

KNOWLEDGE OF CHILD DEVELOPMENT AND THE IMPACT OF MALTREATMENT  
ON CHILDREN AMONG JUSTICE PROFESSIONALS: A MIXED METHODS STUDY  
EXPLORING CURRENT KNOWLEDGE, ATTITUDES TOWARDS PRACTICES, AND  
KNOWLEDGE TRANSLATION PREFERENCES

by

MADDISON ALANNA SPENRATH

B.Sc., The University of Calgary, 2008

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF  
THE REQUIREMENTS FOR THE DEGREE OF

MASTER OF SCIENCE

in

THE FACULTY OF GRADUATE AND POSTDOCTORAL STUDIES  
(Population and Public Health)

THE UNIVERSITY OF BRITISH COLUMBIA  
(Vancouver)

April 2014

© Maddison Alanna Spenrath, 2014

## **Abstract**

The prenatal period and early years of life are a time at which development of the brain and biological systems progresses rapidly, influenced by the quality of the early environments in which a child is raised (McCain, Mustard, & Shanker, 2007). Infants and children exposed to early adversity, such as poverty, neglect, abuse, violence in the home, or unresponsive caregivers, are at an increased risk for negative developmental health outcomes (Lupien, McEwen, Gunnar, & Heim, 2009). The population of children involved in the child protection and family justice system has a high incidence of exposure to adverse early experiences (Public Health Agency of Canada, 2010). Children and families encounter many professionals in the legal and justice system involved in providing supports and services to families and determining care and custody arrangements for children, including mediators, lawyers and judges. Knowledge on the topics of early child development and the impact of maltreatment may assist these professionals in working with children and families.

The present study explores knowledge on the topics of early child development and the impact of maltreatment, the influence of knowledge on attitudes towards practices involving infants and children, and knowledge translation preferences of judges, lawyers and mediators working in the child protection and family law sectors in Alberta. A mixed methods approach combining focus groups within a small purposeful sample and a survey with a larger sample of the population was applied.

A joint analysis of the results from both methods concludes that knowledge varies among the professional population and identifies areas where knowledge can influence attitudes towards practices involving children, such as in representation and recommendations to clients by lawyers and mediators, and in assessing evidence and making judgments in the best interests of

the child. Preferences for knowledge translation approaches include traditional professional development activities, consultation with colleagues, and evidence provided by expert witnesses. Recommendations for further research to characterize knowledge of child development among justice professionals, to expand approaches to knowledge translation, and to promote specialization of professionals and courts are put forth with the aim to protect and support our most vulnerable citizens.

## **Preface**

This thesis is an original intellectual product by the author, Maddison Spenrath. The original research presented in Chapters 2 and 3 was approved by the UBC Behavioural Research Ethics Board (“With the Child in Mind: Brain Development and Best Interests Decisions”, certificate H13-00931) and the University of Calgary Conjoint Health Research Ethics Board (certificate E 24865).

Maddison Spenrath carried out the majority of the research design, recruitment, conduct of focus groups, development of the survey instrument, analysis, and preparation of the manuscript with supervision and guidance from a supervisory committee consisting of Dr. Clyde Hertzman, Dr. Brenda Poon, Dr. Laura Ghali and Dr. Martin Guhn. Dr. Clyde Hertzman contributed to the research design and development of the survey instrument. Dr. Laura Ghali contributed to the research design, development of the survey instrument, and review of this manuscript. Dr. Brenda Poon contributed to the research design, revision of the survey instrument, direction on thematic analysis, and review of the manuscript. Dr. Martin Guhn contributed the revision of the survey instrument, direction on the quantitative analysis and review of the manuscript.

Sections of this thesis will be submitted for publication in peer reviewed journals.

## Table of Contents

<b>Abstract.....</b>	<b>ii</b>
<b>Preface .....</b>	<b>iv</b>
<b>Table of Contents .....</b>	<b>v</b>
<b>List of Tables .....</b>	<b>x</b>
<b>List of Figures.....</b>	<b>xii</b>
<b>Acknowledgements .....</b>	<b>xiii</b>
<b>Dedication .....</b>	<b>xv</b>
<b>Chapter 1: Introduction and Literature Review .....</b>	<b>1</b>
Introduction.....	1
Literature Review .....	3
Early Child Development, Adverse Experiences and Life Course Health .....	3
Life course outcomes associated with exposure to maltreatment and adverse experiences ....	4
How do adverse experiences get “under the skin”? .....	8
Incidence of maltreatment and adverse child experiences in Canada.....	9
Etiology of maltreatment and adverse experiences .....	10
Involvement of Children in Family Law and Child Protection Matters .....	14
Legislative context in Alberta.....	15
The Best Interests of the Child standard. ....	16
Common pathways for children’s involvement in the justice system .....	17
Custody and access disputes .....	17
Child protection actions .....	18

Role of justice professionals in child protection and family matters .....	19
Mediation and non-adversarial approaches to dispute settlement.....	19
Lawyers' role in representation of children, parents and child welfare.....	20
Judges' role in determining the best interests of the child. ....	22
Justice System Influences on Child Well-Being .....	22
Case factors relevant to judicial and legal actions .....	24
Decision trends by professional groups and courts .....	25
Justice professional knowledge of child development and the impact of maltreatment on infants and children.....	26
Rationale .....	27
Knowledge mobilization of child development information.....	28
Research Questions .....	29
<b>Chapter 2: Methods .....</b>	<b>31</b>
Study Context .....	31
Selection of Methodological Approach .....	32
Study Population.....	33
Phase 1: Development and Pre-Testing of the Survey and Focus Group Discussion.....	34
Focus group sample.....	34
Pre-test survey development.....	34
Focus group procedure.....	36
Focus group analysis .....	38
Thematic analysis of focus group proceedings.....	39
Survey revision.....	40

Phase 2: Survey Distribution and Analysis.....	43
Survey sample.....	44
Survey recruitment.....	45
Survey analysis.....	46
Coding of the survey items.....	46
Analysis of survey data.....	48
Joint Analysis of Data Collected from Both Methods: Synthesis of findings .....	50
<b>Chapter 3: Results .....</b>	<b>52</b>
Overview.....	52
Phase 1: Thematic Analysis Results.....	52
Description of focus group sessions .....	52
Theme development and description.....	53
Topic 1: Knowledge of child development and the impact of maltreatment on infants and children.....	55
Variation in knowledge is present among the judicial and legal professional population.....	55
Common areas of strength and gaps in knowledge of child development and related topics exist among justice professionals .....	57
Topic 2: Areas where knowledge may influence attitudes towards practices .....	61
Knowledge influences judgments and inquiries in the best interests of the child. ....	62
Knowledge influences legal representation of adults and children in child protection and family law matters .....	65
Knowledge influences attitudes towards interventions, assessments and the impact of court processes on children.....	67

Topic 3: Sources of knowledge .....	69
Traditional and non-traditional sources of knowledge were accessed among justice professionals .....	69
A call for shared learning across professional groups and court systems .....	71
A call for specialist courts for child and family matters .....	71
Phase 2 Survey Results .....	71
Sample description .....	71
Descriptive and comparative statistics .....	73
Knowledge of child development and the impact of maltreatment on infants and children .....	74
Attitudes towards practices involving children .....	80
Knowledge to action .....	85
Joint Analysis of Phase 1 and Phase 2 Results .....	90
<b>Chapter 4: Discussion.....</b>	<b>95</b>
Trends in knowledge of child development and the impact of maltreatment on children varies among the justice professional population working with children and their families. ....	95
Knowledge of child development concepts supports justice professional practices involving children and families .....	97
Knowledge translation approaches.....	100
Strengths and limitations.....	101
Recommendations .....	102



Recommendation 1: Efforts should be undertaken to mobilize knowledge on child development and the impact of maltreatment for justice professionals working within the family law and child protection contexts .....	102
Recommendation 2: Support specialized training and speciality courts .....	103
Recommendation 3: Improve the accessibility of expert witnesses .....	104
Recommendation 4: Carry out further research measuring the impacts of knowledge on practices involving children .....	104
Conclusion .....	105
<b>Bibliography .....</b>	<b>107</b>
<b>Appendices .....</b>	<b>119</b>
Appendix A Key Themes and References for Survey Development .....	119
Appendix B Focus Group Guide .....	124
Appendix C Pre-test Surveys for Focus Groups .....	128
Appendix D Final Online Survey .....	141
Appendix E Summary of Survey Responses .....	154

## List of Tables

Table 2.1 Description of topics and questions comprising the survey .....	35
Table 2.2 Survey responses by target professional group .....	45
Table 2.3 Survey variable names and definitions .....	47
Table 3.1 Description of themes and subthemes contained within the research topics .....	54
Table 3.2 Survey response rate by professional group .....	72
Table 3.3 Sample description based on responses to the professional background survey questions .....	73
Table 3.4 Mean number and percent correct and certain responses to child development knowledge questions, in general and by sub-topic .....	74
Table 3.5 Mean number and percent correct and correct or almost correct responses to child development milestone questions, all and by domain .....	75
Table 3.6 Comparison of the rate of correct selection of age range of the typical occurrence of child development milestones between respondents to the current survey and the randomly sampled adult respondents to the Alberta Benchmark Survey. ....	76
Table 3.7 Number of correct and certain responses to questions on impact of maltreatment on infants and young children .....	76
Table 3.8 Groups comparison on average number of correct responses to child development knowledge questions between Professional Group and Symposium Attendance variables. ....	78
Table 3.9 Group comparisons on the number of correct and almost correct responses to child development milestones questions between Professional Group and Symposium Attendance variables .....	79

Table 3.10 Group comparisons on the number of correct responses to maltreatment impact questions between Professional Group and Symposium Attendance variables.....	79
Table 3.11 Summary of responses to questions about attitudes towards practices involving children.....	81
Table 3.12 Comparisons of ratings of importance and agreement with attitudes towards practices statements between Professional Groups variable.....	83
Table 3.13 Frequency of use of sources of knowledge (no. responses).....	86
Table 3.14 Mean and standard deviation of frequency of use of sources of knowledge by professional group.....	87
Table 3.15 Topics respondents selected as wanting more information on to inform their practices with families and children by professional group (number of selections).....	88
Table 3.16 Selection of the best ways to receive information on child development and the impact of maltreatment (number of selections).....	89

## List of Figures

Figure 2.1 Study design with primary focus of data collected.....	33
Figure 3.1 Relationship between topics discussed in the focus group proceedings.....	53
Figure 3.2 Correlation between self-rated understanding of child development and the number of correct responses to child development questions.....	80

## Acknowledgements

I am incredibly grateful for all of the support I have received throughout my graduate studies. Laura Ghali and Margaret Clarke were my first bosses and mentors, and have provided me with many valuable opportunities for learning and collaboration throughout my studies, sticking with me over the years and distance to create this research opportunity. When I first moved to Vancouver they initiated my connection to the Human Early Learning Partnership (HELP) at UBC.

Working at HELP has been a formative experience for me learning from interdisciplinary team of truly special individuals led by Clyde Hertzman all working towards the same vision of helping children and families thrive. Clyde was an inspiration to learn from, an endless source of creativity, energy and individualized attention that made a significant impression on me. While I am filled with sadness from his passing, I also feel very fortunate to have had the opportunity to know such a great mind and heart.

Thank you to Brenda Poon and Martin Guhn, whose teaching has greatly advanced my understanding of the diverse contexts influencing development across the life course, and who provided very valuable advice and guidance on my research and analysis. Thank you to Brenda for all of your time and insight on my evolving dissertation.

I made a very special group of friends through the SPPH graduate program, they have provided me with more than I had ever anticipated gaining from the program. Thanks to my family and my partner, Kyle, for their endless encouragement and support.

My gratitude to Mitacs and the Sinneave Family Foundation who jointly funded this research project through an Accelerate internship grant.

Finally, I acknowledge the contribution of the participants in this research project who take on the challenge of supporting children and their families facing significant adversity . I thank you for your participation and dedication to working with the best interests of children in mind.

## **Dedication**

This work is dedicated to Clyde Hertzman, who responded with incredible enthusiasm and support when I approached him with this research proposal. I admired Clyde immensely, not only for his skill as a researcher and supervisor, but also for his ability to make everyone he worked with feel important and valued. He is missed.

# **Chapter 1: Introduction and Literature Review**

## **Introduction**

The prenatal period and early years of life are a time at which development of the brain and biological systems progresses rapidly, at a pace unmatched throughout the later life course (McCain, Mustard, & Shanker, 2007). The development of brain and biological systems is influenced by the quality of the early environment in which a child is raised (Shonkoff & Phillips, 2000). High quality, nurturing environments provide a strong foundation for life-long health and well-being. Conversely, exposure to significant early adversity, including poverty, maternal depression, neglect, abuse, violence in the home, or unresponsive caregivers increases the risk for poor health and developmental outcomes (Lupien, McEwen, Gunnar, & Heim, 2009). Many adult health conditions including heart disease, obesity, mental illness and premature aging are rooted in the early childhood experience (Boivin & Hertzman, 2012).

Infants and children involved in the justice system through family law or child protection matters have a higher incidence of exposure to adverse early experiences, and are at an increased risk for poor health and development outcomes (Public Health Agency of Canada, 2010). This risk may be exacerbated by the courts system through long delays in court proceedings, placement with a caregiver who is unable to meet a child's needs, or disruption of established attachment relationships. On the other hand, involvement in the justice system also poses an opportunity to reduce risk through health promotion and prevention actions for children and families. Judges, mediators and lawyers practicing in child protection and family law areas are involved in making critical decisions concerning interventions and care arrangements for infants and children.



Previous collaborations with judges and lawyers practicing in family law and child protection in Alberta through the Fraser Mustard Chair in Childhood Development, an Applied Research Chair held by Dr. Margaret Clarke at the University of Calgary, introduced me to the importance of knowledge of child development to professionals working with families and young children. The Chair, along with an interdisciplinary panel of experts, developed a curriculum for a judicial and legal symposium on brain development and best interests approaches. The *With the Child in Mind* symposium was hosted in Calgary in November 2009 with 110 judges and lawyers from across Alberta in attendance. The aim of the symposium was to present information on infant and neurological development and the influence of trauma, neglect and deprivation on development, in an effort to support members of the legal and judicial communities to make informed decisions which respect the developmental health of children who come in contact with the justice system in the areas of family law and child protection. Topics presented at the symposium encompassed experience-based brain development, attachment, the impact of maltreatment on children, and practice approaches in line with current research evidence on child development. Recorded presentations and symposium materials were compiled into a learning website for judges and lawyers to access and review key topics presented at the symposium.

Evaluation results from the judge and lawyer participants indicated the content was valuable to their practice, and suggested a need for it to be shared broadly in the child protection and family law professions. The present research study capitalizes on an opportunity to conduct research with an engaged population with the aim to explore knowledge of child development and the impact of maltreatment, how knowledge relates to attitudes towards practices involving

children, and knowledge translation preferences on these topics among justice professionals in Alberta.

## **Literature Review**

I reviewed the literature on the impact of maltreatment on child development and justice professional practices involving children. The review is presented in three sections. The first section reviews the evidence on the negative impact of adverse experience on the developing child. The next section describes the context of the family law and child protection systems in Alberta, including the common pathways for children's involvement in these systems and the roles of justice professionals. The final section reviews the justice professional and system influences on children, including factors related to representation and best interests decisions, and professional knowledge of child development topics.

## **Early Child Development, Adverse Experiences and Life Course Health**

The pre-birth to school age period of human development is characterized by rapid growth and development in the brain and body, unique to this stage of the life course (McCain, Mustard, & Shanker, 2007). The brain is developed through an ongoing process beginning in the prenatal period, peaking in the early years, and continuing at a slower pace throughout the life course. Sensitive periods occur throughout development; these are periods of time in which biological pathways are developing rapidly and require input from the environment (Shonkoff & Phillips, 2000). Throughout this process, experiences interact with genetics to drive the development of brain and biological systems.

Critical tasks of development in the early years include developing capacity for self-regulation, language and learning capabilities, social and emotional abilities, gross and fine motor skills, and executive functioning (Hertzman, 2010; Shonkoff & Phillips, 2000).

Developmental health, comprised of physical, social-emotional, and cognitive domains (Keating & Hertzman, 1999), serves as a foundation for lifelong health, learning and behaviour. Infants and children require quality stimulation, emotional and physical supports to foster developmental health (Maggi, Irwin, Siddiqi, & Hertzman, 2010).

**Life course outcomes associated with exposure to maltreatment and adverse experiences.**

Adverse early experiences, particularly in the absence of protective and nurturing relationships, can negatively influence the development of brain and biological systems related to learning, emotional regulation, and physical health (Lupien, et al., 2009). Early adversity can be considered in two broad categories: the absence of positive or healthy experiences (e.g. unresponsive caregiving) and the presence of negative or harmful experiences (e.g., physical abuse). Maltreatment, which includes the experience of physical abuse, sexual abuse, emotional neglect, physical neglect, and/or exposure to intimate partner violence, is a highly stressful experience for infants and children, especially when a primary caregiver is the source (Gilbert, Kemp, et al., 2009a). Adverse early experiences aside from maltreatment include exposure to harsh parenting practices, marital breakdown, poverty, serious mental illness, or substance abuse in the family. Both episodic adverse experiences (e.g., a single physical abuse incident) and chronic experiences (e.g., recurrent neglect or poverty) are harmful to development. Evidence is pointing towards the greater significance of routine, chronic exposures over episodic exposures on development (Boivin & Hertzman, 2012).

It is challenging to study the impact of maltreatment and adverse experiences such as family breakdown on children. Much of the research in this area is from cross-sectional, retrospective study designs, which are limited by participants' recall bias, the inability to

determine causality, as well as difficulty in controlling for confounding factors. Also, children are often exposed to multiple adversities, or are exposed repeatedly; so it is challenging to separate outcomes related to specific experiences or sub-types of maltreatment (Gilbert, Widom, et al., 2009b). Prospective cohorts and longitudinal studies beginning in the pre-birth or early years provide the best available evidence because they avoid the limitations of recall bias, can estimate temporal associations, and accurately measure confounders in real time. The following impactful studies of life course outcomes associated with exposure to adverse early experiences identify the diverse aspects of health and functioning impaired by early adversity.

A large-scale, retrospective cross-sectional study of the impact of adverse early experiences in the US was influential in revealing the life long consequences of early adversity. The Adverse Childhood Experiences (ACE) study, conducted with over 17,000 adults in a Health Maintenance Organization (HMO) surveyed participants on their past experiences of abuse (neglect, physical and sexual abuse) and household dysfunction (incarceration, substance abuse, violence, mental illness, and parental death). The study was one of the first to report both a high incidence of exposure to abuse and household dysfunction in a largely middle class population, and the significant, graded association of this exposure with poor physical and mental health conditions in adulthood, including depression, obesity and substance abuse (Anda et al., 2005; Felitti et al., 1998). Limitations of the study include the potential for recall bias of early exposure to adversity, and the broad age range of childhood experiences measured (birth to 18 years).

Four comprehensive literature reviews summarize the state of the evidence on the impact of adverse early experiences on lifelong health and wellbeing. Gilbert and colleagues (2009b) review prospective and retrospective studies of negative outcomes associated with exposure to

maltreatment. They conclude strong and moderate evidence exists for an association between maltreatment exposure in childhood and behaviour problems in childhood and adolescence, PTSD, depression, suicide attempts, alcohol problems, obesity, risky sex behaviours, criminality, low educational attainment, and low skilled employment later in life. Maughan and McCarthy's (1997) review identifies adult psychosocial disorders associated with child abuse and neglect, including internalizing and externalizing disorders, substance abuse, sexual dysfunction, affective disorders, self-injury and suicide outcomes as significantly more prevalent in populations exposed to maltreatment in comparison to control groups.

Cicchetti and Toth (2005) review the psychological, neurobiological and psychopathological sequelae of exposure to maltreatment in children from a developmental psychopathology perspective. Psychological outcomes associated with maltreatment include negative affect, insecure and disorganized attachment relationships with caregivers, and difficulties with self-regulation. Neurobiological outcomes reviewed are smaller cerebral volume of child maltreatment victims and chronic hyper or hypo-activity of the hypothalamic-pituitary axis. Psychopathological sequelae identified in young children who have experienced maltreatment include anxiety, depression, and conduct disorder.

Repetti and colleagues (2002) review evidence relating "risky" family environments to mental and physical health outcomes of children. In "risky" contexts, (i.e., familial environments characterized by conflict, aggression, and unsupportive relationships) both direct as well as indirect effects mediated through psychosocial functioning and biological systems were present in relation to mental and physical health and functioning. Poor health outcomes related to risky contexts identified in the review included higher rates of illness, physical health complaints, and obesity in early adulthood, and chronic medical conditions in later adulthood.

The reviews present evidence for the association between early adversity and poor outcomes in various domains of physical and mental health and well-being across the life course, illustrating the wide ranging influence of experience in infancy and childhood. Two cohort studies expand on the literature reviews, offering a longitudinal perspective of the life course impacts of exposure to early adversity. A population-based birth cohort measured the association between notification and confirmation of maltreatment by state child protection agencies and mental health outcomes in adolescence (Mills et al., 2013). A strength of the study was the measurement of maltreatment occurrence through agency reports, which is predicted to be more accurate than self-report, though may be an underestimate due to underreporting by the public and other professionals. Notification of and confirmation of maltreatment were associated with both externalizing and internalizing behaviour problems in adolescence.

Another birth cohort based in Dunedin observed that childhood experience of maltreatment was associated with a greater presence of factors that contributed to elevated risk for age related disease, including depression, high c-reactive protein levels (an indicator of inflammation), and presence of metabolic risk marker cluster (e.g., high blood pressure, overweight, high cholesterol) at age 32 (Danese et al., 2009). These findings are significant in demonstrating the link between early adversity to risk factors in middle life, which are associated with disease in later adulthood, illustrating the life course trajectories associated with early adversity.

The reviewed cohort studies report incidences of experience of maltreatment ranging from 10 – 30%. Adverse childhood experiences apart from maltreatment that are more common in the population, such as family breakdown, are also disruptive to development. One study characterized children who have experienced familial divorce as having a higher risk of

adjustment problems in childhood and adolescence, lower cognitive performance, and increased risk of early marriage and marriage breakdown later in life as compared to those who did not experience familial divorce (Kelly & Emery, 2003). In this study, the increased risk was diminished once socio-economic factors were accounted for, which suggests an interaction between social context and family division. Emery (1999) has identified particular experiences present during divorce that are associated with increased risk in adjustment problems and later relationship difficulties for the child. They include parental subversion of the other parent, manipulation of the child, diminished parenting quality, and exposure to intimate partner violence.

### **How do adverse experiences get “under the skin”?**

Biological embedding is a concept proposed by Hertzman (2012) to explain the association between adverse experiences in childhood and poor physical and mental health in adulthood. The concept of biological embedding describes how experience, which varies according to systematic differences in social exposures, “gets under the skin” to alter biological systems in ways that are stable over time and influence health and well-being across the life course. The differences in social experience influence biology through various mechanisms, such as through shaping connectivity of neuronal networks, gene regulation, and calibration of physiological pathways.

Biological embedding has been examined in relation to life course outcomes associated with exposure to maltreatment. A review of gene by environment interaction (G x E) studies confirms interactions between maltreatment experiences, genetic polymorphisms (e.g., genes involved in stress response systems) and later mental health outcomes (e.g., externalizing and internalizing behaviours) (Bellani, Nobile, Bianchi, van Os, & Brambilla, 2012). In another

study, significantly different patterns of epigenetic markers (DNA methylation), were identified between a group of children who were removed from the custody of their parents because they had been abused and a matched control group on genes linked to psychiatric disorders, cancer and cardiovascular illness (Yang, Zhang, Ge, & Weder, 2013). A recent review for a pediatrician audience presents the evidence regarding the impact of early life stress on the calibration of the neuroendocrine-immune network and subsequent increased risk for later mental and physical health conditions (Johnson, Riley, Granger, & Riis, 2013). These research examples bring together social exposures, genetic and biological modifications, and health and behavioural outcomes to illustrate the concept of biological embedding.

### **Incidence of maltreatment and adverse child experiences in Canada.**

Canada does not have a national system in place to monitor the incidence of and outcomes relating to child maltreatment. Maltreatment is under-recognized by health, education, and enforcement professionals, and is under-responded to through lack of reporting to and investigation by child service agencies (Gilbert, Kemp, et al., 2009a). Therefore incidence rates obtained through reporting and investigation by agencies are likely underestimates of the true rate of maltreatment.

The Canadian Incidence Study team has conducted three waves of analysis to estimate the incidence of maltreatment in Canada. The most recent wave reports a national rate of 14 per thousand children of substantiated cases of maltreatment in 2008 (Public Health Agency of Canada, 2010). Substantiation is defined by the child protection caseworker as the “direction of evidence indicates that maltreatment has occurred” (Trocme, Knoke, Fallon, & MacLaurin, 2009). Infants are highly vulnerable to maltreatment, in particular neglect due to the rapid growth and development that occurs in the first year of life. Unfortunately, infants under age one were



the age group to be most likely investigated for maltreatment in Canada in 2008, with a rate of 52 per thousand. The most recent statistics for the province of Alberta are from 2003, reporting 17,864 substantiated child investigations of maltreatment at a rate of 24 per thousand children. As an indicator of the range of severity of maltreatment represented in cases, one fifth of a sample of these substantiated investigations resulted in an out of home placement (MacLaurin et al., 2008).

The proportion of divorce cases featuring contested custody provides an approximation of the presence of high conflict family breakdown. Of 20,760 divorce cases in Alberta in 2010/11, 19% were contested custody cases where lawyers and judges became involved in determining a custody arrangement (Kelly, 2012). Intimate partner violence and other forms of maltreatment are more common in divorce proceedings with disputed custody than in those without (Grant, 2005).

### **Etiology of maltreatment and adverse experiences.**

Various factors external to the child influence the quality of the early environment and subsequently, developmental health. Ecological models emphasize the interrelatedness of multiple contexts in influencing developmental health (Bronfenbrenner & Morris 2006). The family is the most intimate setting in which a child spends the majority of their time, especially before school age. Parenting practices and family social and economic characteristics such as income and education shape the quality of interactions with and resources available to the child. Cultural influences such as shared norms, beliefs, and customs defining parent and child roles are also influential. The community context includes services such as schools, childcare, recreation as well as the physical environments (natural and built). Broader regional factors at the municipal, provincial and federal level influence health care services, transportation, and family

benefits such as parental leave. Characteristics of the individual child (e.g., gender, developmental status, temperament) interact with various contextual factors to influence development (Maggi et al., 2010).

The persistent high incidence of maltreatment in the population suggests a need for research to identify factors that most strongly contribute to the occurrence of maltreatment. Contextual models illustrate that there is not a single factor or collection of factors that “cause” maltreatment. Researchers have approached the causes of maltreatment as a balance of stressors and potentiating factors against supports and compensating factors in the various contexts the parent and child are situated within (Belsky, 1993; Cicchetti & Carlson, 1989).

Belsky (1993) applies a contextual lens to describe the causes, or etiology of maltreatment within three contexts. The first of the three contexts is the developmental context, consisting of parent and child characteristics. This includes characteristics of the parent (e.g., developmental history and previous experience of maltreatment) as well those of the child (e.g., temperament and developmental status). Knutson (1995) estimates a 30% increased risk of physical abuse of offspring in parents who report previous childhood experience of physical abuse. Children with developmental delay also face an increased risk for maltreatment, with one study reporting almost one third of children with developmental disabilities having a substantiated history of maltreatment (Sobsey, 2002).

The second context, the parent-child interactional context, includes parenting behaviours and quality of interactions between parent and child. In the early months of life, the most important developmental task for infants is to form an attachment with their primary caregiver. Attachment is one aspect of a parent-child relationship that makes the child feel safe and provides a sense of security. Though it is only one aspect of a relationship, healthy or secure

attachment is important to foster, as it is predictive of later developmental outcomes (Greenberg, 1999). Normally developing children will form an attachment with parents and caregivers who provide regular (frequent) care. Secure attachments are the most favourable, and are promoted when a caregiver provides responsive, nurturing care to a child most of the time (Benoit, 2004). Secure attachments are associated with positive social and emotional development throughout childhood and into adulthood, and also promote exploratory behaviours in children, which in turn influence physical and cognitive development (Waters & Cummings, 2000). Finally, secure attachment relationships may moderate the release of stress hormones in children when experiencing novel situations, which may otherwise be damaging to development (Benoit, 2004; National Research Council and Institute of Medicine, 2000).

Insecure attachment relationships may be formed when caregivers are rejecting or respond inconsistently to their child. The child's strategy to cope may be to avoid their caregiver or display extreme emotions. Low maternal responsiveness in infancy is associated with disruptive behaviour problems later during adolescence (Wakschlag & Hans, 1999). Infants who do not use organized strategies for coping with distressing situations are said to have disorganized attachment relationships, possibly resulting from atypical caregiving actions (frightened, frightening, or atypical behaviour; examples include contradictory cues, withdrawal and role reversal) (Lyons-Ruth, Bronfman, & Parsons, 1999). Disorganized attachment relationships, over-represented in the population of children who have experienced maltreatment, are a strong predictor of both internalizing (e.g., anxious), and externalizing (e.g., aggressive) behaviours, and poor peer interactions in childhood and adolescence (Benoit, 2004).

