Examining How the Mental Health Needs of Children Who Have Experienced Maltreatment are Identified and Addressed in Ontario: A Focus on Childhood Sexual Abuse

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Abstract

This two-study dissertation aimed to develop a comprehensive understanding of mental health need identification, service referral process, availability of services, and type of mental health services in Ontario for children who have experienced maltreatment with a specific focus on childhood sexual abuse (CSA). The first study was descriptive and involved an email questionnaire completed by Directors of Service in each of the 53 Ontario Children's Aid Societies (CAS). While the primary purpose of study 1 was to inform the sample for study 2, it also provided information about the identification of mental health needs and the referral process to mental health services for children who have experienced maltreatment. Based on the finding that the majority of mental health service referrals are made to community-based psychologists (80%), study 2 was designed to assess the availability, type, and empirical support of treatments provided by Ontario psychologists and psychological associates to children who have experienced CSA. Through the first provincial census of child and adolescent psychology clinicians registered with the College of Psychologists of Ontario, this study addressed the following questions: (1) What are the demographic, work setting, and treatment provision characteristics of these clinicians? (2) Within this population, what is the proportion and distribution of clinicians who provide treatment to children who have experienced CSA?; (3) To what extent do these treatment services map onto empirically-supported treatments (ESTs) for children who have experienced CSA?; and (4) How do clinicians' demographic, work setting, treatment provision characteristics, and attitudes toward ESTs predict their approach to intervention? Results indicated that clinicians who worked with children who have experienced CSA differed significantly from other clinicians in terms of age, work setting, self-reported theoretical orientation, and clients' primary presenting problems. Moreover, clinician age, self-

reported theoretical orientation, time devoted to clinical training activities, and general attitudes toward ESTs predicted the use of ESTs among clinicians who work with children who have experienced CSA. Limitations and implications for future research are addressed within each study.

Examining How the Mental Health Needs of Children Who Have Experienced Maltreatment are Identified and Addressed in Ontario: A Focus on Childhood Sexual Abuse

Based on the existing literature, it is evident that child maltreatment is prevalent in society and often has significant deleterious effects on its victims (Appleyard, Egeland, van Dulmen, & Sroufe, 2005; Trocmé et al., 2008). Of these deleterious effects, mental health difficulties such as emotional and behavioural problems are frequently cited (Trocmé et al., 2008). As child maltreatment represents one of the most preventable contributors to both child and adult mental illness, early assessment and intervention of mental health difficulties in this population is a top priority (DeBellis, 2001). The literature suggests, however, that there is often limited mental health service provision to youth who have experienced maltreatment (Burns et al., 2004; Kolko, Baumann, & Caldwell, 2003; Staudt, 2003).

This two-study dissertation explored the four interdependent processes that have been identified in the literature as contributing to inadequate mental health service provision to this population: (1) problems with need identification (study 1); (2) difficulties in the referral process to service providers (study 1); (3) availability of services to address the needs of these children (study 2), and (4) the type of services which referred youth receive (study 2; Burns et al., 2004; Canadian Health Services Research Foundation, 2003). The first study in this dissertation examined mental health need identification and the referral process to treatment services within the Ontario child welfare system, since it is the mandated reporting agency for child maltreatment in Ontario. This study has since been published in the *Canadian Journal of Family and Youth* (Czincz & Romano, 2009). The study was descriptive in nature, with the primary purpose being to inform the population to be sampled in study 2. However, the first study also

provided an overview of the ways in which CASs identify mental health needs in their clients, refer children (0 to 16 years) in need to services, allocate resources for mental health service provision, and collaborate with community-based mental health professionals. To my knowledge, this was the first study that assessed these issues within the Canadian child welfare system. Data were gathered through an electronic questionnaire completed by the Director of Service at CASs in Ontario (response rate of 77.4% out of 53 CASs). One finding from this study was that the majority of mental health referrals for children who had experienced maltreatment were made to community-based psychologists (80%). As such, the second study in this dissertation examined the availability, type, and empirical support of services to address the mental health needs of children who have experienced CSA through a census of child and adolescent psychologists and psychological associates in Ontario. The decision to focus on CSA was made primarily because it has the longest established and most widely accepted EST within the domain of child maltreatment (CBT with abuse-focused components; Chaffin & Frederich, 2004; Child Welfare Information Gateway, 2007; Saunders, Berliner, & Hanson, 2004). Prior to elaborating on studies 1 and 2, an overview of child maltreatment is presented, including definitional issues, incidence, effects, and research on mental health service provision to this population.

Overview of Child Maltreatment

Definition

There exists some discrepancy in the definition of child maltreatment across both research and practice domains, which tends to be a function of cultural values, legal mandates, and professional practices (Fallon et al., 2010; Korbin, Coulton, Lindstrom-Ufuti, & Spilsbury, 2000; Veltman & Browne, 2001). However, there is general consensus that child maltreatment

encompasses five broad domains: (1) physical abuse; (2) sexual abuse; (3) neglect; (4) emotional maltreatment; and (5) exposure to domestic violence. Definitions of these maltreatment types used in the *Canadian Incidence Study of Reported Child Abuse and Neglect* (CIS; Trocmé et al., 2008) are presented in Appendix A. These definitions tend to emphasize perpetrator behaviour rather than the resulting harm to the victim or the intent of the perpetrator (Bolger & Patterson, 2001; DeBellis & Kashavan, 2003; Dong et al., 2004; MacMillan & Munn, 2001; Statistics Canada, 2005; Trocmé et al., 2008).

Incidence in Canada

The CIS was the first national study in Canada to examine the incidence of reported child maltreatment and the characteristics of children and families investigated by child welfare services. The CIS was initially conducted in 1998, and data were collected in 2003, and more recently in 2008 (Trocmé et al., 2008). During the 2008 data collection, the CIS tracked 9,933 new child maltreatment investigations that occurred in a representative sample of 112 (out of the 412 total) child welfare agencies across Canada. Data were gathered through the completion of standardized questionnaires by child welfare workers at these agencies, with findings showing that an estimated 235,842 child maltreatment investigations were conducted in Canada in 2008, representing a rate of 39.2 investigations per 1,000 children (Trocmé et al., 2008). Investigation rates were shown to decrease by child age, with a greater number of investigations occurring in younger children. Of the 235,842 investigations, 36% were substantiated by the investigating worker (i.e., maltreatment was confirmed through an investigation), producing an incidence rate of 14.2 cases of substantiated maltreatment per 1,000 Canadian children. In terms of the classification of these substantiated cases by primary maltreatment type, neglect and exposure to domestic violence were the most frequently identified types of maltreatment (each accounting for

34% of substantiated cases), followed by physical abuse (20%), emotional maltreatment (9%), and sexual abuse (3%). In addition, 18% of substantiated cases included more than one type of maltreatment, with the most frequently co-occurring types being neglect and exposure to domestic violence (Trocmé et al., 2008).

The provincial counterpart to the CIS is the *Ontario Incidence Study of Reported Child Abuse and Neglect* (OIS), with the most recent data available from 2003 (Fallon et al., 2005) given that findings from the 2008 cycle have not yet been released. The OIS-2003 collected data from a representative sample of 16 (out of 53 total) CASs through the completion of standardized questionnaires by child welfare workers. Based on this data, an estimated 128,108 child maltreatment investigations were conducted in Ontario in 2003 which accounts for 54.3% of all Canadian investigations. Of these 128,108 investigations, 44% were substantiated representing an incidence rate of 24.4 substantiated investigations per 1,000 children. Exposure to domestic violence was the most frequently identified type of maltreatment (32% of substantiated cases), followed by neglect (27%), physical abuse (24%), emotional maltreatment (15%), and sexual abuse (3%). In addition, 15% of substantiated cases included more than one type of maltreatment, with the most frequently co-occurring types being emotional maltreatment and exposure to domestic violence (Fallon et al., 2005).

While the incidence rate per 1,000 children increased in both the CIS and OIS between the 1998 and 2003 data collection cycles (CIS: 9.2 to 18.7; OIS: 9.8 to 24.4), the rate appears to have decreased to 14.2 in 2008 for the CIS (2008 OIS data not yet released). It is possible that these fluctuations reflect an actual change in the incidence rate as a result of factors shown to affect the occurrence of child maltreatment, such increases in the levels of poverty or rates of maternal depression (Leschied, Chiodo, Whitehead, & Hurley, 2005). However, several other

factors may also account for these differences, including: (1) changes in public and professional awareness of the problem; (2) changes in legislation or case management practices; (3) changes in case substantiation practices; and (4) changes in CIS and OIS study procedures and definitions (Fallon et al., 2005; Trocmé et al., 2008).

Additional national data on the incidence of child maltreatment can be found in a report called *Family Violence in Canada: A Statistical Profile* (Statistics Canada, 2005). This study examined the incidence of police-reported physical and sexual assault against youth under the age of 18 in 2003 by collecting data from 122 Canadian police services (Statistics Canada, 2005). Results indicated that, while youth represented only 21% of the Canadian population, they accounted for 25% of all police-reported physical and sexual assaults in 2003. In terms of assault type, approximately 1 in 4 assaults against youth were of a sexual nature, while 3 in 4 were physical assaults.

It is likely that these statistics are gross under-representations of the true extent to which children experience maltreatment for a number of reasons. First, substantiating cases of maltreatment can be particularly challenging as confirming evidence of the incident is not always available, especially when there are no visible physical injuries and time has passed since the occurrence. This is particularly true of sexual abuse, where physical evidence is especially difficult to obtain (Christian et al., 1999; Young, Jones, Worthington, Simpson, & Casey, 2006). Second, a significant proportion of child maltreatment cases are never reported to either child welfare agencies or police services (MacMillan & Munn, 2001). In the *Ontario Health Supplement Survey*, which included a random sample of 9,953 Ontario residents aged 15 or older, only 5.1% of those who reported a history of childhood physical abuse and 8.7% of those who reported a history of CSA indicated having had past contact with child welfare services

related to their childhood maltreatment (MacMillan & Munn, 2001). The *General Social Survey on Victimization* (Statistics Canada, 2004) collected data monthly from a representative sample of 24,000 Canadians aged 15 years and older about, among other things, their experiences of victimization. Findings indicated that only 24% of individuals aged 15 to 24 years reported their experience of violent victimization (including physical assault, sexual assault, and theft involving violence) to the police. Sexual assault was the type of victimization that was least likely to be reported to the police. Third, children's view of behaviour as being abusive and/or their perception of maltreatment severity have been found to differ greatly from observer reports (i.e., child welfare workers; Bolger & Patterson, 2001; Gable, 1998). For instance, Gable (1998) found that children from neglectful families perceived a higher quality of family functioning that was not reported by child welfare caseworkers, where the measure of family functioning included indices of the quality of family health, ability to manage and resolve conflict, cohesion among family members, presence of strong leadership, and verbal and emotional expressiveness. Finally, reports of childhood maltreatment have been found to have poor reliability and stability over time. Fergusson, Horwood, and Woodward (2000) demonstrated that approximately 50% of individuals who were identified as having experienced childhood maltreatment failed to report the abuse when questioned on a single occasion at the age of 18 to 21 years.

Effects

It is challenging to isolate the effects of specific types of child maltreatment as they often co-occur and are typically found within the context of other life adversities, including difficulties at the individual, family, community, and societal levels (Dong et al., 2004; Finkelhor, Ormrod, Turner, & Hamby, 2005). Finkelhor et al. (2005) found that the mean number of victimizations for children with any history of victimization was three, and that a child who had been

victimized was 69% more likely to experience another episode of victimization during a single year. In a review of 29 studies involving adult retrospective reports of child maltreatment, Higgins and McCabe (2001) found that having experienced more than one type of maltreatment in childhood was associated with greater adjustment problems in adulthood compared to experiencing a single maltreatment type.

Evidence, however, has been found for the deleterious effects of child maltreatment, even after controlling for other life adversities or negative life events (e.g., domestic violence, family disruption, low socioeconomic status, high parental stress; Appleyard et al., 2005; Okun, Parker, & Levendosky, 1994). Overall, the existing literature indicates that children who have experienced maltreatment have significantly higher rates of mental health difficulties than children with no known history of maltreatment (Burns et al., 2004; Kaplow & Widom, 2007; Staudt, 2003). Several studies (Burns et al., 2004; Farmer et al., 2001; Staudt, 2003; Taussig, 2002) have estimated that 50% to 80% of children who have experienced maltreatment will exhibit clinically significant mental health problems that require intervention. In addition, such problems have been shown to sometimes persist throughout the lifespan. McGloin and Widom (2001) found that only 22% of individuals with substantiated cases of child maltreatment were deemed resilient in adulthood, where resilience was defined as meeting a success criterion across six of eight domains of functioning (employment, homelessness, education, social activity, psychiatric disorders, substance abuse, official arrests, and self-reports of violence).

In terms of specific mental health difficulties, depression, anxiety (including posttraumatic stress symptoms), and behavioural difficulties tend to be most prevalent among children with a history of maltreatment (Bolger & Patterson, 2001; Kim & Cicchetti, 2004). However, many additional difficulties have been noted, including developmental delays and self-

harming behaviours (Low, MaCleod, & Duggan, 2000; Stahmer et al., 2005). The 2008 CIS assessed child functioning across a variety of emotional, cognitive, and behavioural domains (Trocmé et al., 2008). Based on the reports of child welfare workers, at least one emotional or behavioural difficulty (i.e., depression, anxiety, school-related difficulties, developmental disabilities, aggression, attachment problems, Attention-Deficit Hyperactivity Disorder, and failure to meet developmental milestones) occurred in 46% of children who had substantiated cases of child maltreatment (Trocmé et al., 2008). A number of factors have been found to moderate the impact of child maltreatment, including the type of maltreatment experienced, age and sex of the child, child's attribution of blame, quality of parent-child relationship, child's locus of control, self esteem of the child, and social support (Bolger & Patterson, 2001; Burns et al., 2004; Kim & Cicchetti, 2004; Staudt, 2003; Vranceanu, Hobfoll, & Johnson, 2007).

Research has recently begun to investigate the neurological changes associated with child maltreatment, in addition to the psychological effects. Children who have experienced maltreatment tend to have reduced intracranial volumes, which has been associated with numerous cognitive impairments (DeBellis, 2001; DeBellis & Kuchibhatla, 2006). For example, DeBellis (2001) found a negative correlation between verbal I.Q. score and severity of abuse. A greater severity of intracranial reduction has been found in children whose maltreatment began at an earlier age and was of longer duration (DeBellis & Kuchibhatla, 2006). Children who have experienced maltreatment also show a substantial decrease in volume (i.e., 8 to 18%) in their corpus callosums, amygdalas, and hippocampuses, which can produce deficits in both memory and cognition (Vanltallie, 2002). The physiological impact of child maltreatment is highly attributable to the neurological maturation occurring during childhood. Since the brain is in the process of developing rapidly during this period, maltreatment that occurs within this timeframe

tends to be more detrimental than trauma experienced in adulthood (Twardosz & Lutzker, 2010). This provides additional support for the necessity of intervening at the earliest possible point in cases of child maltreatment.

Mental Health Service Provision to Children Who Have Experienced Maltreatment

Research on mental health service provision to children who have experienced maltreatment has been conducted primarily within the context of the child welfare system since this is the required reporting agency in almost all jurisdictions across North America. In Ontario, CASs are the required investigation agencies for child maltreatment as mandated by the *Ontario Child and Family Services Act*. Data suggest that there is often limited mental health service provision to children who have come into contact with the child welfare system and who are exhibiting psychological difficulties (Burns et al., 2004; Kolko et al., 2003; Staudt, 2003). The *National Survey of Child and Adolescent Well-being* (NSCAW) provided the first national estimates of mental health need and service use in the child welfare population in the U.S. (Burns et al., 2004). The NSCAW included a random sample of 3,803 children (2 to 14 years) involved with the child welfare system as a result of maltreatment. The need for mental health services was assessed using behaviour checklists completed by parents, teachers, and children, while the use of mental health services in the previous 12 months was assessed using an adapted version of the *Child and Adolescent Services Assessment* (Burns, 2004) completed by both children and caregivers. Results demonstrated that, while approximately half of the children whose maltreatment had come to the attention of child welfare exhibited clinically significant psychological difficulties (i.e., emotional and/or behaviour problems), only 11.7% had received any mental health services during the previous year (Burns et al., 2004). In a Canadian context, the 2003 CIS (Trocmé et al., 2005) and 2003 OIS (Fallon et al., 2005) also found that a small

percentage of children with substantiated maltreatment received referrals specifically for psychological services, as reported by child welfare caseworkers (11.2% and 9.0%, respectively).

Several interdependent processes have been identified as contributing to inadequate service provision to children who have experienced maltreatment, including problems with need identification, difficulties in the referral process to service providers, availability of services to address the needs of these children, and the type of services which referred children receive (Burns et al., 2004; Canadian Health Services Research Foundation, 2003). The literature on these topics and the manner in which the current dissertation studies examine these processes will be reviewed in the introductions to study 1 (need identification and referral process to service providers) and study 2 (availability and type of mental health services for children who have experienced sexual abuse).

STUDY 1:

Examining Need Identification and the Referral Process to Mental Health Services for Children Who Have Experienced Maltreatment

Ontario Child Welfare System

Child welfare legislation and services in Canada are managed at the provincial and territorial level. In Ontario, child welfare services are provided by CAS, funded by the Ministry of Children and Youth Services, governed by the *Ontario Child and Family Services Act*, and apply predominantly to children under the age of 16. Youth who are already the subject of a child protection order, however, may receive services until the age of 18 and youth who are former crown wards may receive services until the age of 21 under the Extended Care and Maintenance program (Ministry of Children and Youth Services, 2010). The 53 CASs in the province are members of the Ontario Association of Children's Aid Societies (OACAS), an

umbrella organization whose function is the promotion of child welfare issues, government relations, advocacy, policy development, communications, research and special projects, member support, quality assurance in child welfare practice, and training for protection workers. Individual CASs strive to prevent abuse and neglect, improve child safety, maintain children's health and wellness, and support and strengthen families to better care for children.

There has been an increasing movement in the Canadian child welfare system over the past decade toward better integration of initial risk assessment and maltreatment identification with service delivery and outcome measurement (Leslie, 2007). In addition, there has been a recent shift within the Ontario child welfare system from a focus solely on child safety and protection toward a comprehensive model of child well-being, including a greater focus on the individual needs of children, increased attention to assessment and screening for areas of concern (including mental health), and a greater involvement of families and community-based services (Leslie, 2007; Ministry of Children and Youth Services, 2007a). This paradigm shift has been evident in child welfare systems globally, reflected in the increased implementation of systems of care models (Fluke & Oppenheim, 2010). Systems of care models take a holistic approach to well-being and are rooted in the belief that services and supports to children and families need to be individualized, accessible, child-centered, family-focused, comprehensive, coordinated, and delivered with cultural and linguistic competence (Pires, Lazear, & Conlan, 2008; Stroul & Blau, 2010).

The movement toward expanding the notion of child well-being beyond issues of safety and immediate protection began with the *United Nations Convention on the Rights of the Child* in 1989, which highlighted children's right to develop to their full potential and actively participate in family and community life as being equal to basic survival rights (United Nations,

1989). This transition gained further support following the child deaths that occurred in the 1990s as a result of maltreatment. These tragic occurrences heightened public awareness of some of the inefficiencies and inadequacies of a child welfare system that focuses exclusively on safety and immediate protection to the exclusion of prevention and well-being initiatives (Regehr, Chau, Leslie, & Howe, 2002).

