | 10 | 4.00 | .94 |
| Both | 10 | 4.70 | .48 |
| CHILDHOOD MALTREATMENT | | | |
| Mother | 10 | 3.00 | 1.25 |
| Father | 10 | 3.20 | 1.23 |
| Both | 10 | 3.70 | 1.34 |
| DOMESTIC ABUSE | | | |
| Mother | 10 | 3.80 | .63 |
| Father | 10 | 3.90 | .57 |
| Both | 9 | 4.52 | .73 |
| SUICIDAL IDEATION | | | |
| Mother | 10 | 3.20 | .95 |
| Father | 10 | 3.30 | 1.03 |
| Both | 10 | 3.90 | 1.10 |
| SUICIDE | | | |
| Mother | 9 | 2.89 | 1.27 |
| Father | 9 | 2.89 | 1.27 |
| Both | 9 | 3.44 | 1.42 |
| SEXUAL ABUSER | | | |
| Mother | 10 | 4.00 | .94 |
| Father | 10 | 4.20 | .91 |
| Both | 10 | 4.50 | .97 |

Table 1. Parental Risk Factor Worker Weightings Continued

| | N | M | SD |
|--------------------------------|----------|----------|-----------|
| CRIMINAL RECORD | | | |
| Mother | 10 | 2.70 | 1.06 |
| Father | 10 | 2.80 | .92 |
| Both | 10 | 3.00 | .82 |
| MATERNAL PREGNANCY AS MINOR | 10 | 2.80 | .79 |

Table 2. Child Risk Factor Worker Weightings

| | N | M | SD |
|------------------------------------|----------|----------|-----------|
| MENTAL ILLNESS | 10 | 3.20 | 1.03 |
| COGNITIVE IMPAIREMENT | 10 | 3.20 | .92 |
| PHYSICAL ILLNESS | 10 | 3.10 | 1.20 |
| PHYSICAL DISABILITY | 10 | 3.00 | .94 |
| SUBSTANCE ABUSE | 9 | 3.44 | 1.01 |
| SUICIDAL IDEATION | 10 | 2.80 | 1.31 |
| SEXUALIZED BEHAVIORS | 10 | 3.10 | .88 |
| SEXUAL IDENTITY ISSUES | 10 | 2.90 | .99 |
| AWOL | 10 | 3.40 | 1.27 |
| ACADEMIC ISSUES | 10 | 2.20 | .79 |
| AGGRESSION | 10 | 3.40 | 1.17 |
| FIRE SETTING | 9 | 2.78 | 1.30 |
| PREGNANCY SELF OR PARTNER | 9 | 2.89 | 1.17 |
| NEGATIVE PEERS | 10 | 3.20 | 1.03 |
| NO PEERS | 10 | 2.40 | .97 |
| STRESSED CAREGIVER RELATIONSHIP | 10 | 3.80 | .63 |
| DEFIANCE OF AUTHORITY | 10 | 3.70 | .68 |
| LACK OF PRO-SOCIAL ACTIVITIES | 10 | 3.00 | 1.16 |
| NONSEXUAL VICTIM KNOWN CRIME | 9 | 3.78 | .83 |
| NONSEXUAL VICTIM UNKNOWN CRIME | 9 | 3.89 | 1.27 |
| SEXUAL VICTIM KNOWN CRIME | 9 | 4.56 | .53 |
| SEXUAL VICTIM UNKNOWN CRIME | 9 | 4.22 | .83 |
| DESTRUCTION OF PROPERTY | 8 | 3.25 | .89 |
| THEFT OF PROPERTY | 8 | 3.50 | .93 |

Table 3. Maltreatment Worker Weightings

| | N | M | SD |
|---------------------------|----|------|------|
| LENGTH OF DYP INVOLVEMENT | | | |
| < 3 months | 10 | 1.80 | .79 |
| 3-6 months | 10 | 2.20 | .79 |
| 7-11 months | 10 | 2.60 | .70 |
| One year | 9 | 2.78 | .83 |
| > 1 year < 2 years | 9 | 3.22 | .67 |
| 2 years | 9 | 3.33 | .87 |
| > 2 years < 3 years | 9 | 3.67 | 1.12 |
| 3 years | 9 | 3.67 | 1.12 |
| > 3 years < 4 years | 9 | 3.89 | 1.27 |
| 4 years | 9 | 4.00 | 1.12 |
| More than 4 years | 9 | 4.11 | 1.36 |
| LENGTH OF PLACEMENT | | | |
| < 3 months | 9 | 1.78 | .67 |
| 3-6 months | 9 | 2.00 | .87 |
| 7-11 months | 9 | 2.56 | .88 |
| One year | 9 | 2.89 | 1.17 |
| > 1 year < 2 years | 9 | 3.11 | 1.17 |
| 2 years | 9 | 3.33 | 1.32 |
| > 2 years < 3 years | 9 | 3.56 | 1.24 |
| 3 years | 9 | 3.67 | 1.32 |
| > 3 years < 4 years | 9 | 3.78 | 1.56 |
| 4 years | 9 | 3.89 | 1.54 |
| More than 4 years | 9 | 3.89 | 1.54 |

Table 4. Criminality Worker Weightings

| | M | SD |
|---------------------------|------|------|
| LENGTH OF YOS INVOLVEMENT | | |
| < 3 months | 1.89 | 1.36 |
| 3-6 months | 2.22 | 1.39 |
| 7-11 months | 2.56 | 1.33 |
| One year | 3.00 | 1.23 |
| > 1 year < 2 years | 3.44 | 1.33 |
| 2 years | 3.67 | 1.23 |
| > 2 years < 3 years | 3.89 | 1.27 |
| 3 years | 4.00 | 1.32 |
| > 3 years < 4 years | 4.44 | 1.01 |
| 4 years | 4.44 | 1.33 |
| More than 4 years | 4.44 | 1.33 |
| LENGTH OF YOS PLACEMENT | | |
| < 3 months | 1.89 | .78 |
| 3-6 months | 2.33 | .71 |
| 7-11 months | 2.89 | .93 |
| One year | 3.33 | 1.12 |
| > 1 year < 2 years | 3.44 | 1.13 |
| 2 years | 3.89 | 1.05 |
| > 2 years < 3 years | 4.11 | 1.27 |
| 3 years | 4.11 | 1.27 |
| > 3 years < 4 years | 4.44 | 1.33 |
| 4 years | 4.67 | 1.00 |
| More than 4 years | 4.56 | 1.33 |

Note: n = 9 for all cases

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