Three different contexts make up the broader context of causes of maltreatment, the community, cultural and historical/evolutionary contexts. These contexts are interdependent and

overlapping with one another, and are comparable to the contexts described in the bioecological model (Bronfenbrenner & Morris, 2006). Contextual factors' influence on the occurrence of maltreatment is illustrated through a multivariate analysis of risk factors related to the occurrence of maltreatment in the AVON longitudinal cohort study of parents and their children (Sidebotham & Heron, 2006). Parental factors (age, education, mental health and previous experience of childhood adversity), socio-economic factors (poverty, instability, single parenthood), and child factors (low birth weight) were associated with a greater risk of parents' maltreatment of their children. Poverty was the strongest predictor of investigation and substantiation of child maltreatment.

Poverty is a disturbingly common experience for children in Canada. There are many different absolute and relative measures employed to determine the prevalence of poverty in Canada, with estimates of the child poverty rate ranging from 8 to 14% (Statistics Canada, 2010). Poverty is associated with the occurrence of maltreatment, particularly neglect, and children growing up in impoverished households are overrepresented in child welfare investigations and out of home placements (de Boer, Rothwell, & Lee, 2013). This association is demonstrated in research characterizing the overrepresentation of aboriginal children in child welfare caseloads. In Alberta in 2003, while only 9% of the child population is of aboriginal heritage, 29% of substantiated maltreatment cases were children of aboriginal heritage (MacLaurin et al., 2008). The First Nations Components of the Canadian Incidence Study (Sinha et al., 2008) compared investigation rates and case characteristics between cases involving non-aboriginal and aboriginal children from child welfare agencies across Canada. The rate of investigations of aboriginal children was four times greater than non-aboriginal children, and aboriginal children were much more likely than non-aboriginal children to be investigated for neglect. The authors

suggest that the greater rate of investigations are partly explained by the increased rate of poverty and socio-economic challenges faced by the First Nations populations included in the study (Sinha et al., 2008).

A feature of the use of contextual models in describing the etiology of maltreatment is the complexity of interactions between the various contexts and characteristics of the child. This complexity is illustrated in the diverse outcomes observed in individuals who are exposed to similar maltreatment experiences (multifinality), and similar outcomes observed in those exposed to diverse experiences (equifinality) (Cicchetti, 2004). Recognition of the contribution of multiple contexts influential to the occurrence and impact of maltreatment is critical when working to provide interventions and preventive services to children and families.

### **Involvement of Children in Family Law and Child Protection Matters**

Society has an important role to play in protecting the well-being of infants and children. Federal and provincial legislation defines the role of the state and the responsibilities of citizens towards protecting the youngest among us, including a commitment to taking actions that are in the best interests of the child. Infants and children may become involved in the justice system if experience of maltreatment is substantiated, if their parents/caregivers are disputing custody and access, if they do not have a parent able or willing to care for them, or if their parents are involved in criminal proceedings.

Involvement in the justice system can be an opportunity for families and children to access intervention supports and services that may result in better functioning, healthier family environments. On the other hand, involvement in the justice system can pose additional risks for a child's well-being through exposure to conflict, multiple or inappropriate placements, and delays in court processes which prolong the time taken to achieve a stable environment for

children. Justice system professionals including judges, lawyers and mediators can have a significant influence on the well-being of infants and children through their representation, decisions and actions working with children and their families. The next sections describe the legislative context in Alberta – the focus for this study, common pathways of children's involvement with the justice system, and the role of justice professionals in the child protection and family law domains.

### **Legislative context in Alberta.**

In Canada, responsibility for the provision of child welfare services falls under the mandate of provincial legislation, which varies between provinces and territories. In Alberta the legislation for child welfare is contained in the *Child, Youth and Family Enhancement Act*. Intervention and services under the *Enhancement Act* in Alberta are delivered in two streams: a family enhancement stream for those families where risk is predicted to be mitigated through supervision, supports and provision of services; and a child protection stream, where risk to a child is assessed as high and immediate protection is required (Gough, 2006). While divorce actions fall under the federal *Divorce Act*, issues of guardianship, parenting and contact orders concerning children fall under the Alberta *Family Law Act*. Additional provincial legislation that protects children includes the *Protection Against Family Violence Act* and the *Protection of Sexually Exploited Children Act*.

Two courts in Alberta are primarily responsible for hearing matters falling under the described legislation, the Provincial Court of Alberta (Family and Youth subsection) and the Court of Queen's Bench (the superior court). Child protection matters are primarily heard at the Provincial Court. Most family law matters can be heard at either court, though divorce

proceedings are only filed at the superior court. Appeals from the Provincial Court are heard at the Court of Queen's Bench (Bala, 2004).

### **The Best Interests of the Child standard.**

The Convention on the Rights of the Child, which Canada ratified in 1991, includes the Best Interests of the Child (BIC) as a primary principle to consider in matters that affect children. The Convention outlines several areas where the BIC principle applies in relation to child protection and family law, including separation of a child from parents (article 9), parental responsibility for a child (article 18), respect for a child's cultural identity (article 20), and adoption (article 21). The BIC principle is also written into federal and provincial legislation concerning children described in the previous section. Decisions affecting a child are to be made with the child's best interests as a primary or paramount consideration. Provincial legislation includes diverse criteria to consider in determining a child's best interests, such as the child's emotional and physical safety, presence of family violence, history of care for the child, child's cultural upbringing, child's views and preferences, nature of existing relationships between the child and caregiver, ability of the caregiver to meet needs of the child, and a recognition of the family as the most appropriate place for children to receive care (*Child, Youth and Family Enhancement Act, R.S.A. 2000, c. C-12, n.d.; Family Law Act, S.A. 2003, c. F-4.5, n.d.*).

The BIC standard applied in family law and child protection has been noted to be ambiguous, vague (Kelly & Lamb, 2000; Wallace & Koerner, 2003) and indeterminate (Parker, 1994). These characteristics leave the standard vulnerable to personal bias and experiences of the decision-maker, particularly in the absence of knowledge of child development concepts (Kelly & Lamb, 2000). There are no extant guidelines or recommendations that define how BIC criteria should be weighed or applied. Judges have reported weighting BIC criteria differently on a case-

by-case basis (Wallace & Koerner, 2003). It has been suggested that more specific criteria outlining the BIC standard could reduce ambiguity and indeterminacy (Paetsch, Bertrand, & Hornick, 2001). Contrariwise, in a review of recent legislative changes to the *Family Law Act* in Alberta, judges expressed variation in opinion concerning the weighing of BIC criteria and the importance of allowing flexibility for the application of judicial discretion in determining the best interests of the child (MacRae et al., 2009). While more specific criteria may better define a child's best interests, flexibility and the need for judicial discretion must remain due to the complexity of the causes, substantiation and consequences of maltreatment for children and families.

### **Common pathways for children's involvement in the justice system.**

Child protection and family law actions are the most common pathways for children to become involved in the justice system. Results from the 2011/12 Civil Court Survey illustrate the breakdown of civil court cases involving children. Of the 33,805 civil court family cases in Alberta involving children, 61% of those cases were concerning access or custody and 21% concerned child protection (Allen, 2013).

### ***Custody and access disputes.***

Separation of intimate partnerships (e.g., marriage and common-law relationships) is a highly emotional and stressful life event, particularly when children are involved. The rate of divorce in Canada is slowly declining over time, partly explained by the similar decline in the rate of marriage. In 2008 the national rate of divorce for the first 30 years of marriage was at 40.7%. The early years of marriage is when the highest divorce rate is found, peaking around 3 years of marriage, and coinciding with the period of time when most couples have children. The majority (over 80%) of divorces and separations do not involve disputed custody arrangements



(Kelly, 2012). In many of these cases, separating parties can arrive at financial and parenting arrangements on their own, or with the assistance of legal counsel and/or mediation. If the separation is high conflict, or custody arrangements are disputed, the court may be charged with deciding on a custody arrangement in the child's best interests, which usually consists of liberal access to both parents unless there is a clear reason to prohibit access, such as substantiated maltreatment (Hughes & Chau, 2012). One quarter of parent respondents to the 2011 General Social Survey who had separated reported having a judge-ordered parenting arrangement in place (Allen, 2013). Families involved in disputed or high conflict separations are likely to face additional challenges, such as intimate partner violence, poverty, mental illness, or a weak social support network (Gordon, 2010).

### ***Child protection actions.***

Legislation for child protection outlines the public's mandate to report if they reasonably suspect that maltreatment of a child has occurred. Child protection authorities are made aware of children who may need intervention through reports from the public and professionals (e.g., police, teachers, physicians). Upon notification, a caseworker assesses the evidence supporting the report, and determines whether a child is in need of intervention. In Alberta from 2005 to 2006, the average number of child protection cases per month was 9,728 and the average number of family enhancement cases per month was 3,222 (Gough, 2006). If a caseworker determines that a child is at significant risk remaining with their current caregivers, they may be apprehended. Parents and caregivers often enter voluntary agreements with child welfare around the provision of intervention services and custody/access arrangements. A judge may order non-voluntary supervision, temporary or permanent guardianship orders. In this situation, lawyers may represent parents, child protection, and the child. Supervision orders include provisions for

supervision of the parents/caregivers and child over a stated period of time, usually alongside the delivery of intervention services. Temporary guardianship orders take the child into the care of the director of child welfare on a temporary basis, usually 6 months. During this time the caregiver may have access to the child; both the caregivers and children may receive intervention services. Permanent guardianship orders are a permanent removal of parental rights to a child, usually without access so as to not interfere with potential adoption, particularly if a child is very young (Bala et al., 2004).

Statutory limits on the amount of time a child can spend in the care of child welfare are written into the *Enhancement Act* at 15 months for children under 6 years and 18 months for children ages 6 to 18 years. These limits are intended to encourage the fast resolution of care arrangements for a child in the recognition that it is detrimental to a child's development to be without permanent, stable caregivers for any extended period of time (Bala et al., 2004).

### **Role of justice professionals in child protection and family matters.**

Various professional groups may become involved in making decisions in the best interests of the child, including judges, lawyers and mediators, who take on diverse but overlapping roles working with children and families involved in child protection and family law matters.

### ***Mediation and non-adversarial approaches to dispute settlement.***

Non-adversarial, collaborative processes as opposed to adversarial processes have become increasingly common and accessible in recent years, particularly in the family law context of separating relationships, but also in child protection matters (Emery, Sbarra, & Grover, 2005). Contributing to the shift towards non-adversarial approaches is that adversarial processes often consume significant time and resources for all parties involved, and the decision

is removed from the control of those involved and given to a judge. Mediators take on a neutral position in giving parties an opportunity to negotiate and communicate to resolve disputes outside of a court. Mediators may have law, social work, psychology or other human services backgrounds. Agreements reached through mediation are not legally binding, but they may form the basis of binding agreements (Mediation/ Dispute Resolution Processes, n.d.).

Divorce and parenting mediation has demonstrated sustained benefits through longitudinal follow-up of randomized control studies of couples offered mediation compared to those who were not. Benefits were shown for both children and parents, and included less time spent in dispute, more detailed parenting arrangements, higher compliance with parenting arrangements, and improved relationships both between children and non-custodial parents and between parents (Emery et al., 2005; Kelly, 2004). However, divorce and parenting mediation and other non-adversarial dispute resolution practices have not been adequately studied in families where maltreatment was present. It may be inappropriate if maltreatment in any form is present, and some jurisdictions have gone so far as to prohibit it (Kelly, 2004).

Child protection mediation is an alternative to litigation that, similar to divorce and parenting mediation, has illustrated positive benefits for families and children, including less time to reach a settlement, and greater likelihood of caregivers compliance with agreements (Knoke, 2009).

### ***Lawyers' role in representation of children, parents and child welfare.***

In family law and child protection matters, lawyers may represent any or all parties involved, including parents/caregivers, child welfare institutions, and children. Lawyers represent adult clients in a traditional instructional advocacy role, in which they advocate for their client's position on their behalf, provide relevant information to their client, as well as assist

their client in understanding the legal and court process. In this role the client's position advanced by a lawyer may or may not be in line with what may be considered the best interests of the child (Goldberg, Hatton, Bala, Curtis & Kelly, 2004).

Representation of children in legal matters is becoming more common with increased recognition of a child's right to have a voice in matters that concern them (Hensley, 2006). Lawyers may take on different roles in representation of children, depending on the individual child and the particulars of the case. Lawyers primarily represent children in the traditional or instructional advocate role. If a child is unable to communicate their wishes and views to their lawyer, the lawyer could represent them as an *amicus curiae* ("friend of the court") in which they hold a neutral position, inform the child of needed information and ensure relevant evidence is before the court. The other alternative is the "Best Interests" role, in which counsel advances their perspective of the child's best interests, which may not represent the child's views (Bala, 2005). The Law Society of Alberta has mandated the instructional advocacy role as the default role for representation of children, if the child is able to make reasonable decisions about the situation, and if counsel can determine that the child's views have not been excessively influenced by an adult ("Guidelines for Representing Children," n.d.).

There is no consensus in the legal population on an age range for when a child is capable of expressing their wishes to counsel, though some jurisdictions have provided criteria to guide the determination of that ability. Written into provincial Acts is that at 12 years of age a child must consent to a guardianship order and is therefore considered an age where almost all children are capable of expressing their views to counsel.

Some controversy over the role of legal counsel for children is illustrated in the literature (Bala, 2005; Hensley, 2006) and in a recent judgment (B.L.S. (Re), 2013 ABPC 132). The

traditional advocacy role as the default or preferred role has been criticized as inappropriate for young children in some cases. A central argument in the debate is whether children have the right to have their views considered in matters that affect them. The traditional advocacy role is proposed as the most effective representation approach to ensure the child's views are considered in the legal process, provided that the child is able to express their views to counsel (Hensley, 2006).

***Judges' role in determining the best interests of the child.***

Judges of the Provincial Court - Family and Youth section and Justices of the Court of Queen's Bench preside over civil matters including child protection and family law matters. In deciding these matters, judges accept evidence submitted to court, and are guided by legislation and case law. Case law is law based on previous judicial decisions, which set precedents for future decisions on similar cases. Written judgments are made publically available and outline the reasons, statutory considerations and evidence to describe how judges arrive at their decisions. Family law matters are largely focused on deciding between competing parenting arrangements put forth by disputing parties. In child protection matters, judges are often deciding on submissions from the director of child welfare on intervention, supervision, access and guardianship orders, whether they are required and if they are in the best interests of the child.

**Justice System Influences on Child Well-Being**

Evidence on the sensitivity of the developing brain concludes that limiting, disrupting or delaying a child's access to nurturing and stable relationships with adults, impedes their ability to learn, grow and form healthy relationships throughout life (Boivin & Hertzman, 2012). The slow pace of court proceedings, the parent's right to fair proceedings, high conflict disputes, multiple placements, and placement with an adult that is not able to care adequately for a particular child,

can exacerbate a child's risk for further harm. In child protection matters, a decision as to whether a parent-child relationship can be preserved with the help of intervention supports, or if actions to identify a permanent out of home placement are needed must occur quickly and decisively. These decisions are challenging to make because of the significant impact on the child and family, and the uncertainty of which arrangement will truly be in the child's best interests. Wotherspoon and colleagues (2010) illustrate how court processes can influence long-term outcomes with the case of infant neglect. The biological need to form an attachment with responsive caregivers occurs in the beginning months of life. Placing a neglected infant in foster care during the court process can provide them the opportunity to form an attachment with a caregiver. Allowing frequent visitations with parents while a child is in an out of home placement can promote or preserve attachment, which may result in improved outcomes in the event that reunification occurs.

The justice system can also be an opportunity for parents and families to access supports and resources to address challenges. For example, child welfare ministries offer programs to assist families, such as therapy, housing supports, childcare, and parenting courses. Over 12,000 children receive interventions services each month in Alberta, both while in the care of their family or in the care of the Director of Child Welfare (Government of Alberta Office of Statistics and Information, 2011). An example in the family law context is Parenting After Separation courses, compulsory for all separating parents with children in Alberta, which provide information and resources on how to minimize the impact of separation on children.

Once maltreatment has occurred, few interventions are supported by strong evidence of effectiveness in preventing the recurrence of and impairment from maltreatment. This is partly because many interventions have not been rigorously tested, but also likely because it is difficult

to modify the pattern of neglectful and abusive behaviour in a parent-child relationship once it is present (Macmillan et al., 2009). Courts may temporarily remove children to protect them from re-occurrence of maltreatment, but if in the meantime the parents are not receiving adequate and intensive interventions to modify maltreatment behaviours or address contextual contributors such as poverty, maltreatment is likely to continue if and when the child is returned (Boivin & Hertzman, 2012). For example, Drake and colleagues (2006) report a 64% rate of re-reporting of maltreatment within 7.5 years in children returning from foster care in a low-income population. Some interventions for prevention of impairment resulting from maltreatment show promising evidence of effectiveness, including cognitive behavioural therapies for children with PTSD symptoms following sexual abuse and parent-child psychotherapy for children exposed to intimate partner violence (Macmillan et al., 2009). In parent-child relationships where attachment is a concern, the attachment relationship should be the primary target for intervention. A meta-analysis of attachment interventions concluded that short, intense interventions are more effective than longer, diffuse interventions (Bakermans-Kranenburg, van IJzendoorn, & Juffer, 2003).

### **Case factors relevant to judicial and legal actions.**

To identify which factors are significant contributors to decisions and actions made by judicial and legal professionals, researchers have employed several methodologies including surveys, interviews and reviews of court records. Primary factors influencing judicial decisions identified through review of archival court records include recommendations from trained professionals and child preferences (Kunin, Ebbesen, & Konecni, 1992). Survey methods have identified the age and developmental status of the child, investigations and reports prepared by court personnel, and testimonies by experts and litigants as key determining factors for judges

(Lowery, 1981; Reidy, Silver, & Carlson, 1989). Wallace and Koerner (2003) explore the perspectives of justice professionals, through interviews requesting participants to describe how relevant factors influence their decision-making. Factors reported by over three quarters of the sample were child characteristics (age and developmental status), parent characteristics (parental fitness and substance use), and extended family supports. A balancing of “risk” factors was described, participants understood it is easier to overcome one risk factor, such as developmental delay of a child if a parent has adequate parenting abilities and extended family supports. When risk is compounded in multiple areas; it becomes more difficult to address problems in a timely matter. Assessment of risk factors in multiple areas is suggested as a tool to aid judges in estimating the risk poor outcomes in an individual child (Wotherspoon et al., 2010). Greenberg (1999) proposes a risk factor model with four domains of risk: child characteristics, attachment characteristics, parental management, and family ecology, and demonstrates that risk present in more than one domain is associated with greater problems in childhood.

### **Decision trends by professional groups and courts.**

Children and families are served by many professionals in the justice system. They often face multiple courtrooms, judges, legal counsel and, sometimes, conflicting court orders in situations where the child protection, family law and criminal justice systems overlap. A recent qualitative study illustrates this dynamic through interviews with women involved in both the family law and child protection system while separating from a partner when domestic violence was present (Hughes & Chau, 2012). The authors report conflicting priorities from both courts related to protecting the child’s best interests. Family law judges were less likely to recognize the presence of intimate partner violence and therefore order joint custody or access, while child



protection judges were more likely to order no contact with the offending partner, leaving protection of the child from the offending partner to the responsibility of the victimized parent.

Professional groups in both the child protection and family law systems may differ in their custody, placement and care decisions for similar cases. These differences may stem from a number of factors, including the details of the case available to each professional, their training and education experience, and their profession's primary consideration as illustrated in a study examining the correlation of child welfare, court clinic and judicial custody decisions in a sample of child maltreatment cases in Ontario. The authors reported a disparity in custody arrangement recommendations between professional groups, with judges more likely to maintain parent-child relations in custody arrangements. Hypotheses put forth by the authors to explain this relationship include: maintenance of status quo; greater amount of information available to judges; or judges being further removed from the context of the family (Butler, Atkinson, Magnatta, & Hood, 1995).

### **Justice professional knowledge of child development and the impact of maltreatment on infants and children.**

Knowledge of child development and the impact of adverse experiences such as maltreatment is described in the literature as essential for professionals working with families and children. In a survey of lawyers practicing family law, 85% of respondents rated knowledge on the impact of separation and divorce on children and 75% rated understanding of dynamics of maltreatment as extremely important to family law practice (Hedeen & Salem, 2006). A call for judges to understand the relevant child development and research on the impact of adverse experiences is put forth by judges practicing in family law, juvenile court and criminal contexts (Cicchetti, 2004; Cohen & Youcha, 2004; Goldsmith, Oppenheim, & Wanlass, 2004; Lederman,

2010). Alongside the recognition of the importance of this knowledge is a call to explore the current knowledge of justice professionals in this area (Butler et al., 1995; Kelly & Lamb, 2000; Wallace & Koerner, 2003).

## **Rationale**

The literature reviewed illustrates the rapid pace and sensitivity to external experience characterizing the development of the brain and biological systems in the prenatal period and early years of development. Adverse experiences in the early years such as maltreatment are associated with increased risk of negative life course outcomes in the social, physical and cognitive domains. Involvement of children in the justice system through child protection and family law actions can serve as an opportunity for intervention to prevent reoccurrence of and impairment from maltreatment. Justice professionals including mediators, lawyers and judges work with families and children towards custody and care arrangements under the guidelines of provincial legislation protecting a child's best interests.

While legislation outlines criteria to consider relating to the best interests of the child, it is not possible for courts to determine the true best interests of the child. They are most often deciding between two or more competing arrangements, none of which may be in the child's best interest. Goldstein, Freud and Solnit (1996) propose that once the state has intervened in the family's autonomy, the court is deciding on the least detrimental alternative rather than the best interests of a child. A child's best interests is to live in a stable home environment with their parents, once they have become involved in the family law and child protection system, their best interest is an arrangement that may no longer be possible.

The call for justice professionals working with children and families to have knowledge of child development and the impact of maltreatment may be grounded in an assumption that this

knowledge will improve practices towards the best interests of the child and subsequently child outcomes. A gap in the literature is any evidence that justice professional knowledge of child development is related to either improvement in practices towards the best interests of the child or improved outcomes for children.

### **Knowledge mobilization of child development information.**

Content on child development and the impact of maltreatment is not featured prominently in current law school curricula according to law professors and professionals from various disciplines contributing to the Family Law Education Reform Project (O'Connell & DiFonzo, 2006). Recommendations from the project included an increased emphasis on content about the context and consequences of child maltreatment in law school curricula.

Beyond education settings, justice professionals continually access information through professional development initiatives and informal learning. Information on child development and the impact of maltreatment can be found in many professional development resources such as seminars, conferences and print and web-based resources offered through justice institutions and professional associations (e.g., The National Judicial Institute, Canadian Bar Association).

Training and professional development initiatives are forms of knowledge mobilization activities. Knowledge mobilization is the process of moving knowledge from researchers to stakeholder groups, and includes translation of research evidence, exchange of knowledge with stakeholders, and applications of knowledge into policies and practices (Shaw et al., 2010). Efforts in translating research evidence about child development and the impact of early experience have risen in prominence in the past decade. The Harvard Centre for the Developing Child in partnership with the Frameworks Institute in the US have constructed simplifying models about the science of early child development and tested them with members of the

public. These efforts aim to identify how messages are interpreted, with the intent of steering individuals away from defaulting to common assumptions and personal experiences (Shonkoff & Bales, 2011). This ongoing effort illustrates both the importance of this knowledge to public, policymakers and professionals working with children, and the challenges in promoting understanding of complex scientific concepts.

Many models of knowledge mobilization or “knowledge to action” processes exist in various sectors including health and education. Common to most of these models is a knowledge production phase, a knowledge application phase, and a feedback or connection between the two phases (Levin, 2008). The Canadian Institutes of Health Research (CIHR) has adopted a model in which both the production phase and action phase include several components and are cyclical, in that application of knowledge continues to influence production of knowledge (Graham et al., 2006). Connection between participants throughout the process in both the knowledge production phase (researchers) and action phase (stakeholders or practitioners) is predicted to improve the quality of knowledge translation products and subsequently the use. These models are useful in studying the application of knowledge of child development and the impact of maltreatment in the family law and child protection context.

## **Research Questions**

The research questions were constructed based on issues identified through interactions with justice professionals and confirmed in the literature. The methods aim to inform practicable solutions to the present situation. The approach to this research is from a pragmatic perspective. The pragmatic worldview is responsive to current situations and emphasizes the use of applied research methods tailored to meet the needs of the situation (Creswell, 2009).

In exploring the level of knowledge, role of knowledge in practice, and knowledge translation preferences of judges, lawyers and mediators in the child protection and family law contexts, the following research questions were addressed by the study.

1. What is the level of understanding among judges, lawyers and mediators working in child protection and family law areas on the topics of child development and the impact of maltreatment on infants and young children?
  - a. Does knowledge of these topics vary among professional groups?
  - b. Does knowledge of these topics differ between those who previously attended the *With the Child in Mind* symposium and those who did not?
2. How does knowledge of child development and the impact of maltreatment on infants and children relate to attitudes towards practices involving children?
3. What are the views among judges, lawyers and mediators practicing in child protection and family law contexts regarding preferences to access information on child development and the impact of maltreatment on children to inform their practices?

A mixed methods approach using both focus group and survey methods was undertaken in two phases to address the research questions, as described in Chapter 2.

## Chapter 2: Methods

This chapter begins with a description of the context of the study including previous collaborations with the population of interest, leading into the description of the target population. The research was completed in two phases, which are presented separately along with the associated sampling, procedures and analyses.

### Study Context

The Fraser Mustard Chair in Childhood Development, a research chair held by Dr. Margaret Clarke at the University of Calgary from 2005 to 2010 was active in efforts to translate scientific research on early child development and share it with various stakeholders who work with families and children in Alberta. One initiative through the Chair, along with an interdisciplinary expert panel of experts, was the development of a curriculum for a judicial and legal symposium on brain development and best interests approaches. The *With the Child in Mind* symposium was hosted in Calgary in November 2009 over two weekdays. Judges and lawyers practicing in the family law and child protection contexts were invited to attend the symposium at no cost by way of an email invitation circulated through workplace and professional association networks; 110 judges and lawyers were in attendance. The format of the symposium was a combination of lectures and interactive case study panels. Presenters included Dr. Nathan Fox (University of Maryland), Dr. Bryan Kolb (University of Lethbridge), Dr. Diane Benoit (University of Toronto), Dr. Harriet MacMillan (McMaster University), Evelyn Wotherspoon (Infant Mental Health Promotion, Sick Kids Hospital), and Dr. Joy Osofsky (Louisiana State University). Evaluation results from the judge and lawyer participants indicated the content was valuable to their practice, and suggested a need for it to be shared broadly in the

child protection and family law professions. Sample quotations from conference participants summarize the value of the content for judicial and legal professions.

*“Completely eye-opening with respect to some issues (e.g., child neglect, and attachment disorders) that currently go unaddressed in our courts. We need more collaboration like this so everyone can get on the same page to really decide how we can do what’s in the child’s best interests.”*

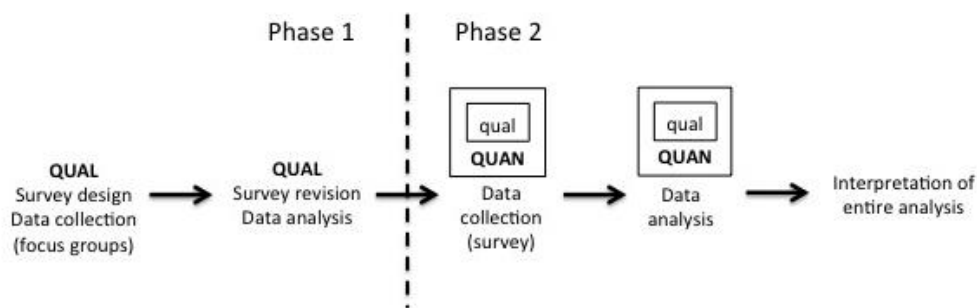
*“I think that we need a lot more Justice representatives and social workers exposed to this information... the conference was astonishingly useful and informative.”*

*“In my view, dissemination of the information in this conference widely among bench and bar, with opportunities to work collaboratively with the clinical community would be of significant benefit to ‘at risk’ families and children.”*

Building on the enthusiastic response of participants, this study capitalizes on a unique opportunity to continue research with an engaged audience.

### **Selection of Methodological Approach**

A mixed methods approach was applied in two phases (Figure 2.1). The approach was comprised of a combination of a sequential exploratory design (Phase 1 and 2), involving a qualitative phase informing and preceding a quantitative phase; and a concurrent embedded design (Phase 2), involving the simultaneous use of quantitative and qualitative approaches (Creswell, 2009; Creswell and Plano Clarke, 2011).



**Figure 2.1 Study design.**

QUAL = qualitative QUAN = quantitative. Uppercase indicates the primary focus type of data collected. Adapted from Creswell and Plano Clarke (2011).