In response to these concerns, the UK passed the *Children Act* and developed the *Looking After Children* model in the early 1990s (LAC; Jackson, 1998). This model proposed a holistic approach to well-being for children who come into contact with child welfare and are placed in out-of-home care, including accountability of service providers, assessment and treatment of issues related to overall health and development, inclusion of natural supports in the child's treatment plan, and monitoring of service outcomes (Jones, Clark, Kufeldt, & Norrman, 1998). Through the implementation of LAC, a focused and systematic approach to need assessment was identified as underlying the effectiveness of service referral and provision (Léveillé & Chamberland, 2010). As a result, the UK developed the *Framework for the Assessment of Children in Need and their Families* (FACNF). The FACNF is a structured assessment conducted by child welfare workers of 20 dimensions of well-being that fall under three broad categories: (1) the child's developmental needs; (2) the caregiver's capacity to meet these needs; and (3) family and environmental factors that influence how these needs are met (Léveillé & Chamberland, 2010). Since its development in 1999, over 15 countries have adopted the FACNF model with the goal of implementing a structured assessment of various dimensions of well-being for children involved with child welfare in order to better respond to their needs (Léveillé & Chamberland, 2010). In a meta-analysis of studies implementing FACNF, Léveillé and Chamberland (2010) concluded that the use of FACNF appeared to lead to improved assessment

of children's needs, provision of a better context for guiding treatment planning, reinforcement of a holistic and child-centered approach to services, and increased interagency collaboration.

Following the UK-initiated paradigm shift in child welfare, the concept of differential response was introduced in child welfare (Waldfogel, 1998). This model highlighted the need to move from a "one-size-fits-all" approach to customized and differentiated responses focused on addressing the needs of both high and low risk famlies (Waldfogel, 1998). The *Differential Response Model of Child Protection Services* was introduced in Ontario in 2007 with the goal of adopting a more holistic approach to the well-being of children involved with child welfare. This service model established the following objectives: (1) maintain a strong focus on child safety, well-being, and permanance; (2) provide more case-sensitive, customized responses for referrals of non-severe situations; (3) strengthen assessment and decision-making by implementing clinical tools and supplementary screening tools; (4) integrate the use of measures with a broader clinical focus; (5) increase the emphasis on engaging children and families in services; (6) build on existing strengths and increase families' capacity; and (7) involve a wider range of informal and formal supports in service planning and provision (Ministry of Children and Youth Services, 2007a).

As a medium for implementing the *Differential Response Model*, the *Child Protection Standards in Ontario* were introduced to provide a minimum level of performance requirements for CAS staff (Ministry of Children and Youth Services, 2007b). Development of the *Child Protection Standards* was strongly influenced by the FACNF, and guide child welfare clinicians through all stages of service delivery, from the initial report of maltreatment to the termination of child welfare services. As a component of the *Child Protection Standards*, the Ministry of Children and Youth Services (2007b) selected a set of both required and supplementary

empirically supported tools to be used in the assessment and screening of children involved with the child welfare system. The required instruments are the *Ontario Safety Assessment*, the *Ontario Family Risk Assessment,* and the *Ontario Family and Child Strength and Needs Assessment.* These tools evaluate immediate safety concerns, the likelihood of future child maltreatment within the current family envioronment, and the presence of strengths and needs in the current family environment. The supplementary tools are the *Strength and Difficulties Questionnaire*, the *Alcohol Use Disorder Identification Test-10*, the *Adult Drug Use Drug Abuse Screening Test*, the *Adult Emotional Well-Being Mental Health Inventory-5*, and the *Family Support Scale.* These tools assess child and adult mental health, adult alcohol and substance abuse, and the family social support system. In terms of child mental health assessment, the required *Family and Child Strength and Needs Assessment* tool contains a subscale that examines the child's maltreatment-related emotional and behavoural adjustment. In addition, the *Strength and Difficulties Questionnaire* examines five areas of child functioning: (1) emotional symptoms; (2) conduct problems; (3) hyperactivity; (4) peer relationship problems; and (5) prosocial behaviours.

Continuing these attempts to develop a child welfare system that is both responsive and effective in addressing the needs of vulnerable children, the Ontario government established the *Commission to Promote Sustainable Child Welfare* in November 2009. This commission has a three-year mandate to develop and implement changes to the Ontario CAS system in an effort to enhance its sustainability and efficiency (Commission to Promote Sustainable Child Welfare, 2010). Specifically, the goals are to (1) enhance the integration and cooperation among CASs, as well as community-based service providers (i.e., youth justice and mental health); (2) focus the early identification of vulnerable children; (3) implement a new approach to accountability and

system management; (4) strengthen and improve service delivery; (5) increase cultural considerations within the system (i.e., focus on specific needs and approach to service delivery within Aboriginal communities; (Commission to Promote Sustainable Child Welfare, 2010).

In sum, recent efforts have been put into place to achieve a more systematic way of gathering comprehensive data on the needs of children and families involved with the child welfare system within a Canadian context. However, there are no data to date on the extent to which these efforts have achieved their objectives with regard to mental health need identification and service referral within the child welfare population, making this the first study to examine this issue. In addition, because the child welfare system is the required reporting agency for child maltreatment and sometimes the sole point of contact with a social service resource for children, it represents an important avenue by which to identify and intervene in the area of mental health impairments among children who have experienced maltreatment. In fact, a recent survey of Canadian child welfare stakeholders (e.g., researchers, governmental, and non-governmental groups) was conducted to identify important areas for future research (Vandermeulen, Wekerle, & Ylagan, 2005). Findings indicated that examining the relationship between mental health services and the child welfare system was one of the most critical areas for child welfare research. This study examined this issue in the context of the Ontario child welfare system by assessing the extent and type of partnerships or collaborative projects between CASs and community-based mental health services.

Mental Health Need Identification

While the recent development of the *Child Protection Standards in Ontario* provides guidance and standardized tools to screen for mental health difficulties, there has not yet been systematic research conducted regarding the extent of implementation and effects of these

standards. Most research on mental health service issues in children involved with child welfare has focused on service utilization, rather than the earlier stage of need identification (Faver, Crawford, & Combs-Orme, 1999). Several organizational factors have been identified as potentially contributing to the limited attention given to identifying the mental health needs of children involved with child welfare. Specifically, child welfare agencies have tended to put the majority of their resources into the investigative process including immediate concerns for child protection, which have left fewer resources for mental health need identification and service delivery (Faver et al., 1999). However, as previously mentioned, there has been a shift in the past decade from focusing exclusively on child protection toward approaches involving longer term care and more holistic service provision (Leslie, 2007). Other organizational factors that may impede the identification of mental health needs in this population are funding shortages (leading to service discontinuity and lack of services), high caseloads, mandated worker deadlines, reduced qualifications of staff, and high staff turnover rates (Faver et al., 1999).

Referral Process to Mental Health Services

Data, while limited, have identified several factors that impact the inter-relationships among need identification, service referral, and use of mental health services in children who come into contact with child welfare. Child-level variables include living arrangement, age, type of maltreatment, and nature of the presenting psychological difficulty (Garland, Landsverk, Hough, & Ellis-MacLeod, 1996; Hurlburt et al., 2004). In particular, children in contact with child welfare who were residing in out-of-home placements and were older (i.e., above age 6) were more likely to receive referrals and use mental health services, even after controlling for level of need (Hurlburt et al., 2004). This finding is concerning given that early intervention with child mental health difficulties has been shown to be associated with more positive outcomes

(DeBellis, 2001; Stahmer et al., 2005). Type of maltreatment has also been found to be related to the likelihood of mental health service referral and use (Garland et al., 1996). In a sample of 662 children (aged 2 to 17 years) who were involved with child welfare as a result of maltreatment, those who had experienced physical or sexual abuse were more likely to receive referrals to mental health services than children who had experienced neglect, even after controlling for the severity of psychological difficulties (Garland et al., 1996). Children in this sample who exhibited externalizing problems were also more likely to receive referrals to mental health services than children with primarily internalizing problems, with the exception of children who had experienced sexual abuse who were likely to receive referrals regardless of their clinical presentation.

At a contextual level, the main variable found to impact the service referral process for children in contact with child welfare who are experiencing mental health difficulties is service collaboration between child welfare agencies and community mental health settings (Burns et al., 2004; Hurlburt et al., 2004). While CASs in Canada provide some mental health services, due to the broad mandate and high workloads within these agencies, many researchers have cited collaborations with community mental health settings as critical to aiding with the provision of services to children in need (Darlington, Feeney, & Rixon, 2005; Wekerle et al., 2005). Several benefits of interagency collaborations include faster and more efficient responses to client difficulties, reduced stress for child welfare workers, increased continuity of care, comprehensive services, and improved cost-effectiveness (Darlington et al., 2005). Broad ranges of interagency collaboration exist, ranging from low-level (i.e., some joint decision making and consultation without shared resources) to fully integrated services (Darlington et al., 2005). While there has been little research conducted in this area, several studies have found that there is typically a

limited amount of collaboration between child welfare agencies and community mental health services (Darlington, Feeney, & Rixon, 2004; Darlington et al., 2005). Barriers to effective interagency collaboration include the lack of structures or policies that support or encourage cross-organizational relationships, issues related to confidentiality procedures, and inadequate resources (Darlington et al., 2005; Johnson, Zorn, Tam, LaMontagne, & Johnson, 2003).

Study Objectives

The present study examined mental health need identification and the referral process to services for children involved with child welfare as a result of maltreatment. While the primary objective of this study was to inform the population to be sampled in study 2, information on mental health need identification and service referral process (i.e., agency structure, resource allocation, interagency collaboration) was also obtained. The majority of studies conducted within CASs have tended to collect data directly from children and their families and typically from clients who have had extensive contact with child welfare (i.e., Flynn & Byrne, 2005; Wekerle et al., 2005). In this study, the perspective of service directors was used to examine how mental health difficulties of children who have experienced maltreatment are identified and addressed within the Ontario child welfare system. The need identification and referral process assessed in study 1 focused on children in the initial stages of contact with child welfare agencies. These areas are critical given that service directors are the coordinators of care for children, with research highlighting the importance of early and effective interventions for children experiencing mental health difficulties.

Method

Survey Methodology: Implementation, Design, and Response Rates

As both dissertation studies involve a survey methodology component, a brief overview of survey design, implementation, and response rates will be presented. An empirically supported approach was used to design and implement the surveys used in both studies (i.e., *Tailored Design Method*; Dillman, 2000). Dillman (2000) outlined the factors that create respondent-friendly surveys and, therefore, increase the likelihood of participant response. These factors include: (1) establishing trust (i.e., sponsorship by a legitimate authority, personal contacts, highlighting the importance of the task, providing an incentive); (2) avoiding subordinating language or jargon; (3) reducing survey length to the minimum required to capture essential information; (4) facilitating the method of completion (i.e., using a high proportion of close-ended questions to decrease mental effort required for response; including a web-link or return envelope with prepaid postage); and (5) minimizing the need to disclose personal information (i.e., anonymous completion and assurance of confidentiality protocols). These factors were all considered and implemented in the survey design components of both studies 1 and 2.

In terms of survey implementation, the five-contact process outlined by the *Tailored Design Method* was employed in both studies (Dillman, 2000). This method involves: (1) a prenotification contact one week prior to the survey being sent; (2) a contact including the survey or survey web-link and a detailed cover letter; (3) a contact one week later thanking the participants who completed the survey and asking the participants who have not yet completed the survey to return it as soon as possible (a copy of the survey or survey web-link included); (4) a follow-up contact two to four weeks later that reiterates the information from the previous

contact; and (5) a final contact one week later that reiterates this information once again. Dillman (2000) reported that the use of these empirically supported design and implementation strategies typically result in response rates of 70% to 75%, which are significantly higher than those typically found in the literature. A review of electronic surveys that specifically target psychological service providers on the issue of clinical practices and attitudes toward ESTs found that response rates ranged from 21.9% and 43.9% (Gray, Elhai, & Schmidt, 2007; Nelson & Steele, 2007; Stewart & Chambless, 2007; Walrath, Sheehan, Holden, & Hernandez, 2006).

Participants

This study surveyed the Director of Service in each of the 53 CASs in Ontario, who were identified by the OACAS as the optimal source of information to provide a global, system-level perspective on the issues at hand. The names and contact information for these individuals were obtained from the OACAS. The study focused on English-speaking participants as all agencies offer services in the English language, with some having additional services in French. Additionally, this was the first of two studies, the second of which relied on measures that are only available and standardized in English.

Data were gathered between October and December 2008, with an overall response rate of 77.4% (N = 41 out of 53 directors). In terms of the length of time it took respondents to complete and return the questionnaire, 48.8% (n = 20) of the questionnaires were returned following the initial contact, 24.4% (n = 10) were returned following the first follow-up contact, 24.4% (n = 10) were returned following the second follow-up contact, and 2.4% (n = 1) were returned following the final contact. The majority of questionnaires were returned by email (95.2%; n = 39), while one questionnaire was returned by fax (2.4%; n = 1) and one by mail (2.4%; n = 1).

Measure

The questionnaire, which included open- and close-ended questions, focused primarily on mental health need identification and service referral/provision. The literature has identified these two variables as the main contributors to the limited mental health service utilization among child welfare clients (Burns et al., 2004; Canadian Health Services Research Foundation, 2003; Staudt, 2003). In addition, the questionnaire included several items on resource allocation (i.e., who pays for mental health services for the children) and interagency collaboration (i.e, the presence of collaborative projects or partnerships between CASs and community mental health settings). The questionnaire used in this study was developed in part by consulting the *About You and Where You Work* questionnaire (Kolko, Cohen, Mannarino, Baumann, & Knudsen, 2009) that surveyed workplace settings, treatment practices, and attitudes of clinicians who work with children who have experienced maltreatment. In addition, the Director of Psychological Services at the Ottawa CAS was consulted to ensure that the questions were relevant and the terminology appropriate to an Ontario child welfare setting. A copy of the questionnaire is provided in Appendix B.

Procedure

This study received ethics approval from the University of Ottawa Research Ethics Board in September 2008. The study was also supported by the OACAS after being reviewed at the Local Directors Meeting held on September 12, 2008. As previously mentioned, the five-contact method outlined by Dillman (2000) was used for questionnaire implementation:

(1) *Pre-notification*. Participants were contacted by email and telephone one week prior to the questionnaire being sent to increase the personal nature of the contact. This

contact also informed participants of the study's objectives and procedures and provided researchers' contact information should they have questions.

(2) *Questionnaire.* The questionnaire was sent to potential participants as an email attachment one week following the prenotification contact. A cover letter was also included informing participants that all participating CASs as well as the OACAS would be receiving a brief report of the results of the study following study completion (Appendix C).

(3) *Thank you Contact.* One week following the questionnaire being sent to potential participants, those who had not yet responded were sent a follow-up email. The email reiterated the study objectives, provided information regarding the dissemination of findings, stated researchers' contact information, and included another copy of the questionnaire.

(4) *Follow-up Contact.* Two weeks after the follow-up email, individuals who still had not responded were contacted by telephone (either directly or by voicemail) and the researcher offered to answer any additional questions that the individual might have with regard to the study. In addition, another copy of the email questionnaire was sent at the time of the telelphone call.

(5) *Final Contact.* One week after the second follow-up contact, a final email was sent to individuals who still had not responded indicating that data collection would be terminating in one week. This final email included a copy of the questionnaire and asked potential paticipants to complete and return the questionnaire within one week if they wished to participate in the study.

Unlike the second dissertation study, questionnaire completion for this first study was not anonymous since participants were contacted by email. Each participant contact reviewed confidentiality procedures, indicating that any presentations or publications resulting from the study would use primarily aggregate data and that, if information about a specific agency were given, no identifying information of either the agency or the director would be disclosed.

Plan of Analysis

Quantitative Data. Questions with dichotomous response options were assessed quantitatively through descriptive analyses. In addition, comparative analyses were conducted based on the location of agencies (rural versus urban). Definitions of rural and urban were based on Statistics Canada's (2006) three-tier definition of rural and urban regions. Large urban areas were defined as one or more adjacent municipalities centered on an urban core having a population of at least 50,000. Small urban areas were defined as any urban area that has a minimum population of 1,000 persons and population density of at least 400 persons per square kilometre. This category also included areas that are part of a census agglomeration, as defined by Statistics Canada (2006). Rural areas were defined as all areas that do not fall into the categories of either large or small urban areas.

Qualitative Data. Three questions (2, 6, and 7) were qualitative in nature and were examined through a qualitative analysis of themes conducted by two independent assessors in order to identify broad response categories. Each assessor reviewed responses independently and categorized them according to overriding themes. Interrater reliability was 89% for question 2, 92% for question 6, and 90% for question 7. Both of the assessors were graduate-level students enrolled in the Clinical Psychology doctoral program at the University of Ottawa.

Results

Response Rate

The overall response rate (77.4%) was examined as a function of the geographic location (urban versus rural) of the CAS. The 41 participants who responded to the questionnaire were the Directors of Service at CASs in the following locations: 46.3% (*n* = 19) in large urban areas; 39.1% (*n* = 16) in small urban areas; and 14.6% (*n* = 6) in rural areas. Of the 12 participants who did not respond to the questionnaire, 8.3% (*n* = 1) were from a large urban area, 41.7% (*n* = 5) were from a small urban area, and 50.0% (*n* = 6) were from a rural area.

Agency Size and Composition

Based on the responses of CAS Directors of Service to question 1, the mean number of mental health professionals employed at Ontario CASs was 136.3 (SD = 105) with a range from 10 to 478. The specific types of professionals employed at the agencies were, in decreasing order, social workers (*M* = 87.9; SD = 91.2), child and youth workers (M = 20.6; SD = 29.4), psychologists (*M* = 0.3; SD = 0.6), and psychiatrists (*M* = 0.1; SD = 0.5). CAS directors also noted that "other staff" (*M* = 27.3; SD = 43.2) were employed, which typically included counsellors, administrative staff, and management. In terms of geographic variation, the greatest number of mental health professionals was employed at urban agencies (*M* = 189.8), while fewer were employed at agencies located in small urban settings (*M* = 97.1), and even fewer at rural agencies (*M* = 73.7).

Identification of Mental Health Needs of Children Served by Child Welfare

Assessment Process. Based on responses to question 2 on assessment process (*What is the process used to identify the mental health needs of youth served by your agency?*), four themes were identified: (1) unstructured interview or observation of the child (63.4%; *n* = 26);

(2) implementation of structured screening tools (53.7%; *n* = 22); (3) interviews with families and collaterals (19.5%; *n* = 8); and (4) lack of any standardized assessment process (2.4%; *n* = 1). A complete list of participant responses, including a breakdown of responses by geographic location, is presented in Appendix D. Note that these were not mutually exclusive categories so it was possible for an agency to indicate using more than one strategy. Of the 53.7% of respondents who endorsed using some form of structured screening tool in the identification of children's mental health needs, only five directors (12.2% of overall sample) endorsed using the specific tools recommended by the Ministry of Children and Youth Services that assess child mental health (i.e., *Ontario Family and Child Strength and Needs Assessment*, *Strengths and Difficulties Questionnaire*).