In the first phase, a pilot survey instrument on knowledge of child development and the impact of maltreatment, attitudes towards practices involving children, and knowledge translation preferences was developed and pre-tested with a purposefully sampled focus group. Qualitative data were collected on participants' perspectives on the suitability of the content and format of the survey, and on how knowledge may influence professional practices and knowledge translation preferences. The pilot survey was revised based on the focus group feedback. The second phase involved the distribution of the survey to the larger study population. The format of the survey was primarily close-ended questions, with one open-ended question and options for elaboration on close-ended responses throughout. A joint analysis of data collected from both phases was conducted, and triangulation of the results was undertaken to address the research questions.

### **Study Population**

The population of interest is judicial, legal and mediator professionals who interact most often with children and families involved in the child protection and family law systems in Alberta. This population primarily spans two courts, the Provincial Court and the Court of Queen's Bench. The study population is identified through their profession and informed through the groups invited to or in attendance at the *With the Child in Mind* symposium. This includes Judges of the Provincial Court of Alberta (Family and Youth Subsection) and Justices of the Court of Queen's Bench. Lawyers who primarily represent children are targeted through Legal Aid's Legal Representation of Children and Youth (LRCY) roster. The Legal Aid Family Law Office counsel and family law rosters consist of lawyers who represent adults in family law and child protection matters. Though not in attendance at the symposium, Family Justice Services



mediators work closely with children and families in the family law and child protection systems in a similar role as lawyers and are therefore included in the study population.

### **Phase 1: Development and Pre-Testing of the Survey and Focus Group Discussion**

A preliminary (pre-test) version of a survey was developed to explore knowledge of child development and the impact of maltreatment, attitudes towards practices involving children and knowledge translation preferences. The two aims of the focus group were to refine the pre-test version of the survey and to gather participants' perspectives and experiences related to the application of knowledge of child development and the impact of maltreatment on their practices involving children and families.

#### **Focus group sample**

A purposeful sample was identified through judicial and legal contacts made previously through the *With the Child in Mind* symposium, who were asked to identify colleagues who fit the following criteria: justice professionals whose primary practice was within the child protection or family law sectors, and were interested in the topics addressed by the survey. In May 2013, the focus groups were conducted separately for the two professional groups recruited, Provincial Court judges (n=4) and lawyers, including one law student (n=5) for a total of 9 participants across the two focus group sessions.

#### **Pre-test survey development**

The pre-test version of the survey was developed with guidance from the research team and input from a reference group of applied researchers and practitioners in the family law and child protection contexts involved in the symposium. In development of the survey, topics of child development and the influence of maltreatment on the developing brain relevant to judicial and legal practice were identified through a review of the relevant neuroscience, psychiatry, and

social science literatures; grey literature; judicial and legal education initiatives; and content contained in the *With the Child in Mind* symposium curriculum. Key concepts were grouped under topics contained in the research questions: knowledge of child development, knowledge of the impact of maltreatment on infants and children, attitudes towards practices involving children, and knowledge translation preferences. Surveys on related topics and/or for a judicial/legal audience were reviewed, with some questions replicated with permission, as noted in Table 2.1. Main topics and key concepts covered by the survey with a reference list are in Appendix A. Questions around the key concepts were developed and aggregated into the main topics of the survey, which was divided into four sections plus a section collecting background information to characterize the participants. A description of the topics and questions contained within each section is included in Table 2.1.

The project team and symposium reference group reviewed the pre-test version of the survey to identify if there were any key concepts missing and provided preliminary feedback on the relevance of the questions. The pre-test version of the survey was intentionally longer than the anticipated final version for the purpose of receiving feedback on as many questions as practical in the focus group setting.

**Table 2.1 Description of topics and questions comprising the survey**

**Section 1: Child Development**

The first section consists of questions related to child development and brain development. Two sets of questions on child development milestones from surveys for a general adult population and parent population to assess knowledge of child development were included with permission: the Alberta Benchmark Survey: What Albertans Know About Child Development (Rikhy & Tough, 2008) and the National Survey of Parents of Young Children conducted by Invest in Kids (Oldershaw, 2002). Additional questions on child development topics that were not covered in existing surveys were created based on the literature reviewed. The specific concepts addressed by the questions in this section include the timing and process of brain development, the influence of experiences on development, attachment relationships, and child development milestones and processes.

<p><b>Section 2: The impact of maltreatment on infants and children</b></p> <p>The second section includes questions on the definition of maltreatment, the impact of adverse experiences such as maltreatment on child development, the influence of early life stress, and outcomes associated with exposure to maltreatment. These questions were created based primarily on content from the <i>With the Child in Mind</i> symposium and literature reviewed on the incidence and outcomes associated with exposure to maltreatment.</p>
<p><b>Section 3: Attitudes towards practices involving children</b></p> <p>This section includes questions related to practices in the best interests of children, attitudes towards the role of knowledge in judicial and legal practice, attitudes towards interventions, and the impact of court processes on infants and children. These questions were created based primarily on content from the <i>With the Child in Mind</i> symposium and from literature on factors related best interests decisions.</p>
<p><b>Section 4: Knowledge to action</b></p> <p>Questions in this section include how knowledge on child development relates to professional practices, topics requiring more information, and preferences for incorporating new knowledge. Questions were adapted from survey on knowledge translation practices for professionals involved in providing information for parents of children with neurodevelopmental disorders (Ghali, 2012).</p>
<p><b>Section 5: Demographic information</b></p> <p>Demographic information questions include the respondent's profession and the court system they primarily practice in, career length, and whether they attended the <i>With the Child in Mind</i> symposium.</p>

### **Focus group procedure**

I developed a focus group interview guide to promote consistency in my facilitation of the two focus groups (Appendix B). The questions included in the interview guide were constructed to inform the research questions. During the first half of the focus group, I asked the participants to review the survey then discuss content and format. Appendix C contains the pre-test version of the survey. Participants were not required to answer the survey questions as they reviewed them, though some chose to. Answers to survey questions were not analyzed. During the second half of the focus group, I asked questions to gather participants' perspectives and experiences related to the application of knowledge of child development and the impact of maltreatment in their practices involving children and families. The website created from content and video recordings from the *With the Child in Mind* symposium

([www.withthechildinmind.org](http://www.withthechildinmind.org)) was used as an example resource to guide discussion of knowledge translation preferences.

The focus group interview guide was semi-structured; questions were posed to the group and I was responsive to the direction of the discussion, bringing participants back to the interview guide when the discussion moved to topics that were not relevant to the research questions. The focus group discussion was audio-recorded; participants also provided written input on printed copies of the survey. Both focus groups were 1.5 hours in duration.

The participants in both groups were colleagues and therefore familiar with one another. The judge focus group participants interacted significantly with one another through answering questions, responding to statements, finishing others' statements, voicing agreements and speaking simultaneously. In discussing the survey, I did not actively facilitate the review; rather, the participants discussed different sections of the survey until they provided all of their feedback. Many of the questions contained in the latter half of the focus group guide were addressed during the review of the survey; those that were not addressed were posed to the group afterwards. The example resource website was not presented to the judge group due to time constraints, but was referred to.

In preparation for the lawyer focus group, the survey was revised and condensed based on discussion in the judge focus group, removing questions that were not essential and improving the wording of questions. During the lawyer focus group, the participants reviewed the survey individually. I then facilitated the discussion on each section of the survey sequentially. This survey discussion focus group took less time than the judges group, therefore more time was available to present and discuss the example resource.

### **Focus group analysis**

Data collected from the focus groups included the following: transcribed recordings of the focus group proceedings, written feedback from participants directly on the surveys as well as on loose-leaf paper, and facilitation field notes. My approach to transcription of the focus group recordings was to first listen to the audio-recordings to gain familiarity of the proceedings while typing out a rough transcript. A second listen to the recordings filled out the rough version to produce a complete transcript. A third pass was for refinement of the transcript to check for accuracy and clarify sections that were difficult to decipher (e.g., where participants were speaking simultaneously).

The written feedback on the survey and loose-leaf paper was transcribed into a document that contained the survey questions, producing one marked-up survey document containing the transcribed feedback from the participants for each focus group, with both comments related to specific survey questions and also more general comments on the survey. The comments that were not based on specific questions or the survey in general were aggregated into a separate document. The transcripts were reviewed to identify comments related to the survey, either in general, or towards specific questions. The data from the focus group transcripts was added to the marked-up survey documents in the same way the written feedback on the survey data was, that is, written beside the specific questions or aggregated separately if about the survey in general. Lastly, my field notes were added to the marked-up surveys in the same manner.

The data set for analysis includes the final transcripts of the two focus groups, the marked-up survey documents for the two focus groups consisting of aggregated written feedback of all participants, and the separate aggregated written comments that were not specific to the survey.

### ***Thematic analysis of focus group proceedings.***

The purpose of the thematic analysis was to provide a detailed account of data and identify patterns of meaning related to concepts in the research questions: the knowledge of child development and the impact of maltreatment, the role of knowledge in professional practices and knowledge translation preferences of the population of interest. The approach to coding the dataset was a combination of a deductive process, guided by the research questions, and an inductive process, guided by the data itself (Fereday & Muir-Cochrane, 2006). The identification of themes was at an explicit level emphasizing what participants were saying over identifying underlying assumptions or motivations (Braun & Clarke, 2006).

The transcription process served as an opportunity to become immersed in the data through listening to the focus group recordings three or more times. The transcripts and survey notes were then read carefully, with some preliminary notes on potential themes and connections within the data identified. Once the transcripts were thoroughly reviewed with some preliminary notes taken, coding began, supported by the use of NVivo software (Version 10).

The transcripts were initially coded systematically, through consideration of the content and application of codes. Initial codes consisted of a few words summarizing the content of the segment of data (extract). Codes were compiled into a table with a brief definition. Following this, the codes were reviewed and analyzed to identify patterns and connections between them as described by Fereday and Muir-Cochrane (2006). Similar codes were grouped together into topics related to the research questions and aligned with the questions posed in the focus group interview guide. For example, under the topic of knowledge of child development were codes describing the level of knowledge among the professional population, one prominent code was the “specialist vs. generalist knowledge”, which was applied to any extract that indicated

differences in knowledge between specialist (e.g., Provincial Court Judges) and generalist (e.g., Court of Queen's Bench Judges) groups.

As codes were grouped together, they were refined and expanded on. Within the topics, preliminary themes emerged and were described based on the initial groups of codes. The extracts within the emerging themes were reviewed in an effort to refine the themes. Some extracts were recoded and shifted as themes emerged. Patton's (2002) criteria for judging themes was applied to aim for both internal homogeneity and external heterogeneity between extracts contained within themes. Recoding extracts and themes occurred as needed until a list of themes that adequately represented the data was produced.

The write up of the themes was for the purpose of thoroughly describing the data and connections between themes throughout, in an effort to describe participants' perspectives on justice professional knowledge of child development and the impact of maltreatment, and how it relates to attitudes towards practices involving children. The themes are written as reflecting the perspectives of the group as a whole while using the words of individual participants to capture and provide examples of occurrences of the theme (Braun and Clarke, 2006).

### **Survey revision**

The aim of the revision of the survey was to reduce the length of the survey, ensure the content was relevant and the essential topics had been included, and to improve the format and clarity of questions. Participant feedback from the focus groups related to the content of the survey and format of the questions guided the revision. General comments shared by several participants were that the survey was too long and too difficult. At the same time, some questions were noted as too obvious.

A general criterion was applied in incorporating the participant feedback to the survey revision. If a written comment was shared by two or more participants, or if a comment was voiced by one participant and one or more participants agreed, it was deemed valid and applied to the revision. Comments generally fit into four categories; a question/section was not relevant and should be deleted or significantly edited, a question or term within a question was unclear, a question was noted to be relevant but too easy or difficult, or a section/question was good and should be kept as is. Participants suggested new wording for questions, or entirely new questions to include.

In revision of the survey, the first step was to identify the questions/sections that weren't relevant for removal and to highlight those that were too easy or too difficult for revision. A section that participants from both focus groups suggested to remove was a set of questions that involved rating the importance of various factors in relation to best interests decisions. It was suggested that participants would likely rate all of the factors as highly important, so asking to rate them separately would not reveal any useful information. Next, the wording of questions was revised to incorporate precise terminology and enhance clarity. Some suggestions of additional questions were included, for example, participants from both focus groups suggested adding a question that asks about the difference between the terms "attachment" and "bonding".

Following the incorporation of focus group feedback, the research team reviewed the survey with the aim to further refine the questions and reduce the length of the survey. The sections and the subtopics within the survey remained after the revision. The response options for the knowledge questions were changed from an agreement scale to a true/false scale with uncertainty built in (False, Probably False, Probably True, True). A summary of the changes to



the survey by section based on participant feedback follows. The final version of the survey is in Appendix D.

### **Section 1: Knowledge of Child Development**

Most substantive comments received were about the questions on the topic of attachment. Participants suggested adding questions on the definition of attachment and the difference between attachment and bonding, as these two terms are often incorrectly used synonymously in legal proceedings. Wording of questions was improved and the least relevant questions were removed. Participants in the focus group commented that it took a long time to complete the developmental milestones questions, so several of them were removed, leaving two or three from each developmental domain.

### **Section 2: Impact of Maltreatment on Infants and Children**

Participants expressed confusion as to which subtypes were included within the umbrella definition of maltreatment (e.g., physical abuse, exposure to intimate partner violence), so a definition of maltreatment was included at the beginning of the section. Wording and clarity of questions was improved throughout.

### **Section 3: Attitudes Towards Practices Involving Children**

This section elicited the most comments from the participants. Participants indicated that the original versions of the survey questions on the role of knowledge for professionals were not reflective of professional roles, for example, lawyer participants clarified that their role is to advise and bring forth relevant evidence rather than make decisions in a child's best interest. As a result, these questions were edited to more accurately reflect judicial and legal roles. Participants noted that the interventions for children and families involved in child protection matters offered through child welfare often do not meet the criteria noted in the intervention

questions, such as being supported by evidence of effectiveness. Questions were added on additional practice areas where attitudes may be influenced by knowledge, such as the impact of court delay on young children. As previously indicated, the questions rating importance of factors and sources of evidence for consideration of best interest decisions were removed as focus group participants indicated that survey respondents would likely rate all of the factors as important. The list of factors to consider in determining the best interests of a child was aggregated into four groups: child characteristics, parent characteristics, parent-child relationship characteristics, and contextual characteristics as suggested by participants.

#### **Section 4: Knowledge to Action**

Feedback on this section was largely that the questions were straightforward and covered key knowledge sources and preferences. Some additional options for sources of knowledge, such as colleagues and expert witnesses, were added based on suggestions from participants.

#### **Section 5: Demographics**

Judge respondents expressed reservation on being identified through demographic questions, as they are a small population group. The questions on gender and location (city) were removed to promote anonymity. The lawyer profession was separated into lawyers who primarily represent children and those who represent adults, as suggested by the lawyer focus group.

#### **Phase 2: Survey Distribution and Analysis**

The focus of the Phase 2 survey distribution was to gather broader perspectives on knowledge of child development and the impact of maltreatment, attitudes towards practices involving children and families, and knowledge translation needs from judge, lawyer and

mediator professional groups, and explore the variation in these perspectives throughout the professional populations.

### **Survey sample**

The target population for the survey consists of the key professional groups of judges, lawyers and mediators working with children and families in Alberta who were identified through discussion with key contacts made from the *With the Child in Mind* symposium. This included Judges of the Provincial Court of Alberta (Family and Youth Subsection and Circuit Judges); Justices of the Court of Queen's Bench; Lawyers on Legal Aid Alberta's Legal Representation of Children and Youth (LRCY) roster; Legal Aid Alberta's Family Law Office counsel and Family Law rosters; and Family Justice Services Mediators, Dispute Resolution Officers and Child Support Resolution Officers. The full target population was invited to participate rather than a smaller representative sample for several reasons. First, the population and sub-populations of professional groups are relatively small, so non-response may result in too few respondents to capture the range of professional views. Second, development of a sampling frame was not feasible in the present study because I did not have access to contact information of lists of potential participants. To respect privacy of participants, invitations were distributed through internal contacts within professional groups. Lastly, I wanted to invite the same target population of the *With the Child in Mind* symposium, represented by these professional groups to participate in this study. This is because the conference participants indicated that this information was important to their profession, and therefore targeting those professional groups provides evidence to characterize the knowledge, attitudes and knowledge translation needs to inform action to support them. Participation in the symposium was not required for participation in the study. The survey population by professional group is displayed

in Table 2.2. Of the 81 respondents to the survey, 14 (19%) indicated that they had previously attended the *With the Child in Mind* symposium.

**Table 2.2 Survey responses by target professional group.**

	<b>Estimated n</b>	<b>Complete response n (%)</b>	<b>Partial response n (%)</b>	<b>Opened, did not answer n (%)</b>	<b>Total n (%)</b>
Provincial Court Judges	66	6 (9%)	1(2%)	3(5%)	10 (15%)
Court of Queen's Bench Justices	76	3 (4%)	1(1%)	1(1%)	5 (7%)
Lawyers (LRCY)	98	12 (12%)	1(1%)	4 (4%)	17 (17%)
Lawyers (Legal Aid)	150	26 (17%)	3(2%)	14(9%)	43 (29%)
Mediators	135	28 (21%)	0(0%)	8 (6%)	36 (27%)
<b>Total</b>	<b>525</b>	<b>75 (14%)</b>	<b>6 (1%)</b>	<b>30 (6%)</b>	<b>111 (21%)</b>

### **Survey recruitment.**

In July 2013 an invitation was sent through workplace contacts of potential participants explaining the background and purpose of the study with a link to the online survey, and an information sheet explaining the consent process. Invitations were distributed through 6 workplace contacts to a total of 525 potential participants. The invitation letter and information sheet are in Appendix D.

I communicated with workplace contacts to send out reminder emails to promote increased participation. A reminder email was sent out three weeks following the first invitation. Second reminders were sent 5 weeks after the first invitation in September when regular fall schedules resumed. I followed up with contacts from groups with low response rates to determine if additional reminders would compel participation. I learned that the online survey mode was appropriate, and also that the survey population was very busy, and may have not responded due to the estimated duration of the survey (20 minutes).

### **Survey analysis.**

The aim of the analysis was to describe trends in knowledge, attitudes and knowledge translation needs in the population. The concurrent embedded approach to mixed methods was applied in the development of the survey; qualitative questions and free text spaces for elaboration were included throughout to supplement the quantitative questions in the survey. Qualitative responses were coded and grouped into themes within each question/section of the survey.

#### ***Coding of the survey items.***

Knowledge questions were binary coded for the correct answer and incorrect answer. The correct answer is defined as answering “True” or “Probably True” for the positive statements and “False” or “Probably False” for the negative statements. A second variable for the knowledge questions is coded for certainty, with “True” and “False” coded as Certain and “Probably True” and “Probably False” coded as Uncertain. Child development milestones questions were coded as Correct for the accurate age category selected, Almost Correct for the closest age category before or after selected and Incorrect for any other age category selected.

Attitudes questions rating agreement with statements were separately coded for each response option. For rating factors related to the Best Interests of the Child, each response option was separately coded. Definitions of variables used in the analyses along with questions contained in the variables are listed in Table 2.3.

**Table 2.3 Survey variable names and definitions**

<b>Variable Name</b>	<b>Definition for analysis</b>
<b>Knowledge of Child Development</b>	
General Knowledge of Child Development	#, % correct of questions 1-21
Certainty of Knowledge of Child Development	#, % certain of questions 1-21
Timing and process of brain development	#, % correct of 1, 2, 4, 6
Experience-based Brain Development	#, % correct of 3, 5, 7, 8, 9, 10, 12
Knowledge of developmental capabilities	#, % correct of 13, 14, 15
Attachment	#, % correct of 11, 16-21
Knowledge of child development milestones	#, % correct/almost correct of questions 22-30
Child Development Milestones (by domain)	
• Social	#, % correct of 24 and 29
• Emotional	#, % correct of 25, 26, 27
• Cognitive	#, % correct of 22 and 30
• Physical	#, % correct of 23 and 28
Self-reported knowledge of child development	Average rating of question 66
<b>Impact of Maltreatment on Infants and Young Children</b>	
General Knowledge of the Impact of Maltreatment on Children	#, % correct of questions 31 – 49
Certainty of Knowledge of the Impact of Maltreatment on Children	#, % certain of questions 31 – 49
Defining maltreatment	#, % correct of questions 31, 33
Occurrence of maltreatment	#, % correct of questions 32, 34, 36, 37
Impact of maltreatment	#, % correct of questions 35, 38, 39, 40, 41, 42
Outcomes associated with experience of maltreatment	#, % correct of questions 43-49
<b>Attitudes towards practices involving infants and children</b>	
Role of knowledge in practice	
Judges	Rating of 50
Lawyers	Rating of 51
Evidence of child development	Rating of 52
Interventions	Average rating of 53, 54, 55, 56, 58
Impact of Court Proceedings	Average rating of 57 and 59
Importance of factors in consideration of best interests	
Characteristics of child	Rating of question 60
Characteristics of parent	Rating of question 61
Characteristics of relationship between child and parent	Rating of question 62
Contextual factors	Rating of question 63
Importance of understanding of child development in consideration of best interests	Rating of question 64
Importance of understanding of influence of maltreatment	Rating of question 65
<b>Knowledge to Action</b>	
Seek out information on child development/maltreatment.	List all responses
Sources used to inform practice	Average rating of each source
Topics want more info on	Number of times selected for each topic
Best ways to receive new information	Number of times selected for each topic

### *Analysis of survey data*

Descriptive and comparative analyses were carried out in relation to the three research questions. For comparative purposes, the professional groups were split into four categories, Judge/Justice, Lawyer primarily representing children, Lawyer primarily representing adults, and Mediators, with a fifth category for those who selected “Other” as the option for a professional group that did not fit within the remaining professional groups. The lawyers were split into two groups based on input from the lawyer focus group respondents indicating that those representing children would respond differently to the survey because of their distinct approaches to practice and specialization of training in comparison to those primarily representing adults. Comparisons were made by Professional Group and Attendance at the symposium (Yes or No) to explore differences in the knowledge, attitudes and knowledge translation preferences within the target population. Responses to the open-ended questions were also grouped by profession to identify trends or patterns within and across the professional groups responding to the survey. The analyses are described under the respective research questions.

**Q: What is the level of understanding among judges, lawyers and mediators working in child protection and family law areas on the topics of child development and the impact of maltreatment on infants and young children?**

- a. Does knowledge of these topics vary among professional groups?**
- b. Does knowledge of these topics differ between those who previously attended the With the Child in Mind Symposium and those who did not?**

The mean and standard deviation of the number of correct responses for aggregate questions under general knowledge of child development and the impact of maltreatment on the developing brain were produced for the full population. A correlation between the general

knowledge of child development and self-reported knowledge of child development variables of the population was conducted to view if they were associated.

Group comparisons were conducted between independent variables of Professional Group and Symposium Attendance on dependent variables of knowledge of child development and knowledge of the impact of maltreatment. One-way ANOVA was the method of group comparison between professional groups. If the F statistic was significant at the  $P = 0.05$  level, multiple comparisons were conducted using the Bonferroni correction to identify which groups were significantly different from one another.

A t-test was conducted comparing responses to questions within the knowledge variables between those who attended at the symposium and those who did not on the dependent variables, at a  $P = 0.05$ , with the assumption of equal variances of the groups. To avoid Type I errors due to multiple comparisons within the same dataset, a conservative correction to the P value through the Bonferroni method was calculated by dividing the P value by the number of comparisons within the dataset (45), for a corrected value of  $P = 0.001$ .

**Question: How does knowledge of child development and the impact of maltreatment on the developing brain relate to attitudes regarding practices involving children?**

The mean and standard deviation of responses to variables of attitudes towards practices were calculated for the full respondent population. Average ratings of the importance of factors related to decisions in the best interests of the child were calculated, as well as average ratings of the importance of knowledge of child development and the impact of maltreatment in rating those factors.



A two-part question asking participants to describe how knowledge of child development and the impact of maltreatment influenced their professional practice was coded for thematic analysis. The thematic analysis procedure was the same as described for Phase 1.

The relationship between the General Knowledge of Child Development variable and the Attitudes Towards Practices variable was estimated by calculating the correlation between the two variables. The Knowledge of Impact of Maltreatment variable was compared to the Attitudes variable using the same approach.

Using ANOVA and t-tests with a significance level of  $P=0.05$ , the average ratings of importance of factors in consideration of the best interests of the child were compared to view if ratings of importance varied between Professional Group and Symposium Attendance.

**Q: What are the views among judges, lawyers and mediators working in child protection and family law regarding if and how they want to receive information on child development and the impact of maltreatment on the infants and children to inform their practices involving children?**

Descriptive results of knowledge-seeking practices were compiled to view what information was sought and which sources were most and least commonly used among professional groups. Most common topics used to inform practices and ratings of the best ways to receive new information were aggregated by Professional Group.

### **Joint Analysis of Data Collected from Both Methods: Synthesis of findings**

A joint analysis of data collected from both phases was conducted; triangulation of the results from both methods was undertaken to validate the findings, noting whether results from both phases converge or diverge. Themes identified from the focus groups were compared with the survey results to summarize which results aligned between both methods and which results

may not have appeared through the use of either method but were revealed through the joint analysis.

## **Chapter 3: Results**

### **Overview**

The results are presented within the two phases of the study. The first phase includes the results of the thematic analysis on judicial and legal perspectives on professional knowledge of child development and the impact of maltreatment, attitudes towards practices involving children and families, and knowledge translation preferences. The second phase includes the results of the survey. A joint analysis of the results from both phases follows.

### **Phase 1: Thematic Analysis Results**

The procedure for transcription of the focus group proceedings and the revision of the survey based on focus group results are described in Chapter 2. Following is a description of the focus group proceedings and the key themes identified from the thematic analysis.

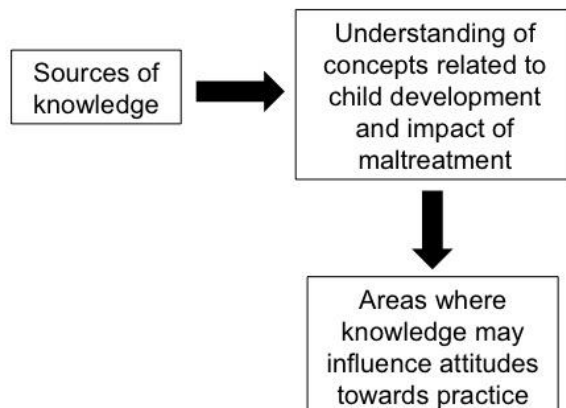
#### **Description of focus group sessions**

The nature of the interactions among the focus group participants and myself as facilitator differed between the two groups. The judge participants engaged in direct discussion with one another, responding to questions and occasionally speaking tangentially. This direct discussion could be attributed to the familiarity with each other; the nature of their interactions gave me the impression that debate and discussion was common among the group. The participants in the lawyer focus group were also familiar with one another, as colleagues or acquaintances; however, they engaged in somewhat less discussion with one another, but did voice agreement and dissent towards comments stated in the session. More discussion amongst participants in the judge focus group resulted in broader topics addressed within the group in comparison to the lawyer focus group. The participants in both groups were enthusiastic about

the research questions and survey, and expressed interest in learning about the results of the research.

### **Theme development and description**

The themes I identified within the focus group data align closely with the research questions. This was expected, as the focus group interview guide was structured around the research questions. The themes are grouped within three topics related to the research questions: (1) understanding of child development and the impact of maltreatment on infants and young children among the justice professional population (2) the influence of knowledge on attitudes towards practices involving families and children, and (3) sources of knowledge of child development and related information. Figure 3.1 illustrates the relationship between the topics as described in the rationale of the study. Sources of knowledge are accessed to improve understanding of concepts related to child development and the impact of maltreatment. Knowledge and understanding may influence attitudes towards practices involving children in the family law and child protection contexts. Following is in depth description of themes contained within the main topics, as summarized in Table 3.1.



**Figure 3.1 Relationship between topics discussed in the focus group proceedings.**

**Table 3.1 Description of themes and subthemes contained within the research topics.**

<b>Theme</b>	<b>Description and subthemes</b>
<b>Topic 1: Knowledge of child development and the impact of maltreatment on infants and children</b>	
<i>Variation in knowledge is present among the judicial and legal professional population.</i>	<i>Specialist judge and lawyer populations may have greater knowledge of child development and related topics than generalist populations due to greater exposure to relevant evidence in family law and child protection cases and additional training.</i> <i>Self-reported knowledge may overestimate true knowledge and function as a barrier for accessing knowledge resources.</i>
<i>Common areas of strength and gaps in knowledge of child development and related topics exist among justice professionals.</i>	<i>Misuse and misunderstanding of attachment concepts is common among justice professionals.</i> <i>Lack of recognition of the occurrence and impact of neglect is common among justice professionals.</i> <i>The impact of early adversity on child development was well understood among participants and described with particular language advanced by the Harvard Centre for the Developing Child.</i>
<b>Topic 2: Areas where knowledge may influence attitudes towards practices</b>	
<i>Knowledge influences judgments and inquiries in the best interests of the child.</i>	<i>Knowledge of child development informs judgments and inquiry processes, both improving the quality of judgments in the best interests of the child and increasing their complexity.</i> <i>Evidence specific to a child's developmental well-being is critical to judgments in the best interest of the child.</i> <i>The rule of judicial notice guides the application of judges' knowledge of child development concepts to judgments. Child development concepts may not meet the criteria for judicial notice.</i> <i>Knowledge informs the weighing of children's views and preferences towards their best interests.</i>
<i>Knowledge influences legal representation of adults and children in child protection and family law matters.</i>	<i>Knowledge influences developmentally appropriate recommendations to parents/caregivers involved in child protection and family law disputes. Recommendations include developmentally appropriate care arrangements involving children.</i> <i>Knowledge influences approaches to representation of children's interests, including the role counsel takes, interactions with children and calls for additional assessments.</i>
<i>Knowledge influences attitudes towards interventions, assessment and the impact of court processes on children.</i>	<i>Interventions provided to children and families may lack evidence to support effectiveness.</i> <i>Developmental assessments of children provide valuable information related to a child's best interests.</i> <i>Knowledge of the pace of child development may inform efforts to achieve fast resolution of matters involving children.</i>
<b>Topic 3: Sources of knowledge</b>	
<i>Traditional and non-traditional sources of knowledge are accessed among justice professionals.</i>	<i>Expert witnesses are a key source of knowledge for justice professionals. Preferred format of sources varies by age. Workshops and conferences are preferred sources of knowledge, particularly for older age groups. Younger professionals may prefer web-based resources.</i>
<i>A call for shared learning among professional groups and court systems.</i>	<i>Recommendation for joint learning initiatives and resources to promote a shared knowledge base across professional groups.</i>
<i>A call for specialist courts for child matters.</i>	<i>Child matters should be resolved in specialist courts by professionals with specialized training.</i>

*Note.* Subthemes are italicized within the theme descriptions.

## **Topic 1: Knowledge of child development and the impact of maltreatment on infants and children**

The themes within this topic describe the level of knowledge in the judicial and legal professional population on topics related to child development and the impact of maltreatment on infants and children, along with explanations for the variation in knowledge between professional groups and individuals. Areas of strength and gaps in knowledge on various child development subtopics are described.

### ***Variation in knowledge is present among the judicial and legal professional population.***

Knowledge of child development concepts is expected to vary among professionals practicing the family law and child protection contexts. These concepts are not widely presented in current law school curriculum as discussed in the Introduction (O'Connell & DiFonzo, 2006); therefore, there is no expectation for a common baseline of knowledge among judicial and legal professionals.

*Specialist populations may have greater knowledge of child development and related topics than generalist populations.* Participants described how judges in the Family and Youth Subsection of the Provincial Court are considered the “specialists” in the area of family law and child protection. Provincial Court Judges in this subsection have the greatest exposure to child protection and family law matters, and consequently to evidence and content related to child development and the impact of maltreatment on infants and children. Conversely, Justices of the Court of Queen’s Bench preside over a variety of civil and criminal matters, as well as appeals from the Provincial Court. Therefore they are less often exposed to family law and child

protection matters. A participant described the difference between the specialist and generalist professional populations in their exposures to cases involving children.

F: “[Justices of the Court of Queen’s Bench] *just don’t work in the trenches, the way family court judges do and they don’t have the child welfare stuff they only do that on appeal, so when they have a case like that, it comes in, they miss it.*”

Participants reported a similar pattern of exposure to content about child development among specialist groups in lawyer and mediator professional populations. While child protection and family law is not a specialist practice for mediators and lawyers, many professionals choose to focus their practices in family law and/or child protection matters, and may join professional rosters for which they require additional training to qualify (e.g., Legal Aid or LRCY). Participants predicted that those who choose to specialize in practices likely had a greater understanding of child development concepts than those who do not.

One consequence of perceived differences in specialist knowledge identified by participants is lawyers advising clients to base the selection (where possible) of which court to file a case through on the perceived differences in knowledge of judges presiding within those courts. For instance, in family law cases where divorce is not an issue, one could choose to file a case either in the Provincial Court or the Court of Queen’s Bench. A participant observed the perception of this difference between the courts in consideration of where to file a family law case.

A: “*Well I know a lawyer who says um, she had a file, a family file, family lawyer, they have a 50/50 or some kind of arrangement worked out, she was representing one or the other but it was going to go to provincial court. “No, because they do that ‘brain theory’ there, we’re going to go to QB [Court of Queens Bench]. Because that judge will let the consent order pass through.”*”

*Discrepancy between self-reported and true knowledge of child development concepts.* In addition to recognition of variation in understanding throughout bench and bar, participants

noted the potential for a discrepancy between self-reported knowledge and actual knowledge. This discrepancy was identified as a barrier to seeking out information or professional development resources, in that if one assumes they have knowledge in an area, they are less likely to actively seek it out. Where understanding is limited, professionals may rely on status quo arrangements or commonplace assumptions that may not be supported by current theory and research in child development, as stated by a lawyer participant.

*A: “And everybody thinks that they know, goes by the common sense, kind of dominant theory or their cultural theory so a lot of people think that they don’t need to know.”*

***Common areas of strength and gaps in knowledge of child development and related topics exist among justice professionals.***

Along with the variation in knowledge among judge and lawyer participants, there were common areas of misunderstanding as well as areas where knowledge was considered strong among the population.

*Misuse and misunderstanding of attachment concepts is common among justice professionals.* Attachment is one aspect of a caregiver-child relationship in which the child uses their caregivers as a secure base from which to explore and seek comfort under distress (Benoit, 2004). Participants reported that attachment is a poorly understood concept often used incorrectly in the justice context. One of the most common and inaccurate uses of the concept of attachment is when used synonymously with “bond”, referring to relationships of kinship or affection between children and parents/caregivers. Misunderstanding surrounds not only the definition of attachment but also on related concepts including display of attachment behaviours, formation of multiple attachments, and transferring of attachment relationships. First, with respect to display of attachment behaviours, a common assumption is that a comfortable child



interacting with their caregiver in a calm environment is displaying attachment behaviours. On the contrary, attachment behaviours are displayed only when a child is under distress (e.g., injured, ill or frightened) (Bakermans-Kranenburg et al., 2003). Second, although a child can form multiple attachments or attachment hierarchies, what is misunderstood is that the quality of those attachments may differ depending on how caregivers respond to children under distress. Finally, contrary to views that attachment relationships can be transferred from one caregiver to another, infants form attachments based on the unique responses of parents and caregivers rather than shift relationships or “reattach” from one caregiver to another (Benoit, 2004). The following quote by Participant H captures the experience of the use of attachment concepts in court:

H: *“[W]hen you’re sitting in a courtroom you discover what people think attachment is and they’re invariably wrong.”*

In addition to misuse/misunderstanding of attachment concepts, judges cite the common occurrence of parents, counsel and witnesses denying the legitimacy of evidence related to attachment. Judges observe that disputing parties advance evidence that aligns with their position or values, which may or may not align with attachment theory. For example, a common argument among disputing parties in support of a 50/50 parenting time arrangement is that a child is “equally attached” to both parents, which is not in line with evidence that infants form unique attachments with each of their caregivers. Similarly, disputing parties may make arguments of what a witness values, which may not align with evidence justice professionals put forward regarding attachment and a child’s best interests. For example, judge participants indicated that in some cases, particularly those involving families of aboriginal heritage, arguments that prioritize a witness’s values regarding the importance of continuity in culture may conflict with a justice professional’s arguments for the best interests of a child; this can

contribute great complexity in making best interests decisions, particularly when there is evidence of adverse experiences that gave rise to state intervention, as illustrated through the following exchange:

*H: "...there are families that, it's not the aboriginal culture but they believe that if we as a system put them in a placement that has the things that this witness values, then that will solve everything. It could be the aboriginal culture, for this family that I'm dealing with, this child has become aggressive at the age of 4 or 5 because he's not with his mom and his grandma."*

*K: "That's exactly it, that's very common. You've done it, you've caused the problem by taking him away from his mother."*

Arising from discussion among judge participants on denial of legitimacy of attachment concepts among justice professionals and litigants was discussion of the use of culture in arguments for a child's best interest as a paramount consideration, which was identified as a common practice in cases involving children of various ethnic heritages, including aboriginal heritages. Judges did not place high value on arguments for a child's best interests based on culture alone, particularly when the arguments were not supported by other factors related to a child best interests such as the quality of attachment, capability of caregivers and availability of supports and resources.

As a response to the common misuse of attachment concepts, judge participants ask experts and counsel who refer to attachment in evidence to define the concept. The definition assists the judge in weighing evidence related to attachment in determination of the best interests of the child. A judge illustrates this practice in the following quote.

*H: "Please give me your definition of attachment. And I even had a lawyer one time working on attachment and I got so upset, I said that's not what attachment is, and she said, "Well what is it then?" As if I'm supposed to be giving the evidence."*

*Lack of recognition of the occurrence and impact of neglect among justice professionals.*

The term maltreatment as an umbrella definition of adverse child experiences including abuse, neglect and exposure to intimate partner violence is not typically used in the family law and child protection context. Participants discussed the overlap between subcategories of maltreatment, namely abuse and neglect. Some judge participants use the term “abuse” to refer to several adverse experiences, including physical and sexual abuse and neglect. Judges propose that neglect is less often recognized and considered as less harmful to children in comparison to physical and sexual abuse, as stated by one participant.

K: *“Because people don’t believe, people think that... child neglect is one of the least appreciated forms of child abuse that exists, child neglect is child abuse.”*

These views are consistent with those presented by Wotherspoon and colleagues (2010) in an article highlighting best practices for family law and child protection professionals acting in a neglected infant’s best interests.

*The impact of early adversity on child development was well understood among participants and described with particular terminology.* Participants in the focus groups were well informed about concepts related to experience-based brain development and the impact of adversity on the developing child. To communicate about child development processes and the influence of adverse experiences on children, participants used terminology advanced by the Centre for the Developing Child at Harvard University. This terminology is included in simplifying models developed by the Centre, which are composed of metaphors and lay language descriptions to communicate child development processes. For example, one model describes responsive infant and parent interactions as a back and forth game of “serve and return” as compared to the sport of tennis. Another model differentiates stressful experiences to

characterize those experiences that are the most harmful to a child as “toxic stress” (Shonkoff & Bales, 2011). Expert witnesses and presenters at conferences and workshops, both from within the justice professional field as well as from external fields in academia, medicine, psychology and epidemiology often use this terminology to communicate concepts related child development and the experience of early adversity. Presenters at the *With the Child in Mind* symposium used the simplifying models in their presentations.

Although the focus group participants were well versed in this terminology and familiar with the life long impacts of early experiences and adversity, they reported that many in the justice population may not be familiar with this terminology without prior exposure to the simplifying models, and, as a result, may interpret the concepts differently. As an example, one participant illustrated that depending on the individual’s previous exposure to this terminology, “stress” could be interpreted as either an innocuous experience or a significant detriment to early development.

## **Topic 2: Areas where knowledge may influence attitudes towards practices.**

Building on the variation in knowledge of child development and the impact of maltreatment, themes in this topic reflect participants’ views of how knowledge may influence attitudes towards practices involving families and children. Participants identified both the influence of their knowledge to their own practice, and areas that they predict knowledge could influence practices involving families and children in both child protection and family law contexts.

***Knowledge influences judgments and inquiries in the best interests of the child.***

Judge participants suggested that knowledge of child development concepts assists them in interpretation of legislation and case law and weighing of evidence, tasks that are central to their primary role of making decisions in the best interests of the child.

*Knowledge of child development informs judgments and inquiry processes.* In weighing various factors and evidence related to the best interests of the child, judge participants agreed that understanding child development concepts improved the quality of their judgments. A consequence of this improved quality is that written judgments were longer and more complex in describing how a decision was formed. The following exchange illustrates the complexity of the process. Participants were responding to the question of whether or not knowledge of child development assists in making judgments.

H: *“No it makes it harder. Because you go into it in more detail, and the more information you have the bigger the picture grows.”*

K: *“But when you stand back you know damn well the more you’ve got the happier you are. Reliable scientific evidence, the more you have before you, this creates a clearer lens for me where I can weigh the evidence through those.”*

*Evidence specific to a child’s developmental well-being is critical to judgments in the best interest of the child.* While recognizing the importance of knowledge to judicial practice, strong consensus was present among judge participants on the importance of evidence specific to an individual child’s developmental well-being in determination of a child’s best interests, as Participant S explains.

S: *“That at the end of the day, it really doesn’t matter what is in these judges’ heads as far as attachment theory it really comes down to what comes out of the evidence.”*

Judges require evidence in order to adequately weigh the relevant factors related to a child’s best interests (e.g., parent mental health, child’s functioning, economic resources

available to the family). This process of weighing factors against one another is central to making decisions regarding placement and care of children. Judges described this process as a balancing of various risks and supports across factors most relevant to a child's health and development. This process was noted as difficult because the outcomes are unknown; at the same time the decisions need to be made in an informed and timely way so that children have the best opportunity for early stability.

K: *"That's really why a lot of children get left [in the home] longer than they should. It's this fear of this disruption being so big even if it's kind of disorganized, the attachment, to not be unknown. Or what's going to happen, how often can this child keep being sent back? So those decisions are often left far too long because the outcomes are not assured."*

H: *"Well it gets really complicated because you may have a neglectful parent but for some reason the kid is going to a very good daycare and so at home there's some neglect, but it's certainly ameliorated because the day care is good and is doing all sorts ... low turn over and quite a bit, and how do you measure those things?"*

K: *"Again it depends on the age of the child"*

N: *"I would say what [an expert witness] says, the four factors. You can have neglect in some areas but you can have a kid with a strong personality and a strong grandparent."*

Many factors relevant to a child's best interests are displayed in these quotes, including factors concerning the child, the child-parent relationship, social supports, and program quality. The "four factors" that Participant N refers to in the quote above is a concept often presented by an expert witness. Participants describe the "four factors" concept as one way to balance risks and strengths in four areas: the child, parent, child-parent relationship, and the broader context. This model of risk assessment is supported by evidence demonstrating that risk present in multiple domains is more problematic than risk in any one area, while at the same time protective factors in some areas can ameliorate the risk present in others (Greenberg, 1999).

*The rule of judicial notice guides the application of judges' knowledge of child development concepts to judgments.* The rule of judicial notice was referred to by participants to describe the extent that judges can rely on their own knowledge of child development concepts in their decisions. It guides what a judge can “take notice” of in a judgment, allowing “...uncontroversial facts to be established without evidentiary proof.” Facts must be undisputed because they are commonly known among the general population, or can be easily accessed from accurate and reliable sources (Judge, 2012, p. 327). There is some controversy over which concepts meet the criteria for judicial notice, particularly in the area of social science (Judge, 2012; Williams, 1996). Judge participants noted that much of their knowledge in this area did not meet the criteria for judicial notice, and therefore they could not refer to it in judgments unless it was presented in the evidence, as described by Participant H.

H: *“We run into the problem more frequently than we want to that we are the specialist court, we do have the information, but we can't rely on it, we can't take judicial notice of it and we don't have it presented to us so that we can use it in as an evidentiary foundation for the appropriate decision.”*

Without announcing their prior knowledge, judges may attempt to draw out evidence on these topics through expert witnesses and legal counsel, for example by suggesting that counsel involves developmental experts if deemed necessary to bring evidence forward.

Lawyer participants shared the same view as judges of the importance of getting the relevant evidence related to a child's developmental well-being and needs in front of the court. However, they may experience barriers to ensuring the evidence is brought forward. For example, it is not always possible to have an expert involved due to the financial and time barriers, as described by Participant A.

A: *“And you know what's so crazy is they [judges] need us to get the information in front of them, but they have the information [knowledge] already. And the thing is how can we*

*afford to get experts to come and give, like I'd like to just bring in, you know, an article..."*

In response to this quote, another lawyer participant suggested that counsel could submit an article as evidence relating to a child's health and development. Evidence was not always submitted in the form of an expert witness report or testimony. Empirical articles, for example, may be submitted; however expert witnesses were often referred to as a valuable and reliable source of evidence.

*Knowledge informs the weighing of children's views and preferences in judgments.*

Participants noted that there is debate amongst justice professionals regarding the amount of weight to place on a child's views and preferences at different ages. Judges note that most children at any age don't want to be separated from their caregivers, even if they have experienced significant abuse or neglect. An older child's desire to remain in a home environment that may be "dangerous" is more likely to be granted because an older child is perceived to be better able to communicate his or her own views and comprehend future implications. Understanding of child development and the characteristics of a particular child assist in the amount of emphasis a judge or lawyer may place on a child's views, as noted by Participant O.

O: *"It's easy to say we should take the desires of the child into account, but how do we take it into account is hugely dependent on how old the child, so where they are developmentally."*

***Knowledge influences legal representation of adults and children in child protection and family law matters.***

A lawyer's primary role, as emphasized by the lawyer participants, is to advocate for their client's position, whether that client is a child, parent/caregiver or child welfare



organization. Nonetheless, participants discussed the potential impact of professional understanding of child development and the impact of maltreatment on interactions between counsel and clients towards a child's best interests.

*Knowledge influences developmentally appropriate recommendations to parents/caregivers involved in child protection and family law disputes.* In representing adult clients, knowledge of child development and the impact of adverse experiences may inform recommendations for developmentally appropriate care arrangements based on the individual child's needs. An example may be recommending non-adversarial approaches where appropriate, which have the potential to reduce the amount of time a child is exposed to caregiver disputes or conflict. The traditional adversarial legal process can obscure the emphasis on what is best for the child, with disputing parties ultimately wanting to "win" rather than work towards a solution in the child's best interests, as one lawyer states.

F: *"But the problem is if ultimately the parent wants a relationship with the child, and they should either back off for example, or choose a different course of action, so it's do you want to win, or do you want a good relationship? And some lawyers, they just want to win and they push their clients to win, "don't settle for that you can get more", and really maybe they're misreading their client, what the client wants."*

*Knowledge influences approaches to representation of children's interests.*

Representation of children in the traditional advocate role is considered a best practice. This involves discovering the child's interests (distinguished from "best interests") and advocating on their behalf. Counsel for a child also ensures their client understands the legal and court processes she or he is involved in. The child's interests may or may not align with a judge or lawyer's view of her or his best interests.

If a child does not have capacity to instruct counsel, lawyer participants acknowledged the other possible roles they may take on in representing children, such as a "Best Interests

Advocate” or an “Amicus Curiae” (i.e., friend of the court). Participants suggested that knowledge of child development could assist them in assessing a child’s capacity to instruct counsel, as well as deciding when a child is in need of further assessment. Specifically, knowledge of the timeline of development can assist in determining if a child is delayed in their development, which may signal the need for intervention as one lawyer notes in reference to knowledge of child development milestones.

Q: *“I guess I thought it [knowledge of child development milestones] was critical because you are engaging and you are potentially influencing the outcomes for children, and not every case has an expert, you know what I mean like, you’re dealing with a different, so how are you going to know if there’s a red flag if you don’t have even sort of at least a basic understanding because not everyone has that, right?”*

***Knowledge influences attitudes towards interventions, assessments and the impact of court processes on children.***

Beyond the professional roles that lawyers and judges take on in family and child matters, attitudes towards other practices, such as family- and child-focused interventions and developmental assessments, were discussed.

*Interventions offered to families and children may not have evidence to support effectiveness.* In response to the survey questions on best practices in interventions for children and families, judges and lawyers reported having little influence on which interventions were offered to families and children, and were aware that many interventions offered were not evidence-based. Some judge participants expressed reservations about the effectiveness of currently available interventions, particularly when children were of older ages. Interventions in this context refer primarily to those offered through child welfare (contracted through community organizations), which may be offered as conditions of court orders. Example interventions include therapeutic access, cognitive behavioural therapy, and parent education

programs. Further, offering interventions that are timely and implemented in line with best practices (e.g., at sensitive periods of development and of short duration and high intensity) is difficult, because “time drags on”, as one participant puts it, in reference to the slow pace of court proceedings.

*Developmental assessments of children provide valuable information related to a child's best interests.* Assessments were viewed by participants as necessary and valuable for acquiring accurate evidence on a child's developmental status or a parent's capacity. Assessors are usually experts in their field (e.g. psychologists, social workers, physicians), who provide evidence on the findings of their assessments. While the role of assessor is outside the practice of judges and lawyers, participants considered their own knowledge important because not all cases involve assessors. Reliance on an assessor or other expert witness is not always feasible due to cost or time barriers, particularly in Legal Aid cases where funding is limited.

*Knowledge of the pace of child development may inform efforts to achieve fast resolution of matters involving children.* Some aspects of the legal process itself may be detrimental to a child, including long delays in reaching resolution, exposure to intense, prolonged conflict and multiple placements or transitions resulting from judgments and appeals. Participants suggested that reducing long delays in the court process could be achieved if lawyers did not take on a case when their own schedule would delay it, or if there were a system in place to prioritize resolution of cases involving infants over less urgent matters. Another suggestion was to emphasize non-adversarial processes, where appropriate, based on understanding of the deleterious impact of exposure to prolonged conflict on children. Non-adversarial processes may moderate the intensity of parental conflict and reduce the length of time spent in dispute. However, while non-adversarial processes are becoming more common especially in family law matters, participants

emphasized that there were many situations in which a case needed to be in traditional adversarial court so that the relevant evidence could be brought forward and assessed.

### **Topic 3: Sources of knowledge.**

This theme describes sources currently used by justice professionals for updating and advancing their knowledge in the areas of child development and the impact of maltreatment to inform their practices with families and children. Also identified were sources not currently available but suggested by participants to advance understanding, as well as preferred delivery modes.

#### ***Traditional and non-traditional sources of knowledge were accessed among justice professionals.***

Traditional professional development resources were often accessed by participants, including conferences, workshops, publications and web-based resources. One area where this content was not being presented is in law school curricula, a law student participant indicated disappointment that courses specific to child development and family functioning are lacking.

*Expert witnesses are a key source of knowledge for justice professionals.* Beyond professional development activities, a key source of knowledge for participants is expert witnesses, such as those who perform assessments on child functioning and parenting capacity. Participants described how an expert witness's role was to present the current state of research evidence concerning child development and family functioning. Judge participants were very familiar with expert witnesses practicing throughout Alberta and referred to specific experts and the evidence they provide in several instances throughout the focus group. One reason the witnesses were a valuable source of knowledge was because they offered opportunities for

repeated exposure to concepts in various matters, as explained by one judge participant and agreed upon by the rest of the group.

N: *“...where we get a lot of my knowledge is those experts, evidence in court from experts, we hear them and if you hear it over and over and over...”*

While experts are key sources of knowledge for professionals and evidence for specific cases, they are costly and therefore not accessible in all legal matters. For this reason, some professionals call on experts in their own networks to act as informal, uncompensated sources of knowledge, as described by a lawyer participant.

G: *“Or you’d call someone you know, like an expert. To whom it’s unfair because then they’re not getting paid.”*

*Preferred format of sources varies by age.* The preferred format of delivery of knowledge translation resources varies considerably among justice professionals, according to participants, and is largely age dependent. Participants predicted that older age groups preferred face-to-face presentations and interactions and less often accessed web-based materials, as Participant K explains:

K: *“...I just can’t do it. I don’t know if it’s because my brain has been trained to see this thing happening [gestures for face to face interaction] and I can’t pull anything out of it. So I’m not saying that webinars are not wonderful resources I’m saying that I don’t know that my mind’s going to go there. And age has a factor in that too.”*

In contrast, younger professionals are more commonly accessing online sources of information, as Participant P states:

P: *“...I think you’re going to see in the next 5 years when my generation starts to practice, a huge movement towards online and electronic. Because that’s how we do our research, it’s all online.”*

***A call for shared learning across professional groups and court systems.***

Lawyer participants suggested access to professional development sources that are currently only available for judicial audiences, such as resources developed by the National Judicial Institute (e.g., online courses and “Bench Books” or judicial reference books), would be valuable to promote shared understanding across justice populations. Similarly, more opportunities for shared professional development events such as workshops, seminars and conferences were suggested.

***A call for specialist courts for child and family matters.***

Individuals who choose to focus their practice on serving children and families may undertake additional specialized training to qualify for rosters or other specialized practices; for example, to join the Legal Representation for Children and Youth roster a lawyer must undergo additional and ongoing training. Participants from both focus groups brought forth the issue of whether family law and child protection matters should be exclusively addressed in specialty courts with professionals who have undertaken specialized training.

The themes that emerged from the focus group data describe the variation of knowledge, identify areas where knowledge may influence practice, and share preferences for knowledge translation approaches. These themes are further analyzed alongside the responses to the survey responses collected in Phase 2.

**Phase 2 Survey Results**

***Sample description***

Of the estimated 525 individuals invited to complete the survey, 111 participants opened the survey and of those, 75 completed the full survey and 6 completed part of the survey for an overall response rate of 15% (range of 4-21% among professional groups). Focus group

participants were not included in this sample. Table 3.2 displays the size of the population invited to complete the survey and the response rate aggregated by respondent group.

**Table 3.2 Survey response rate by professional group**

<b>Professional Group</b>	<b>Estimated n</b>	<b>Response rate n (%)</b>
Provincial Court Judges	66	7 (11%)
Court of Queen's Bench Justices	76	4 (5%)
Lawyers (LRCY)	98	13 (13%)
Lawyers (Legal Aid)	150	29 (19%)
Mediators	135	28 (21%)
Total	525	81 (15%)

The survey invitation contained a link to complete the survey online through the Fluid Surveys website. The use of unique survey links enabled tracking of participation from each respondent group. Contacts within each respondent group were asked to provide estimates of the number of individuals they invited to participate in the survey as well as the amount of overlap between different respondent groups. The two lawyer populations and mediator population had significant overlap; half of the roster of lawyers representing children and youth was estimated to overlap with the roster from Legal Aid Alberta. I was conservative in my estimate of overlap by using the smaller range of estimates provided to me. In addition, the rosters used for invitations may have had out of date contact information, or included inactive members. Therefore, the true response rate is likely higher than 15%.

Table 3.3 describes the sample by their responses to the demographic questions. The majority of participants and greatest response rate was from the population of Lawyers that primarily represent adults, and the fewest participants and lowest response rate was from the Judge and Justice population. The majority of the participants (58%) worked within both the Provincial Court and Court of Queen's Bench systems. Almost half of the population worked at

their current profession for less than 10 years and 19% of respondents attended the *With the Child in Mind* symposium.

**Table 3.3 Sample description based on responses to the professional background survey questions.**

	Professional Group					Court System		
	Judges/ Justices	Lawyer (adult)	Lawyer (child)	Mediator	Other	PC	CQB	Both
Completed Survey (n)	8	30	11	18	7	20	10	42
Worked at profession <10 years (n)	5	14	2	10	3	15	2	15
Attended symposium (n)	3	2	6	2	1	3	3	8

*Note.* Lawyer (children) = lawyer primarily representing children; Lawyer (adults) = lawyer primarily representing adults; PC = Provincial Court; CQB = Court of Queen's Bench; Both = PC and CQB

Fourteen participants selected “Other” and specified a response to the question on professional group. Those with specified responses that fit within one of the professional groups and corresponding respondent link were placed into that group for the comparative analyses. The majority of those who selected “Other” were invited through the mediator roster, and identified themselves as mediators in addition to social workers, psychologists, or family court counselors. Seven respondents remained as “Other”, and included administrators, a law student, and social workers. Similarly, those who left their professional group question blank were assigned into a category based on primary professional group selected by others in the same respondent category.

### ***Descriptive and comparative statistics***

The variables derived from the knowledge, attitudes and knowledge translation preferences questions on the survey are listed and described in Chapter 2. The aggregate answers to the quantitative survey questions are listed in Appendix F.



### ***Knowledge of child development and the impact of maltreatment on infants and children***

Child development questions were aggregated into general knowledge variables and subtopic variables, as illustrated in Table 2.3. The number and percent of correct and certain responses for the child development questions are listed in Table 3.4. Of the 21 questions on child development topics, participants answered an average of 17 (82%) correctly with a range of 14 to 21, and were certain on an average of 61% of the responses, with a range of 3 to 21. The questions that elicited the most variation in responses in this section were those about timing and process of brain development. Participants answered the majority of the experience-based brain development questions correctly; on average participants answered 95% correctly with 68% certainty. On the developmental capabilities question, most participants incorrectly agreed that infants as young as six months consciously know how to manipulate parents. From the national survey of parents in which this question was taken from, the author noted that the ability to plan ahead events to manipulate a person's actions develops at around 18 months (Oldershaw, 2002). The large majority of respondents answered most of the questions related to attachment correctly. The two questions that elicited variation in responses pertained to the relationship between attachment roles and other parenting roles and the difference between the concepts of "attachment" and "bond".

**Table 3.4 Mean number and percent correct and certain responses to child development knowledge questions, in general and by sub-topic**

<b>Knowledge of Child Development (no. questions)</b>	<b>Correct n (%)</b>	<b>Certain n (%)</b>
General knowledge of child development (21)	17.3 (82%)	12.8 (61%)
Timing and process of brain development (4)	3.2 (80%)	1.7 (43%)
Experience-based brain development (7)	6.7 (95%)	4.7 (68%)
Knowledge of developmental capabilities (3)	2.4 (80%)	2.1 (70%)
Attachment (7)	5.5 (78%)	4.3 (61%)

The majority of participants did not identify the correct age range of the child development milestones (Table 3.5). The average number of correct milestones identified was 1.6 out of 9, with a range of 0 to 4 correctly answered. Sixty-two percent of participants identified the correct or next closest age range of the milestone. Participants answered the fewest correct on the social development questions and were most accurate on the physical development questions.