Assessment Process Varying by Type of Maltreatment. The possibility that mental health assessment might vary by type of maltreatment was also examined as part of question 2. The majority of participants (73.1%; *n* = 30) reported that the assessment process did not vary by maltreatment type. The 17.1% (*n* = 7) of respondents who indicated assessment variability noted that children are sometimes referred to a community agency or program that deals explicitly with the assessment and/or treatment of a particular type of maltreatment at the outset of their contact with the child welfare system. Percentages do not add to 100 due to missing data. In terms of the geographic location of respondents who endorsed assessment variability as a function of maltreatment type, 57.1% (*n* = 4) were from an urban setting, 28.6% (*n* = 2) were from a small urban setting, and 14.3% (*n* = 1) were from a rural setting.

Mental Health Service Referrals

Breadth. CAS Directors of Service indicated the approximate percentage of children being served by their agency over a typical one-year period who required a referral to mental

health services (question 3). Responses varied greatly, with a mean of 57.9% (SD = 22.2) and a range of responses from 15% to 95%. The mean for urban agencies was 52.9%, while the mean for small urban and rural settings was 59.1%, and 67.5%, respectively.

In-House Service Referrals. Approximately half of respondents (48.8%; *n* = 20) reported that there were mental health services offered within their CAS (question 4). Two agencies provided only assessment services while the remainder provided both assessment and intervention services (e.g., individual and/or group counselling, play therapy, family therapy). Wide variability existed in the percentage of mental health referrals handled within the agency itself (5% to 100%). Of the respondents who endorsed having in-house mental health services, services were provided primarily by social workers (80.0%; *n* = 16) followed by child and youth workers (55.0%; *n* = 11), psychologists (55.0%; *n* = 11), psychiatrists (40.0%; *n* = 8), and other therapists or counsellors (40.0%; *n* = 8). In terms of the geographic location of CASs offering in-house mental health services, 50.0% (*n* = 10) were from a large urban area, 35.0% (*n* = 7) were from a small urban area, and 15.0% (*n* = 3) were from a rural area.

Referrals to Community-Based Providers. In addition to within-agency services, almost all CAS Directors of Service (95.1%; *n* = 39) reported that referrals are made to community-based professionals and agencies to address the mental health needs of children being served by their agency (question 5). The majority of these referrals were made to psychologists (79.5%; *n* = 31), followed by social workers (61.5%; *n* = 24), mental health centers or hospital-based services (59%; n = 23), psychiatrists (56.4%; *n* = 22), child and youth workers (25.6%; n = 10), and other therapists or counsellors (15.4%; *n* = 6). The approximate percentage of referrals made to any community-based mental health service in a given year ranged from 5% to 100% (*M* = 78.7; SD = 31.5).

Outcome Tracking of Community-Based Referrals. For community-based referrals, over half of the respondents (51.2%; *n* = 21) reported that there was a tracking process in place to monitor the outcome of these referrals (question 5). The most commonly cited tracking process was plan of care meetings (38.1%; *n* = 8) followed by tracking based on expenditures for community mental health services (33.3%; *n* = 7). For those respondents who endorsed having a tracking process in place, 61.9% (*n* = 13) were from large urban settings, 23.8% (*n* = 5) were from small urban settings, and 14.3% (*n* = 3) were from rural settings.

In sum, Directors of Service across the province reported a high need for referrals to mental health services among the Ontario child welfare population (M = 58%). Just under half the agencies (49%) provided some in-house mental health services and almost all agencies (95%) made referrals for these services to community-based providers, with the majority of referrals made to psychologists (80%). Encouragingly, over half of CASs reported having a tracking process in place to monitor the outcome of these community referrals.

Resource Allocation

In terms of the ways in which fees are typically handled for mental health services provided within CASs (questions 4 and 5), 80.0% (*n* = 16) of respondents reported that the agency covers all fees while 20.0% (*n* = 4) stated that in-house services are government-funded. Turning to the payment of fees for community-based mental health services, approximately half of respondents whose agencies make community-based referrals reported that the agency covers these fees (51.3%; *n* = 20), while 41.0% (*n* = 16) stated that most referrals are made to government-funded services and 7.7% (*n* = 3) reported that the client is responsible for fee payment.

Collaboration with Mental Health Service Providers in the Community

The majority of respondents (90.2%; *n* = 37) reported that their agencies had partnerships or collaborative projects with mental health service providers in the community (question 6). Four themes were identified among these responses: (1) the presence of collaborative projects or joint programming with community mental health service providers (75.6%; *n* = 31); (2) the presence of a contract or agreement with community mental health service providers to serve children involved with CAS (26.8%; *n* = 11); (3) funding partnerships between CAS and community service providers for the provision of mental health services to children involved with CAS (12.2%; *n* = 5); and (4) the collaborative development of shared protocols with community service providers for mental health service provision to children involved with CAS (7.3%; *n* = 3). A list of sample responses by theme is presented in Appendix E. Of the agencies that endorsed having collaborative relationships with community-based mental health service providers, 45.9% (*n* = 17) were located in large urban settings, 40.6% (*n* = 15) were in small urban settings, and 13.5% (*n* = 5) were in rural settings.

Suggested Modifications to the Process of Mental Health Need Identification and Service Referral

CAS Directors of Service were asked to answer the following question: *What (if any) changes would you make in the process of identifying mental health needs and providing therapeutic services or referrals for children and adolescents being served by your agency?* (question 7). Five themes were identified among responses: (1) the need for a greater number of community-based child and adolescent mental health services and resources (39.0%; n = 16); (2) the need for improved efficiency in the identification of mental health needs of children involved with CAS (17.1%; n = 7); (3) the need for more mental health professionals and services within

CASs (12.2%; n = 5); (4) the need for increased funding directed to children's mental health services within CASs (7.3%; n = 3); (5) the need for increased accountability and outcome tracking for children involved with CAS who are referred for mental health services (7.3%; n = 3); and (6) no changes necessary (7.3%; n = 3). A list of sample responses by theme is presented in Appendix F.

Discussion

This would appear to be the first study to examine mental health need identification and referral process to mental health services for children involved with Ontario child welfare as a result of maltreatment. The Director of Service from 41 (of 53) Ontario CASs provided information on the identification and assessment of mental health needs among child welfare clients, on the process of referring clients in need to mental health treatment services, on resource allocation, and on interagency collaboration between the child welfare sector and community mental health services.

The percentage of children with mental health concerns requiring a service referral varied greatly among CASs. However, it is evident that there is a high need for mental health services in this population as the mean response was 58%. This is consistent with previous research indicating that 50% to 80% of of children who have experienced maltreatment exhibit clinically significant mental health problems that require intervention (Burns et al., 2004; Farmer et al., 2001; Staudt, 2003; Taussig, 2002). Current study findings suggest a limited systematic or structured approach to the identification of mental health needs among children involved with child welfare. While just over half of agencies reported using some form of structured screening tool to identify mental health needs in their clients, only 12.2% reported using tools recommended by the *Child Protection Standards in Ontario* for the assessment of child mental

health (i.e., *Ontario Family and Child Strength and Needs Assessment*, *Strengths and Difficulties Questionnaire)*. Future research is needed to assess the reasons behind the apparent infrequent use of these instruments. This finding, however, may partly explain the low percentage of children involved with child welfare who are referred to mental health services within North America, compared to the number of children in need of treatment (i.e., 11.7% and 11.2% as reported by Burns et al., 2004 and Trocmé et al., 2005, respectively). It is important to note, however, that changes in organizational practices take time and that the study was only conducted one year following the introduction of the *Child Protection Standards*.

While a shift from an exclusive focus on child protection toward a more holistic approach to child well-being has been recently discussed in the literature (Fluke & Oppenheim, 2010; Leslie, 2007), less than half of Ontario CASs appear to be offering any type of in-house mental health services to their clients (49%). In the agencies that do offer such services, they are provided primarily by social workers (80%) followed by child and youth workers (55%) and psychologists (55%). Future research should examine the impact of offering in-house mental health treatment on service utilization by clients. Almost all respondents endorsed making referrals to community-based mental health services for their clients (95%). Respondents reported that most of these referrals are made to psychologists (80%) followed by social workers (62%), and mental health centers or hospital-based services (59%). There was wide variability among CASs in terms of the percentage of overall mental health referrals made to in-house versus community-based services, ranging from 5% to 100% for both types of referrals. While this study provides some preliminary insight into the referral process to mental health services by Ontario CASs, it is crucial to further define patterns and influential factors in the type and

frequency of referrals made within these organizations in order to identify ways to augment service delivery to the child welfare population.

Results related to the tracking of community referral outcomes by CASs and to the presence of interagency collaboration between the child welfare sector and community mental health services were encouraging. Over half of CAS directors stated that there was a tracking process in place in their agency to monitor the outcome of community referrals for mental health service provision. In addition, over 90% of agencies reported having partnerships or collaborative projects with community mental health service providers. This finding contrasts previous research which found limited collaboration between child welfare agencies and community mental health settings (Canadian Health Services Research Foundation, 2003; Darlington et al., 2004; Darlington et al., 2005). Further research is required to assess whether this discrepancy reflects a greater degree of collaboration between Ontario CASs and community-based mental health services or is attributable to issues such as biased responding.

In terms of the influence of geographic location on mental health need identification and service referral, findings appear to be consistent with previous literature showing that the prevalence of mental health difficulties does not differ by geographic location (or may be greater in rural versus urban areas), but there is a larger gap between need and mental health service use among rural residents (Bjorklund & Pippard, 1999; Hanrahan & Hartley, 2008; Lin, Goering, Offord, Campbell, & Boyle, 1996; Paul, Gray, Elhai, Massad, & Stamm, 2006; Ryan-Nicholls & Haggarty, 2007). Agencies located in rural settings across Ontario reported having a higher percentage of children with mental health needs requiring a service referral. However, these agencies also reported employing fewer mental health professionals, having a less standardized approach to mental health need identification, having fewer in-house mental health services,

tracking service referral outcomes to a lesser extent, and having fewer collaborative relationships with community-based mental health services, compared with urban and small urban agencies. However, it is important to note that the percentage of responding agencies located in a rural setting was low (14.6%), which may have influenced the results.

Limitations

Data were gathered only from the Directors of Service for each agency. The Directors of Service were identified by the OACAS as being the optimal source to provide organizational-level perspective on the issues addressed in the questionnaire. Therefore, descriptive findings provide some preliminary insight into the identification of mental health needs and service referral process for children who have experienced maltreatment, but do not reflect a comprehensive analysis of these issues. It would be important for future research to further explore these findings by eliciting feedback from a variety of CAS employees and stakeholders, including frontline child welfare workers. Respondents were also asked to rely on their recall to provide approximate answers to several questions, and this data collection procedure may have influenced the accuracy of findings. For instance, as a checklist of assessment measures was not presented in the question on the identification of children's mental health needs, respondents may not have accurately recalled all tools employed at their agency. As 12 of the 53 potential respondents did not participate in the study, the findings do not represent a complete portrait of the mental health need identification and service referral process for all Ontario CASs.

Implications

Since child welfare agencies are often the sole point of contact with a social service resource for children who have experienced maltreatment, a high percentage of whom exhibit mental health difficulties (Dore, 1999), it is critical that these organizations adequately identify

need and provide service referrals to this population. Given that issues such as funding shortages and high caseloads can impede this process (Faver et al., 1999), collaborations and partnerships between child welfare agencies and community-based mental health services are critical in achieving this goal (Burns et al., 2004; Hurlburt et al., 2004). While this study found encouraging results with regard to this collaboration, similar to previous research (Burns et al., 2004; Kolko et al., 2003; Trocmé et al., 2005), there remains a large discrepancy between mental health service need and receipt within the Ontario child welfare population. Future research is needed to build on these findings by identifying specific organizational factors that are correlated with improved mental health need identification and service referrals among clients (i.e., provision of in-house services, type of collaborations with community-based providers, resource allocation).

STUDY 2:

Mental Health Services for Children Who Have Experienced Sexual Abuse: Availability, Type, and Empirical Support of Treatment Provided by Ontario Psychologists and Psychological Associates

Following study 1 finding that the majority of mental health referrals for children involved with child welfare are made to community-based psychologists, this study investigated the availability and type of mental health services provided by all registered child and adolescent psychologists and psychological associates in Ontario for youth who have experienced CSA. While the majority of participants were doctorate-level psychologists (84.3%), 14.6% of the sample were masters-level clinicians (psychological associates) registered with CPO. The decision to focus on CSA was based on several considerations. First, CSA has the longest established and most widely accepted EST within the domain of child maltreatment (Chaffin &

Frederich, 2004; Child Welfare Information Gateway, 2007; Saunders et al., 2004), thereby providing the strongest benchmark against which to compare findings from the current study. Second, CSA is the only maltreatment type with a psychometrically-sound measure assessing treatment practices employed in the community with this population (Kolko et al., 2009). Finally, while Canadian data suggest that CSA has the lowest incidence rate among maltreatment types (Trocmé et al., 2008), it is also least reported, is associated with the most stigma, and is most difficult to substantiate (De Marco, Tonmyr, Fallon, & Trocmé, 2007; MacMillan, Jamieson, & Walsh, 2003; Trocmé et al., 2008). This suggests that statistics grossly under-represent actual rates of CSA occurrence.

Researchers have recently highlighted how little is known about clinical practices for children who have experienced sexual abuse, despite the fact that trauma and CSA are among the most common problems treated in child mental health (Kolko et al., 2009; Schoenwald et al., 2008). This study begins to address this knowledge gap by presenting census data on demographic, work setting, and treatment provision characteristics of registered child and adolescent psychologists and psychological associates in Ontario. These data, which have not previously been gathered, provide important information on the proportion and distribution of psychology clinicians in the province who work specifically with children who have experienced CSA. This study also assessed the type of interventions provided by these clinicians and the extent to which these services map onto the EST identified in the literature for this population (i.e., CBT with abuse-focused components). Finally, the study examined whether clinicians' demographic, work setting, treatment provision characteristics, or attitudes toward ESTs influence their approach to intervention with children who have experienced CSA. Prior to presenting study 2 methodology and results, the empirical literature on CSA will be reviewed.

Specifically, this review will focus on definitional issues, prevalence, effects, and ESTs that have been identified for children who have experienced CSA. Subsequently, the existing literature on the availability and empirical support of community-based services for this population will be reviewed.

Overview of CSA

Definition

Currently, a universally accepted definition of CSA does not exist in the research literature as a result of much variation in inclusion criteria and age limit (Goldman & Padayachi, 2000; Haugaard, 2000; Lalor & McElvaney, 2010). For example, past studies examining CSA have used cut offs ranging from 12 to 18 years (Goldman & Padayachi, 2000). While there is consensus on many acts considered to be CSA (e.g., intercourse, genital touching), there remains controversy about whether other acts should be deemed as sexually abusive (e.g., nude massage, exhibitionism; Haugaard, 2000). These definitional inconsistencies make it difficult to compare findings across studies and to arrive at firm conclusions about such issues as the prevalence and effects of CSA (Haugaard, 2000; Pereda, Guilera, Forns, & Gomez-Benito, 2009). Roosa, Reyes, Reinholtz, and Angelini (1998) noted that there can be up to a 300% difference in reported prevalence rates of CSA based on the definitional criteria used.

Incidence and Prevalence

Bearing definitional issues in mind, retrospective research has reported community prevalence rates of CSA ranging from 12% to 54% in women and from 4% to 15% in men (Putnam, 2003; Tyler, 2002). However, as a result of the secretive nature of sexual abuse, the available prevalence statistics likely underestimate the true scope of the problem (Berliner & Elliott, 2002). For example, children are most likely to disclose CSA to peers and rarely disclose

the experience to adults (i.e., parents, professionals, the legal system; Priebe & Svedin, 2008). An Ontario study found that only 9% of CSA victims reported having had contact with child welfare services because of their maltreatment (MacMillan et al., 2003). Other factors, such as discrepancies in the existing definitions of CSA and a reliance on retrospective surveys of adults, generate additional difficulty in obtaining accurate prevalence estimates (Berliner & Elliott, 2002; Putnam, 2003; Roberts, O'Connor, Dunn, & Golding, 2004). While these estimates pertain to North American samples, incidence and prevalence of CSA has been found to vary by culture, as described in a review of the international epidemiology of CSA by Pereda et al. (2009).

Turning to data on children, while the 2008 CIS did not report a breakdown of total investigations by maltreatment type, the 2003 CIS found a total of 15,227 investigations of CSA in Canada in 2003, which accounted for 6.5% of all maltreatment investigations (Trocmé et al., 2005). Of these investigations, 2,935 cases were substantiated, which represented 3% of all substantiated cases of maltreatment. The 2003 OIS reported a total of 9,493 CSA investigations in Ontario, accounting for 7.4% of all maltreatment investigations (Fallon et al., 2005). Similar to the CIS, CSA represented 3% of all substantiated maltreatment cases in Ontario in 2003 (1,490 cases; Fallon et al., 2005). CSA was the maltreatment type with the lowest rate of substantiation in both the CIS and OIS, which is likely related to the low likelihood of physical evidence, the secretive nature of CSA, and the high social stigma surrounding disclosure (De Marco et al., 2007; MacMillan et al., 2003; Trocmé et al., 2005).

Statistics Canada (2005) conducted a survey of police-reported maltreatment involving children under the age of 18 years. While this methodology is likely more reliable than the use of adult recollections, it is important to note that CSA is rarely reported to police services (MacMillan et al., 2003). In this report, rates of sexual abuse in children were found to be

alarmingly high, as children under the age of 18 accounted for only 21% of the Canadian population but represented 61% of sexual assault victims in Canada (Statistics Canada, 2005). Approximately three quarters of police-reported sexual assault victims were between 12 and 17 years, while one quarter was 6 to 11 years (Statistics Canada, 2005).

The incidence of CSA reported in both the 2003 and 2008 CIS (3% of all substantiated maltreatment cases) revealed an approximately 32% decline in substantiated cases of CSA from data collected in 1998 (Trocmé et al., 2005; Trocmé et al., 2008). This decline in the incidence of reported CSA cases is a phenomenon that has been observed across North America during the late 1990s and early 2000s (Finkelhor & Jones, 2004; Jones, Finkelhor, & Kopiec, 2001; Trocmé et al., 2005). Possible explanations include an actual decrease in the occurrence of CSA, an increasing conservatism in the reporting and substantiation of CSA cases, a diminishing number of older cases, and changes in the reporting practices of CSA (Finkelhor & Jones, 2004; Jones, Finkelhor, & Kopiec, 2001). More specifically, it is possible that there is a real decline in CSA due to increased efforts to prevent CSA resulting from a strong media and political focus on CSA during the 1980s and early 1990s (Jones et al., 2001; Finkelhor & Jones, 2004). Another outcome of this media and political attention to CSA was criticism about overzealous investigations of CSA and the creation of false memories through the process of therapy (Gardner, 1989; Hyman, Husband, & Billings, 1995; Wakefield & Underwager, 1992). These issues may have led to more conservative reporting of CSA as well as reticence among child welfare workers to investigate and substantiate cases of CSA due to fear of media or public backlash (Finkelhor & Jones, 2004). There may also be a reduction in the number of past cases of CSA that had not been disclosed by the victim following this surge of social attention to the issue of CSA. This would reflect a reduction in the number of older cases available for new

disclosures, but not a true decline in new cases of CSA (Finkelhor & Jones, 2004). Finally, it has been suggested that, as most child welfare systems in North America have been undergoing significant reform during the past decade (e.g., changes in reporting practices, increasing movement from child protection to overall child wellbeing), it is difficult to reliably compare statistics gathered in the past to current statistics on the prevalence of CSA (Finkelhor & Jones, 2004; Jones, Finkelhor, & Kopiec, 2001).