**Table 3.5 Mean number and percent correct and correct or almost correct responses to child development milestone questions, all and by domain.**

<b>Child development milestones questions (no. questions)</b>	<b>Correct n (%)</b>	<b>Correct or Almost Correct n (%)</b>
All developmental milestones (9)	1.6 (18%)	5.5 (62%)
Social (2)	0.4 (19%)	1.2 (61%)
Emotional (3)	0.4 (12%)	1.6 (53%)
Cognitive (2)	0.4 (20%)	1.2 (61%)
Physical (2)	0.5 (26%)	1.5 (76%)

Looking at the pattern of “Almost Correct” responses, participants were more likely to underestimate the age range (select younger age ranges) than overestimate the age range. These milestones questions were included in the survey with permission from the *Alberta Benchmark Survey: What Adults Know About Child Development* survey of randomly selected adults on their knowledge of child development (n=1443) (Rihky & Tough, 2008). The rates of correct answers between this sample and the Alberta Benchmark Survey’s general population sample were very similar, as illustrated in Table 3.6. The similarity in response rates suggests two things: first, that the study population was somewhat representative of the Alberta population, and second, that the understanding of child development milestones was similar between the justice professional study population and the general adult population in Alberta.

**Table 3.6 Comparison of the rate of correct selection of age range of the typical occurrence of child development milestones between respondents to the current survey and the randomly sampled adult respondents to the Alberta Benchmark Survey.**

<b>Developmental milestone</b>	<b>% correct on current survey</b>	<b>% correct on Alberta Benchmark Survey</b>
Engage in pretend and fantasy play	16%	12%
Walk	53%	47%
Sit and play quietly by him/herself for an hour	20%	27%
Recognize or read emotions of others	11%	14%
Make different cries for different needs	24%	23%
Form an attachment with their primary caregiver	10%	15%
Reach for objects	56%	52%
Start to show concern for others	18%	15%
Follow simple instructions	24%	26%

Open-ended responses to questions in this section of the survey were largely related to the clarity and meaning of the questions. Several participants noted that the wording of some of the questions was ambiguous. Two participants commented that the questions were too general and the answer would depend on the particular child.

Similar to the child development knowledge questions, participants responded correctly and with certainty on the majority of questions about the impact of maltreatment on infants and children (see Table 3.7). The question that participants answered the least correctly was related to whether or not the occurrence of neglect was the most common form of maltreatment experienced by infants; 30% of participants answered this incorrectly and 68% answered with uncertainty.

**Table 3.7 Number of correct and certain responses to questions on impact of maltreatment on infants and young children**

<b>Knowledge of the Impact of Maltreatment (no. questions)</b>	<b>Correct n (%)</b>	<b>Certain n (%)</b>
General Knowledge of the Impact of Maltreatment on Infants and Children (19)	17.5 (92%)	11.3 (63%)
Defining maltreatment (2)	1.9 (96%)	1.7 (84%)
Occurrence of maltreatment (4)	3.4 (85%)	2.2 (56%)
Impact of maltreatment (6)	5.4 (90%)	3.6 (60%)
Outcomes associated with experience of maltreatment (7)	6.7 (96%)	4.1 (59%)

Respondent comments related to these questions were similar to those for the child development questions; that is, some questions were ambiguous and the answers depended on the individual child. As one participant wrote, “No black and white answers as people are unique and respond differently, even to the same treatment in the same household.”

Group comparisons were conducted between independent variables of Professional Group (Judges/Justices, Lawyers primarily representing children, Lawyers primarily representing Adults, Mediators, Other), and Symposium Attendance (Yes or No) on dependent variables of responses to survey questions on general knowledge of child development (Table 3.8).

Participants who attended the symposium answered on average one more question correctly on the general child development questions and on the attachment questions, this difference was not statistically significant when the Bonferonni correction was applied. There were no significant differences in the number of correct responses between professional groups.

**Table 3.8 Groups comparison on average number of correct responses to child development knowledge questions between Professional Group and Symposium Attendance variables.**

<b>Professional Group</b>						
<b>Child development knowledge questions (no. questions)</b>	<b>Judges/ Justices</b>	<b>Lawyer (adult)</b>	<b>Lawyer (child)</b>	<b>Mediator</b>	<b>Other</b>	<b>Prob&gt;F</b>
General child development (21)	17.6	17.4	16.9	17.6	18.0	0.75
Timing and process of brain development (4)	2.8	3.0	2.7	3.1	3.0	0.89
Experience-based brain development (7)	6.8	6.7	6.2	6.8	6.8	0.05
Developmental capabilities (3)	2.5	2.3	2.3	2.6	2.7	0.20
Attachment (7)	5.6	5.4	5.7	5.3	5.8	0.64
<b>Symposium Attendance</b>						
	<b>Yes</b>	<b>No</b>	<b>Prob T&gt;t</b>			
General child development (21)	<b>18.4</b>	<b>17.2</b>	<b>0.02</b>			
Timing and process of brain development (4)	3.3	2.8	0.12			
Experience-based brain development (7)	6.7	6.7	0.76			
Developmental capabilities (3)	2.4	2.4	0.90			
Attachment (7)	<b>5.9</b>	<b>5.4</b>	<b>0.02</b>			

*Note.* Lawyer (adults) = lawyer primarily representing adults; Lawyer (child) = lawyer primarily representing children.

Comparisons significant at the  $P < 0.05$  are shown in boldface. These comparisons are not significant after correction for multiple comparisons within the dataset.

Group comparisons between Professional Group and Symposium Attendance variables on the number of correct or almost correct identifications of child development milestones (Table 3.9) and on the impact of maltreatment did not reveal significant differences (Table 3.10).

**Table 3.9 Group comparisons on the number of correct and almost correct responses to child development milestones questions between Professional Group and Symposium Attendance variables.**

<b>Professional Group</b>						
<b>Child development questions (no. questions)</b>	<b>Judges/ Justices</b>	<b>Lawyers (adult)</b>	<b>Lawyer (child)</b>	<b>Mediator</b>	<b>Other</b>	<b>Prob&gt;F</b>
All milestones questions (9)	5.1	5.4	5.2	6.0	5.8	0.44
Social (2)	1.0	1.1	0.9	1.3	1.7	0.12
Emotional (3)	1.4	1.8	1.4	1.6	1.4	0.29
Cognitive (2)	1.3	1.1	1.4	1.3	1.2	0.73
Physical (2)	1.5	1.5	1.5	1.7	1.4	0.58
<b>Symposium Attendance</b>						
				<b>Yes</b>	<b>No</b>	<b>Prob T&gt;t</b>
All milestones questions (9)				5.2	5.6	0.31
Social (2)				1.2	1.2	0.91
Emotional (3)				1.4	1.6	0.14
Cognitive (2)				1.2	1.2	0.72
Physical (2)				1.6	1.5	0.77

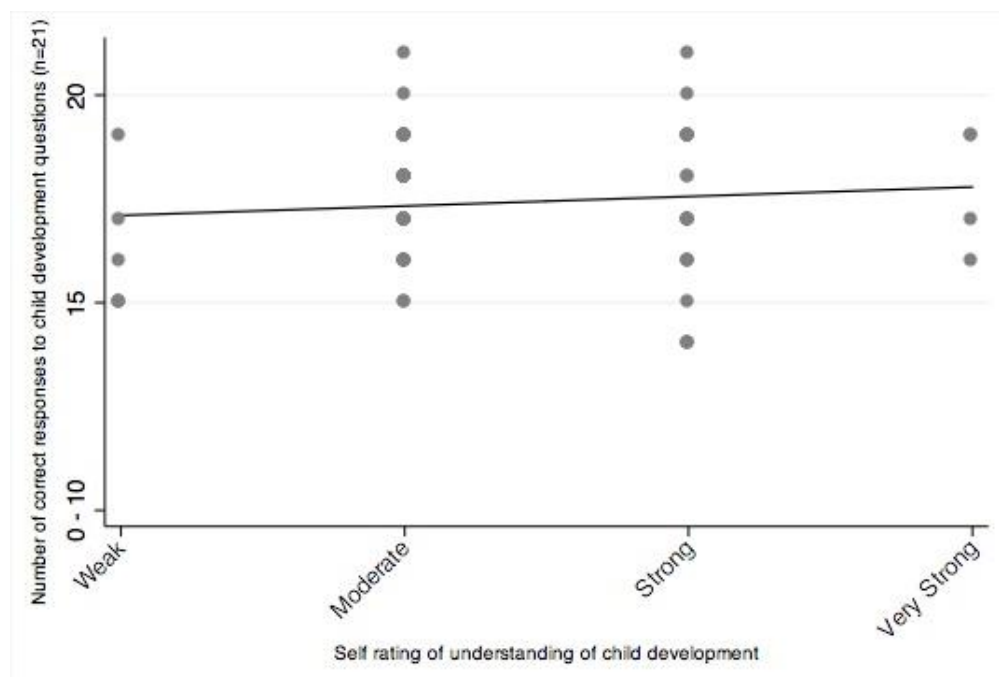
*Note.* Lawyer (adults) = lawyer primarily representing adults; Lawyer (child) = lawyer primarily representing children.

**Table 3.10 Group comparisons on the number of correct responses to maltreatment impact questions between Professional Group and Symposium Attendance variables.**

<b>Professional Group</b>						
<b>Impact of maltreatment questions (no. questions)</b>	<b>Judges/ Justices</b>	<b>Lawyer (adult)</b>	<b>Lawyer (child)</b>	<b>Mediator</b>	<b>Other</b>	<b>Prob&gt;F</b>
General questions on the impact of maltreatment (19)	16.8	17.3	17.5	17.7	18.3	0.33
Defining maltreatment (2)	1.8	2.0	1.9	1.9	1.9	0.35
Occurrence of maltreatment (4)	3.1	3.4	3.6	3.3	3.6	0.66
Impact of maltreatment (6)	5.5	5.2	5.5	5.4	5.9	0.35
Outcomes associated with maltreatment (7)	6.4	6.6	6.6	6.9	7.0	0.26
<b>Symposium Attendance</b>						
				<b>Yes</b>	<b>No</b>	<b>Prob T&gt;t</b>
General questions on the impact of maltreatment (19)				17.6	17.1	0.37
Defining maltreatment (2)				1.9	1.9	0.89
Occurrence of maltreatment (4)				3.3	3.4	0.44
Impact of maltreatment (6)				5.2	5.5	0.24
Outcomes associated with maltreatment (7)				6.1	6.7	0.97

*Note.* Lawyer (adults) = lawyer primarily representing adults; Lawyer (child) = lawyer primarily representing children.

Participants' self-ratings of their knowledge of child development were primarily "Average" (55%) and "Strong" (32%). I also calculated the association between self-rated knowledge of child development and number of correct answers on the child development questions. A weak, positive correlation ( $\text{corr} = 0.10$ ) was present between the two variables as illustrated in Figure 3.2. The figure illustrates the significant variation of correct responses according to self-rating. For those who rated their knowledge in the area as "Strong" or "Moderate," the proportion of correct responses ranged from 67% to 100%.



**Figure 3.2 Correlation between self-rated understanding of child development and the number of correct responses to child development questions.**

### *Attitudes towards practices involving children*

Participants were asked to rate their agreement on statements about attitudes towards practices involving infants and children. Average ratings are displayed in Table 3.11. The majority of participants agreed that both judges and lawyers should have knowledge of child

development to inform their practices with children and families. The majority also agreed that evidence related to child development should be presented to court. Open responses related to these questions provided additional context regarding the role various professionals have in getting evidence before the court. Three participants clarified that the role of judges, lawyers and mediators was not to act as an assessor for the child, but rather to rely on experts for this role.

**Table 3.11 Summary of responses to questions about attitudes towards practices involving children.**

<b>Attitudes towards practices involving infants and children</b>	<b>Mean (SD)</b>
Role of knowledge in practice	
Judges should have knowledge of child development	4.8 (0.58)
Lawyers should have knowledge of child development	4.7 (0.56)
Evidence of child development should be presented in court	4.5 (0.76)
Interventions	
Intervention in infancy and early childhood is as effective in preventing poor outcomes as intervention at a later age.	3.1 (1.47)
High quality early child education programs can benefit both children and caregivers.	4.7 (0.47)
An infant can be separated from their primary caregiver for a few weeks without having a negative impact on their relationship.	2.3 (1.16)
Removing a child from a neglectful environment will result in improvements in their health and well-being.	3.7 (0.89)
A child in the presence of their primary caregiver can't be neglected.	1.4 (0.65)
Impact of Court Proceedings	
High conflict proceedings	4.8 (0.42)
Extended court proceedings	4.5 (0.77)
<b>Ratings of importance</b>	
Factors in consideration of best interests	
Characteristics of child	3.6 (0.69)
Characteristics of parent	3.6 (0.66)
Characteristics of relationship between child and parent	3.7 (0.59)
Contextual factors	3.3 (0.65)
Understanding of child development in consideration of best interests.	3.5 (0.68)
Understanding of influence of maltreatment.	3.6 (0.63)

*Note.* Ratings of agreement were rated on a 5 point likert scale from Strongly Disagree (1) to Strongly Agree (5).  
Ratings of importance were on a 4 point likert scale from Not at all important (1) to Very important (4).

Responses were varied on questions related to interventions, particularly in relation to the effectiveness of early intervention as compared to late intervention. Participants' open responses in this section of the survey revealed that some participants viewed the wording of the question as unclear, but agreed that early intervention was more effective than later intervention. This may



account for the variation of responses to that question. Some variation in response to the question of removing a child from a neglectful environment was also explained by the participants' qualitative responses; comments noted that it would depend on the particular case and on where the child was being moved.

Agreement on the impact of separation between infants and caregivers varied between participants, with 63% disagreeing that separation of infants and caregivers for a few weeks would not negatively impact their relationship. There were no open responses specific to this question to clarify this response.

In ratings of the importance of four types of factors in consideration of the best interests of the child, the characteristics of relationships between infants and caregivers were rated the most important overall, while contextual factors were rated as slightly less important in comparison. Also rated as important by over 90% of participants was their understanding of both child development and the impact of maltreatment in weighing factors related to the best interests of the child.

Comparisons between professional groups on their agreement with attitudes statements and ratings of importance showed no significant differences between groups apart from the question on the importance of knowledge of child development in the weighting of the factors (Table 3.12). When the Bonferroni correction for multiple comparisons was applied, there was no significant difference in the pairwise comparisons.

Correlations between corresponding attitudes and knowledge variables were calculated. Responses to the question on attitudes towards separation of infants and caregivers were not correlated with the number of correct answers to the attachment questions ( $\text{corr} = -0.05$ ). Similarly, there was no significant correlation between attitudes towards the effectiveness of

early intervention and the number of correct answers on the child development questions (corr = -0.10).

**Table 3.12 Comparisons of ratings of importance and agreement with attitudes towards practices statements between Professional Groups variable.**

<b>Statements of agreement of attitudes towards practices involving children</b>	<b>Judges/ Justices</b>	<b>Lawyer (adults)</b>	<b>Lawyer (child)</b>	<b>Mediator</b>	<b>Other</b>	<b>Prob&gt; F</b>
Judges should have knowledge of child development.	4.6	4.6	4.6	4.7	4.9	0.71
Lawyers should have knowledge of child development.	4.6	4.5	4.6	4.7	5.0	0.39
Evidence of child development should be presented in court.	4.5	4.2	4.3	4.7	4.3	0.33
Effectiveness of early intervention.	2.8	3.1	3.4	3.1	2.7	0.88
Benefit of high quality care and education programs.	4.6	4.7	4.6	4.8	4.7	0.73
Negative impact of separation of infants and caregivers.	2.3	2.3	1.8	2.4	2.3	0.77
Removing a child from neglectful environment will improve well-being.	4.0	3.5	3.6	3.9	3.1	0.18
A child in presence of caregiver can't be neglected.	1.1	1.4	1.7	1.2	1.4	0.30
Negative impact of court processes (high conflict and long duration).	4.8	4.6	4.7	4.7	4.4	0.71
<b>Statements of importance of factors related to a child's best interests</b>						
Child characteristics	3.3	3.5	3.4	3.9	3.7	0.08
Parent characteristics	3.6	3.5	3.8	3.8	3.1	0.11
Parent-child relationships	3.4	3.6	3.6	3.9	3.9	0.21
Contextual factors	3.1	3.1	3.4	3.7	3.3	0.08
Importance of child development knowledge in weighing above factors.	<b>3.8</b>	<b>3.2</b>	3.4	<b>3.8</b>	<b>3.7</b>	<b>0.03</b>
Importance of knowledge on the impact of maltreatment on weighing above factors.	3.8	3.4	3.4	3.8	3.9	0.08

*Note.* Ratings of agreement were rated on a 5-point Likert scale from Strong Disagree (1) to Strongly Agree (5). Ratings of importance are on a 4 point likert scale from Not at all important (1) to Very important (4). Lawyer (adults) = lawyer primarily representing adults; Lawyer (child) = lawyer primarily representing children. Comparisons significant at the  $P < 0.05$  are shown in boldface. These comparisons are not significant after correction for multiple comparisons within the dataset.

A two-part open-ended question asked participants to explain how their own understanding of child development and the impact of maltreatment on infants and children influenced their practices involving children. Forty participants responded. The responses were coded and grouped into themes and are presented here by professional group. Responses to both parts of the question (child development and the impact of maltreatment) overlapped significantly, with some participants copying the same response for both parts of the question, so the responses for both questions were analyzed together.

Judge participants described several areas in which their knowledge of child development and the impact of maltreatment influenced their practices including the following: determining parenting arrangements; imposing supervision requirements; and ordering parenting assessments, counseling, and legal representation for children. One participant described information about a child's developmental status as fundamental to determine care arrangements, but at the same time noted that the information was not always presented to court. In that instance, they may rely on their own knowledge.

Lawyer participants suggested that this knowledge informs interactions with adult clients. For example, one participant described that the knowledge contributed to understanding of ways that past history of maltreatment influenced current behaviour and functioning. Lawyer participants also used their knowledge to educate clients about child development and ways that their actions may affect their children. In the case of high conflict separation, lawyers may discuss the detrimental impacts of exposure to conflict on a child's development. Knowledge in this area also informed recommendations for clients regarding parenting arrangements, referrals to experts for assessments, and interventions. For example, with regards to parenting arrangements, several participants described recommending short frequent visitation and no

overnight stays for separating parties with infants presumably because of the importance of stable routines in promoting attachment and security.

In representing children, lawyer participants described that knowledge was influential in how they interacted and communicated with their child clients, and in interpreting a child's behaviour and actions. Lawyer participants could draw from their knowledge to understand a child's needs and identify appropriate assessments or interventions. Participants also described ways that knowledge informed their assessment of whether or not a child was capable of providing direct instructions in a traditional advocate situation. Finally, knowledge assists lawyers in identifying "red flags" or signs that a child may be developmentally delayed and the possible causes of this delay.

Mediator respondents most frequently cited knowledge of child development as essential for communicating with parent clients, such as helping them understand the impact of separation, conflict and care arrangements on the particular child. The information also helped participants recognize signs signaling the occurrence of maltreatment, obtain assistance for children where maltreatment has occurred, and determine if a caregiver was willing and able to care for the child. One mediator participant suggested that the information could inform development of policy and programs for families and children.

### ***Knowledge to action***

Most of the participants (80%) reported seeking out knowledge on child development and/or the impact of maltreatment. A variety of sources were commonly used by participants to inform their practice, the most frequently rated by participants were colleagues, professional association resources, print sources and web searches (Table 3.13). Least common were web-based sources including interactive websites and webinars. Eleven participants shared other

sources of knowledge; the most common responses were on their own experiences as a parent and interactions with friends, family and colleagues knowledgeable on the subjects.

**Table 3.13 Frequency of use of sources of knowledge (no. responses)**

Sources of knowledge	Always	Often	Sometimes	Rarely	Never
Colleagues	10	32	28	4	1
Professional association resources (websites, publications, newsletters)	5	32	26	10	1
Books and other print sources	5	23	36	9	2
Web searches	7	27	18	14	8
Evidence presented to court (e.g., expert witnesses)	11	14	29	11	9
Workshops (in person)	3	23	32	8	9
Conferences	4	15	40	7	9
Media sources (TV, magazines, newspapers, news websites)	4	14	33	19	5
Case law	10	12	23	19	10
Research published in scientific journals	4	20	20	19	12
Interaction with researchers	4	7	24	14	26
Webinars (online seminars)	0	7	29	19	20
Interactive learning modules (online)	0	4	20	25	24

The most common responses to the best ways to receive information on child development and the impact of maltreatment were the more traditional, in-person delivery modes of conferences and workshops, followed by print resources and emails/e-newsletters. Least common were interactive websites and webinars. In viewing the frequency of use of sources between professional groups, some notable differences emerged (Table 3.14). Judges were least likely to use web searches and research sources. As would be predicted, mediators were less likely to use case law and evidence as sources of knowledge, as they are much less likely to be involved in cases that go to court.

**Table 3.14 Mean and standard deviation of frequency of use of sources of knowledge by professional group.**

<b>Sources of knowledge</b>	<b>Judges/ Justices</b>	<b>Lawyer (child)</b>	<b>Lawyer (adult)</b>	<b>Mediator</b>	<b>Other</b>
Colleagues	3.5 (0.53)	3.4 (0.92)	3.7 (0.87)	3.4 (0.86)	3.9 (0.69)
Professional association resources (websites, publications, newsletters)	3.7 (0.74)	2.9 (0.94)	3.5 (0.97)	3.4 (0.71)	3.4 (0.53)
Books and other print sources	2.9 (1.0)	3.2 (1.3)	3.2 (0.76)	3.5 (0.71)	3.4 (0.79)
Web searches	1.6 (0.74)	3.1 (1.4)	3.1 (1.1)	3.5 (0.80)	4.1 (0.69)
Evidence presented to court (e.g., expert witnesses)	3.6 (0.92)	3.7 (1.1)	3.5 (0.94)	2.1(1.0)	2.2 (0.98)
Workshops (in person)	2.8 (1.1)	3.4 (1.1)	3.0 (1.1)	3.1 (0.94)	2.9 (1.1)
Conferences	3.1 (0.83)	2.9 (1.2)	2.9 (1.1)	3.1 (0.68)	2.6 (0.79)
Media sources (TV, magazines, newspapers, news websites)	2.1 (0.83)	2.9 (1.1)	2.9 (1.0)	3.2 (0.86)	3.3 (0.49)
Case law	3.6 (0.92)	3.1 (1.4)	3.3 (1.1)	1.8 (0.75)	2.6 (0.79)
Research published in scientific journals	2.1 (1.2)	2.6 (1.2)	2.8 (1.2)	2.9 (0.93)	3.6 (1.1)
Interaction with researchers	1.8 (1.0)	1.8 (0.99)	2.7 (1.3)	2.4 (1.1)	1.7 (0.95)
Webinars (online seminars)	1.1 (0.35)	2.4 (0.81)	2.2 (1.0)	2.8 (0.73)	2.6 (0.96)
Interactive learning modules (online)	1.1 (0.35)	2.2 (0.92)	1.8 (.76)	2.7 (0.83)	2.0 (1.0)

*Note.* Rating of frequency of use ranged from Always = 5 to Never = 1.

Lawyer (adults) = lawyer primarily representing adults; Lawyer (child) = lawyer primarily representing children.

In selecting topics that they would like more information about, the most frequently selected topics by participants were family functioning, child development, and brain development (Table 3.15). The most frequently rated responses varied by professional group. Judge respondents selected most of the topics provided. Lawyers representing adults and Mediators selected “Family Functioning” and “Mental Health and Addictions in the Family context” the most frequently. Lawyers for children most frequently selected “Outcomes associated with the experience of maltreatment” and “Brain development”.

**Table 3.15 Topics respondents selected as wanting more information on to inform their practices with families and children by professional group (number of selections).**

<b>Topic</b>	<b>Judges/ Justices</b>	<b>Lawyers (adult)</b>	<b>Lawyers (child)</b>	<b>Mediators</b>	<b>Other</b>
Family functioning	6	25	7	12	6
Child development	5	22	8	11	5
Brain development	7	21	8	10	4
Mental health and addictions in the family context	6	23	4	13	4
Cultural influences on child development	5	21	8	10	5
Intervention programs for families where maltreatment has occurred	6	23	4	12	3
Outcomes associated with the experience of maltreatment	6	22	8	7	5
Intervention programs for children who have experienced maltreatment	7	22	5	10	3
Programs for prevention of maltreatment	5	21	6	11	3
Developmental/neurological disorders of infancy and childhood	8	17	5	12	2
Community influences on the child and family	4	18	6	7	3
Non-adversarial approaches (e.g., mediation, collaborative divorce)	4	15	5	5	5
Other	0	2	1	2	0
<b>Total respondents</b>	<b>8</b>	<b>30</b>	<b>11</b>	<b>18</b>	<b>7</b>

*Note.* Lawyer (adults) = lawyer primarily representing adults; Lawyer (child) = lawyer primarily representing children.

Finally, in selecting the best ways to receive information to inform practices, participants most often selected traditional professional development approaches, conferences and workshops (Figure 3.16). Online sources were not selected as often as the best ways to receive information.

Qualitative responses in this section highlighted some barriers for accessing knowledge translation resources, including cost to participate in conferences, lack of workplace professional development opportunities, and lack of professional opportunities outside of urban centers. One participant described a barrier as not being able to personally review and summarize the academic literature on a subject, presumably owing to limitations in time, and at the same time

being hesitant to rely on summaries of the literature provided by professional associations or others.

**Table 3.16 Selection of the best ways to receive information on child development and the impact of maltreatment (number of selections).**

<b>Best ways to receive information</b>	<b>n</b>
Workshops in practice setting	49
Conferences	47
Print materials (e.g., desk references, Bench Books)	40
Regular emails or electronic newsletters	39
Books	33
Web-based resources (e.g., learning portals)	32
Articles in academic journals	26
Interactive learning modules (online)	24
Online discussion forums	13

The final open-ended response opportunity in the survey invited general comments from participants about any aspect of the survey. Several participants left thoughtful comments that spanned the survey topics. One participant described how their personal observations of the interaction between biology and experiences did not necessarily align with current evidence on the influence of early experiences, but that they answered the survey questions in a “politically correct way” nonetheless. This comment can be considered when assessing how other participants may have responded to survey questions. Another participant described an interest in the topics of early child development and the impact of maltreatment, but did not feel that it was necessary for representation of a child’s wishes.

A survey respondent observed that lawyers and judges were not knowledgeable in the areas of child development and the impact of maltreatment and stated that the content from the *With the Child Symposium* should be presented regularly at Family Law seminars. The same participant also expressed a need for child development information to reach parents before they



encounter the justice system. Throughout the open responses were several comments expressing interest in the study and viewing the results.

### **Joint Analysis of Phase 1 and Phase 2 Results**

A joint analysis of the results from both phases of the study identified areas of convergence and divergence between the two methods of data collection. Where the results aligned between the two methods is support for the validity of the results. Areas where the results differed between the two approaches may be attributed to the differences between the purposeful and broader samples and in the depth of the focus group collection of data collection compared to the more structured survey approach.

Both the survey and the focus group results indicated that knowledge on topics of child development and the impact of maltreatment varied among the population of judicial, legal and mediator professionals working with children. While there was variation how participants responded to the knowledge questions on the survey, there were no significant differences in the number of correct responses between professional groups. Those who did not attend the symposium answered fewer correct responses on average than did those respondents who were in attendance at the *With the Child in Mind* symposium. This is in alignment with the theme of specialist and generalist populations, specialist populations often undertake additional training which may contribute to greater understanding. The focus group participants recruited through purposeful sampling would be considered “specialists.” Provincial Court Judges in the Family and Youth Subsection have the greatest exposure to cases involving infants and children in child protection and family law matters, and therefore are also more often exposed to scientific evidence presented by expert witnesses, which was cited by participants as a key source of knowledge. There were too few Provincial Court Judge survey respondents to draw conclusions

about the differences in correct responses to knowledge questions as an indicator of specialist knowledge.

A key theme arising from the focus group was on the misunderstanding and misuse of attachment concepts among professionals in the target population. Arising from this view was a suggestion to include a question in the survey about the difference between the terms “attachment” and “bond” in order to explore if survey responses were consistent with the focus group participants’ experiences of the terms being used interchangeably. This question was included and 58% of respondents incorrectly agreed that attachment and bond were the same concept.

The majority of participants underestimated the timeline of when most infants and children reached developmental milestones, often choosing younger milestones for development. Focus group participants noted that understanding developmental milestones was relevant to recognition of the occurrence of neglect, as developmental delay is an outcome associated with experience of neglect. If professionals’ understanding of developmental timelines was slightly younger, as these findings suggest, then their perception of normally developing children could be skewed to assume that children were behind in development. This may result in over-recognition of neglect by justice professionals if they were relying on their own knowledge of developmental milestones to signal a “red flag.” Participants described that a “red flag” signaled them to consult a developmental expert for further assessment.

Most respondents selected the correct responses to the impact of maltreatment questions, but were least correct and certain on questions related to the occurrence of maltreatment. Focus group participants noted that neglect was less often recognized in comparison to other forms of maltreatment. Responses to survey questions related to this theme corresponded with this

finding, as 85% of respondents agreed that neglected infants were difficult to identify in legal proceedings, while only 70% correctly agreed that infants were more likely to experience neglect than other forms of maltreatment.

Another theme related to knowledge of child development was the potential for discrepancy between self-reported and true knowledge of child development, which could act as a barrier for seeking out knowledge in this area. This finding was supported in the survey results by the correlation between correct responses on the general child development questions and participants' self-rating of their own knowledge, which was weak and slightly positive. For those who rated their knowledge as "Strong", the number of correct child development responses varied substantially, ranging from 67% to 100% (Figure 3.2).

Focus group participants suggested the inclusion of questions on the importance of professional knowledge and evidence on child development in practices involving children. The majority of survey respondents agreed that lawyers and judges should have knowledge of child development, and also agreed that evidence on child development should be presented in support of decisions concerning children. Both focus group participants and survey respondents clarified that the role of counsel was to advocate for a client, and confirmed the value of assessors and experts to advise on the development and well-being of a child.

The responses to the open-ended survey questions on the application of child development knowledge to practices involving children aligned closely with the themes arising from the focus groups. For judges, both the focus group and survey participants cited the importance of knowledge of child development and the impact of maltreatment to inquiry and judgments in the best interests of the child. For lawyers, both the focus group and survey participants suggested that knowledge influenced interactions with child clients, enabled them to

recognize “red flags” that prompted them to seek out expert assessments, and was used in determining their role in representing the child. In representing adult clients, respondents suggested that knowledge influenced the advice given to clients, for example, recommending parenting time arrangements that respect a child’s developmental state, or recommending non-adversarial approaches to dispute resolution where appropriate.

Mediator professionals were not represented in the focus group sample, but mediator professionals who responded to the survey shared similar views as lawyers on the role of knowledge in advising clients on parenting time arrangements and making them aware of the impact their actions may have on their child.

Survey responses to questions on child development were not significantly correlated with corresponding attitudes questions. This could reflect that corresponding knowledge and attitudes are not associated, or could be resulting from the phrasing of the questions and the participants’ difficulties in interpreting the attitudes questions. Attitudes towards practices involving children are complex and were difficult to capture in closed-ended survey questions. Open-ended responses to the survey clarified responses to the close-ended questions, noted the complexity, and supplemented additional information. For example, one survey question asked participants to rate their level of agreement that high conflict proceedings can be harmful for children. Focus group and survey participants elaborated on this question through noting that while traditional adversarial processes may be detrimental for children due to the potential length of proceedings and focus on “winning” rather than finding an arrangement in the child’s best interests, non-adversarial processes such as judicial dispute resolutions were not appropriate for every case.

Regarding sources of information, the survey responses mostly aligned with the focus group themes, participants accessed a variety of sources of knowledge to inform their practices involving children. The theme around later career professionals using more traditional sources than early career professionals was present in the survey results, as judges and justices were less likely to use online formats than other professional groups. Conferences were not rated as frequently used by survey respondents but were selected as one of the best ways to receive information to inform practices. Survey respondents identified barriers to accessing conferences and workshops that were not present in the focus group discussion, including travel, cost and availability in the workplace. The survey sample included respondents outside of urban centers. They shared that in-person conferences and workshops were difficult to access and therefore would be open to online resources.

To sum up, several areas of correspondence were identified between the survey and focus group findings. Variation in knowledge among the professional population was found, as were common gaps in understanding such as the difference between attachment and bonding and the lack of recognition of neglect in infants. Respondents from both methods agreed on the importance of having this knowledge as justice professionals and bringing related evidence on child development to the attention of the court. In both the survey and focus groups, participants described reliance on informal sources of knowledge from colleagues and experts, as well as traditional conferences and workshops. Taken together, the results from the focus group and survey phases of the study provide greater depth towards understanding trends in knowledge and attitudes among justice professionals in relation practices to involving children and families.

## Chapter 4: Discussion

The aim of this study was to explore the understanding of child development and the impact of maltreatment among child protection and family law professionals, how this knowledge could influence practices involving children and families, and preferences and current practices for accessing new knowledge. The key conclusions resulting from the research are (1) knowledge of child development and the impact of maltreatment varies among the justice population, with specialist groups predicted to have greater knowledge, and common areas of strength and weakness in understanding of concepts identified; (2) knowledge of child development concepts was considered beneficial to justice professional practices involving children and families, with some limitations; and (3) efforts to improve the acquisition and use of knowledge of child development should be supported through both informal and formal knowledge translation approaches.

### **Trends in knowledge of child development and the impact of maltreatment on children varies among the justice professional population working with children and their families.**

While a call exists for justice professionals to have an understanding of child development and the impact of maltreatment on children's well-being in the literature, there has been no research to date to quantify and describe it. This study provides some evidence on the knowledge base of justice professional on these topics, including the variation in knowledge among the justice profession.

There were no significant differences between professional group responses to the knowledge questions on the survey, however, a difference in knowledge between specialist and generalist practitioners was described by focus group participants, with specialists presumed to have enhanced knowledge resulting from greater exposure to cases involving families and

children, and to research evidence on child development and related concepts. This specialist knowledge was viewed as a benefit towards practices involving children.

Besides the trend of enhanced specialist knowledge, common areas of understanding and gaps in knowledge were identified among participants. Participants were most knowledgeable about topics on experience based brain development and the deleterious impact of maltreatment on infants and children. These concepts have gained increased public recognition through recent knowledge translation efforts, most prominently through the Harvard Centre on the Developing Child together with various partner organizations. Simplifying models to describe child development and the influence of adverse experiences were developed and are now widely disseminated through journal articles, media pieces, and presentations for specialist and public audiences (e.g., Shonkoff & Garner, 2012). The use of the language of simplifying models among participants suggests that the models are successful at promoting communication of these concepts. Efforts to ensure the language presented in these models is well understood among bench and bar would improve shared understanding of concepts to aid in communication of evidence and arguments.

A common gap in understanding surrounds the application of attachment concepts and recognition of the occurrence of maltreatment. This can be remedied in part by the practice of always defining concepts when using them. Judges participating in the focus group described that they request those who use attachment concepts in presenting evidence to court to define the concept to inform their assessment of the evidence and to promote shared understanding both in the present and for future reference in case law. Variation in understanding of attachment concepts among professionals may in part be attributed to a lack of consensus in the literature on key areas such as formation of attachments, multiple attachment relationships, and separation of

infants and caregivers. This lack of consensus is illustrated in Kelly and Lamb's (2000) article on applying child development research to custody and access decisions that was responded to by Solomon and Biringen (2001) and more recently in articles contained in a special journal issue edited by McIntosh (2011) on attachment theory and application to family contexts, all of which prompted debate and discussion in the literature (Gordon, 2010).

Another area where understanding could be promoted is on cultural influences on child development and the importance of culture as a matter to consider towards a child's best interests. According to focus group participants, culture was often presented to court as an overriding determinant of a child's best interest as opposed to one factor among many to consider. Shared understanding of the influence of culture on a child's developmental well-being among justice professionals may support appropriate cultural considerations in interventions and care arrangements.

### **Knowledge of child development concepts supports justice professional practices involving children and families**

The majority of participants agreed that knowledge of child development and the impact of maltreatment was important to their practice; however, lawyers more often cited that the knowledge was less important to their practice as they relied on expert assessors to present evidence on a child's development to court. Other lawyer participants noted that while they rely on expert assessors, their own knowledge of child development could signal when additional assessment was required, and can be particularly important in ensuring the necessary evidence is brought forth in the absence of assessors.

Similarly, the majority of judges agreed that this knowledge was important to their practice, most significantly by improving the quality of the decisions they make concerning



interventions and care arrangements for children in family law and child protection matters. The quality of these decisions has potential implications for future cases. Written judgments are public documents, which describe the evidence put forth in the case, the matters to be considered, and the explanation for the judges' decision, referencing the relevant legislation, case law and evidence. Case law is law based on previous judgments, therefore judgments that are evidence informed and include accurate evidence on child development and the impact of maltreatment on children not only benefit the present case, but also future cases that will reference the relevant case law.

A barrier to the application of knowledge is the restrictions of the rule of judicial notice; child development concepts may not meet the criteria of judicial notice, and therefore may not be applied to judgments unless they are present in the evidence. Despite this limitation, judges maintain that this knowledge benefits their practices in important ways.

On the other side of the bench, lawyer participants expressed frustration in getting appropriate information related to child development and the impact of maltreatment to be recognized as evidence by judges. The frustration stems from the barriers to accessing experts to submit evidence, and the time and effort required to bring forth current research evidence, which may require considerable resources in resource-limited cases. Bridging the gap between judges' needs for accurate evidence based on professional observation and current research and lawyers' difficulties in presenting the information as evidence is the role of the expert witness.

While the value of expert witnesses was undisputed among participants, so was the limitation of the inaccessibility of expert witnesses in a majority of cases. Expert witnesses are costly and few in numbers, and therefore they are often not available for many family law and child protection matters. Because expert witnesses are valued sources of valid and appropriate

information on a child's development and well-being, efforts to increase the accessibility of expert witnesses, particularly in Legal Aid cases that are low resourced, may be beneficial to the process of making decisions in the best interests of a child.

Lawyer participants emphasized their central role as taking instructions and advocating on their client's behalf as distinct from the role of judges in determining the best interests of the child. Knowledge of child development supported them in their advocate role. Both lawyers and mediator participants shared that their knowledge of child development and the impact of maltreatment was used in an educator role to inform parent clients of the potential impacts their actions had on their child, and in suggestion of arrangements that were developmentally appropriate and in line with the child's best interests. While representing children, in the absence of guidelines for the age range in which children are able to communicate their views, understanding of child development processes can inform lawyer's assessments of whether or not a child is developmentally capable to communicate his or her views. Participants in both groups suggested that their knowledge of developmental milestones was used to interpret whether a child was in need of further assessment. Responses to the child development milestones questions on the survey, for the most part, underestimated the normal timeline of development, which would suggest that lawyers would over-recognize a need for further assessment. This over-recognition is far less of a detriment to children than under-recognition if it leads to further assessment. However, if lawyers are basing evidence on their own observations that could be problematic as they are not qualified as assessors.

Judge participants in the focus group expressed concern with lawyers representing young children in the traditional advocate role, as in their experience most children, particularly young children's views are to stay with (both of) their parents, even if they have experienced significant

abuse or neglect. Despite this, the instructional advocate role ensures that the child's views are made known, which is one of the matters to be considered in determining a child's best interests. In contrast with the views of the judges, I believe the instructional advocacy role is appropriate for most children. Judges in their position of assessing all of the available evidence will take the child's views in the context of the child's experience and developmental state to inform the direction of their judgments. For example, a judge may allow older children to remain in more "dangerous" circumstances than younger children who express the same wish because the child's views were considered in the context of their developmental state.

### **Knowledge translation approaches**

Justice professionals access a variety of traditional and informal sources of knowledge. Conferences and workshops were described as highly valuable sources of information, but are becoming less accessible (e.g., time consuming, costly), and fewer opportunities are offered within the workplace, according to survey respondents. Younger generations of professionals more frequently use and may prefer online over in-person modes of knowledge translation. These trends point towards an increased reliance on more accessible and informal sources of knowledge accessed day-to-day, such as online sources and consultation with colleagues. Supporting this informal diffusion of knowledge offers promise for cost-effective knowledge translation, though it runs the risk of inaccurate information being shared. A balance between intensive learning through conferences and workshops and diffuse, more regular learning, such as in preparation for cases may meet the needs of professionals to gain accurate and current information on child development and related topics. A call for joint learning initiatives between professional groups (e.g., judges and lawyers) in addition to initiatives more specific to professions was put forth to promote a shared knowledge base across justice professionals.

## **Strengths and limitations**

Several aspects of the present study are unique and provide preliminary answers to questions present in the literature. A key strength is the use of mixed methods to compare in-depth information collected from an informed purposeful sample with more surficial data collected from a broader population. The pre-testing of the survey with the population of interest ensured the questions were relevant and appropriate.

A limitation of the survey itself was the complex concepts addressed by agreement or disagreement with a brief statement. General statements based on population trends are often not appropriate in the justice context. Justice professionals are less concerned with trends in populations as they are with the relevant information about a particular child. Open responses to in the survey suggested this was an issue. The inclusion of free text response options allowed participants to add additional comments concerning their answers and gleaned valuable information about how participants answered the survey questions. Joint analysis of the focus group themes and survey responses also provided more context into how participants responded to survey questions.

A limitation of the study is the low response rate and the self-selection of participants in responding to the survey. In an effort to increase the response rate, I connected with workplace contacts to learn some of the reasons for the low response rate. The common response was that the population was very busy and had limited time to respond to a 20 minute survey. The Provincial Court Judges were also tasked with responding to another lengthy survey over the same time period. The sample bias is likely skewed towards respondents with an interest in child development and related topics responding at a greater rate. The population that did respond to

the survey were likely more interested in the topics covered by the survey and possibly more knowledgeable on the survey topics than those that did not respond. One approach to collect feedback from the population in the future could be to conduct surveys at a conference or through a professional association. Despite the low response rate, one indication that the sample may be somewhat representative to the adult population in Alberta was the similarity in responses to child development milestones questions in comparison to a randomly sampled general adult population responding to the *Alberta Benchmark Survey: What Adults Know About Child Development* (Rihky & Tough, 2008).

## **Recommendations**

The following recommendations call for further inquiry to extend and validate the findings of the current study and to mobilize knowledge on child development and related topics in an effort to improve the capability of the justice system to support children and families and respect the unique needs of our youngest citizens.

**Recommendation 1: Efforts should be undertaken to mobilize knowledge on child development and the impact of maltreatment for justice professionals working within the family law and child protection contexts.**

The variation in knowledge and importance of knowledge of child development and the impact of maltreatment to informing practices involving children that were identified in this study lead to the recommendation for efforts to mobilize this knowledge within justice professional populations. This can occur in formal learning settings, professional settings, through collegial interactions, and through ongoing professional development opportunities. Results of the present study on areas of strength and common areas of misunderstanding, as well

as preferences for content and delivery to apply to practices can inform the content and design of future knowledge mobilization activities for justice professional audiences.

For ongoing professional development, expansion of web-based formats is suggested as younger generations rely more heavily on online learning. This may be more cost-effective and accessible than in person modes, particularly for those practicing outside of urban centres. Professional development initiatives that span professional groups are also recommended to promote a shared knowledge base in this area.

### **Recommendation 2: Support specialized training and speciality courts.**

The suggestion that professionals should have specialized knowledge to inform their work with children and families also lends support to specialization practices in Alberta. The current structure in Alberta is somewhat specialized, with a Family and Youth Division of the Provincial Court, and roster lawyers who may undergo additional training such as the Legal Representation for Children and Youth roster. In some jurisdictions, child and youth matters are addressed primarily by specialist courts or by professionals who have undergone speciality training; an example is the Safe Babies Court Teams initiative in the US (Zero to Three, (n.d.)). Specialty courts address many of the suggestions brought forth by participants in this study, including specialization of professionals; a problem solving focus in contrast to traditional adversarial approaches; and a priority to make timely decisions in a child's best interests. Additional credentials required for specialization could be accessed through concentrated programs in law schools. Recommendations for content on child development and the impact of maltreatment on children to be present in law school curricula and for specialist education are also contained in the recent Family Law Education Reform Project (O'Connell & DiFonzo, 2006).

### **Recommendation 3: Improve the accessibility of expert witnesses.**

Participants were unanimous in their rating of the value of expert witness involvement in matters that concern the well-being of children. Expert witnesses acted as valuable sources of information to justice professionals and supported the inclusion of child development research in evidence presented to judges. Efforts to expand the accessibility of expert witnesses in child protection and family law matters, particularly in Legal Aid cases where litigants have few resources, would support judges in making best interests decisions informed by relevant evidence. Efforts to get current and quality research into evidence by expert witnesses may also benefit future cases where no expert is present, as evidence presented to court is documented in written judgments that are subsequently reviewed by justice professionals in preparation for cases.

In the absence of the availability of expert witnesses, supporting practitioners with current research evidence in a format that can be applied to practices involving children and families is recommended. This is supported by the discussion between lawyers indicating that in the absence of experts and/or assessors, they rely on their own knowledge. To share current evidence, it should be summarized and presented in a way that can be applied to practices, such as in the form of a practice brief, which could be prepared by professional associations in partnership with researchers. For example, the Zero to Three organization in the US compiles articles, reports and guides linking research to practice approaches targeted to professionals.

### **Recommendation 4: Carry out further research measuring the impacts of knowledge on practices involving children.**

Additional research into this population's knowledge of child development and the impact of maltreatment with a larger sample would provide further evidence to support efforts to

improve understanding of these topics in justice professional populations. Inclusion of other professionals such as frontline protection workers, assessors and clinicians is suggested as these populations all work closely in the justice system in supporting the well-being of children and families.

Survey responses to questions on child development were not significantly correlated with corresponding attitudes questions. This could reflect that corresponding knowledge and attitudes are not associated, or could be resulting from the phrasing of the questions and the participants' difficulties in interpreting the attitudes questions, as was indicated on the open response to the survey. Focus group respondents suggested that knowledge was related to attitudes. Further inquiry on the relationship between knowledge of child development and attitudes towards practices involving children is recommended.

Another area for further research is on measuring the potential impacts of knowledge on practice, and ultimately child outcomes, building on the practice areas identified by participants in the study. Data gathered from written judgments or court records, as well as in depth interviews with justice professionals about their practices could quantify the impact of the knowledge on practices.

## **Conclusion**

Many children involved in the justice system have experienced significant adversity in their earliest years. Justice professionals take actions that are meant to be in a child's best interests; an exceedingly difficult task, involving families that may face many significant social challenges, with few available interventions to offer that are evidence-based, all within the slow pace of court proceedings in opposition to the rapid pace of early child development. While research points to the many ill outcomes in diverse domains of health and well-being associated



with the experience of early adversity, no outcomes are assured, adding to the complexity of determining a child's best interests. This research explored some of the ways that supporting justice professionals to understand current research on child development and the impacts of maltreatment may benefit their practices towards supporting our most vulnerable children. It is my hope that it can be applied along with additional societal efforts to protect children and support families towards a fair and healthy population.

## Bibliography

- Allen, M. (2013). *Profile of child-related family law cases in civil court, 2011/2012*. Statistics Canada. Retrieved from <http://www.statcan.gc.ca/pub/85-002-x/2013001/article/11781-eng.pdf>
- Anda, R. F., Felitti, V. J., Bremner, J. D., Walker, J. D., Whitfield, C., Perry, B. D., et al. (2005). The enduring effects of abuse and related adverse experiences in childhood. *European Archives of Psychiatry and Clinical Neuroscience*, 256, 174–186. doi:10.1007/s00406-005-0624-4
- Bakermans-Kranenburg, M. J., van IJzendoorn, M. H., & Juffer, F. (2003). Less is more: meta-analyses of sensitivity and attachment interventions in early childhood. *Psychological Bulletin*, 129, 195–215.
- Bala, N. (2004). Child Welfare Law in Canada: An introduction. In Bala, N., Zapf, M. K., Williams, R. J., Vogl, R., & Hornick, J. (Eds.), *Canadian Child Welfare Law* (2<sup>nd</sup> ed.). Toronto, ON: Thompson Educational Publishing.
- Bala, N. (2005). Child representation in Alberta: Role and responsibilities of counsel for the child in family proceedings. *Alberta Law Review*, 43, 845.
- Bala, N., Zapf, M. K., Williams, R. J., Vogl, R., & Hornick, J. (2004). *Canadian Child Welfare Law* (2<sup>nd</sup> ed.). Toronto, ON: Thompson Educational Publishing.
- Bellani, M., Nobile, M., Bianchi, V., van Os, J., & Brambilla, P. (2012). G × E interaction and neurodevelopment I. Focus on maltreatment. *Epidemiology and Psychiatric Sciences*, 21, 347–351. doi:10.1017/S2045796012000418
- Belsky, J. (1993). Etiology of child maltreatment: a developmental-ecological analysis. *Psychological Bulletin*, 114, 413–434.

- Benoit, D. (2004). Infant-parent attachment: Definition, types, antecedents, measurement and outcome. *Paediatrics & Child Health*, 9, 541–545.
- Boivin, M., & Hertzman, C. (Eds.) (2012). *Early Childhood Development: adverse experiences and developmental health*. Royal Society of Canada-Canadian Academy of Health Sciences Expert Panel
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3, 77–101.
- Bronfenbrenner, U., & Morris, P. A. (2006). The bioecological model of human development. *Handbook of Child Psychology*.
- Butler, S., Atkinson, L., Magnatta, M., & Hood, E. (1995). Child maltreatment: The collaboration of child welfare, mental health, and judicial systems. *Child Abuse & Neglect*, 19, 355–362. doi:10.1016/S0145-2134(94)00136-7
- Chart of courts in Alberta - Alberta Justice. (n.d.). Chart of courts in Alberta - Alberta Justice. Retrieved August 1, 2013, from [http://justice.alberta.ca/programs\\_services/courts/Pages/chart\\_courts\\_alberta.aspx](http://justice.alberta.ca/programs_services/courts/Pages/chart_courts_alberta.aspx)
- Child, Youth and Family Enhancement Act, R.S.A. 2000, c. C-12. Child, Youth and Family Enhancement Act, R.S.A. 2000, c. C-12.* qp.alberta.ca.
- Cicchetti, D. (2004). An Odyssey of Discovery: Lessons Learned through Three Decades of Research on Child Maltreatment. *American Psychologist*, 59, 731–741. doi:10.1037/0003-066X.59.8.731
- Cicchetti, D., & Carlson, V. (1989). *Child Maltreatment: Theory and Research on the Causes and Consequences of Child Abuse and Neglect*. Cambridge, United Kingdom: Cambridge University Press.

- Cicchetti, D., & Toth, S. L. (2005). Child maltreatment. *Annual Review of Clinical Psychology*, 1, 409–438. doi:10.1146/annurev.clinpsy.1.102803.144029
- Cohen, J., & Youcha, V. (2004). Zero to Three: Critical Issues for the Juvenile and Family Court. *Juvenile and Family Court Journal*, 55, 15–27. doi:10.1111/j.1755-6988.2004.tb00157.x
- Creswell, J. W. (2009). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (3rd ed.). Thousand Oaks, California: SAGE Publications.
- Creswell, J.W. and Plano Clark, V. L. (2011). *Designing and Conducting Mixed Methods Research* (2nd ed.). Thousand Oaks, California: SAGE Publications.
- Danese, A., Moffitt, T. E., Harrington, H., Milne, B. J., Polanczyk, G., Pariante, C. M., et al. (2009). Adverse Childhood Experiences and Adult Risk Factors for Age-Related Disease. *Archives of Pediatrics & Adolescent Medicine*, 163, 1135–1143. doi:10.1001/archpediatrics.2009.214
- de Boer, K., Rothwell, D. W., & Lee, C. (2013). *Child and Family Poverty in Canada: Implications for child welfare research* (No. 123E). Canadian Child Welfare Research Portal. Retrieved from [www.cwrp.ca](http://www.cwrp.ca).
- Drake, B., Jonson-Reid, M., & Sapokaite, L. (2006). Re-reporting of child maltreatment: does participation in other public sector services moderate the likelihood of a second maltreatment report? *Child Abuse & Neglect*, 30, 1201–1226. doi:10.1016/j.chiabu.2006.05.008
- Emery, R. E. (1999). *Marriage, Divorce, and Children's Adjustment* (2nd ed.) Thousand Oaks, California: SAGE Publications.
- Emery, R. E., Sbarra, D., & Grover, T. (2005). Divorce mediation: Research and Reflections. *Child Development Perspectives*, 43, 22–37. doi:10.1111/j.1744-1617.2005.00005.x

- Family Law Act, S.A. 2003, c. F-4.5. Family Law Act, S.A. 2003, c. F-4.5., qp.alberta.ca.*
- Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., et al. (1998). Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults: The Adverse Childhood Experiences (ACE) Study. *American Journal of Preventive Medicine*, 14, 245–258.
- Fereday, J., & Muir-Cochrane, E. (2006). Demonstrating Rigor Using Thematic Analysis: A Hybrid Approach of Inductive and Deductive Coding and Theme Development. *International Journal of Qualitative Methods*, 5, 80–92.
- Ghali, L. (2012) *Experience of Ambassadors Survey*. Sinneave Family Foundation.
- Gilbert, R., Kemp, A., Thoburn, J., Sidebotham, P., Radford, L., Glaser, D., & Macmillan, H. L. (2009a). Recognising and responding to child maltreatment. *Lancet*, 373, 167–180.  
doi:10.1016/S0140-6736(08)61707-9
- Gilbert, R., Widom, C. S., Browne, K., Fergusson, D., Webb, E., & Janson, S. (2009b). Burden and consequences of child maltreatment in high-income countries. *The Lancet*, 373, 68–81.  
doi:10.1016/S0140-6736(08)61706-7
- Goldberg, D., Hatton, M. J., Bala, N., Curtis, C., Kelly, G. (2004). The Lawyer's Role. In Bala, N., Zapf, M. K., Williams, R. J., Vogl, R., & Hornick, J. (Eds.), *Canadian Child Welfare Law* (2<sup>nd</sup> ed.). Toronto, ON: Thompson Educational Publishing.
- Goldsmith, D. F., Oppenheim, D., & Wanlass, J. (2004). Separation and Reunification: Using Attachment Theory and Research to Inform Decisions Affecting the Placements of Children in Foster Care. *Juvenile and Family Court Journal*, 55, 1–13. doi:10.1111/j.1755-6988.2004.tb00156.x
- Goldstein, J., Solnit, A. J., Goldstein, S. (1996) *The Best Interests of the Child: The least*

*detrimental alternative*. New York, NY: The Free Press.

Gordon, M. L. (2010). Infants and Toddlers: An Update of Canadian Case Law on Post-Separation Parenting Arrangements. *Canadian Family Law Quarterly*, 29, 95.

Gough, P. (2006). Alberta's child welfare system. *Centre of Excellence for Children's Well-Being*. Retrieved from <http://www.cecw-cep.ca/sites/default/files/publications/en/Altachildwelfaresystem46E.pdf>

Government of Alberta Office of Statistics and Information, (2011). *Children and Youth Receiving Intervention Services, 2008-2009 to 2010-2011*. Government of Alberta Office of Statistics and Information.

Graham, I. D., Logan, J., Harrison, M. B., Straus, S. E., Tetroe, J., Caswell, W., & Robinson, N. (2006). Lost in knowledge translation: Time for a map? *Child Development Perspectives*, 26, 13–24. doi:10.1002/chp.47

Grant, K. L. (2005). Deserving of Further Attention: A Case Streaming Approach to Child Custody and Access in the Context of Spousal Violence. *Canadian Journal of Family Law*, 22, 57-100.

Greenberg, M. T. (1999). Attachment and Psychopathology in Childhood. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of Attachment: Theory, Research, and Clinical Applications* (1st ed.). New York: Guildford Publication.

Guidelines for Representing Children. (n.d.). Guidelines for Representing Children.