Characteristics

Most CSA is committed by individuals with whom the child has a relationship (Madu, 2001; Statistics Canada, 2005). Statistics Canada (2005) data indicated that perpetrators were family members in 32% of CSA cases, friends/acquaintances in 48% of cases, and strangers in only 13% of cases. Intrafamilial sexual abuse almost always involved a male relative (98%), with the offender being a father figure in 4 out of 10 cases (Statistics Canada, 2005).

Girls have been shown to have a 2 to 3 time higher risk of experiencing CSA than boys, with abuse starting at an earlier age and having a longer duration (Putnam, 2003). Statistics Canada (2005) found CSA to be over-represented among females, who were victims in 80% of reported cases. Rates of intrafamilial CSA were especially high among pre-adolescent females. While these sex differences are consistently found in the literature, it is important to note that boys tend to disclose CSA less often than girls, and mental health professionals also tend to assess CSA in boys less frequently than in girls (Madu, 2001; Putman, 2003; Romano & De Luca, 2001; Yancey & Hansen, 2010). Beyond sex, another risk factor for CSA includes age, with risk increasing from infancy to late adolescence (Putnam, 2003). Children living in single-parent households, children with physically or emotionally unavailable mothers, children with physical disabilities, and children experiencing high levels of family conflict have also been

found to be at increased risk for CSA (Berliner & Elliott, 2002; Putnam, 2003; Yancey & Hansen, 2010).

Effects

The initial and long-term consequences of CSA have been well-documented and are varied, indicating that there is no specific sexual abuse syndrome (Berliner & Elliott, 2002; Maniglio, 2009). While the effects of CSA vary greatly among individuals, researchers have consistently reported higher levels of psychopathology over the lifespan in children who have experienced sexual abuse compared to the general population (MacMillan & Munn, 2001; Maniglio, 2009; Ruggiero, McLeer, & Dixon, 2000). Initial effects of CSA often include internalizing (e.g., fear, post-traumatic stress symptoms, depression, anxiety) and externalizing (e.g., aggression, disruptive behaviour, sexualized behaviour) problems, poor self-esteem, self-blame, guilt, academic problems, suicidal ideation/behaviour, disordered eating, and risk for re-victimization (Beitchman, Zucker, Hood, da Costa, & Akman, 1991; Berliner & Elliott, 2002; Classen, Palesh, & Aggarwal, 2005; Lev-Wiesel, 2008; Maniglio, 2009; Putnam, 2003; Tyler, 2002). Over the long-term, individuals who experienced CSA appear to be at greater risk for anxiety, depression, substance use disorders, suicidal behaviour, relationship problems, adolescent pregnancy, and parenting difficulties (Beitchman et al., 1992; Dube et al., 2005; Fiscella, Kitzman, Cole, Sidora, & Olds, 1998; Lev-Wiesel, 2008; Maniglio, 2009; Putnam, 2003; Roberts et al., 2004; Romano, Zoccolillo, & Paquette, 2006; Schuetze & Das Eiden, 2005). In a sample of 8292 families, Roberts et al. (2004) found that most of these long-term effects of CSA remained, even after controlling for the co-occurrence of other childhood maltreatment experiences such as physical and emotional abuse. In addition, adults who have been sexually abused as children seem to experience greater physical health problems (e.g., gastrointestinal,

gynaecological) and use health care services at significantly higher rates than individuals with no known history of CSA (Sickel, Noll, Moore, Putnam, & Trickett, 2002).

While there are a number of factors that can influence the severity of CSA effects, aspects related to the abuse experience, characteristics of the victim, and the environmental surroundings of the child are commonly cited as playing a role in post-abuse adjustment. Higher frequency, more intrusive acts, and longer duration of abuse have been associated with increased negative effects in victims (Berliner & Elliott, 2002; De Marco et al., 2007; MacMillan & Munn, 2001; Ruggiero et al., 2000). Contact CSA and a closer relationship with the perpetrator have also been linked with poorer levels of functioning and adjustment in victims (King et al., 1999; Neumann, Houskamp, Pollock, & Briere, 1996; Putnam, 2003). A child's temperament, attachment style, and level of functioning prior to the abuse can moderate the severity of CSA effects (Saywitz, Mannarino, Berliner, & Cohen, 2000). Environmental factors such as the existence of a social support network and the availability of emotionally supportive caregivers have been associated with post-abuse adjustment in victims (De Marco et al., 2007; Saywitz et al., 2000). Research has not identified a specific course or pattern of symptomatology in CSA victims over the lifespan (Berliner & Elliott, 2002). In a review of studies, Berliner and Elliott (2002) noted that the onset and duration of symptoms tend to be more individual specific, with no clear patterns emerging across victims. Some victims do not appear to display any emotional or behavioural symptoms following CSA. However, it is possible that symptoms can arise later in life as a result of a phenomenon known as the "sleeper effect" (Putnam, 2003).

It appears that symptomatology may differ by sex, with boys exhibiting more externalizing difficulties (e.g., aggression and substance abuse) and girls experiencing a range of both internalizing and externalizing problems (Romano & De Luca, 2001; Yancey & Hansen,

2010). Common characteristics of CSA in girls (e.g., abuse by a father figure, invasive sexual acts) have been linked to more detrimental outcomes that span affective, behavioural, and relational domains. What is especially concerning is that CSA in girls can lead to a persistent cycle of violence over the life span and an increased risk of offspring maladjustment and maltreatment (McCloskey & Bailey, 2000; Roberts et al., 2004; Schuetze & Das Eiden, 2005). A meta-analysis on the long-term effects of CSA in women, as gathered through retrospective data, found the link with re-victimization to be particularly marked (Neumann et al., 1996). A more recent longitudinal study of women found that CSA was associated with a range of negative adult outcomes, including poorer mental health, problematic parenting behaviours, and adjustment problems in these women's children (i.e., hyperactivity, conduct problems, peer problems, emotional problems; Roberts et al., 2004).

Treatments

The literature consistently identifies CBT with abuse-focused components as the treatment of choice for children who have experienced sexual abuse (Child Welfare Information Gateway, 2007; Macdonald, Higgins, & Ramchandani, 2008; Putnam, 2003; Saunders et al., 2004). Four reviews of treatment outcome research on trauma-related symptoms in children concluded that CBT with abuse-focused components was efficacious in treating CSA-related symptoms among girls and boys across a range of ages from preschool to adolescence (Carr, 2004; Feeny et al., 2004; Saywitz et al., 2000; Taylor & Chemtob, 2004). A more recent meta-analysis identified CBT as most beneficial for symptoms of psychological distress and difficulties with self-concept in children who have experienced CSA (Hetzel-Riggin, Brausch, & Montgomery, 2007). While this meta-analysis provided preliminary support for other treatment modalities (i.e., supportive therapy, play therapy, group therapy) in addressing behavioural

symptoms and social functioning difficulties often associated with CSA, these approaches have yet to establish a solid evidence base related to their efficacy. Moreover, the efficacy of several modalities in the meta-analysis was based on over 15 studies (i.e., CBT, abuse-focused), while that of other modalities was only based on a few studies (i.e, play therapy; Hetzel-Riggin et al., 2007).

The intervention that has received the most empirical support to date and that has been found to be superior to other approaches for children who have experienced sexual abuse is Trauma-Focused Cognitive Behavioural Therapy (TF-CBT; Child Welfare Information Gateway, 2007; Saunders et al., 2004). TF-CBT was initially developed by Deblinger and Heflin (1996) and later revised by Cohen, Mannarino, and Deblinger (2006). It is a short-term treatment that typically lasts 12 to 18 sessions, with each session running from 60 to 90 minutes. The primary goals of TF-CBT are to (1) reduce children's negative emotional and behavioural responses to sexual victimization and (2) correct abuse-focused maladaptive attributions and beliefs. TF-CBT specifically addresses post-traumatic stress, acting out behaviours, sexualized behaviour, depression, and anxiety (Cohen et al., 2006). In TF-CBT, children gradually confront their sexual abuse experience in individual sessions through the following areas of focus, summarized by the acronym PRACTICE: Psycho-education; Parenting skills; Relaxation skills; Affective modulation skills; Cognitive coping skills; Trauma narrative and cognitive processing of the traumatic event(s); In vivo mastery of trauma reminders; Conjoint child-parent sessions during which the child has an opportunity to share the trauma narrative with a non-offending caregiver; and Enhancing safety and future developmental trajectory (Cohen et al., 2006; Cohen & Mannarino, 2008). It is important to note that TF-CBT is indicated for children whose primary presenting problems are related to their traumatic experience (Cohen & Mannarino, 2008).

Therefore, it is imperative that a complete trauma-focused assessment is conducted prior to starting treatment to evaluate the extent to which the traumatic event is impacting the child's current functioning (Cohen & Mannarino, 2008).

TF-CBT has been identified as a well-supported, efficacious treatment based on theoretical, clinical, and empirical evidence (Cohen, Deblinger, Mannarino, & Steer, 2004; Cohen & Mannarino, 1996; Deblinger, Lippmann, & Steer, 1996). TF-CBT was the only intervention of 22 interventions to be given the highest rating (classification rating 1) indicating a well-supported, efficacious treatment in a document called *Child Physical and Sexual Abuse: Guidelines for Treatment* prepared by the National Crime Victims Research and Treatment Center (Saunders et al., 2004). The Kauffman Best Practices Project identified TF-CBT as the only intervention out of 16 to be considered a well-supported and efficacious treatment with children who have experienced sexual abuse (Chadwick Center, 2004). A randomized controlled trail comparing the combined effect of a selective serotonin reuptake inhibitor and TF-CBT with TF-CBT alone supported an initial trial of TF-CBT without medication for children exhibiting psychological symptoms following trauma exposure (Cohen, Mannarino, Perel, & Staron, 2007). Other agencies and organizations that have identified TF-CBT as the treatment of choice for children who have experienced sexual abuse include the Government of Canada National Clearinghouse on Family Violence, the United States Department of Health and Human Services Substance Abuse and Mental Health Services Administration, and the California Evidence-Based Clearinghouse for Child Welfare and the Child Welfare Information Gateway. While there is some preliminary evidence for the use of TF-CBT with children who have experienced other traumas (i.e., natural disasters), the strongest empirical evidence for the intervention is in the treatment of CSA-related symptoms (Cohen & Mannarino, 2008). In 2005, the National Crime

Victims Research and Treatment Center at the Medical University of South Carolina developed a free web-based TF-CBT training for clinicians in the community (http://tfcbt.musc.edu/).

Summary

The sexual abuse of children remains one of the most underreported forms of maltreatment due to the frequent lack of physical evidence, the secretive nature of the experience, and the high social stigma surrounding disclosure (De Marco et al., 2007; Lev-Wiesel, 2008; MacMillan et al., 2003; Trocmé et al., 2008). A wide range of both internalizing and externalizing symptoms have been associated with CSA (MacMillan & Munn, 2001; Putnam, 2003; Ruggiero et al., 2000; Yancey & Hansen, 2010). These effects are present in numerous victims of CSA even after controlling for other childhood adversities, as well as in the absence of other adverse experiences in childhood (Molnar, Buka, & Kessler, 2001). Research points to CBT with abuse-focused components (specifically TF-CBT) as the treatment of choice for children exhibiting mental health symptoms related to CSA. Numerous sources have identified this treatment as efficacious and have been attempting to disseminate it to the community (Chadwick Center, 2004; Cohen et al., 2005; National Clearinghouse on Family Violence, 2006; Paul et al., 2006; Saunders et al., 2004).

Connection Between Mental Health Service Research and Community-Based Practice

As the goal of this study was to examine the type of mental health services available in the community for children who have experienced sexual abuse, it is important to first consider more generally the connection between psychotherapy research and community practice. Given that much evidence exists that ESTs tend to outperform usual clinical care (Bickman, 2002; Shirk, 2004; Weisz, Jenson Doss, & Hawley, 2006) and that ethical clinical practice suggests the

use of ESTs (Saunders, 2005), it is important to examine whether ESTs are being routinely used in clinical practice. Clinicians have a duty to be both knowledgeable and skilled in treatments proven to be efficacious for a given population or otherwise to refer clients to a professional who is more competent in the area (Saunders, 2005). If clinicians are not trained in ESTs relevant to their area of practice, there is a risk that clients will receive sub-standard or dangerous services and/or that resources will be used inefficiently (Pearce, 2007). However, it is important for researchers to first acquire an understanding of treatment techniques currently being used in clinical practice in order to assess the extent of deviation (if any) from ESTs and then to consider optimal ways to disseminate ESTs to the community.

Based on the limited research conducted to date, it appears that interventions found to be efficacious by way of empirical evidence often are not used in “real world” clinical settings (Hoagwood & Olin, 2002; Saunders, 2005; Weersing, Weisz, & Donnenberg, 2002). It has frequently been reported that community clinicians rely primarily on advice from colleagues and past clinical experiences to inform treatment decisions rather than consulting research findings (Nelson and Steele, 2007; Stewart & Chambless, 2007). Most of the existing research, however, has examined adherence to specific ESTs and has rarely assessed the specific interventions being used by community clinicians or clinicians’ perceptions of ESTs (Aarons, 2004; Becker, Zayfert, & Anderson, 2004; Nelson, Steele, & Mize, 2006; Weersing et al., 2002). This exemplifies how research often guides practice, but rarely does practice provide direction for research. The lack of attention paid to clinical practices by most researchers is evident in studies comparing randomized controlled trials to treatment in the community that refer to the latter simply as “treatment as usual” without providing any further information regarding specific therapeutic techniques being used (Baumann, Kolko, Collins, & Herschell, 2006; Bickman, 2002; Shirk,

2004). Results of such research tend to highlight a disconnect between research and practice (Becker et al., 2004; Mussell et al., 2000), but it remains unclear whether such findings have fully captured the nature and specific techniques employed in the “treatment-as-usual” comparison samples. It is important to address this area by gathering data on the predominant theoretical orientations being used by clinicians, on whether clinical practices are based on existing research, on how therapy outcomes in clinical practice correlate with the types of treatments being employed, and ultimately on whether changes in clinical practices are needed (Weersing et al., 2002). It is remarkable that there exists only one psychometrically-sound measure to date (Weersing et al., 2002) that assesses specific treatment practices employed in child and adolescent psychotherapy.

In addition to learning about the clinical practices being routinely used in the community, gaining information about clinicians themselves (e.g., demographics, work settings, treatment provision characteristics) can be helpful in considering how to best translate knowledge about ESTs to the community. Findings indicate that clinician variables associated with the use of ESTs include education, length of time since graduation, years in practice, age, sex, training in psychological treatments, theoretical orientation, attitude toward treatment research, and the openness of clinical setting toward treatment research (Aarons, 2004; Gray et al., 2007; Nelson & Steele, 2007; O’Donnell, 2004; Sprang, Craig, & Clark, 2008; Stewart & Chambless, 2007; Von Ranson & Robinson, 2006). In addition, geographic location of practice (i.e., urban versus rural) has been found to influence both the availability and empirical support of mental health services. While the prevalence of both mental health difficulties and child maltreatment tend to be similar or greater in rural versus urban areas, a larger gap between need and mental health service use has been noted among rural residents (Bjorklund & Pippard, 1999; Hanrahan &

Hartley, 2008; Lin et al., 1996; Paul et al., 2006; Ryan-Nicholls & Haggarty, 2007). Specific barriers to mental health service provision in rural areas that have been cited in the literature include a shortage of service providers, a lack of training opportunities in clinical interventions for mental health service providers, lack of specialization opportunities for clinicians, and difficulties with accessibility to services. Additional barriers that have been cited as influencing the provision of mental health services to rural populations is an often increased stigma of mental health difficulties in rural areas and difficulties with client confidentiality given the smaller community sizes (Bjorklund & Pippard, 1999; Ryan-Nicholls & Haggarty, 2007). Assessing these clinician variables, along with the content of clinical practices, is critical in the process of identifying the optimal means of effectively disseminating ESTs to the community.

Training in Empirically Supported Treatments for Community-Based Mental Health Clinicians

Organizations such as the Institute of Medicine (2001) and the American Psychological Association (2005) are increasingly placing strong emphasis on the use of ESTs in clinical practice. However, the extent to which mental health disciplines have emphasized and/or mandated the practice of ESTs has varied. In order to examine the amount and type of EST training provided across various mental health disciplines, Weissman et al. (2006) conducted a national survey of psychiatry, psychology (Ph.D. and Psy.D.), and social work (MSW) training programs in the U.S. Findings indicated that the percentage of programs requiring both a teaching and clinical supervision component in ESTs was greatest in psychiatry (95.7%), followed by Ph.D. psychology (56.2%), MSW (38.3%), and Psy.D. (32.7%).

While such data do not exist in a Canadian context, differences in the emphasis and mandates of the regulatory bodies of mental health disciplines with respect to ESTs are evident.

The accreditation criteria for doctoral programs in both clinical and counseling psychology in Canada require training in ESTs (Hunsley, 2007). In addition, in 1996 the Canadian Psychological Association's (CPA) Clinical Psychology Section appointed its own EST task force and the Ontario Psychological Association claimed that all publicly-funded psychological treatments need to be evidence based (Hunsley, 2000; Ontario Psychological Association, 2001). While these advances appear promising, methods for monitoring and accountability must be pursued to enforce their implementation.

The responses and opinions of clinicians must also be considered for these initiatives to be successful in order to identify optimal means of ensuring their implementation and maintenance. Variables that have been found to be associated with more positive attitudes toward or greater use of ESTs in samples of community clinicians are younger age, a CBT orientation, more education, more recent exposure to academia, and employment in an urban setting (Aarons, 2004; Gray et al., 2007; Paul et al., 2006). Interestingly, in a survey of 1,195 U.S. students currently enrolled in Clinical Psychology Ph.D. programs, results indicated that students who planned on having solely clinical careers reported being less likely to use research to guide their treatment planning than students who planned on having clinical-research careers (Luebbe, Radcliffe, Callands, Green, & Thorn, 2007). This study demonstrates that a divide between research and practice may be established early on in the careers of mental health professionals and may be perpetuated by a system that focuses more on choosing between two pathways (clinical versus research) than reinforcing the integration of these two domains.

Support and Implementation of Empirically Supported Treatments in Child Welfare

More specifically, the focus on ESTs has also become increasingly important within the area of child welfare (Leslie, 2007; Wekerle et al., 2005). Several changes within child welfare

that have driven this movement include (1) an identification of best practices and demonstration of service effectiveness as a result of increased spending in these areas; (2) the growth of Quality Assurance and Quality Improvement programs that closely monitor client outcomes; (3) increased implementation of electronic databases where practice and outcome data are recorded; (4) increased expectations for training and education of child welfare staff; and (5) dissatisfaction with current practices and a call for greater accountability and use of ESTs (Leslie, 2005).