*Lawsociety.Ab.Ca*. Retrieved January 17, 2014, from [http://www.lawsociety.ab.ca/lawyers/practice\\_advisors/practice\\_ethics/practice\\_advice\\_representing\\_children.aspx](http://www.lawsociety.ab.ca/lawyers/practice_advisors/practice_ethics/practice_advice_representing_children.aspx)

Hedeen, T., & Salem, P. (2006). What Should Family Lawyers Know? Results Of A Survey Of

- Practitioners And Students. *Family Court Review*, 44, 601–611.
- Hensley, D. (2006). Role And Responsibilities Of Counsel For The Child In Alberta: A Practitioner's Perspective And a Response To Professor Bala. *Alberta Law Review*, 43, 871–903.
- Hertzman, C. (2010). Social geography of developmental health in the early years. *Healthcare Quarterly*, 14, 32–40.
- Hertzman, C. (2012). Putting the concept of biological embedding in historical perspective. *Proceedings of the National Academy of Sciences of the United States of America*, 109(Supplement\_2), 17160. doi:10.1073/pnas.1202203109
- Hughes, J., & Chau, S. (2012). Children's Best Interests And Intimate Partner Violence In The Canadian Family Law And Child Protection Systems. *Critical Social Policy*. doi:10.1177/0261018311435025
- Johnson, S. B., Riley, A. W., Granger, D. A., & Riis, J. (2013). The science of early life toxic stress for pediatric practice and advocacy. *Pediatrics*, 131, 319–327. doi:10.1542/peds.2012-0469
- Judge, E. F. (2012). Curious Judge: Judicial Notice of Facts, Independent Judicial Research, and the Impact of the Internet. *Annual Review of Civil Litigation*. Carswell.
- Keating, D. P., & Hertzman, C. (Eds.). (1999). *Developmental Health and the Wealth of Nations: Social, Biological, and Educational Dynamics*. New York, NY: The Guilford Press.
- Kelly, J. B. (2004). Family mediation research: Is there empirical support for the field? *Conflict Resolution Quarterly*, 22, 3–35.
- Kelly, J. B., & Emery, R. E. (2003). Children's Adjustment Following Divorce: Risk and Resilience Perspectives. *Child Development Perspectives*, 52, 352–362. doi:10.1111/j.1741-

3729.2003.00352.x

- Kelly, J. B., & Lamb, M. E. (2000). Using child development research to make appropriate custody and access decisions for young children. *Family Court Review*, 38(3), 297–311. doi:10.1111/j.174-1617.2000.tb00577.x
- Kelly, M. B. (2012). *Divorce cases in civil court, 2010/2011* (No. 85-002-X). Statistics Canada. Retrieved from *statcan.gc.ca*.
- Knoke, D. (2009). *Mediation in child welfare*. Centre of Excellence for Children's Well-Being. Toronto, ON, Canada. Retrieved from <http://cwrp.ca/sites/default/files/publications/en/Mediation74E.pdf>
- Knutson, J. F. (1995). Psychological characteristics of maltreated children: putative risk factors and consequences. *Annual Review of Psychology*, 46, 401–431. doi:10.1146/annurev.ps.46.020195.002153
- Kunin, C. C., Ebbesen, E. B., & Konecni, V. J. (1992). An archival study of decision-making in child custody disputes. *Journal of Clinical Psychology*, 48, 564–573.
- Lederman, J. C. (2010). Science in the Courtroom: Vital to Best Interests and Reasonable Efforts. *Juvenile and Family Court Journal*, 61, 63–68. doi:10.1111/j.1755-6988.2009.01039.x
- Levin, B. (2008). *Thinking About Knowledge Mobilization*. Canadian Council on Learning. Toronto, ON. Retrieved from *ccl-cca.ca*.
- Lowery, C. R. (1981). Child custody decisions in divorce proceedings: A survey of judges. *Professional Psychology*, 12, 492–498. doi:10.1037/0735-7028.12.4.492
- Lupien, S. J., McEwen, B. S., Gunnar, M. R., & Heim, C. (2009). Effects of stress throughout the lifespan on the brain, behaviour and cognition. *Nature Reviews Neuroscience*, 10, 434–445.



- Lyons-Ruth, K., Bronfman, E., & Parsons, E. (1999). Maternal frightened, frightening, or atypical behavior and disorganized infant attachment patterns. *Monographs of the Society for Research in Child Development*, 64, 67-96.
- MacLaurin, B., Trocme, N., Fallon, B., Pitman, L., McCormack, M., McCormack, M., et al. (2008). *Alberta incidence study of reported child abuse and neglect (AIS-2003): Final Report*. Calgary: Centre for Excellence for Children's Well-Being. Retrieved from *cecw-cepb.ca*.
- Macmillan, H. L., Wathen, C. N., Barlow, J., Fergusson, D. M., Leventhal, J. M., & Taussig, H. N. (2009). Interventions to prevent child maltreatment and associated impairment. *The Lancet*, 373, 250–266. doi:10.1016/S0140-6736(08)61708-0
- MacRae, L., Simpson, S., Paetsch, J., Bertrand, L., Pearson, S., & Hornick, J. (2009). *An Evaluation Of Alberta's Family Law Act*. Canadian Research Institute for Law and the Family.
- Maggi, S., Irwin, L. J., Siddiqi, A., & Hertzman, C. (2010). The social determinants of early child development: An overview. *Journal of Paediatrics and Child Health*, 46, 627–635. doi:10.1111/j.1440-1754.2010.01817.x
- Maughan, B., & McCarthy, G. (1997). Childhood adversities and psychosocial disorders. *British Medical Bulletin*, 53, 156–169.
- McCain, M. N., Mustard, J. F., & Shanker, S. (2007). *Early Years Study 2*. Toronto, ON: Council for Early Child Development. Retrieved from *earlyyearsstudy.ca*.
- McIntosh, J.E. (Ed.) (2011) Attachment Theory, Separation and Divorce: Forging Coherent Understandings for Family Law [Special Issue]. *Family Court Review*, 49(3), 418-556.
- Mediation/ Dispute Resolution Processes. (n.d.). Mediation/ Dispute Resolution Processes.

- Albertacourts.Ab.Ca.* Retrieved January 17, 2014, from <http://www.albertacourts.ab.ca/fjs/adr.php#family-mediation>
- Mills, R., Scott, J., Alati, R., O'Callaghan, M., Najman, J. M., & Strathearn, L. (2013). Child maltreatment and adolescent mental health problems in a large birth cohort. *Child Abuse & Neglect*. doi:10.1016/j.chiabu.2012.11.008
- National Research Council and Institute of Medicine (2000). Shonkoff, J. P., & Phillips, D. (2000). *From neurons to neighborhoods: The science of early childhood development*. Committee on Integrating the Science of Early Childhood Development. Shonkoff, P. and Phillips, D., (Eds.), Board of Children, Youth, and Families, Commission on Behavioural and Social Sciences and Education. Washington, D.C.: National Academy Press.
- O'Connell, M. E., & DiFonzo, J. H. (2006). The Family Law Education Reform Project Final Report. *Family Court Review*, 44, 524–570. doi:10.1111/j.1744-1617.2006.00107.x
- Oldershaw, L. (2002) *A National Survey of Parents of Young Children*. Invest in Kids.
- Paetsch, J., Bertrand, L., & Hornick, J. (2001). *Family Mediation Canada Consultation on Custody, Access and Child Support*. Family, Children and Youth Section, Department of Justice Canada. Retrieved from [justice.gc.ca](http://justice.gc.ca).
- Parker, S. (1994). The Best Interests of the Child - Principles and Problems. *International Journal of Law, Policy and the Family*, 8, 26–41. doi:10.1093/lawfam/8.1.26
- Patton, M. Q. (2002). *Qualitative Research & Evaluation Methods* (3rd ed.). Sage.
- Public Health Agency of Canada (2010) *Canadian Incidence Study of Reported Child Abuse and Neglect - 2008: Major Findings*. Retrieved from <http://www.phac-aspc.gc.ca/cm-vee/public-eng.php>
- Reidy, T. J., Silver, R. M., & Carlson, A. (1989). Child custody decisions: A survey of judges.

*Family Law Quarterly*, 23, 75.

Repetti, R. L., Taylor, S. E., & Seeman, T. E. (2002). Risky families: Family social environments and the mental and physical health of offspring. *Psychological Bulletin*, 128, 330–366. doi:10.1037/0033-2909.128.2.330

Rikhy, S., & Tough, S. (2008). *Community Knowledge of Child Development. Alberta Benchmark Survey: What Adults Know About Child Development*. Alberta Centre for Child, Family and Community Research. Retrieved from research4children.com

Shaw, K., Chapman, S. A., Pinto, D., Dellinger, C., Schnirer, L., Bisanz, J., & Tough, S. (2010). *Mobilizing Knowledge About the Development of Children, Youth and Families (MKAD): Focus on knowledge transformation and learning*. Community-University Partnership for the Study of Children, Youth and Families and Alberta Centre for Child, Family and Community Research. Edmonton, AB: Authors Retrieved from research4children.com.

Shonkoff, J. P., & Bales, S. N. (2011). Science does not speak for itself: Translating child development research for the public and its policymakers. *Child Development*, 82, 17–32.

Shonkoff, J. P., Garner, A. S., Committee on Psychosocial Aspects of Child and Family Health, Committee on Early Childhood, Adoption, and Dependent Care, Section on Developmental and Behavioral Pediatrics. (2012). The lifelong effects of early childhood adversity and toxic stress. *Pediatrics*, 129(1), e232–46. doi:10.1542/peds.2011-2663

Sidebotham, P., & Heron, J. (2006). Child maltreatment in the “children of the nineties”: A cohort study of risk factors. *Child Abuse & Neglect*, 30, 497–522. doi:10.1016/j.chiabu.2005.11.005

Sinha, V., Trocme, N., Fallon, B., MacLaurin, B., Fast, E., Thomas Prokop, S., et al. (2011).

*Kiskisik Awasisak: Remember the Children. Understanding the Overrepresentation of First*

- Nations Children in the Child Welfare System*. Ontario: Assembly of First Nations.
- Sobsey, D. (2002). Exceptionality, Education, and Maltreatment. *Exceptionality*, 10, 29–46.  
doi:10.1207/S15327035EX1001\_3
- Solomon, J., & Biringen, Z. (2001). Another Look at the Developmental Research. *Family Court Review*, 39(4), 355–364. doi:10.1111/j.174-1617.2001.tb00617.x
- Statistics Canada (2010). Income in Canada (75-202-X) Retrieved from [www.statcan.gc.ca](http://www.statcan.gc.ca).
- Trocme, N., Knoke, D., Fallon, B., & MacLaurin, B. (2009). Differentiating between substantiated, suspected, and unsubstantiated maltreatment in Canada. *Child Maltreatment*, 14, 4–16. doi:10.1177/1077559508318393
- Wakschlag, L. S., & Hans, S. L. (1999). Relation of maternal responsiveness during infancy to the development of behavior problems in high-risk youths. *Developmental Psychology*, 35, 569–579. doi:10.1037/0012-1649.35.2.569
- Wallace, S. R., & Koerner, S. S. (2003). Influence of Child and Family Factors on Judicial Decisions in Contested Custody Cases. *Child Development Perspectives*, 52, 180–188.  
doi:10.1111/j.1741-3729.2003.00180.x
- Waters, E., & Cummings, E. M. (2000). A secure base from which to explore close relationships. *Child Development*, 71, 164–172.
- Williams, R. J. (1996). Grasping a Thorny Baton... A Trial Judge Looks at Judicial Notice and Courts' Acquisition of Social Science. *Canadian Family Law Quarterly*, 14, 179–232.
- Wotherspoon, E., Vellet, S., Pirie, J., O'Neill-Laberge, M., Cook-Stanhope, H. L., & Wilson, D. (2010). Neglected Infants In Family Court. *Family Court Review*, 48, 505–515.  
doi:10.1111/j.1744-1617.2010.01325.x
- Yang, B. Z., Zhang, H., Ge, W., & Weder, N. (2013). Child abuse and epigenetic mechanisms of

diseaserisk. *American Journal of Preventive Medicine*, 44, 101-107.

Zero to Three (n.d.). Safe Babies, Strong Families, Healthy Communities. Retrieved February 21, 2014, from <http://www.zerotothree.org/maltreatment/safe-babies-court-team/core-components-pdf-learn-more-document.pdf>

# Appendices

## Appendix A Key Themes and References for Survey Development

### Themes and Subtopics

#### 1. Knowledge of child development

##### Timing and process of brain development

- Rapid brain development in prenatal and early childhood period
- Sensitive periods of development
- Interdependence of brain structures and functions
- Plasticity of brain declines over time
- Overproduction of synapses, pruning

##### Early brain development as a foundation for later developmental health

- Experience-based brain development
  - o Interplay of experience and genes (epigenetics)
  - o Experiences include social interactions, physical care, emotional nurturance (responsive caregiving)

##### Child development milestones

- Developmental milestones at from birth to school age in social, emotional, physical and cognitive domains of development,

##### Attachment relationships

- Attachment is one aspect of a child-caregiver relationship, which serves to make the child safe, secure and protected.
- Between infant and primary caregiver, and other caregivers as well (multiple attachments possible)
- Role of caregiver as attachment figure is independent of other parenting roles
- Sensitive, responsive caregiving promotes secure attachments.
- Activation of attachment behaviours when child is in distress.
- Types of attachment relationships, defining characteristics.
- Quality/type of attachment relationship is a predictor of a child's
- Sensitive period for attachment formation from 6 months to 2-3 years.
- Disruption of attachment increases risk of poor social and emotional outcomes for children.
- No biological preference for attachment formation

#### 2. Knowledge of impact of maltreatment on infants and children

##### Defining maltreatment

- Maltreatment includes emotional neglect, physical neglect, physical abuse, sexual abuse, and exposure to intimate partner violence
- Neglect is the persistent failure of a caregiver to attend to a child's needs

##### Occurrence of maltreatment

- Neglect is not necessarily intentional, could be related to low resources, mental illness, substance abuse.
- Neglect can be difficult to recognize in the courts system

- Infants and children are often exposed to more than one form of maltreatment
- Infants are more likely to experience neglect than other forms of maltreatment, and more likely than older age groups.
- Exposure to intimate partner violence is associated with similar traumatic experience as exposure to maltreatment directed at a child.
- Some forms of intimate partner violence, particularly coercive controlling violence is associated with impaired parenting and other forms of maltreatment.

#### Risk/protective factors related to maltreatment

- family poverty, infant characteristics, infant health status, parental health and knowledge, family functioning, mental health and addictions, community and social supports
- Infants with developmental disabilities (down's syndrome, fetal alcohol spectrum disorder, autism spectrum disorder) are more likely to experience maltreatment and may experience greater impairment resulting from maltreatment.

#### Impact of maltreatment

- Impairment from maltreatment can include stunted physical growth, delayed intellectual development, social and emotional dysfunction (all domains).
- The relationships between experience of maltreatment and outcomes can be multifinal, in which similar experiences associated with different outcomes, or equifinal, in which different experiences associated with similar outcomes.
- Impact of maltreatment depends on duration, timing, and severity.
- Individuals who have experienced maltreatment in childhood have a higher risk of maltreating their own offspring.
- Disorganized attachment is overrepresented in maltreated children, occurs when caregiver is both a source of fear and a source of comfort.
- Chronic high stress exposure can influence the development of stress systems in the brain and body, which affect the long term functioning of the stress response system, resulting in dysregulated stress responses.
- Multiple adversities are associated with poorer outcomes than single adversities.

### 3. Attitudes towards practices involving children

- Infants and children in the family court and child welfare system should receive comprehensive physical, developmental and mental health assessments.
- Documentation of effectiveness should be ensured before recommending intervention programs.
- Early intervention and early removal of risk or maltreatment is more effective for improved outcomes rather than intervention later in life.

#### Intervention characteristics

- Addressing social conditions that increase risk for maltreatment should be a priority
- Attachment relationships should be the primary target of intervention
- Short intense intervention more impactful than diffuse long term
- High quality ECE programs can support both children and caregivers

#### Parenting and custody arrangements

- Visits between children and caregivers should occur frequently in a safe setting at long enough duration for the relationship to sustain and strengthen.
- Out of home placements should focus on promoting security and continuity of relationships.
- A relatively short period of time (~2 weeks) with no contact between an infant and their primary caregiver can have negative long-term effects on the relationship.
- Attachment relationships should be preserved when possible, multiple placements propose the most risk for infants and children.

#### Impact of legal proceedings

- High conflict proceedings can have negative impacts on children involved
- Court delay and length of time in proceedings can impact children through stress for families and time taken to find a permanent placement
- Collaborative, non-adversarial processes may have less conflict, but pose a risk for infants and children when they are not developmentally informed.

#### 4. Knowledge to Action

How does judicial and legal understanding of brain development and the influence of maltreatment impact consideration of the best interests of the child?

What are judicial and legal training needs in the area of brain development and the influence of maltreatment?

What are the knowledge sources most currently used?

What are the preferred formats and methods of accessing new knowledge?

What topics are more information needed to inform practices with children?



## References for Survey Development

### **Organizational References**

Zero to Three <http://www.zerotothree.org/maltreatment/>

Centre on the Developing Child <http://developingchild.harvard.edu/>

Infant Mental Health Promotion <http://www.imhpromotion.ca/>

Encyclopedia on Early Child Development <http://www.child-encyclopedia.com/en-ca/home.html>

The Alberta Family Wellness Initiative <http://www.albertafamilywellness.org/>

With the Brain in Mind [www.withthebraininmind.org](http://www.withthebraininmind.org)

[www.withthechildinmind.org](http://www.withthechildinmind.org)

### **Surveys on Similar Topics or Audiences**

- What Adults Know About Child Development – An Alberta Benchmark Survey, Alberta Centre for Child, Family and Community Research
- A National Survey of Parents of Young Children, Invest in Kids
- Knowledge and Attitudes of Criminal Justice Professionals in Relation to Fetal Alcohol Spectrum Disorder (Cox et al., 2008)
- Consultation on Custody, Access and Child Support, Family Mediation Canada
- Pilot Knowledge Translation Strategies for Neurodevelopmental Disorders: Experience of Ambassadors Survey, NeuroDevNet

### **Articles and Reports**

Benoit, D. (2004). Infant-parent attachment: Definition, types, antecedents, measurement and outcome. *Paediatrics & Child Health*, 9(8), 541–545.

Boivin, M., & Hertzman, C. (eds). Early Childhood Development: adverse experiences and developmental health. Royal Society of Canada - Canadian Academy of Health Sciences Expert Panel (with Ronald Barr, Thomas Boyce, Alison Fleming, Harriet MacMillan, Candice Odgers, Marla Sokolowski, & Nico Trocme).

Cohen, J., & Youcha, V. (2004). Zero to Three: Critical Issues for the Juvenile and Family Court. *Juvenile and Family Court Journal*, 55(2), 15–27. doi:10.1111/j.1755-6988.2004.tb00157.x

Dicker, S., & Gordon, E. (2000). Connecting healthy development and permanency: A pivotal role for child welfare professionals. *Permanency Planning Today*.

Dubowitz, H. (2000). What is child neglect. *Handbook for Child Protection Practice*.

Fonagy, P. (2001). Attachment theory and psychoanalysis.

Gilbert, R., Widom, C. S., Browne, K., Fergusson, D., Webb, E., & Janson, S. (2009). Burden and consequences of child maltreatment in high-income countries. *The Lancet*, 373(9657), 68–81. doi:10.1016/S0140-6736(08)61706-7

Glaser, D. (2000). Child abuse and neglect and the brain--a review. *Journal of Child Psychology and Psychiatry, and Allied Disciplines*, 41(1), 97–116.

Goldsmith, D. F., Oppenheim, D., & Wanlass, J. (2004). Separation and Reunification: Using Attachment Theory and Research to Inform Decisions Affecting the Placements of Children in Foster Care. *Juvenile and Family Court Journal*, 55(2), 1–13. doi:10.1111/j.1755-6988.2004.tb00156.x

- Gould, F., Clarke, J., Heim, C., Harvey, P. D., Majer, M., & Nemeroff, C. B. (2012). The effects of child abuse and neglect on cognitive functioning in adulthood. *Journal of Psychiatric Research*, 46(4), 500–506. doi:10.1016/j.jpsychires.2012.01.005
- Halfon, N., Mendonca, A., & Berkowitz, G. (1995). Health status of children in foster care. The experience of the Center for the Vulnerable Child. *Archives of Pediatrics & Adolescent Medicine*, 149(4), 386–392.
- Harden, B. J., & Klein, S. (2011). Infants/toddlers in child welfare: What have we learned and where do we go from here? *Children and Youth Services Review*, 33(8), 1464–1468.
- Jaffe, P. G., Crooks, C. V., & Poisson, S. E. (2003). Common Misconceptions in Addressing Domestic Violence in Child Custody Disputes. *Juvenile and Family Court Journal*, 54(4), 57–67. doi:10.1111/j.1755-6988.2003.tb00086.x
- Jonson-Reid, M., Kohl, P. L., & Drake, B. (2012). Child and adult outcomes of chronic child maltreatment. *Pediatrics*, 129(5), 839–845. doi:10.1542/peds.2011-2529
- Lederman, C. S., & Osofsky, J. D. (2004). Infant Mental Health Interventions in Juvenile Court: Ameliorating the Effects of Maltreatment and Deprivation. *Psychology, Public Policy, and Law*, 10(1-2), 162–177. doi:10.1037/1076-8971.10.1-2.162
- Maughan, B., & McCarthy, G. (1997). Childhood adversities and psychosocial disorders. *British Medical Bulletin*, 53(1), 156–169.
- Osofsky, J. D., Maze, C. L., Lederman, J. C. S., Grace, M. P., & Dicker, S. (2004). Questions Every Judge and Lawyer Should Ask About Infants and Toddlers in the Child Welfare System. *Juvenile and Family Court Journal*, 55(2), 45–51. doi:10.1111/j.1755-6988.2004.tb00160.x
- Shonkoff, J. P., & Phillips, D. (2000). From neurons to neighborhoods: The science of early childhood development.
- Sobsey, D. (2002). Exceptionality, Education, and Maltreatment. *Exceptionality*, 10(1), 29–46. doi:10.1207/S15327035EX1001\_3
- Sroufe, L. A., Duggal, S., & Weinfield, N. (2000). Relationships, development, and psychopathology. ... *Psychopathology*.
- Sroufe, L. A., Egeland, B., & Kreutzer, T. (1990). The fate of early experience following developmental change: longitudinal approaches to individual adaptation in childhood. *Child Development*, 61(5), 1363–1373.
- Sullivan, P. M. (2003). Violence against children with disabilities: Prevention, public policy, and research implications. ... *Crimes of Violence Against Children and ...*
- Widom, C. S., & Maxfield, M. G. (2001). An Update on the “Cycle of Violence.” Research in Brief.
- Wotherspoon, E., Vellet, S., Pirie, J., O'Neill-Laberge, M., Cook-Stanhope, H. L., & Wilson, D. (2010). Neglected Infants In Family Court. *Family Court Review*, 48(3), 505–515. doi:10.1111/j.1744-1617.2010.01325.x

## Appendix B Focus Group Guide

### WITH THE CHILD IN MIND: BRAIN DEVELOPMENT AND BEST INTERESTS DECISIONS

#### FOCUS GROUP GUIDE

---

##### Introduction

Thanks for joining us today for this focus group. Today you will complete and review a brief survey and then engage in a group discussion on your preferences concerning how new knowledge and evidence can be integrated into judicial and legal practice. Please read and sign this consent form which outlines your involvement and our obligations to you.

*Hand out consent forms, review key points and have participants sign and return.*

##### Project Background

You've seen some information on the project in the invitation letter, we will speak a bit more about our history and why you are here today. This project started in 2009 with a symposium entitled *With the Brain in Mind: Brain Development in Best Interests Decisions*, where a committee of practitioners in the family law and child welfare system, child development researchers, pediatricians, psychiatrists and other experts collaborated to develop a curriculum to aid judges and lawyers in representing and making decisions in the best interests of the child. From the symposium, we collected speaker clips, literature and other resources into an online training module which is available for all to access. The next and current phase of the project is to assess current knowledge of brain development and maltreatment and attitudes towards best interests decisions of lawyers, mediators and judges, and explore ways to provide evidence-based

information that will support actions in the best interests of the child. The purpose of this focus group is to collect preliminary feedback on a survey instrument developed to assess knowledge and attitudes, and to gather evidence on your preferences for integrating new knowledge and evidence into practice with children and families in the family law and child protection systems.

### Survey Component

We ask you to complete this survey to assess knowledge of brain development and maltreatment and attitudes towards best interests decisions. The survey will take 20-30 minutes to complete.

We will use your feedback on the survey to modify it prior to sending it out to a larger sample of judges, mediators and lawyers throughout Alberta to complete.

While you are filling out the survey, we have provided you with some notepaper to identify any questions, comments or suggestions concerning clarity, relevance or content of the survey items.

Please note if a question or topic comes to mind that you feel should be included in the survey that isn't. We will discuss as a group the feedback on the survey, and then we will compile your feedback and use it to improve the survey.

*Give 20-30 minutes for the participants to complete the survey.*

*Pose questions to the group.*

1. What are your overall impressions of the survey?
2. Were there any questions that were unclear or difficult to answer? If yes, which ones?
3. How was the length of the survey? Did you have enough time to answer all of the questions? Was it too long for a professional to take the time to answer?
4. Are there any questions that should be included on the survey that aren't?
5. Please comment on the format of the questions (Likert scales). Was this an adequate way to pose the question?

*Break ( 15 minutes)*

### Online Course

At this time we will introduce you to the online course created from the 2009 symposium content.

*Take them to the website, play the introduction video and the Understanding Child Maltreatment Module, demonstrate how to navigate the site. Show the Resources on the sidebar.*

Are there any comments or questions regarding the website?

### Learning Needs

Do you feel a need for more ongoing professional development or other resources to assist you in your role as professional in the justice and legal system? Why, why not?

What kinds of content would you like to receive? (*examples below for prompting*)

New research updates

Practice guidelines

Synthesis of best practices

Case studies

If yes, what format do you prefer this to be delivered in? (*examples below for prompting*)

Online – written, video, interactive, video conferences

Paper-based – key summaries, larger resource documents

Person-based - delivered through a workshop, seminar, at a conference, who should deliver it?

Do you seek out information such as new research findings to inform your practice?

How do you seek it out? How do you integrate new information in your practice?

How would you prefer to receive, seek out and integrate information into your practice?

Do you have any other concerns regarding your learning and information needs?

e.g. Time constraints.

### Conclusion

Thank you very much for your participation in this focus group. We will review and reflect on your responses to refine the survey and inform our efforts to share new information with child-focused professionals in the judicial and legal system. If you have any questions, feel free to contact Maddison Spenrath or Laura Ghali, our contact information is on your consent form.

## Appendix C Pre-test Surveys for Focus Groups



### *Understanding Knowledge of Child Development and the Impact of Maltreatment on the Developing Brain and Attitudes towards Practices in the Best Interests of the Child*

*Pre-test version*

#### Instructions

This is a draft version of a survey that will be distributed to judicial, legal and mediator professionals in the child protection and family law sectors. There are sections on knowledge of child development, attitudes towards practices in the best interests of the child, knowledge translation needs, and demographics.

Your responses will not be analyzed, but will be used to improve the survey. Please complete the survey keeping the following in mind:

- Which questions are most relevant to your practice?
- Which questions are least relevant to your practice?
- Are any key topics missing?
- Are any questions or terminology unclear?

You can write on the survey or convey your input verbally afterwards.

## SECTION 1: KNOWLEDGE OF CHILD DEVELOPMENT

Please rate the extent to which you agree or disagree with the following statements.					
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. The brain develops most rapidly during the first year of life.					
2. The brain is increasingly able to change and adapt as children age.					
3. There are periods of time in early childhood when specific brain regions have a heightened sensitivity to experience.					
4. Pathways in the brain related to self-regulation develop later than pathways related to sensory functions.					
5. Prenatal exposures do not influence brain development of the fetus.					
6. In the developing brain, genes direct the development of exactly as many connections between brain cells as required.					
7. Experiences during the early years of life influence how genes are expressed.					
8. Physical care such as nutrition is more important to brain development than emotional care such as nurturance.					
9. Experiences during infancy and childhood are not likely to have lifelong impacts on health.					
10. All infants and children require responsive, nurturing caregivers.					
11. Attachment relationships are observed when a child is under stress in the presence of their primary caregiver.					
12. Attachment relationships are based upon actions of the caregiver.					
13. Infants with healthy attachments use their caregiver as a secure base from which to explore.					
14. The quality of attachment relationship between a child and their primary caregiver is not related to a child's later relationship quality and social functioning.					
15. The role of parent as attachment figure is related to other parenting roles such as playmate.					
16. Formation of attachment relationships takes place from age six months to 2 years.					

Comments:



On average, at what age can most children first do the following?							
	Pre-birth	0 to 3 months	4 to 6 months	7 to 12 months	1 to 2 years	3 to 6 years	6+ years
17. Engage in pretend and fantasy play							
18. Walk							
19. Play alongside other children without incident							
20. Share his/her toys with other children							
21. Sit and play quietly by him/herself for an hour							
22. Exert independence from their caregiver, for example pick out clothes he/she wants to wear or toys to play with							
23. Crawl							
24. Recognize or read the emotions of others							
25. Make different cries for different needs							
26. Bond with a parent							
27. Reach for objects							
28. Dress and undress by themselves							
29. Speak out when they think something is unfair or “not right”							
30. Have “best friends”							
31. Start to show concern for others							
32. Follow simple instructions							
33. Begin counting							

Comments:

Please rate the extent to which you agree or disagree with the following statements.					
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
34. If a baby does not receive appropriate stimulation – like being read to, played with, or touched and held – his/her brain will not develop as well as the brain of a baby who does receive these types of stimulation					
35. Every baby is born with a certain level of intelligence, which cannot be either increased or decreased by how parents interact with him/her					
36. The more stimulation a baby receives by holding and talking to them, the more you spoil them					
37. A baby can't communicate much until he/she is able to speak at least a few words					
38. Infants as young as six months consciously know how to manipulate parents					
39. The average one-year old can say one or two words, but understands many more words and phrases					
40. By age one, a baby's brain is fully developed					

Comments:

## SECTION 2: MALTREATMENT AND THE DEVELOPING BRAIN

Please rate the extent to which you agree or disagree with the following statements.					
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
41. Neglect can be an unintentional failure by a caregiver to attend to a child's needs.					
42. Neglected infants are easily recognized in court proceedings.					
43. Exposure to violence in the home is not harmful to a child if it is not directed at the child.					
44. Social conditions such as poverty, isolation, and low community support are related to the occurrence of maltreatment.					
45. Exposure to adversity (e.g., maltreatment, chronic stress) can have enduring effects on an infant's development.					
46. Infants with developmental delay are at a higher risk of experiencing maltreatment.					
47. Infants with developmental delay will experience less harm from maltreatment.					
48. Infants are more likely to experience neglect than abuse.					
49. Similar maltreatment experiences lead to the same developmental outcomes in different individual children.					
50. Disorganized attachment relationships can develop when a parent is both a source of fear and comfort for the child.					
51. Exposure to chronic stress in infancy won't affect the functioning of the stress response in the long term.					
52. Stress can be traumatic when a child is exposed to frequent prolonged periods of arousal without receiving security from a caregiver.					
53. Multiple sources of adversity cause greater harm to infants and children than singular sources.					
54. Maltreatment behaviours are easily modified once present in a caregiver-child relationship.					

<b>Children</b> who have experienced maltreatment are at an increased risk for the following impairments:					
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
55. Stunted physical growth					
56. Deficits in educational achievement					
57. Display of aggression/hyperactivity					
<b>Adults</b> who have experienced maltreatment as an infant or child are at an increased risk for the following:					
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
58. Involvement in criminal acts					
59. Unemployment					
60. Substance abuse					
61. Maltreatment of own offspring					

Comments:

### SECTION 3: ATTITUDES TOWARDS PRACTICES IN THE BEST INTERESTS OF THE CHILD

Please rate your agreement with the following statements:					
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
62. Understanding child development will improve ability of judicial and legal professionals to determine the best interests of the child.					
63. Because it is so urgent, intervention programs should be recommended to children and families who need them regardless of whether there is evidence supporting effectiveness.					
64. Short, intense parent-child interventions are preferable over long, diffuse interventions.					
65. It is the courts' responsibility to ensure a child in the system has received health and developmental assessments.					
66. Intervention in infancy and early childhood is as effective in preventing poor outcomes as intervention at a later age.					
67. Interventions for families where maltreatment has occurred should address social conditions such as poverty.					
68. Attachment relationships should be the primary target of intervention in parent-child relationships where maltreatment has occurred.					
69. Placements and parenting orders should emphasize continuity of relationships for the infant or child.					
70. High quality early child education programs do not benefit children who have experienced maltreatment.					
71. An infant can be separated from their primary caregiver for a few weeks without having a negative impact on their relationship.					
72. Removing a child from a neglectful environment will improve their health and well-being.					
73. Where possible, non-adversarial approaches to resolving conflicts involving infants and children are preferred.					

In a typical case, please rate how important the following factors are in consideration of the best interests of the child.				
	Not Important	Somewhat Important	Important	Very Important
74. Physical safety of the child				
75. Emotional safety of the child				
76. Psychological safety of the child				
77. Permanence of relationships for the child				
78. Child's need for stability				
79. Child's well-being				
80. Child's developmental status				
81. Age of the child				
82. Child's special needs				
83. Views and preferences of the child				
84. Gender of the child				
85. Preservation of the family				
86. Preservation of relationships with both parents				
87. Extended family and community supports				
88. History of care for the child				
89. Presence of family violence				
90. Preservation of cultural identity of the child				
91. Ability of parents to care for the child				
92. Parent's physical health				
93. Parent's mental health				
94. Parent's substance abuse				
95. Parent's economic stability				
96. Parent's right to fulfill their parental role				
97. Criminal proceedings relevant to the child				
98. Substantiated maltreatment of the child				
99. Other (please specify):				

100. How important is your understanding of child development in considering the above factors?

- ☐ Not Important  
☐ Somewhat Important  
☐ Important  
☐ Very Important

101. How important is your understanding of the influence of maltreatment on the developing child in considering the above factors?

- ☐ Not Important  
☐ Somewhat Important

- ☐ Important  
☐ Very Important

How important are the following sources of information for consideration of the child's best interests?				
	Not Important	Somewhat Important	Important	Very Important
102. Child Protection Reports				
103. Custody Investigation Reports				
104. Testimony of the Parties				
105. Court-Appointed Psychologist Recommendations				
106. Testimony of Expert Witnesses				
107. Desires of Children				
108. Desires of Parents				
109. Recommendations of Attorneys				
110. Health and Developmental Assessments of the Child				
111. Parent Capacity Assessments				
112. Other sources (please specify):				

Comments:

## SECTION 4: KNOWLEDGE TO ACTION

113. Please rate your own understanding of child development.

- ☐ Very weak  
☐ Weak  
☐ Moderate  
☐ Strong  
☐ Very Strong

114. Do you seek out information on child development and/or the impacts of maltreatment on the developing brain?

- ☐ Yes  
☐ No

114. Which of the following sources do you currently use to update your own knowledge to inform your practice with children?					
	Never	Rarely	Sometimes	Often	Always
Workshops (in person)					
Webinars (online seminars)					
Interactive learning modules (online)					
Conferences					
Professional association resources (websites, publications, newsletters)					
Research published in scientific journals					
Media sources (TV, magazines, newspapers, news websites)					
Books and other print sources					
Interaction with researchers					
Colleagues					
Web searches					
Other (please specify):					

115. Which topics would you like more information on to inform your practice with children and families? (Check all that apply)

- ☐ Outcomes associated with the experience of maltreatment  
☐ Programs for prevention of maltreatment  
☐ Intervention programs for children who have experienced maltreatment  
☐ Intervention programs for families where maltreatment has occurred  
☐ Brain development



- ☐ Child development
- ☐ Developmental/neurological disorders of infancy and childhood
- ☐ Family functioning
- ☐ Community influences on the child and family
- ☐ Non-adversarial approaches (e.g., mediation, collaborative divorce)
- ☐ Other (please specify):

116. Please describe how your **understanding** of research evidence concerning child development and the impact of maltreatment on infants and children influences your **practices** in the best interests of the child.

117. What is the best way to convey new information on child development and the impact of maltreatment on the developing brain to inform your practice?

- ☐ Workshops in my practice setting
- ☐ Conferences
- ☐ Web-based resources (e.g., learning portals)
- ☐ Interactive learning modules (online)
- ☐ Online discussion forums
- ☐ Print materials (e.g., desk references, Bench Books)
- ☐ Books
- ☐ Articles from
- ☐ Regular emails or electronic newsletters
- ☐ Other (please specify):

Comments:

## SECTION 5: DEMOGRAPHIC INFORMATION

118. Where do you do most of your work?

- ☐ Calgary
- ☐ Edmonton
- ☐ Lethbridge
- ☐ Red Deer
- ☐ Medicine Hat
- ☐ Grand Prairie
- ☐ Other (please specify) \_\_\_\_\_

119. What is your profession?

- ☐ Judge/Justice
- ☐ Lawyer
- ☐ Mediator
- ☐ Other (please specify) \_\_\_\_\_

120. In which court do you work?

- ☐ Provincial Court
- ☐ Court of Queen's Bench
- ☐ Both

121. How long have you been working at your current profession?

- ☐ <10 years
- ☐ 10-19 years
- ☐ 20-29 years
- ☐ 30-39 years
- ☐ 40+ years

122. Gender

- ☐ Male
- ☐ Female

123. Did you attend the November 2009 Symposium: With the Child in Mind: Brain Development and Bests Interests Decisions at Mount Royal University?

- ☐ Yes
- ☐ No

Comments:

**You have reached the end of the survey. Thank you, your input is appreciated.**

# Survey

---

Understanding Knowledge of Child Development and the Impact of Maltreatment on Infants and Children and Attitudes towards Practices involving Children

## **Introduction**

Children and their families are served by many professionals in the family law and child protection systems. Decisions regarding placement, care and intervention are made with the best interests of the child as the primary or paramount consideration.

The purpose of this survey is to explore knowledge, attitudes, and knowledge translation needs related to child development and the impact of maltreatment on infants and children in the professional population working with children and families involved in family law and child protection in Alberta. The results from this survey will inform future professional development activities and resources, and advance understanding of how knowledge of these topics relates to practices involving children.

The survey consists of 5 sections containing questions related to knowledge of child development, the impact of maltreatment on infants and children, attitudes towards practices involving children, knowledge translation preferences, and demographic information.

Many of the questions require you to select a rating from a scale, with space for elaboration of answers if you wish.

The survey is anticipated to take 15-20 minutes to complete.

The next page is an information sheet that outlines your participation in the study.

## Information Sheet

Study Title: With the Child in Mind – Brain Development and Best Interests Decisions

Sponsor: MITACS

Investigators:

Principal Investigator:

Dr. Laura Ghali, University of Calgary (403) 210-5000

Co-Investigators:

Dr. Brenda Poon, University of British Columbia

Dr. Margaret Clarke, University of Calgary

Dr. Martin Guhn, University of British Columbia

Project Coordinator:

Maddison Spenrath, University of British Columbia (604) 822-9964

You are invited to participate in an online survey designed to explore the knowledge of child development and the impact of maltreatment on the developing brain, attitudes towards best interests decisions, and professional development and practice needs of judges, lawyers and mediators working with families and children in the Child Protection and Family Law systems in Alberta.

There is no anticipated risk as a result of participating in the online survey. This research study aims to collect data to inform professional development and resources to assist child-focused professions in their practice, which may benefit you and your colleagues.

Your participation is anonymous, you will not be asked to provide your name in the online survey, or any personal information that may disclose who you are. This survey will take 15 - 20 minutes to complete.

Your participation is completely voluntary. You have the right to terminate the online survey at any time before submission. No survey responses will be recorded until you press the submit button at the end of the survey. Once you click the “submit” button at the end of the survey, you will not be able to withdraw your data. The University of Calgary Conjoint Health Research Ethics Board has approved this research study.

If you have any questions about the research study, please contact Maddison Spenrath [Maddison.Spenrath@albertahealthservices.ca](mailto:Maddison.Spenrath@albertahealthservices.ca) or the Principal Investigator, Laura Ghali [ghali@ucalgary.ca](mailto:ghali@ucalgary.ca).

If you have any questions concerning your rights as a participant in this research, please contact the Chair, Conjoint Health Research Ethics Board, University of Calgary, at 403-220-7990.

Clicking the button entitled “Next” on this form indicates that you have understood to your satisfaction the information regarding your participation in the research project and agree to participate as a subject.

## Section 1: Knowledge of Child Development

Please rate the extent to which you think the following statements are true or false.

	False	Probably False	Probably True	True
1. The brain develops most rapidly during the first year of life.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. The brain is increasingly able to change and adapt as children age.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. There are periods of time in early childhood when specific brain regions have a heightened sensitivity to experience.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Pathways in the brain related to self-regulation develop earlier than pathways related to sensory functions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Prenatal exposures do not influence brain development of the fetus.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. In the developing brain, genes direct the development of exactly as many connections between brain cells as required.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. Experiences during the early years of life influence how genes are expressed.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Emotional care such as nurturance is less important to brain development than physical care such as nutrition.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Experiences during infancy and childhood have immediate rather than long-term impacts on health.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. Cultural experiences shape an infant's brain development.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. The absence of a responsive caregiver poses a significant risk to a child's health and development.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. If an infant does not receive appropriate stimulation – like being read to, played with, or touched and held – his/her brain will not develop as well as the brain of a baby who does receive these types of stimulation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. A baby can't communicate much until he/she is able to speak at least a few words.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

14. Infants as young as six months consciously know how to manipulate parents.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. The average one-year old can say one or two words, but understands many more words and phrases.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. Attachment relationships are observed when a child is under stress in the presence of their primary caregiver.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. The quality of attachment relationship between a child and their primary caregiver is related to a child's later social and emotional functioning.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. The role of parent as attachment figure is related to other parenting roles such as playmate.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19. Attachment and bond are different words for the same concept.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20. Attachment is one aspect of a relationship between a caregiver and child, which makes the child safe, secure and protected.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
21. Disruptions of secure attachment relationships pose significant risk to a child's health and development.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**On average, at what age can most children first do the following?**

	Pre- birth	0 to 3 months	4 to 6 months	7 to 12 months	1 to 2 years	2 to 3 years	3 to 6 years	6 + years
22. Engage in pretend and fantasy play	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
23. Walk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24. Sit and play quietly by him/herself for an hour	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25. Recognize or read the emotions of others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
26. Make different cries for different needs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

- |   |                       |                       |                       |                       |                       |                       |                       |                       |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 27. Form an attachment with their primary caregiver | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 28. Reach for objects                               | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 29. Start to show concern for others                | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 30. Follow simple instructions                      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

**You may use this space to elaborate on answers to any questions in this section:**



## Section 2: Impact of Maltreatment on Infants and Children

For the purpose of this section, maltreatment includes acts of commission or omission by a parent or other caregiver that result in harm, or threat of harm to a child. The five primary forms of maltreatment are physical abuse, sexual abuse, physical neglect, emotional maltreatment and exposure to domestic violence.

**Please rate the extent to which you think the following statements are true or false.**

	False	Probably False	Probably True	True
31. Neglect can be an unintentional failure by a caregiver to attend to a child's needs.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
32. Neglected infants may be difficult to identify in legal proceedings.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
33. Exposure to violence in the home is not harmful to a child if it is not directed at the child.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
34. Social conditions such as poverty, isolation and low community support are associated with the occurrence of maltreatment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
35. Exposure to adversity (e.g., abuse, poverty) can have enduring effects on a child's development.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
36. Infants with developmental delay have a lower risk of experiencing maltreatment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
37. Infants are more likely to experience neglect than other forms of maltreatment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
38. Similar maltreatment experiences lead to the same developmental outcomes in individual children.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
39. Disorganized attachment relationships are most common in populations of children who have experienced maltreatment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
40. Exposure to chronic stress in infancy may affect the body's response to stress in the long term.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
41. Stress becomes traumatic when a child is exposed to prolonged periods of high stress in the absence of responsive caregiving.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
42. Multiple sources of adversity (e.g. poverty, neglect) cause greater harm to infants and children than singular sources.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Children who have experienced maltreatment are at an increased risk for the following impairments:**

	False	Probably False	Probably True	True
43. Stunted physical growth	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
44. Deficits in educational achievement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
45. Display of aggression/hyperactivity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Adults who have experienced maltreatment as an infant or child are at an increased risk for the following:**

	False	Probably False	Probably True	True
46. Involvement in criminal acts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
47. Unemployment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
48. Substance abuse	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
49. Maltreatment of own offspring	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**You may use this space to elaborate on answers to any questions in this section:**

--

### Section 3: Attitudes towards practices involving children

Please rate your agreement with the following statements:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
50. Judges should have knowledge of child development to determine the best interests of the child.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
51. Lawyers should have knowledge about child development to assist them in representing families and children.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
52. Evidence on child development should be presented in support of decisions concerning children.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
53. Intervention in infancy and early childhood is as effective in preventing poor outcomes as intervention at a later age.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
54. High quality early child education programs can benefit both children and caregivers.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
55. An infant can be separated from their primary caregiver for a few weeks without having a negative impact on their relationship.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
56. Removing a child from a neglectful environment will result in improvements in their health and well-being.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
57. High conflict legal proceedings can negatively impact infants or children involved.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
58. A child in the presence of their primary caregiver can't be neglected.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
59. Extended court proceedings can have an adverse impact on a young child.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**In a typical case, please rate how important the following factors are in consideration of the best interests of the child.**

	Not at all Important	Somewhat Important	Important	Very Important
60. Characteristics of the child (e.g., age, temperament, health status, special needs)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
61. Characteristics of the parent/caregivers (e.g., mental and physical health, previous experience of maltreatment)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
62. Characteristics of the relationship between the child and parent/caregivers (e.g., quality and presence of attachment, history of care)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
63. Contextual factors (e.g., social and extended family supports, program supports, culture, household stability)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**64. How important is your understanding of child development in considering the above factors and the best interests of the child?**

- ☐ Very Important
- ☐ Important
- ☐ Somewhat Important
- ☐ Not at all Important

**65. How important is your understanding of the influence of maltreatment on infants and children in considering the above factors and the best interests of the child?**

- ☐ Very Important
- ☐ Important
- ☐ Somewhat Important
- ☐ Not at all Important

**You may use this space to elaborate on answers to any questions in this section:**

#### **Section 4: Knowledge to Action**

**66. Please rate your own understanding of child development.**

- ☐ Very weak
- ☐ Weak
- ☐ Moderate
- ☐ Strong
- ☐ Very Strong

**67. Do you seek out information on child development and/or the impacts of maltreatment on infants and children?**

- ☐ Yes, on child development
- ☐ Yes, on impacts of maltreatment
- ☐ Yes, on both child development and the impacts of maltreatment
- ☐ No

**68. Please describe how your understanding of the following influences your practices involving children:**

**a. Child development**

**b. The impact of maltreatment on infants and children**

**69. Which of the following sources do you currently use to inform your practices involving children?**

	Never	Rarely	Sometimes	Often	Always
Workshops (in person)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Webinars (online seminars)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Interactive learning modules (online)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Conferences	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Professional association resources (websites, publications, newsletters)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Research published in scientific journals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Media sources (TV, magazines, newspapers, news websites)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Books and other print sources	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Interaction with researchers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Colleagues	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Web searches	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Evidence presented to court (e.g., expert witnesses)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Case law	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Please list any other sources not included above:**

**70. Which topics would you like more information on to inform your practice with children and families? (Check all that apply)**

- ☐ Outcomes associated with the experience of maltreatment
- ☐ Programs for prevention of maltreatment
- ☐ Intervention programs for children who have experienced maltreatment
- ☐ Intervention programs for families where maltreatment has occurred
- ☐ Mental health and addictions in the family context
- ☐ Brain development
- ☐ Child development
- ☐ Developmental/neurological disorders of infancy and childhood
- ☐ Cultural influences on child development
- ☐ Family functioning
- ☐ Community influences on the child and family
- ☐ Non-adversarial approaches (e.g., mediation, collaborative divorce)
- ☐ Other, please specify... \_\_\_\_\_

**71. What are the best ways to receive new information on child development and the impact of maltreatment on infants and children to inform your practice? (Check all that apply)**

- ☐ Workshops in my practice setting
- ☐ Conferences
- ☐ Web-based resources (e.g., learning portals)
- ☐ Interactive learning modules (online)
- ☐ Online discussion forums
- ☐ Print materials (e.g., desk references, Bench Books)
- ☐ Books
- ☐ Articles in academic journals
- ☐ Regular emails or electronic newsletters
- ☐ Other, please specify... \_\_\_\_\_

**You may use this space to elaborate on answers to any questions in this section:**

--

## **Section 5: Demographic Information**

This section is used to gather general information about the survey respondents. It will be summarized at a group-level only. The information that we gather will NOT be used to identify you in any way.

### **72. What is your profession?**

- ☐ Judge/Justice
- ☐ Lawyer primarily representing adults
- ☐ Lawyer primarily representing children
- ☐ Mediator
- ☐ Other, please specify... \_\_\_\_\_

### **73. In which court do you work?**

- ☐ Provincial Court
- ☐ Court of Queen's Bench
- ☐ Both

### **74. How long have you been working at your current profession?**

- ☐ < 5 years
- ☐ 5-10 years
- ☐ 10-19 years
- ☐ 20-29 years
- ☐ 30+ years

### **75. Did you attend the November 2009 Symposium: With the Child in Mind: Brain Development and Bests Interests Decisions at Mount Royal University?**

- ☐ Yes
- ☐ No

**You have reached the end of the survey. Thank you, your input is appreciated.**

**Is there anything else that you would like to add? You may use this space to provide any additional comments you may have about the survey:**



## Appendix E Summary of Survey Responses

The following tables summarize the participant responses to individual survey questions.

### Section 1: Knowledge of Child Development

Text: Please rate to the extent you think the following statements are true or false.

Variables	n	Mean	SD	Min	Max
1. The brain develops most rapidly during the first year of life.	80	3.4	0.65	1	4
2. The brain is increasingly able to change and adapt as children age.	80	2.6	1.0	1	4
3. There are periods of time in early childhood when specific brain regions have a heightened sensitivity to experience.	80	3.6	0.48	3	4
4. Pathways in the brain related to self-regulation develop earlier than pathways related to sensory functions.	78	2.0	0.95	1	4
5. Prenatal exposures do not influence brain development of the fetus.	80	1.2	0.54	1	4
6. In the developing brain, genes direct the development of exactly as many connections between brain cells as required.	79	1.9	0.86	1	4
7. Experiences during the early years of life influence how genes are expressed.	80	3.3	0.85	1	4
8. Emotional care such as nurturance is less important to brain development than physical care such as nutrition.	79	1.4	0.63	1	4
9. Experiences during infancy and childhood have immediate rather than long-term impacts on health.	78	1.7	0.83	1	4
10. Cultural experiences shape an infant's brain development.	79	3.5	0.66	1	4
11. The absence of a responsive caregiver poses a significant risk to a child's health and development.	79	3.9	0.43	1	4
12. If an infant does not receive appropriate stimulation – like being read to, played with, or touched and held – his/her brain will not develop as well as the brain of a baby who does receive these types of stimulation.	79	3.8	0.49	1	4
13. A baby can't communicate much until he/she is able to speak at least a few words.	80	1.1	0.41	1	3
14. Infants as young as six months consciously know how to manipulate parents.	80	2.7	1.1	1	4
15. The average one-year old can say one or two words, but understands many more words and phrases.	80	3.7	0.58	1	4
16. Attachment relationships are observed when a child is under stress in the presence of their primary caregiver.	80	3.2	0.84	1	4
17. The quality of attachment relationship between a child and their primary caregiver is related to a child's later social and emotional functioning.	79	3.6	0.61	1	4
18. The role of parent as attachment figure is related to other parenting roles such as playmate.	77	2.9	0.85	1	4

Variables	n	Mean	SD	Min	Max
19. Attachment and bond are different words for the same concept.	80	2.5	1.0	1	4
20. Attachment is one aspect of a relationship between a caregiver and child, which makes the child safe, secure and protected.	79	3.7	0.47	2	4
21. Disruptions of secure attachment relationships pose significant risk to a child's health and development.	80	3.8	0.49	2	4
Response options: False (1) Probably False (2) Probably True (3) True (4)					

Text: On average, what age can most children first do the following?

Variables	0 to 3 months	4 to 6 months	7 to 12 months	1 to 1.5 years	1.5 to 2 years	2 to 3 years	3 to 5 years	5 to 6 years
22. Engage in pretend and fantasy play	3	3	6	12	13	23	18	1
23. Walk	0	0	31	41	5	1	0	2
24. Sit and play quietly by him/herself for an hour	0	6	8	7	8	14	15	17
25. Recognize or read the emotions of others	31	28	9	3	5	0	4	0
26. Make different cries for different needs	58	19	2	0	0	1	0	0
27. Form an attachment with a primary caregiver	70	6	2	2	0	0	0	0
28. Reach for object	22	45	13	0	0	0	0	0
29. Start to show concern for others	4	7	17	14	16	13	6	2
30. Follow simple instructions	2	5	29	19	16	8	0	0

## Section 2: Impact of Maltreatment

Text: Please rate the extent to which you think the following statements are true or false.

Variables	n	Mean	SD	Min	Max
31. Neglect can be an unintentional failure by a caregiver to attend to a child's needs.	78	3.6	0.71	1	4
32. Neglected infants may be difficult to identify in legal proceedings.	78	3.3	0.83	1	4
33. Exposure to violence in the home is not harmful to a child if it is not directed at the child.	78	1.0	0.19	1	2
34. Social conditions such as poverty, isolation and low community support are associated with the occurrence of maltreatment.	78	3.3	0.85	1	4
35. Exposure to adversity (e.g., abuse, poverty) can have enduring effects on a child's development.	78	3.8	0.54	1	4
36. Infants with developmental delay have a lower risk of experiencing maltreatment.	78	1.2	0.36	1	2
37. Infants are more likely to experience neglect than other forms of maltreatment.	78	2.7	0.92	1	4
38. Similar maltreatment experiences lead to the same developmental outcomes in individual children.	78	1.8	0.86	1	4
39. Disorganized attachment relationships are most common in populations of children who have experienced maltreatment.	77	3.1	0.77	1	4
40. Exposure to chronic stress in infancy may affect the body's response to stress in the long term.	78	3.7	0.48	2	4
41. Stress becomes traumatic when a child is exposed to prolonged periods of high stress in the absence of responsive caregiving.	78	3.7	0.64	1	4
42. Multiple sources of adversity (e.g. poverty, neglect) cause greater harm to infants and children than singular sources.	78	3.2	0.79	1	4

Response options: False (1) Probably False (2) Probably True (3) True (4)

Text: Children who have experienced maltreatment are at an increased risk for the following impairments

Variables	n	Mean	SD	Min	Max
43. Stunted physical growth	78	3.3	0.76	1	4
44. Deficits in educational achievement	78	3.6	0.48	3	4
45. Display of aggression/hyperactivity	78	3.6	0.51	2	4

Response options: False (1) Probably False (2) Probably True (3) True (4)

Text: Adults who have experiences maltreatment as an infant or child are at an increased risk for the following

Variables	n	Mean	SD	Min	Max
46. Involvement in criminal acts	78	3.5	0.55	2	4
47. Unemployment	78	3.5	0.57	2	4
48. Substance abuse	78	3.6	0.49	3	4
49. Maltreatment of own offspring	78	3.6	0.57	2	4

Response options: False (1) Probably False (2) Probably True (3) True (4)

### Section 3: Attitudes towards practices involving children

Text: Please rate your agreement with the following statements

Variables	n	Mean	SD	Min	Max
50. Judges should have knowledge of child development to determine the best interests of the child.	78	4.6	0.58	3	5
51. Lawyers should have knowledge about child development to assist them in representing families and children.	78	4.6	0.56	3	5
52. Evidence on child development should be presented in support of decisions concerning children.	78	4.4	0.76	1	5
53. Intervention in infancy and early childhood is as effective in preventing poor outcomes as intervention at a later age.	77	3.1	1.5	1	5
54. High quality early child education programs can benefit both children and caregivers.	78	4.7	0.47	4	5
55. An infant can be separated from their primary caregiver for a few weeks without having a negative impact on their relationship.	78	2.3	1.2	1	5
56. Removing a child from a neglectful environment will result in improvements in their health and well-being.	78	3.7	0.89	1	5
57. High conflict legal proceedings can negatively impact infants or children involved.	77	4.8	0.42	4	5
58. A child in the presence of their primary caregiver can't be neglected.	77	1.4	0.65	1	5
59. Extended court proceedings can have an adverse impact on a young child.	77	4.5	0.77	1	5

Response options: Strongly Disagree (1) Disagree (2) Neutral (3) Agree (4) Strongly Agree (5)

Text: In a typical case, please rate how important the following factors are in consideration of the best interests of the child.

Variables	n	Mean	SD	Min	Max
60. Characteristics of the child (e.g., age, temperament, health status, special needs)	78	3.6	0.69	1	4
61. Characteristics of the parent/caregivers (e.g., mental and physical health, previous experience of maltreatment)	77	3.5	0.66	1	4
62. Characteristics of the relationship between the child and parent/caregivers (e.g., quality and presence of attachment, history of care)	78	3.7	0.59	1	4
63. Contextual factors (e.g., social and extended family supports, program supports, culture, household stability)	78	3.3	0.65	2	4

Response options: Not at all Important (1) Somewhat Important (2) Important (3) Very Important (4)

Variables	n	Mean	SD	Min	Max
64. How important is your understanding of child development in considering the above factors and the best interests of the child?	78	3.5	0.68	2	4
65. How important is your understanding of the influence of maltreatment on infants and children in considering the above factors and the best interests of the child?	78	3.6	0.63	2	4

Response options: Not at all Important (1) Somewhat Important (2) Important (3) Very Important (4)

Question	n	Mean	SD	Min	Max
66. Please rate your own understanding of child development.	76	3.3	0.70	2	5

Response options: Very weak (1) Weak (2) Moderate (3) Strong (4) Very Strong (5)

Text: Do you seek out information on child development and/or the impacts of maltreatment on infants and children?

Variables	n selected
Yes, on child development	15
Yes, on impacts of maltreatment	0
Yes, on both child development and the impacts of maltreatment	49
No	11

Text: Which of the following sources do you currently use in your practices involving children?

Variables	n	Mean	SD	Min	Max
Workshops (in person)	75	3.0	1.0	1	5
Webinars (online seminars)	75	2.3	.97	1	4
Interactive learning modules (online)	73	2.1	.91	1	4
Conferences	75	3.0	1.0	1	5
Professional association resources (websites, publications, newsletters)	74	3.4	.86	1	5
Research published in scientific journals	75	2.8	1.2	1	5
Media sources (TV, magazines, newspapers, news websites)	75	2.9	0.96	1	5
Books and other print sources	75	3.3	0.86	1	5
Interaction with researchers	75	2.3	1.2	1	5
Colleagues	75	3.6	0.83	1	5
Web searches	75	3.1	1.2	1	5
Evidence presented to court (e.g., expert witnesses)	74	3.1	1.2	1	5
Case law	74	2.9	1.2	1	5

Response options: Never (1) Rarely (2) Sometimes (3) Often (4) Always (5)

Text: Which topics would you like more information on to inform your practice with children and families?

Variables	n selected
Outcomes associated with the experience of maltreatment	49
Programs for prevention of maltreatment	46
Intervention programs for children who have experienced maltreatment	48
Intervention programs for families where maltreatment has occurred	49
Mental health and addictions in the family context	50
Brain development	51
Child development	52
Developmental/neurological disorders of infancy and childhood	45
Cultural influences on child development	50
Family functioning	57
Community influences on the child and family	38
Non-adversarial approaches (e.g., mediation, collaborative divorce)	35
Other	5