When examining at the general findings on clinicians` use of ESTs for children who have experienced maltreatment, the research (while quite limited) tends to support a disconnect between research findings and community practice. In a review by Flynn and Bouchard (2005) on the evaluation of service effectiveness within the Canadian child welfare system, a need for more research in the following areas was highlighted: (1) high-quality impact evaluations; (2) evaluation of a wider range of interventions; and (3) implementation and evaluation of evidence-based practice interventions. While three studies have found that community clinicians employ some research-based practices in the area of child maltreatment (CBT and family therapy; Baumann et al., 2006; Cohen, Mannarino, & Rogal, 2001; Greenwalt, Sklare, & Portes, 1998), most of the research in this area has not come to this conclusion. The interventions most frequently used in the community with children who have experienced CSA tend to be non-behavioural, which is concerning given that most research studies find behavioural interventions to be efficacious in the treatment of CSA-associated effects (Weersing et al., 2002; Weiss, Catron, Harris, & Phung, 1999; Wilson, 1997).

Availability, Type, and Empirical Support of Mental Health Services Provided to Children Who Have Experienced CSA

There is currently no literature on the extent or availability of services for this population, as the limited literature that does exist in the area of treatment for children who have experienced CSA focuses on the type of services provided to the victims. Four such studies were located over a 20 year period. In the first study by Keller, Cicchinelli, and Gardner (1989), a nation-wide survey of 553 CSA treatment programs in the U.S. and Puerto Rico was conducted. A 25-item questionnaire was developed that included questions about program philosophy and approach, staffing, funding, evaluation, and client characteristics. The initial sample consisted of 2,258 CSA treatment programs, and a response rate of 24.4% was obtained. Findings indicated that the treatment offered in approximately 88% of programs focused on the victims of abuse, with the majority taking a family-oriented approach. Specific therapeutic techniques varied, with over half of respondents endorsing the following techniques: insight therapy; play therapy; behaviour modification; art therapy; psycho-education; and cognitive restructuring. However, precise definitions of interventions were not provided, which may have lead to varying interpretations of the terms by participants. Additionally, the survey found that less than half of the programs (43.8%) indicated using any standardized or program-specific tools to assess the needs or progress of clients in treatment.

Campbell and Carlson (1995) conducted a survey of 427 U.S. mental health professionals working in the area of CSA about their training background. Participants were recruited from a CSA conference and a response rate of approximately 30% was obtained from the 1400 attendees. A measure was developed for this study, in which clinicians rated their knowledge and training related to 42 topics concerning the treatment of CSA. Findings revealed that the majority

of professionals (75%) had received some general training in the area of CSA (e.g., female victims, incest victims), but less than half had received training related to important areas such as treatment provision to male victims (43.5%) and relevant cultural issues (37.5%). It was found that professionals who had received previous training in the area of CSA treatment felt more knowledgeable and believed the training to have been of value in their clinical work with this population.

Day, Thurlow, and Woolliscroft (2003) conducted a survey of mental health professionals working in a British hospital about whether factors such as clinician age, training, or supervision had an impact on how competent clinicians felt in working with adult clients who had experienced sexual abuse as children. The initial sample consisted of 149 mental health professionals from various disciplines and a response rate of 36.2% was obtained (N = 54). The sample was composed of psychologists, nurses, psychiatrists, occupational therapists, counselors, and social workers. A measure was developed for this study that contained open-ended questions related to general knowledge about CSA and needs/ideas about current service provision in this area. Findings revealed that sex and age had no effect on clinician ratings of support, comfort, or competency in their work with CSA and clinicians with less than 10 years experience reported feeling significantly more supported in their work with this population. In addition, 56.6% of respondents reported having received some training in the treatment of CSA, with the most common training being a 1 to 3 day workshop. While clinicians who had received some training in this area reported feeling more comfortable and competent in their work with CSA, two thirds of participants (66.7%) reported feeling unsupported in their clinical work and 81% reported a need for more training in the area of CSA treatment.

In the most recent survey, Kolko et al. (2009) examined workplace settings, treatment practices, and attitudes of clinicians who work with children who have experienced sexual abuse. The sample consisted of 401 community-based clinicians from 26 U.S. states who were attending training workshops in TF-CBT. The majority of clinicians were female (78%) whose highest level of education was a master's degree (71%) and who worked in an outpatient setting (70%). The most common professional discipline was social work (40.3%), and half of the sample had less than five years of clinical experience (49.9%). Findings revealed that clinicians in the community used a variety of therapeutic interventions to treat children who have experienced sexual abuse, with the most frequently used techniques being family interventions (40%), cognitive techniques (33%), psychodynamic approaches (25%), gradual exposure (22%), play therapy (19%), and behavioural techniques (12%). Clinicians who used gradual exposure interventions also reported greater use of cognitive, family, and play therapy techniques as well as more positive attitudes toward treatment manuals. The sample used in this study, however, was not random and it is possible that participants had particularly favorable attitudes toward ESTs in the area of CSA given that they were attending a training workshop on TF-CBT.

In sum, there is a lack of research examining the clinical interventions being used by mental health service providers treating children who have experienced sexual abuse. Of the four articles identified, only two specifically examined the use of treatment techniques (Keller et al., 1989; Kolko et al., 2009), while the other two focused on past training experiences and clinicians' feelings of competency when working with CSA (Campbell & Carlson, 1995; Day et al., 2003). While findings from the two articles examining the clinical interventions being used with this population appear encouraging on the surface, the study conducted by Kolko et al. (2009) was likely biased given that participants were attendees at a TF-CBT training workshop,

and the study by Keller et al. (1989) is 20 years old and was conducted prior to the development of TF-CBT.

Summary and Contribution to the Literature

As research exists on efficacious interventions to address the mental health sequelae of CSA (Cohen et al., 2006; MacMillan & Munn, 2001; Neumann et al., 1996; Ruggiero et al., 2000; Saunders et al., 2004), the following study aimed to assess the availability, type, and empirical support of mental health services for this population as well as the factors that may predict clinicians' choice of treatment approach. Based on findings from study 1 that most CAS directors of service estimate the majority of mental health referrals for children who have experienced maltreatment are made to psychologists in the community (80%), the first goal of this study was to collect census data from CPO- registered child and adolescent psychologists and psychological associates in Ontario. Data included demographic, work setting, and treatment provision characteristics in order to develop a profile of psychology clinicians who work with children who have experienced CSA. The second goal of the study was to assess the type and empirical support of treatments being used in community-based settings with this population, as well as the factors that may predict clinicians' intervention choice (i.e., demographic, work setting, treatment provision characteristics, or attitudes toward ESTs). By assessing the current practices and attitudes toward ESTs among clinicians working in the area of CSA, this study will serve as a starting point for the identification of obstacles related to the implementation of ESTs with this population.

This study aimed to answer the following broad questions:

(1) What is the proportion and distribution of Ontario psychologists and psychological associates who provide mental health services to children who have experienced sexual abuse? (service availability)

(2) To what extent do mental health treatments being used by clinicians in the community map onto what has been shown to be efficacious in the literature with CSA (i.e., CBT with abuse-focused components).

(3) Do clinicians' demographic, work setting, treatment provision characteristics, or attitudes toward ESTs influence their choice of intervention with children who have experienced CSA?

In combination with study 1, this dissertation investigated the interdependent processes that have been identified by Burns et al. (2004) and the Canadian Health Services Research Foundation (2003) as potentially contributing to inadequate service provision to children who have experienced maltreatment. Specifically, the dissertation examined: (1) problems with need identification (study 1); (2) difficulties in the referral process to service providers (study 1); (3) availability of services to address the needs of these children (study 2); and (4) empirical support of the services to which referrals are made (study 2).

Hypotheses

Based on the previously outlined literature, it was expected that clinicians' use of ESTs with children who have experienced CSA (CBT with abuse-focused components) would be predicted by clinician age, type and location of work setting, self-reported theoretical orientation, and general attitudes toward ESTs. Specifically, it was expected that clinicians who endorsed greater use of ESTs with this population would: (1) be younger; (2) work in a setting where research is integrated with clinical practice (i.e., university- or hospital- affiliated); (3) have a

primary work setting in a large urban location; (4) self-identify as working within a cognitive and/or behavioural framework; (5) spend a greater proportion of their time on clinical training activities (i.e., self-directed readings, workshop attendance); and (6) report more favourable attitudes toward ESTs.

Method

Participants

The original sample was composed of the 1,607 registered child and adolescent psychologists and psychological associates who indicated providing clinical and/or counselling services in Ontario through CPO, the required registration agency for psychology clinicians in the province. One can search for CPO members on the website (www.cpo.on.ca) by: (1) authorized area(s) of practice (clinical, counselling, neuropsychology, forensic, health, industrial/organizational, rehabilitation, and school); (2) authorized client population(s; children, adolescents, adults, seniors, families, couples, and organizations); and (3) language(s) in which service is provided (over 100 options). To create a database of all child and adolescent psychology clinicians in Ontario providing clinical and/or counselling services in English (N = 1,607), the following lists were cross-referenced: (1) clinical service provision to children in English (*n* = 1,384); (2) counselling service provision to children in English (*n* = 949); (3) clinical service provision to adolescents in English (*n* = 1,743); and (4) counselling service provision to adolescents in English (*n* = 1,227). Lists were created from the Directory of Members listing on the CPO website over a four-month period between July and October 2009. The present study focused on clinicians who provide services in English, as the measures used were only available and standardized in English.

A flowchart depicting participant recruitment and response rate is presented in Figure 1. Of the 1,607 clinicians who fit the inclusion criteria, 1,184 had provided an email address on the CPO website (and were contacted by email), while the remainder (*n* = 423) provided only a mailing address (and were contacted by mail). Of the 1,607 clinicians, 390 (24.3%) were ineligible to participate for the following reasons: 179 reported that they had not provided psychological services to children and/or adolescents within the past year, and 211 could not be contacted (i.e., number or email not in service, mail was returned to sender, or CPO website reported that they were currently working out of province). Of the 1,217 eligible participants, 725 (60%) completed the study, with 610 questionnaires completed online and 115 returned by mail. Given that responses were anonymous, it was not possible to conduct attrition analyses or track the length of time it took for respondents to return the questionnaires. The majority of participants were female (69.5%), Ph.D. educated (78.8%), and had their primary work setting in a large urban setting (84.9%).

Measure

The questionnaire package developed for this study (Appendix G) was composed of three sections: (1) demographic, work setting, and treatment provision characteristics; (2) treatment techniques employed with children who have experienced sexual abuse; and (3) use of and attitudes toward ESTs. All participants (N = 725) completed section 1, while only those clinicians who endorsed working with children who have experienced CSA completed sections 2 and 3.

Demographic, Work Setting, and Treatment Provision Characteristics. This section consisted of items that inquired about variables that have been shown to influence clinical decision making in the literature: age; highest degree received; year degree was awarded;

primary work setting; geographic location of primary work setting (urban versus rural and provincial location); self-described theoretical orientation; years of treatment provision; receipt of clinical supervision; amount of time devoted to learning new clinical methods; and attitudes toward ESTs (Aarons, 2004; Bambling, King, Raue, Schweitzer, & Lambert, 2006; Gray et al., 2007; Nelson & Steele, 2007; O'Donnell, 2004; Paul et al., 2006; Stewart & Chambless, 2007; Von Ranson & Robinson, 2006). Two additional variables were included in this section (primary age range of clients and primary presenting problems treated) in order to provide a comprehensive overview of psychology clinician characteristics in Ontario. Within primary age range of clients, over 18 was included as an option since it was possible that only a minority of a clinician's practice was devoted to working with children. Participants who endorsed working in the area of CSA responded to four additional questions in this section: (1) number of years providing treatment to children who have experienced CSA; (2) number of clinical practice hours per week involving the treatment of children who have experienced CSA; (3) receipt of any certifications in mental health treatments for children who have experienced CSA (and specification of certifications received); and (4) whether any mental health service referrals for children who have experienced CSA come from an Ontario CAS (and, if yes, participants were asked to specify the percentage). Given that the majority of questions in this section were composed of nominal or ordinal responses, most questions had categorical response options in order to facilitate ease of responding for participants.

Therapy Procedures Checklist (TPC). An abbreviated version of the TPC (Weersing et al., 2002) was used to assess the treatment techniques currently being used by clinicians to treat children exhibiting CSA-related symptoms. The original TPC includes 53 items and was developed for the purpose of assessing clinicians' reports of the techniques they employ when

working with child and adolescent clients. Clinicians rate their agreement with each item using a 3-point Likert scale ranging from 0 (*I rarely or never do this*) to 2 (*I frequently or regularly do this*).

The TPC is composed of three subscales, each representing a psychotherapeutic orientation (i.e., behavioural, cognitive, and psychodynamic). The measure contains 17 items for the behavioural subscale, 13 items for the cognitive subscale, 20 items for the psychodynamic subscale, and three items that are not specific to a particular orientation. Note that these three latter items were not included in the abbreviated version. The TPC demonstrated excellent internal consistency for all three subscales ($\alpha = .84$ to .96) and high test-retest reliability over a two week period (all $r > .74$; Weersing et al., 2002). The TPC is the only existing psychometrically-sound measure to date that assesses treatment practices employed in child and adolescent psychotherapy, and it has been used in several other studies (Baumann et al., 2006; Kolko et al., 2009; Weersing & Weisz, 2002; Weiss et al., 1999).

Due to the length of the TPC and the fact that additional items were added for this study (see below), an abbreviated version was developed in keeping with the recommendations of the empirically supported approach to survey design and implementation by Dillman (2000). The abbreviated version included the top seven items with the highest factor loadings on each of the three subscales. A complete list of the original TPC items and factor loadings as well as items used in the abbreviated version is presented in Table 1. Excellent internal consistency values were found for the three abbreviated subscales, with the following Cronbach's alphas for the current study sample: cognitive subscale = .91; behavioural subscale = .87; and psychodynamic subscale = .84. Following data collection, an exploratory factor analysis with a promax rotation

was conducted to confirm the factor structure of the abbreviated measure (reported in the Results section).

In addition to the 21 items of the abbreviated TPC, items on gradual exposure (*n* = 4) and play therapy (*n* = 8) were included, as developed by Kolko et al. (2009) in their study of treatment practices with children who have experienced sexual abuse. These items were added to the TPC by Kolko et al. (2009) to reflect common interventions used with children who have experienced sexual abuse. Internal consistency was excellent for the play therapy subscale (α = .91) and acceptable for the gradual exposure subscale (α = .65; Kolko et al., 2009). In the current study, similar Cronbach's alpha values were found for the play therapy factor (α = .89) and the gradual exposure subscale (α = .63). Kolko et al. (2009) explained the lower alpha for the gradual exposure factor as reflecting the fact that the items do not represent a unidimensional construct. A common factor analysis using principal axis factoring was conducted by Kolko et al. (2009), and two factors emerged (representing the play therapy and gradual exposure subscales) accounting for a total of 50.56% of the variance. Kolko et al. (2009) found that all 12 items had loadings of 0.30 or higher on only one of the two factors.

Evidence-Based Practice Attitude Scale (EBPAS). The 15-item EBPAS (Aarons, 2004) was used to measure clinicians' attitudes toward the adoption of ESTs. Clinicians rated their agreement with each item using a 5-point Likert scale ranging from 0 (*not at all*) to 4 (*to a very great extent*). The EBPAS consists of four subscales: (1) Appeal (*n* = 4) measures the extent to which a clinician would adopt an EST if it were intuitively appealing, could be used correctly, or was being used by colleagues who were satisfied with it; (2) Openness (*n* = 4) measures the extent to which a clinician is willing to try new interventions; (3) Requirements (*n* = 3) measures the extent to which a clinician would adopt an EST if obliged to do so by an agency or

supervisor; and (4) Divergence (n = 4) measures the extent to which a clinician perceives ESTs as not being clinically useful and less important than clinical experience. In addition, the EBPAS derives a total score, which represents a clinician's global attitude toward the adoption of ESTs.

In a sample of 322 child and youth clinical service workers, the EBPAS demonstrated high internal consistency for appeal (α =.80) and requirements (α =.90), while internal consistency was found to be adequate for openness (α =.78) and divergence (α =.59; Aarons, 2004). In the current study, all four EBPAS subscales as well as the total score were found to have good internal consistency: appeal (α =.71); requirements (α =.87); openness (α =.74); divergence (α =.73); and total score (α =.80).

Procedure

This study received ethics approval from the University of Ottawa Research Ethics Board in December 2009. Data were collected over a 7-month period from December 2009 to June 2010. As previously mentioned, the five-contact implementation process outlined by the empirically supported *Tailored Design Method* (Dillman, 2000) was employed in the following manner for the web-based component of the present study:

1) *Pre-notification*. Participants were sent a pre-notification email one week prior to the questionnaire being sent explaining the study's objective and procedure and providing them with the researchers' contact information should they have questions. The pre-notification email included a brief explanation of the study objectives, the way in which the individual's contact information was obtained (CPO Directory of Members), the estimated study completion time (15 minutes), and the researchers' contact information. Participants were informed that any presentations or publications resulting from the study would use aggregate data and that no individual information would be disclosed. Participants were also left a

personalized telephone message several days following the pre-notification email to ensure they had received the email and to provide them with the researchers' contact information should they have any additional questions.

2) *Web-Based Study.* A personalized email including a detailed cover letter and the study web-link was sent to participants one week following the pre-notification email. The questionnaire was designed and administered through SurveyMonkey, an online company that facilitates the creation and implementation of web-based research. A copy of the web-based questionnaire is provided in Appendix G. The cover letter described the purpose of the study and informed participants about the incentive (i.e., donation to Kids Help Phone for every completed questionnaire), as incentives have been shown to increase the likelihood of survey completion (Heerwegh, 2006). A copy of the cover letter is provided in Appendix H. The email also clearly specified that participation was voluntary and that consent would be implied if the participant chose to complete the questionnaire.

3) *Thank you Contact.* One week after the questionnaire web-link was sent to participants, an email was sent thanking participants who had completed the study and asking the participants who had not yet completed the questionnaire to do so as soon as possible if they were interested in participating in the study. This email also reiterated information presented in the initial study cover letter (e.g., study objectives, researchers' contact information, and estimated completion time).

4) *Follow-up Contact.* A follow-up email was sent to participants two to four weeks after the thank you email. This email contained the same information as the thank you email, including the study web-link.

5) *Final Contact.* One week after the follow-up contact, a final contact was made with potential participants indicating that data collection would be terminating in one week. This email included the same information provided in the previous follow-up contacts, including the study web-link.

While the above procedure was used for the 1,184 individuals who had provided their email address on the CPO website, the 423 participants who did not provide their email addresses were contacted by mail and telephone. These individuals were also contacted five times, however four of these contacts were made by telephone due to limited financial resources for mailings. Participants were left a pre-notification voice message informing them that the questionnaire was being mailed out within the next week. A personalized mailing was sent to each individual, which included a detailed cover letter (Appendix I), a printed copy of the questionnaire, the study web-link, as well as a prepaid return envelope. Three follow-up voicemail messages (at one, three, and four weeks after mailing) were left for individuals. These messages thanked individuals who had already completed the questionnaire and encouraged those who had not yet completed it to do so and return it by mail or complete it online (the web-link address was provided).

In sum, for the sample of individuals who provided their email addresses (n = 1, 184), there were a total of 5,920 email messages and 1, 184 phone contacts made. For those who did not provide their email addresses (n = 423), a total of 423 mailings and 1,692 phone contacts were made. As two data collection methods were utilized, chi-square analyses (x^2) were conducted for both the full sample (n = 725) and the CSA subsample (n = 231) to explore potential differences based on study completion method. A series of chi-squared analyses were conducted on demographic variables between those who completed the questionnaire on the web

versus those who returned a printed copy by mail. For both the full sample and CSA subsample, there were no statistically significant differences between participants who completed the study online versus those who returned it by mail on any of the following demographic characteristics: sex; age; education; primary work setting; urban versus rural location of work setting; provincial location of work setting; and years of clinical experience. Therefore, the data from all participants (regardless of completion method) were combined into one data set for the main analyses.

Plan of Analysis

Census Data. All participants (*N* = 725) completed the demographic, work setting, and treatment provision characteristics section of the questionnaire, and participants who endorsed working in the area of CSA (*n* = 231) also completed the TPC and the EBPAS with regard to this population. Descriptive analyses were conducted to gain an understanding of the demographic, work setting, and treatment provision characteristics of the full sample (N = 725), the subset of participants who endorsed working with children who have histories of CSA (*n* = 231) and those who did not endorse working with children who have experienced CSA (*n* = 494).

Exploratory Factor Analysis of Abbreviated TPC. To determine the factor structure of the abbreviated TPC, a common factor analysis using principal axis factoring (Promax rotation) was conducted. The decision to conduct an exploratory factor analysis was made given that the TPC remains in the early stages of development and that the abbreviated version was newly created for implementation in the present study. In terms of power required for exploratory factor analyses, Tabachnik and Fidell (2007) suggest a sample size of 200 to 300 participants. With solutions that have several high loading marker variables (> .80), such as those in the current

study, 150 participants is deemed to be a sufficient sample size. Therefore, the sample size of 231 in the present study met these requirements.

Regression Analyses Identifying Predictors of Intervention Use. To examine the impact of clinician demographic, work setting, treatment provision characteristics, and attitudes toward ESTs on use of ESTs for CSA, a multiple regression analysis was conducted for an outcome variable that represented techniques used in EST for CSA (TF-CBT). The EST outcome variable was composed of the three TPC subscales representing the underlying orientations used in TF-CBT (cognitive, behavioural, and gradual exposure). The developer of TF-CBT (Dr. Judith Cohen) was consulted in this process (personal communication, December 2010) and agreed that all of the items in these three subscales mapped directly onto TF-CBT. In addition, multiple regressions were conducted separately on each of the five abbreviated TPC subscales (cognitive, behavioural, psychodynamic, play therapy, and gradual exposure) and are included in Appendices K through Q to gain an understanding of the demographic, work setting, and treatment provision characteristics associated with the use of these interventions.

Predictor variables included in these analyses were selected based on the limited amount of existing research identifying the demographic and background variables that moderate clinician behaviour: age; highest degree received; year degree was awarded; primary work setting; geographic location of primary work setting (urban versus rural); self-described theoretical orientation; years of treatment provision to children who have experienced CSA; amount of time devoted to learning new clinical methods; and attitudes toward ESTs (Aarons, 2004; Gray et al., 2007; Nelson & Steele, 2007; O'Donnell, 2004; Paul et al., 2006; Sprang et al., 2008; Stewart & Chambless, 2007; Von Ranson & Robinson, 2006). While the EBPAS total score was used as a predictor variable for the five TPC subscale models, the EBPAS subscales

were used as predictors in the EST model in order to gain a deeper understanding of how attitudes towards EST affect actual use of ESTs in practice. Given the overall dearth of research in this area, three additional predictor variables were included in the analyses: sex; provincial location of primary work setting; and receipt of clinical supervision. Provincial location of work setting provided an understanding of the treatment approaches used by clinicians across the province, and receipt of clinical supervision has been found to be associated with clinician practices (Bambling et al., 2006).

Given that the categorical nature of many of the predictor variables limited the power available for these analyses, univariate analyses were initially conducted between all predictor variables and each of the six outcome variables to determine which associations were statistically significant. The following univariate analyses were conducted based on the type of measurement used for each predictor variable: t-test for the dichotomous variable (sex); ANOVAs for the categorical variables [age, education, work setting, geographic location (urban versus rural), provincial location of work setting, self-reported theoretical orientation, receipt of supervision, time spent learning new clinical methods, and years of treatment provision]; and multiple regression for the continuous variables (EBPAS total score and subscale scores). To better ensure that significant predictors were not prematurely removed, an α probability level of .10 was used. Only significant associations were retained for final regression models, so it was possible to have a different set of predictors for each outcome variable.

For the final regression analyses, those categorical predictor variables that were retained were dummy coded. It was necessary to collapse several response categories within these variables in instances where categories had less than 10% of the distribution (Tabachnik & Fidell, 2007). While attempts to meet this suggestion were made as much as possible, it was also

important to attend to theoretical considerations (i.e., unrelated theoretical orientations were not combined). Note that for the predictor variable concerning self-reported theoretical orientation, psychodynamic and interpersonal approaches were combined given that interpersonal therapy was derived from the psychodynamic approach, the approaches are often combined in the literature (Blagys & Hilsenroth, 2000; Callahan, Price, & Hilsenroth, 2004), and interpersonal orientation had a cell size of only 2.6%. Please see Appendix J for an overview of all additional variables combined to meet this cell size criterion.

While categorical predictor variables entered into final regression models were dummy coded, analyses were re-run treating age as ordinal (as this variable had more than five categories and is typically treated as ordinal in most studies). Almost identical results were found for these analyses. Therefore, to maximize power, regression results are presented treating age as an ordinal variable.

Power Analyses. A sample size of 210 was required for the main regression analyses based on a medium effect size of .15, with 14 predictor variables (as "year degree was awarded" was removed due to problems with multicollinearity, described in results section), alpha = .05, and statistical power = .80. Although a sample of 231 clinicians working in the area of CSA was obtained, the categorical nature of a number of the predictor variables limited power. The remedy for this issue was previously described and involved univariate analyses being conducted between all predictor variables and each outcome variable to determine which variables significantly predicted variance. These identified predictor variables were then entered into the final regression model for each outcome variable. All analyses were conducted using SPSS Version 18.

Results

Overall Census Results

Demographic and work setting characteristics. Table 2 presents demographic and work setting characteristics for the full sample (N = 725), the subset of participants who endorsed working with children who have experienced CSA (*n* = 231), and participants who did not endorse working in the area of CSA (*n* = 494). The majority of participants in the full sample were female (69.5%), had a doctorate-level education (84.3%), and had a primary work setting in a large urban setting (84.9%). Participants were relatively evenly split across age ranges between the age of graduation and retirement. A large percentage of the sample reported working in private practice (42.5%) followed by the educational system (18%), hospital settings (16.5%), and community-based agencies (12.8%). In terms of provincial location, the highest proportion of participants reported having a primary work setting in the Greater Toronto Area (43.2%) followed by Eastern Ontario (23.5%), Southwestern Ontario (13.9%), and Central Ontario (12.1%). A small percentage of the sample stated that they had a primary work setting in Northern Ontario (5.9%). Demographic and work setting characteristics of the subsamples (CSA and non-CSA clinicians) mirror census data and will be presented in more detail in the subsequent section.

Treatment provision characteristics. Table 3 presents characteristics related to treatment provision for the full sample (N = 725), and for the subset of participants who endorsed working (*n* = 231) and not working in the area of CSA (*n* = 494). Almost one third of participants in the full sample reported having between 0 and 4 client contact hours per week (27.9%), with the second most frequent responses being 10 to 14 hours (18.2%) and 5 to 9 hours (16.9%). A large proportion of participants treated clients between the ages of 6 and 12 (40.7%)

followed by clients in the 13 to 18 year age range (28.6%). Only 5.2% of the sample provided treatment to clients between the ages of 0 and 5. In terms of primary presenting problems for the majority of clients treated within the past year, the most frequent responses were anxiety disorders (67.8%), mood disorders (52.5%), behaviour or conduct disorders (52.1%), and learning disorders (52.1%). Just over half of the sample self-identified as working within a CBT orientation (51.3%) followed by integrative (20.2%) and psychodynamic (10.6%). Over half of participants reported never receiving clinical supervision (56.1%) and almost half the sample stated that they were completely satisfied with the frequency of their supervision (44.7%). The clinicians who most frequently reported being completely satisfied, however, were those that received supervision weekly (86.2%), followed by daily (75.0%), twice per month (52.6%), never (50.6%) and monthly (45.6%). One third of participants provided supervision to others on a weekly basis (33.8%) and just over one third of the sample devoted between 5 and 9 hours weekly to learning new clinical methods (35.2%; e.g., self-directed readings, workshop attendance).

Results for Clinicians Working with Children Who Have Experienced CSA

Demographic and work setting characteristics. Using chi-squared analyses (x^2), several significant demographic differences between clinicians who did (n = 231) and did not (n = 494) endorse working in the area of CSA were identified (see Table 2). For variables that were found to differ significantly, post-hoc analyses were conducted to determine which categories within the variable differed between groups. Standardized residual values were calculated and those that exceeded the critical value of $Z = \pm 1.96$ ($p < .05$) were deemed significant.

Age was found to differ significantly between the two samples ($x^2 = 12.09$, $p < .05$), with a greater number of clinicians who endorsed working in the area of CSA being between the ages

of 41 and 50 (34.6%) compared to those who did not endorse working with CSA (24.7%). Year degree was awarded was statistically significant ($x^2 = 22.74$, $p < .05$), with fewer CSA clinicians graduating between the years of 1974 and 1978 (3.9%) than non-CSA clinicians (9.5%). Primary work setting differed significantly ($x^2 = 40.23$, $p < .01$), with CSA clinicians working more in community agencies (17.7%) and CASs (1.3%) than non-CSA clinicians (10.8% and 0.0%, respectively). Non-CSA clinicians were also found to work more in educational settings than CSA clinicians (24.0% and 6.5%, respectively). Finally, geographic location of clinicians' primary work setting (urban versus rural) differed significantly across the two samples ($x^2 = 9.12$, $p < .05$). CSA clinicians worked more in small urban settings (14.7%) than non-CSA clinicians (7.9%). Note that there were no statistically significant differences between CSA and non-CSA clinicians on sex, education, and provincial location of primary work setting.

Treatment provision characteristics. Using chi-squared analyses (x^2), several significant differences in treatment provision characteristics were found between clinicians who did ($n = 231$) and did not ($n = 494$) endorse working in the area of CSA (see Table 3). For variables that were found to differ significantly, post-hoc analyses were conducted to determine which categories within the variable differed between groups. Standardized residual values were calculated and those that exceeded the critical value of $Z = \pm1.96$ were deemed significant.

Years of clinical experience differed significantly ($x^2 = 25.94$, $p < .01$), with more CSA clinicians having between 20 and 24 years of experience (23.4%) than non-CSA clinicians (13.0%). Primary age range of clients was statistically significant ($x^2 = 34.93$, $p < .01$), with CSA clinicians working more with clients above the age of 13 (67.1%) than non-CSA clinicians (42.0%). Clinicians who did not work with children who have experienced CSA also reported working more with clients between ages 6 and 12 (46.7%) than CSA clinicians (28.6%). Primary

theoretical orientation between the two samples differed ($x^2 = 22.50$, $p < .01$), with more non-CSA clinicians reporting having a CBT orientation (55.4%) than CSA clinicians (43.3%). More clinicians who reported working with CSA endorsed their orientation as integrative (29.0%) than non-CSA clinicians (16.2%). In addition, CSA clinicians were found to treat the following primary presenting problems significantly more than non-CSA clinicians: anxiety disorders (82.3% and 61.5%, respectively; $x^2 = 31.30$, $p < .01$); mood disorders (71% and 44.2%, respectively; $x^2 = 45.25$, $p < .01$); maltreatment or trauma (64.9% and 17.4%, respectively; $x^2 = 161.47$, $p \leq .01$); substance abuse/dependence ($x^2 = 27.48$, $p < .01$); personality disorders (21.6% and 10.3%, respectively $x^2 = 16.73$, $p < .05$); and sleep disorders (11.3% and 6.1%, respectively $x^2 = 5.89$, $p < .05$). Treatment provision characteristics that were not found to differ significantly between CSA and non-CSA clinicians were client contact hours per week, receipt of clinical supervision, satisfaction with frequency of clinical supervision receipt, provision of supervision, and hours devoted to clinical training activities.

Table 4 presents treatment characteristics specific to clinicians who endorsed working with children who have experienced CSA ($n = 231$). Years of clinical experience with this population varied, with the highest percentage of clinicians reporting 10 to 14 years (19.5%) and 15 to 19 years (18.2%) experience. The overwhelming majority (84.4%) indicated providing, on average, 0 to 4 hours of clinical service per week to this population. Over three quarters of clinicians (77.5%) had never received any certifications in the area of CSA. For the 20.8% of clinicians who had received certifications, the most frequently mentioned qualifications were training in TF-CBT (4.8%) and *Eye Movement Desensitization and Reprocessing* (EMDR; 3.9%). The remaining 12.1% of clinicians mentioned receiving certifications in a variety of other areas including trauma and loss, narrative therapy, psychodynamic training programs, and play

therapy. Finally, approximately half (51.9%) of the clinicians reported getting referrals from CAS for this population, with a wide range of variability (5% to 100%) in terms of the percentage of referrals received (*M* = 35%). In sum, the majority of clinicians who reported working with children who have experienced CSA had worked with this population for a substantial amount of time (i.e., 10 to 19 years), provided few clinical service hours per week to these youth (0 to 4), and had never received any certifications in treatment provision for this population.

Exploratory Factor Analysis of the Abbreviated Therapy Procedures Checklist

Missing Data. Prior to conducting the factor analysis, missing data were assessed. Only 4.8% of the total data were missing. The nature of the missing data was assessed through the creation of a dichotomous variable composed of cases with and without missing data on TPC items. Chi-square (x^2) analyses were run to determine whether these groups differed significantly on any of the predictor variables and all comparisons were found to be non-significant ($p < .05$). Therefore, data were deemed to be missing completely at random. While the analyses described below were conducted with missing value imputation (single imputation method), they were repeated without imputing missing data and produced identical results.

Analyses. Common factor analysis using principal axis factoring (Promax rotation) was performed on the 33 items from the abbreviated TPC for the total sample of clinicians who endorsed working with children who have experienced CSA (*n* = 231). An examination of item correlation matrices (Table 5) suggested that the sample was factorable. Kaiser's measure of sampling adequacy (.86) also demonstrated the factoribility of R as it was above the value required for a good factor analysis (.60; Tabachnick & Fidell, 2007). Given that item correlations ranged from .13 to .70 and that it seemed important to replicate previous researchers' approach

to TPC factor analyses (Kolko et al., 2009), Oblique (Promax) rotation was chosen. Oblimin rotation was also conducted as a comparative measure, producing similar results to the Promax rotation. To determine how many factors should be retained for further analysis, a scree plot was examined (see Figure 2), and factors with eigenvalues above one were retained. A scree plot presents the eigenvalues of the correlation matrix in descending order of magnitude. A sharp drop in the plot, analyzed by visual inspection, signals that subsequent factors are ignorable. Consistent with the original TPC, a five factor structure emerged that accounted for a total of 59.40% of the variance.

Factor loadings of TPC items, eigenvalues, and percent of variance are presented in Table 6. Variables are ordered and grouped by strength of loading to facilitate interpretation. Loadings under .32 (32% of variance) are not included in the table. All items had the highest loading on the factor to which it belonged in the original TPC, and all except one item had loadings of .32 or higher on only one factor, which is the minimum cutoff suggested by Tabachnik and Fidell (2007) for an item to be interpretable. Most items (64%) had excellent loadings (> .71), 18% had very good loadings (> .63), 9% had loadings considered good (> .55), and 9% had fair loadings (> .45). The only exception was item 32 from the play therapy subscale. While this item had the highest loading (.47) on the factor to which it was hypothesized to belong, it also had a loading above .32 (.43) on the gradual exposure subscale. This finding may be explained by the exposure-based nature of this play therapy item: "*Using art projects to facilitate processing memories, thoughts, and feelings about the abuse*". As a result of this cross-loading, item 32 was removed from the play therapy subscale in subsequent analyses. However, analyses were re-run with the inclusion of item 32 on the subscale for comparative purposes and results remained unchanged. The internal consistency of four factors was found to be excellent (cognitive $\alpha = .91$;

behaviour α = ; play therapy α = .89; psychodynamic α = .84). The α value of the gradual exposure factor was found to be adequate at .63. This finding is comparable to that of Kolko et al. (2009). In sum, the five factors on the abbreviated version of the TPC for this sample of clinicians parallel the three factors of the original version of the TPC (cognitive, behaviour, and psychodynamic therapy) and the two factors added by Kolko et al. (2009) to reflect common interventions used with children who have experienced sexual abuse (play therapy and gradual exposure). Correlations among factors are presented in Table 7.

Multiple Regression Analyses

Missing Data. Given that all further analyses were run with participants who endorsed working in the area of CSA, missing data were assessed for this sample of 231. Missing data for all the predictor variables (i.e., demographic, work setting, and treatment provision characteristics) ranged from 0% to 4%. There was complete data for sex and year in which highest degree was awarded. Self-reported theoretical orientation had the highest amount of missing data at 3.5%. Tabachnick and Fidell (2007) suggest that less than 5% missing data does not significantly affect findings if the data are missing completely at random. As such, the nature of the missing data was assessed through the creation of a dichotomous variable composed of cases with and without missing data. Chi-square (x^2) analyses were run to determine whether these groups differed significantly on any of the predictor variables and all comparisons were found to be non-significant. Therefore, data were deemed to be missing completely at random and, as such, missing data were not imputed.

Assumption Testing. Univariate assumption testing of predictor and outcome variables was conducted to identify potential outliers and problems with multicollinearity and to examine normality, linearity, and homoscedasticity. A summary of assumption testing results and

remedies employed for univariate analyses is presented in Table 8. Given that univariate analyses were conducted to identify which predictor variables to include in the final regression model for each outcome variable, multivariate assumption testing was conducted following these analyses on the variables within each model and results are presented in Table 9.

Regression Model Results. Given that the current study aimed to assess the extent to which interventions used in the community map onto ESTs for CSA, the primary focus was on the model that comprised TF-CBT interventions (cognitive, behavioural, and gradual exposure subscales). However, regression analyses were run for all five of the abbreviated TPC subscales to gain a sense of which demographic, work setting, and treatment provision characteristics impacted the use of various types of clinical practices with this population. Results for these models are presented in Appendices K through Q and include the following information: (1) summary table of the predictor variables found to be significant in the univariate analyses and therefore included in each regression model (Appendix K); (2) summary table of the predictor variables found to be significant within each regression model (Appendix L); and (3) complete results for each of these five regression analyses (Appendices M through Q).

Empirically Supported Treatment Subscale as Outcome Variable.

*Univariate analyses***.** Univariate analyses were conducted between each of the 15 predictor variables and the EST subscale (composed of the three TPC subscales representing techniques used in TFCBT, namely cognitive, behavioural, and gradual exposure). The 15 predictor variables were the following: (1) sex; (2) age; (3) education; (4) work setting; (5) urban/rural location of primary work setting; (6) provincial location of primary work setting; (7) self-reported theoretical orientation; (8) receipt of supervision; (9) hours devoted to clinical training activities; (10) clinical service hours per week with youth who have experienced CSA;

(11) EBPAS Appeal Subscale; (12) EBPAS Openness Subscale; (13) EBPAS Requirements Subscale; (14) EBPAS Divergence Subscale; and (15) EBPAS Total Score. Six predictor variables were found to be statistically significant at $p < .10$ and were therefore entered into the final multiple regression model: age ($F(3, 221) = 2.62$, $p < .10$); theoretical orientation ($F(3, 219) = 11.56$, $p < .01$); hours devoted to training ($F(3, 220) = 2.65$, $p < .10$); EBPAS Appeal Subscale ($F(1, 222) = 4.19$, $p < .05$); EBPAS Openness Subscale ($F(1, 222) = 5.45$, $p < .05$), and EBPAS Total ($F(1, 222) = 4.22$, $p < .05$).

Multivariate model. The regression model (Table 10) was found to be significant (F (8, 221) = 6.25, $p < .01$) and accounted for 19% of the total variability in scores on the EST subscale ($R^2 = .19$). Significant predictors within the model were age, theoretical orientation, and hours devoted to training. Results suggest that greater clinician age predicted less frequent use of ESTs for children who have experienced CSA ($b = -.06$, $p < .05$). Compared to clinicians who indicated their primary theoretical orientation as CBT, those whose orientation was interpersonal/ psychodynamic, integrative, or experiential/ humanistic reported less frequent use of ESTs with this population ($b = -.29$, $b = -.20$, and $b = -.36$, $p < .01$, respectively). Compared to 0 to 4 hours per month of training activities (i.e., workshop attendance, self-directed readings), greater involvement in training (≥ 10 hours per month) predicted more frequent use of ESTs with children who have experienced CSA ($b = .14$, $p < .05$). The EBPAS Appeal Subscale demonstrated a trend level effect, suggesting that the greater the intuitive appeal of ESTs, the greater the frequency of use of these ESTs with this population ($b = .06$, $p = .07$).

Discussion

Results of this study present the first census of demographic and treatment provision characteristics of CPO-registered child and adolescent psychologists and psychological

associates, with a specific focus on clinicians who treat youth who have experienced sexual abuse. The decision to focus on clinicians who have treated youth with histories of CSA was made since the literature identifies this type of child maltreatment as having the most well-established EST (TF-CBT; Chaffin & Frederich, 2004; Child Welfare Information Gateway, 2007; Saunders et al., 2004). Therefore, rather than being solely exploratory in nature, the study was hypothesis-driven to a greater extent with the goal of determining the degree to which the interventions used by psychology clinicians in the community map onto those demonstrated to be efficacious with this client population. Discussion of study findings will highlight the following: (1) demographic, work setting, and treatment provision characteristics of all Ontario child and adolescent psychologists and psychological associates; (2) demographic, work setting, and treatment provision characteristics of clinicians who work specifically with youth who have experienced CSA, as well as differences on these variables between this subset of clinicians and other clinicians in the province; and (3) the type of interventions provided to youth exhibiting CSA-related symptoms by community-based psychology clinicians and which demographic, work setting, and treatment provision characteristics predict EST use with this population. Study limitations, implications of findings, and suggested directions for future research will also be considered.

Overview of Demographic, Work Setting, and Treatment Provision Characteristics of Child and Adolescent Psychologists and Psychological Associates in Ontario

Given that there has not, to date, been a census of psychology clinicians in Ontario who work with children and adolescents, the study's first objective was to describe the demographic, work setting, and treatment provision characteristics of this population. In addition to providing valuable information about the availability and distribution of these clinicians across the

province, data also provide a context in which to better understand the focal sample, namely clinicians who work with youth who have experienced sexual abuse.

To my knowledge, the only Canadian research that outlined the demographics and practices of a general sample of psychologists surveyed 88 members of the *Canadian Register of Health Service Providers in Psychology* (CRHSPP), a non-profit corporation offering optional membership to licensed clinicians (Hunsley & Lefebvre, 1990). The sex distribution in the current study (69.5% female; 29.7% male) was inconsistent with findings from Hunsley and Lefebvre (1990), given that 77.3% of their respondents were male. Hunsley and Lefebvre (1990) noted, however, that female psychology clinicians are underrepresented among CRHSPP members. The sex distribution of Ontario psychology clinicians in the present study did mirror that of graduating psychologists in the U.S., as presented in the 2009 *Survey of Earned Doctorates* (70.3% female; 29.7% male; National Science Foundation, 2009). The greater proportion of female clinicians reflects the increasing number of women who entered the field of psychology during the past two decades, often termed the “feminization of psychology” (Stone & Yan, 1997). Moreover, the current study found equivalent percentages of clinicians across age ranges (up until the age of retirement) and across years of clinical experience. This finding indicates that the overall number of individuals entering the field has remained fairly consistent over the past three to four decades, which also parallels findings from the *Survey of Earned Doctorates* (National Science Foundation, 2009).

One interesting finding was that, while approximately 4 in 10 clinicians (42.5%) reported being employed in private practice, almost 3 in 10 (27.9%) indicated having 0 to 4 client contact hours per week. One possible explanation for this result is that the questionnaire requested participants to identify only their primary work setting, rather than reporting all sources of

income (e.g., including consulting and contract positions). While comparable data could not be located, a survey of Canadian psychology clinicians (Hunsley & Lefebvre, 1990) as well as the 2007 *Doctorate Employment Survey* (American Psychological Association, 2007) found that many psychology professionals are employed in two or more work settings. For instance, Hunsley and Lefebvre (1990) found that private practice was reported as the primary work setting for 33.0% of the sample and a secondary setting for 39.8% of participants. In order to gain a comprehensive understanding of psychological service availability across the province, future research may benefit from examining all employment settings of clinicians, including contract and consultant positions. For instance, the present study's finding that only 0.4% of Ontario child and adolescent psychology clinicians have a primary work setting at CAS seems astonishing given that this is the first point of contact for youth who have experienced maltreatment, a high percentage of whom exhibit mental health difficulties (Dore, 1999). It would be important to determine the extent to which psychologists work as consultants to these agencies in order to accurately assess the need for additional psychological resources within Ontario CASs. Study 1 results suggest that such a need may be real, given that 12.2% of respondents reported that more mental health professionals should be employed at their agency.

Turning to geographic location of child and adolescent psychology services, the present study's findings are consistent with previous literature (Hanrahan & Hartley, 2008; Paul et al., 2006; Ryan-Nicholls & Haggarty, 2007) in showing that services appear to be concentrated in large urban areas. This is concerning, given that the *Canadian Community Health Survey* (CCHS; Statistics Canada, 2002) reported that the self-rated physical and mental health of Canadians was significantly poorer in rural and remote regions than in urban environments. The CCHS revealed that, compared to Canadians living in urban settings, those residing in rural

regions had a lower life expectancy, elevated rates of smoking and obesity, and a greater prevalence of Major Depressive Disorder (Statistics Canada, 2002).

The provincial region found to be most lacking in service availability was Northern Ontario, an area which is predominantly rural and is geographically isolated from the remainder of the province. Northern Ontario covers 800,000 square kilometres, encompasses 90 percent of Ontario's land area, and has a population density of only one person per square kilometre (Canadian Mental Health Association, 2009). Shortages in many types of healthcare services (i.e., primary medical care, dental care, social services) have previously been identified in this region of the province (Lawrence et al., 2004; Solomon, Salvatori, & Berry, 2001; Strasser et al., 2009). It is worrisome that mental health service availability is significantly lacking in this region, given that residents of Northern Ontario have been found to have considerably higher self-reported rates of poor mental health, compared to the rest of the province (Canadian Mental Health Association, 2009).

Several initiatives have been developed to attract medical and social service providers to this region such as the *Northern Ontario Grant Assistance Program* and the *Northern Ontario School of Medicine* (Rourke, 2002; Strasser et al., 2009), but service availability continues to lag significantly behind the rest of the province. In addition to programs that focus specifically on workforce recruitment and retention, it is vital to consider systemic issues that may impede health professionals from practicing in the region, specifically quality of life factors such as availability of leisure/recreation activities or employment opportunities for spouses (Solomon et al., 2001). Additional barriers to accessing health services for residents of Northern Ontario include the following: (1) infrastructure and cost of transportation services; (2) shortage of outreach services for remote communities; (3) lack of education of primary health care providers

in the assessment and treatment of mental health issues; (4) limited focus on continuity of care and multidisciplinary collaboration; (5) lack of access to affordable housing for many residents of the region; and (6) limited focus on sustainability of services (i.e., training and engaging local residents in service provision). Initiatives such as telemedicine and peer support networks have attempted to mitigate several of these issues (Canadian Mental Health Association, 2009), but significantly more attention to addressing these barriers is required.

Having considered various socio-demographic characteristics of Ontario psychology clinicians working with child and adolescent populations, presenting problems most often treated by these clinicians will now be examined. The most frequently reported presenting problems treated within the past year were anxiety disorders (68%), followed by mood disorders (53%), behaviour/ conduct disorders (52%), learning disorders (52%), and ADHD (52%). This pattern of rates parallels the little information that exists on prevalence patterns of mental health problems in the general population of Canadian youth (i.e., anxiety disorders are most common, followed by mood disorders, behaviour/conduct disorders, learning disorders, and ADHD; Boyle & Offord, 1988; Breton, Bergeron, Valla, Berthiaume, & Gaudet, 1999; Romano, Tremblay, Vitaro, Zoccolillo, & Pagani, 2001; Waddell, McEwan, Hua, & Shepherd, 2002), but are clearly higher given that participants were reporting on a clinical population.

The limited data on general prevalence rates of mental health disorders in Ontario youth are troubling, as the most recent comprehensive assessment of child psychiatric disorders in the province was the *Ontario Child Health Study* conducted in 1983 (Boyle & Offord, 1988; Offord, Boyle, Fleming, Blum, & Grant, 1989). It is these findings that continue to be referenced in recent provincial grant submissions and policy reports (i.e., Children's Mental Health Ontario, 2010). The *Mental Health Commission of Canada* has described child and youth mental health as

the "most neglected piece" of the Canadian health care system (Senate of Canada, 2006). It is worrisome that Canadian Population Health Indicators (Canadian Paediatric Society, 2006) do not include measures of child and adolescent mental health, given that approximately 1 in 5 youth worldwide suffers from a psychiatric disorder and that these rates have been predicted to increase 50% by the year 2020 (European Commission, 2004; Waddell et al., 2002). Moreover, unlike the majority of developed countries, Canada lacks a national information collection and reporting system to accurately assess the incidence and prevalence of mental illness in the nation (Canadian Alliance on Mental Illness and Mental Health, 2004; Ryan-Nicholls & Haggarty, 2007).

Information specifically on prevalence rates of presenting problems among youth who receive mental health services could not be located. The research that does exist on this population, however, highlights the high level of comorbidity of mental health problems in youth, which has been cited as ranging from 10% to 78% (Boyle & Offord, 1988; Ford, Goodman, & Meltzer, 1999; Romano, Tremblay, Vitaro, Zoccolillo, & Pagani, 2005; Spady, Schopflocher, Svenson, & Thompson, 2001; Waddell et al., 2002). Exploring the prevalence of mental health disorders among clinical populations of youth, with specific attention to further defining the variables that influence the onset and trajectory of presenting problems, will help researchers to better understand the development of these disorders as well as highlight areas that may be important to consider during the development of interventions. Obtaining accurate incidence and prevalence rates of child psychiatric disorders in Canada will also allow for a more precise assessment of the extent of service utilization.

In the present study, the two most commonly-reported theoretical orientations were CBT (51.3%) and integrative (20.2%). This finding is consistent with previous research and reflects a

shift in the field of psychology from a dominant focus on psychodynamic and humanistic approaches toward a greater use of CBT and integrative/eclectic models (Hunsley & Lefebvre, 1990; Stone & Yan, 1997; Warner, 1991). A major limitation, however, in gaining a comprehensive understanding of the way in which community-based clinicians conceptualize their practice is the restrictive approach that research has tended to use to categorize orientations. For example, studies have generally found that the majority of community-based psychologists endorse the frequent use of eclecticism and integrative approaches (Boswell, Castonguay, & Pincus, 2009; McClure, Livingston, Livingston, & Gage, 2005; Stone & Yan, 1997). However, the literature also reveals that the terms "eclecticism" and "integrative" are not well defined or operationalized among either researchers or clinicians (Boswell et al., 2009; McClure et al., 2005). Similar to previous research, the current study was also limited since, while 1 in 5 participants endorsed integrative as their primary theoretical orientation, interpretation of this construct likely varied among participants. Several preliminary definitions of these constructs have been suggested in the literature (McClure et al., 2005; Norcross, Karpiak, & Lister, 2005), including: (1) unsystematic eclecticism/integration (drawing techniques from varying orientations without the guidance of an underlying theory or therapeutic model); (2) therapeutic eclecticism/integration (blending of two or more orientations in the case conceptualization and choice of intervention); and (3) technical eclecticism/integration (drawing techniques from several compatible orientations while being guided by a single underlying theory or therapeutic model).

Future research should explore not only how clinicians define and understand the concept of theoretical orientation, but also the factors that influence their use of particular orientations. The limited research in this area indicates that clinicians' self-reported theoretical orientation

tends to change as they gain more clinical experience, but it remains unclear whether there is any pattern in this orientation shift among clinicians (Boswell et al., 2009; Lucock, Hall, & Noble, 2006; McClure et al., 2005). Gaining an understanding of how community-based clinicians conceptualize and affiliate themselves with particular theoretical orientations can be directly related to identifying optimal methods for encouraging the use and dissemination of ESTs, given that Lucock et al. (2006) found that influences on clinical decision making varied as a function of self-reported theoretical orientation. To illustrate, clinicians who identified themselves as having a CBT orientation were found to base their clinical work more on information drawn from conferences, research journals, and evidence-based guidelines. In contrast, the clinical decision-making process of psychodynamic/psychoanalytic and person-centered clinicians was influenced more by intuition, past clinical experience, and personal therapy (Lucock et al., 2006).

Consistent with the dearth of research on the demographic, work setting, and treatment provision characteristics of community-based child and adolescent psychology clinicians, there is limited information on the frequency, type, and effectiveness of clinical training within this population (Townend, Iannetta, & Freeston, 2002; VanderGast, Culbreth, & Flowers, 2010). It was retrospectively determined that the wording of the first part of question 15 (*do you have opportunities to learn new clinical methods?*) was overly broad given that it was endorsed by 96% of respondents. Results of the second component of this question, however, found that most participants devoted 0 to 4 hours per month to clinical training activities, such as self-directed readings and workshop attendance. Future research should more precisely examine the nature of the clinical training to which clinicians are referring through open-ended questions or a comprehensive breakdown of possible training or continuing education activities. Furthermore, it would be important to identify the distinguishing factors between clinicians who do not devote

any time to training activities (0 hours) from those who spend 1 to 4 hours per month engaged in clinical training.

Over half the participants (56.1%) reported that they were not currently receiving any clinical supervision, followed by receipt of supervision monthly (15.7%), twice per month (5.2%), weekly (4.0%), and daily (0.6%). In addition, 44.7% of the sample reported being completely satisfied with the status of their supervision contact. While a greater percentage of clinicians who received supervision weekly or daily reported being more satisfied with their supervision contact (86.2% and 75.0%, respectively), over half of clinicians who never received supervision also indicated being completely satisfied (50.6%). These findings are consistent with previous literature that, once accessed, the majority of clinicians benefit from clinical supervision but most do not actively seek it out (Spence, Wilson, Kavanagh, Strong, & Worrall, 2001; VanderGast et al., 2010). Following licensure, there are no supervisory requirements within Ontario, which is somewhat surprising given that clinical supervision has been associated with increased clinician competence and more positive therapeutic outcomes in clients (Barnett, Cornish, Goodyear, & Lichtenberg, 2007; Canadian Psychological Association, 2009; Falender et al., 2004). There exist only ethical guidelines for the practice of clinical supervision in Ontario (Canadian Psychological Association, 2009), but no mandates related to the implementation of these suggestions. The ambiguity surrounding clinical supervision is evident in these guidelines, as three separate definitions for supervision are provided within the document. The limited research on clinical supervision practices may be a contributing factor to the infrequency of supervision receipt among clinicians.

There is a strong need to further explore the relationship between supervision characteristics and client outcomes (Townend et al., 2001). Such characteristics include aspects

of the supervisory relationship, supervisor credentials, the extent to which the supervisor takes the supervisees' learning style into account, the use of audiovisual aids, supervision format (i.e., individual versus group), and the content of supervision (i.e., didactic versus collaborative approach, extent to which the supervisory relationship is explored). It is alarming that findings from a study of supervision among CBT therapists found that over one third of supervisors had never received any formal training in the provision of supervision (Townend et al., 2001), given that competence in supervision has been shown to require training (Milne & James, 2002). It is also concerning that there does not exist any well-developed or generally accepted theoretical frameworks related to the role of clinical supervision in the practice of psychology, and that no psychometrically-sound measure on this topic could be located. The little research that does exist in this area, however, appears to have contributed little to the implementation or practice of supervision (Spence et al., 2001). In addition to developing theoretical frameworks and exploring the impact of supervision on clinician competence and client outcomes, it is critical that future research examine the reasoning behind the infrequent use of clinical supervision by community-based clinicians (i.e., availability, affordability, interest).

Overview of Demographic, Work Setting, and Treatment Provision Characteristics in Ontario Psychologists and Psychological Associates Who Provide Services to Youth Who Have Experienced CSA

Out of the 725 CPO-registered clinicians who indicated working with child and adolescent populations, 231 indicated working clinically with children who have histories of CSA. Compared to child and adolescent psychology clinicians more generally, a greater proportion of clinicians who work with youth who have experienced CSA (1) were middle aged; (2) had more years of clinical experience; (3) worked in community-based agencies or CASs; (4)

worked in more small urban and rural settings; and (5) treated youth older than 13 years of age; (6) reported their primary theoretical orientation as integrative or psychodynamic; and (7) treated anxiety disorders, mood disorders, maltreatment/trauma, substance abuse/dependence, personality disorders, and sleep disorders more often in their practice. In addition, significantly fewer clinicians who worked with youth who have experienced CSA reported their primary orientation as CBT, compared to child and adolescent psychology clinicians more generally.

It is unclear why clinicians who work in the area of CSA tended to be older and have more years of clinical experience than youth-focused clinicians who did not report working with CSA. Given that the literature suggests that media coverage can influence public awareness and perception of CSA (Daro, 2002), it is possible that the strong media and political focus on CSA during the 1980s and early 1990s (Jones et al., 2001; Finkelhor & Jones, 2004) may have encouraged more disclosures, an increase in the number of clients seeking services, and in the number of clinicians focussing on training and treatment provision to this population. This finding is concerning given the other finding from the present study that clinicians trained during this time period (i.e., the 1980s and early 1990s) were found to implement ESTs less frequently in their practice and CSA is the type of child maltreatment that has the most well-established EST (TF-CBT; Chaffin & Frederich, 2004; Child Welfare Information Gateway, 2007; Saunders et al., 2004).

Turning to geographic location, CSA clinicians reported working more frequently in rural and small urban settings than in large urban environments, which may be a result of the higher prevalence of maltreatment reported in more rural areas (Bjorklund & Pippard, 1999; Hanrahan & Hartley, 2008; Lin et al., 1996; Paul et al., 2006; Ryan-Nicholls & Haggarty, 2007). CSA clinicians also worked more with older youth (13+ years) than non-CSA clinicians, which is not

surprising given that age has been found to be a critical variable related to disclosure. The onset of adolescence has been found to be associated with more purposeful disclosures of CSA, which is likely influenced by increased maturity, decreased susceptibility to perpetrator tactics for maintaining secrecy, and increased understanding that unwanted sexual contact is wrong (Keary & Fitzpatrick, 1994; Kogan, 2004). These findings highlight the need for CSA education and prevention initiatives targeting pre-pubescent children in order to encourage disclosure and, subsequently, decrease the length of time between victimization occurrence and receipt of treatment.

Clinicians who endorsed working with CSA treated the following primary presenting problems more frequently than those who did not work with this population: anxiety disorders, mood disorders, maltreatment/trauma, substance abuse/dependence, personality disorders, sleep disorders. This finding is not surprising given that these mental health difficulties are precisely those most cited in victims of CSA (Beitchman et al., 1991; Berliner & Elliott, 2002; Classen et al., 2005; Putnam, 2003; Tyler, 2002).

CBT with abuse-focused components has been shown to be the treatment of choice for this population (Child Welfare Information Gateway, 2007; Macdonald et al., 2008; Putnam, 2003; Saunders et al., 2004). Given this finding, it is concerning that CSA clinicians more frequently reported their primary theoretical orientation as psychodynamic or integrative, compared to non-CSA clinicians. Furthermore, the majority of CSA clinicians (78%) had never received any certifications in the treatment of youth who have experienced CSA. This finding is surprising given that there are a number of such training opportunities available, including a free web-based training for TF-CBT which has been available since 2005 (Cohen et al., 2005). This

highlights the gap between ESTs identified for this population in the literature, and the use of these treatments in community-based practice.

Type and Empirical Support of Mental Health Service Provision for Youth Who Have Experienced CSA

Among Ontario psychologists and psychological associates working with youth who have experienced CSA, six hypotheses were made about factors related to the use of ESTs with this population (CBT with abuse-focused components). It was expected that clinicians who endorsed greater use of ESTs would: (1) be younger; (2) work in a setting where research is integrated with clinical practice (i.e., university- or hospital- affiliated); (3) have a primary work setting in a large urban location; (4) self-identify as working within a cognitive and/or behavioural framework; (5) spend a greater proportion of their time on clinical training activities (i.e., self-directed readings, workshop attendance); and (6) report more favourable attitudes toward ESTs. Four of the six hypotheses were supported.

First, as anticipated in hypothesis 1, the greater the age of a clinician, the less likely the use of ESTs. This finding is not surprising, given that the focus on ESTs in the field of psychology is a relatively recent phenomenon (Aarons, 2004; Gray et al., 2007; Hunsley, 2007; Paul et al., 2006). The finding that older clinicians are less likely to use ESTs, however, is concerning given that the present study found the majority of clinicians working with youth who have experienced CSA to be between 41 and 60 years of age. Second, as predicted in hypothesis 4, clinicians appear to be accurately aware of the theoretical orientation to which the techniques they employ belong, since those who self-reported their primary theoretical orientation as CBT tended to endorse the use of more ESTs than those with self-reported orientations of interpersonal/psychodynamic, integrative, or experiential/ humanistic. Third, as anticipated in

hypothesis 5, clinicians who devoted more time (≥ 10 hours per month) to clinical training activities (i.e. self-directed readings, workshop attendance) reported using ESTs to a greater extent than those who devoted less time to such activities (≤ 4 hours per month). This finding provides preliminary evidence for the importance of exposing community-based clinicians to opportunities for ongoing education in an attempt to ensure that efficacious treatments are delivered to consumers. This is consistent with previous research findings indicating that clinical training and continuing education of mental health clinicians is associated with an increased use of ESTs (Hoagwood et al., 2001). It would be important, however, for future research to examine the types of training opportunities most frequently used by clinicians and those most related to the adoption of ESTs. As predicted in hypothesis 6, findings suggest that, in order to augment the use of ESTs in practice through an increase in clinical training opportunities, clinicians should not only be exposed to this training, but an effort should be made to ensure clinicians fully comprehend the benefit of ESTs to both themselves and their consumer. As demonstrated in this study, clinicians who are able to internalize these benefits and find ESTs intuitively appealing (i.e., develop an understanding of the importance of EST implementation, feel confident in the correct use of ESTs, learn that trusted colleagues are supportive of ESTs; Aarons, 2004) are more likely to employ them in their practice.

Hypotheses 2 and 3 were not supported, specifically that having a primary work setting in an environment where research is integrated with clinical practice (i.e., university- or hospital-affiliated) or in a large urban location would predict greater use of ESTs for CSA. These findings are inconsistent with previous research (Aarons, 2004; Bjorklund & Pippard, 1999; Ryan-Nicholls & Haggarty, 2007). Given that providers' likelihood of implementing ESTs has been found to result from an interaction between personal characteristics of the clinician (i.e., training,

professional experience) and contextual issues (i.e., organization type, structure, and location; funding; legalities and politics; Aarons, 2004; Whittaker et al., 2006), it is important that this relationship be further examined in an effort to understand the impact of work setting on use of ESTs. While the current study focused predominantly on personal characteristics of the clinicians, future research is needed to consider the role of contextual issues in the adoption of ESTs.

While not the primary focus of the study, the extent to which clinicians employed various types of clinical techniques (e.g., behavioural, cognitive, psychodynamic, play, and gradual exposure interventions) with youth who have experienced CSA was also explored. These results are presented in Appendices K through Q. These data highlight several areas for future research. In particular, it would seem important to develop a psychometrically-sound measure of clinical practices with operationalized subscales in order to draw clearer conclusions regarding the demographic, work setting, and treatment provision characteristics that best predict choice of intervention. To date, the TPC (Weersing et al., 2002) is the only such measure of mental health treatment techniques used with children and adolescents. The development of additional measures that assess treatment techniques employed by community-based clinicians should consider the following: (1) given that CBT has been highlighted as an EST for many mental health difficulties in youth (Weersing & Weisz, 2002; Weisz et al., 2006), it would be helpful to include a CBT subscale rather than separating cognitive and behavioural interventions as done in the TPC; (2) further operationalization of the play therapy subscale is necessary since it is not a theoretical orientation per se, but rather a treatment modality which can have several underlying orientations, including CBT and psychodynamic (Bratton, Ray, Rhine, & Jones, 2005; Ray, Bratton, Rhine, & Jones, 2001); (3) use of a 5-point Likert scale to provide sufficient response

variability to conduct extensive analyses in contrast to the TPC which uses a 3-point scale; and (4) subscales that represent unidimensional constructs. With regard to the latter point, the abbreviated TPC does not fit this suggestion as evidenced by the moderate positive correlations between most of the five subscales (Table 7). It is likely that this issue resulted from the fact that a number of individual TPC items contain underlying elements of two or more orientations. This issue is most evident between the play therapy and gradual exposure subscales, as many of the play therapy approaches also refer to gradual exposure interventions (i.e., *"Using art projects to facilitate processing memories, thoughts, and feelings about the abuse"*).

Limitations. It is important to note several limitations of the present study. First, 40% of all CPO-registered clinicians who indicated working with child and adolescent populations did not respond to the questionnaire. This may have impacted the generalizability of study findings. Unfortunately, it was not possible to conduct attrition analyses given that responses were anonymous. While the present study's response rate of 60% was less than the rate of 70% to 75% obtained by Dillman (2000) using the *Tailored Design Method*, it was nonetheless significantly greater than response rates of electronic surveys in the literature which typically range from 21.9% to 43.9% (Gray et al., 2007; Nelson & Steele, 2007; Stewart & Chambless, 2007; Walrath et al., 2006). Second, as previously mentioned, the lack of a generally accepted definition of two concepts outlined in the questionnaire (theoretical orientation and clinical supervision) may have lead to varying interpretations by participants. To clarify clinicians' understanding of these terms, future work may benefit from the inclusion of qualitative methods in the research design. Third, as with all self-report measures, it was not possible to confirm the congruence of self-reported actions with observable behaviour. Fourth, TPC items were rated on a 3-point Likert scale and, as such, there was limited response variability to conduct additional statistical analyses

(i.e., cluster and profile analyses). Fifth, it would be important to further operationalize the type of treatment clinicians are providing to clients (i.e., distinguishing between assessment, intervention, and clinical research). Finally, in order to gain a comprehensive understanding of the type and availability of mental health services in Ontario for youth who have experienced CSA, this research should be replicated with professionals from other mental health disciplines who provide such services, including social workers, psychiatrists, and child and youth workers.

Implications. Data gathered from the census of Ontario child and adolescent psychologists and psychological associates in the first component of study 2 can serve as a springboard for future research. In this era of increased demand for accountability and evidence-based practice, gaining a comprehensive understanding of the demographic profile and treatment practices of clinicians can help to identify the discrepancy of community-based practices from research literature, as well as the optimal means of disseminating information and ESTs to this population.

The second component of study 2 provided the first information on the demographic, work setting, and treatment provision characteristics that predict the type and empirical support of mental health services provided by Ontario psychology clinicians to youth who have experienced CSA. The findings put a spotlight on an area of research that has previously gone unexamined and highlight areas of focus for future work. Results from this study provide some preliminary support for clinician characteristics associated with greater use of ESTs with youth who have experienced CSA (i.e., younger age, greater number of hours devoted to clinical training, self-reported CBT orientation, and finding the use of ESTs intuitively appealing). Expanding this research to identify optimal means of enhancing clinical training (especially in older clinicians) and developing dissemination strategies for interventions that highlight the

intuitive appeal of the techniques for clinicians are important next steps. In an effort to develop studies with a stronger research design and theoretical basis, work that builds on these results should focus on: (1) devising a psychometrically-sound fidelity measure that maps directly onto the core components of TF-CBT; (2) developing psychometrically-sound assessment instruments that measure treatment techniques employed by community-based clinicians in a manner that is less ambiguous and can be categorized according to orientations/approaches resulting in less overlap between subscales; (3) integrating qualitative, micro-level data (i.e., case studies of individual treatment practices) with quantitative, macro-level data in order to provide a comprehensive understanding of clinician practices; and (4) building a theoretical framework with regard to variables predicting intervention use within this population.

General Discussion

Given that child maltreatment has been highlighted as one of society's most serious health problems (Thomlinson, 2003), this two-study dissertation explored the four interdependent processes that have been identified in the literature as contributing to inadequate mental health service provision to this population: (1) problems with need identification (study 1); (2) difficulties in the referral process to service providers (study 1); (3) availability of services to address the needs of these children (study 2), and (4) the type of services which referred youth receive (study 2; Burns et al., 2004; Canadian Health Services Research Foundation, 2003). Both studies used an empirically supported approach for survey design and implementation (the *Tailored Design Method*; Dillman, 2000).

The objective of study 1 was predominantly to inform the sample composition for study 2. However, a number of important findings were also gathered with regard to mental health need identification and service referral process for Ontario youth who have experienced

maltreatment. Based on the survey responses from 41 of the 53 (77.4%) Directors of Service at Ontario CASs, the majority of youth in contact with CAS appear to experience mental health difficulties in need of service referrals (M = 58%). Consistent with U.S. literature (Burns et al., 2004; Dore, 1999; Staudt, 2003), however, the Ontario child welfare system seems to have a limited systematic approach to identifying children in need of mental health services. Ontario has made several significant advances in the past decade towards outlining guidelines to standardize this process (Ministry of Children and Youth Services, 2007a, b), and will hopefully continue to make progress in this area through the development of recent initiatives such as the previously discussed *Commission to Promote Sustainable Child Welfare.* These steps are important given that study findings suggest that adherence to existing standards and accountability mechanisms are lacking. To illustrate, only 12.2% of CASs reported using the assessment tools recommended by the Ministry of Children and Youth Services to assess child mental health status. This emphasis on the theoretical component of optimal service provision, with disregard to matters related to practical applications of these guidelines, mirrors the underlying issue surrounding the challenge of disseminating ESTs to community providers, as will subsequently be discussed.

Based on the finding from study 1 that the majority of mental health referrals from Ontario CASs are made to community-based psychologists, the first component of study 2 involved developing the first complete database of all CPO-registered, practicing child and adolescent psychology clinicians in Ontario (N = 1,607). The development of this database in itself exposed a significant gap in the literature, namely the lack of publicly available information on the demographics and clinical practices of psychology clinicians in the province. This lack of attention to the content of community-based practice or “treatment-as-usual” is not limited to Ontario, but spans the field of psychology as a whole (Baumann et al., 2006; Bickman,

2002; Shirk, 2004). This research deficiency is especially salient in child and adolescent psychology (Herschell, McNeil, & McNeil, 2004). Unfortunately, assumptions are frequently made in the literature that findings for adults can be extrapolated to children, which is not necessarily the case given the developmental considerations associated with youth (Grave & Blisset, 2004).

The primary purpose of gathering the census data was to provide a context in which to understand the subset of Ontario psychology clinicians who work specifically with children who have experienced CSA. In addition, in this second component of study 2, clinicians who reported working with children who have experienced CSA provided information on specific treatment practices used with this population and their general attitudes toward ESTs. It is concerning that many of the demographic and treatment provision characteristics that were found to be more common in clinicians who worked with CSA (i.e., older age, working more in rural settings, less frequently endorsing primary orientation as CBT) are the same characteristics cited in the literature as being associated with a decreased use of ESTs (Gray et al., 2007; Macdonald et al., 2008; Putnam, 2003; Paul et al., 2006; Ryan-Nicholls & Haggarty, 2007; Saunders et al., 2004).

This finding highlights the need for knowledge mobilization in the area of child maltreatment, which has been previously highlighted in the literature (Trocmé, Esposito, Laurendeau, Thomson, & Milne, 2009). This process entails moving beyond traditional dissemination strategies (i.e., academic journals and conferences) in an attempt to engage and inform community-based clinicians and policy-makers about ESTs. This is a critical step in transitioning ESTs to evidence-based practice (EBP). EST refers to specific interventions or techniques that have produced therapeutic change in controlled trials, while EBP describes clinical practice informed by ESTs, clinical expertise, patient needs and preferences, and

organizational culture (Kazdin, 2008). While evidence exists that identifies ESTs for many psychological difficulties, including CSA-related symptoms, there is a lack of research exploring community-based practice considerations in the implementations of such ESTs (i.e., EBP; Kazdin, 2008). While this study explored the extent to which psychology clinicians use the approach that has received empirical support in the literature for children exhibiting CSA-related symptoms (TF-CBT), it also highlighted the need for more EBP research with this population.

Much of the "blame" in the literature is placed on community-based clinicians not seeking out or integrating research findings into their practice. Adapting efficacious interventions for use in community-based settings, however, requires collaboration between researchers and clinicians in which each party truly values and reflects on the others' viewpoint. Researchers must not presuppose that their findings will somehow reach those in need of service through typical dissemination strategies, but actively seek to include and engage clinicians in the process of developing and implementing interventions (Lyons, 2009). Similar to conducting any program evaluation or initiation of systemic or therapeutic change, the first step must be the development of a collaborative relationship and implementation of a needs assessment (Boddy & Macbeth, 2000; Krupnick et al., 2006; Lyons, 2009; Zuroff & Blatt, 2006). Defining a shared vision or goal among researchers, decision-makers, and policy-makers has been highlighted as a critical factor for promoting research utilization within an organization (Trocmé et al., 2009). A competent clinician would not expect a client to engage in a specific treatment protocol immediately at the outset of therapy, but would focus first on developing rapport and a shared understanding of the issues at hand and later collaboratively design a treatment plan in which both clinician and client are contributors. Similarly, collaboration and communication among all

involved stakeholders is critical in developing plans for disseminating knowledge of ESTs to community-based settings (Lyons, 2009).

As initial steps towards achieving a collaborative working relationship with clinicians, researchers can engage with community-based clinicians by (1) seeking to gain a greater understanding of their demographic profiles, personal characteristics, and clinical practices and (2) exploring influences on their clinical decision-making (i.e., organizational/legal mandates, training/educational background, role of clinical experience, research literature, continuing education, clinical supervision, and client feedback). Gaining a comprehensive understanding of these issues may provide information on optimal methods of disseminating research findings to the community and promoting the adoption of these findings into clinical practice. In addition, this process may actually enhance the usefulness and practicality of research findings themselves through the consideration of grassroots data in the development process of interventions. This process has been previously referred to as practice-based evidence (Lyons, 2009). For instance, Garland, Hawley, Brookman-Frazee, and Hurlburt (2008) suggest that identifying common core elements of efficacious ESTs (i.e., therapeutic content, treatment techniques, aspects of the working alliance, intervention parameters such as duration) may enhance the applicability of these treatments to community-based settings.

Overall, both studies highlight the need to move beyond clinical guidelines and theory towards a service approach more focused on accountability and cohesion between the realms of research and practice. While there has been some movement in this direction in the field of psychology over the past two decades, including an increased focus on ESTs and transition from efficacy to effectiveness research, there remains a long road ahead. If an effort is not made to

create bridges and build rapport between researchers and community-based clinicians, they will continue to exist in separate silos within the discipline.

While research surrounding the development of ESTs is imperative, exploring mechanisms of dissemination to the community and devoting time to engaging clinicians in their implementation and adoption is just as crucial to ensuring that consumers benefit from findings. In reviewing the literature, there is a disconnect that exists between the areas of research and practice within psychology, as evidenced by the dearth of research on the demographics and practices of community-based clinicians as well as clinicians' frequently cited dislike of manualized treatments and the incorporation of research findings to their practice (Baumann et al., 2006; Bickman, 2002; Hoagwood & Olin, 2002; Saunders, 2005; Shirk, 2004; Weersing et al., 2002). This study serves as an initial step towards bridging this gap with regard to the identification and treatment of mental health difficulties in youth who have experienced CSA.

Hopefully, this dissertation will inspire similar research pertaining to other mental health difficulties and populations. It is critical that the discipline of psychology work towards identifying more effective means of ensuring that research findings do not remain within the walls of academic institutions and professional conferences, but actually reach and benefit individuals in the community in need of treatment. It is time to take action on an issue that has been at the forefront of psychology for decades, illustrated in the following statement by Senator Hubert Humphrey in the American Psychologist in 1963: *"We need people to build bridges from research to community programs. The bridges must lead from scientific symposia to the halls of Congress, Federal office buildings, legislatures, city halls, school boards, chambers of commerce, trade unions, service clubs, churches and temples, neighbourhoods, street corners, and every other arena of opinion and action"* (Humphrey, 1963).

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Table 1

Therapy Procedures Checklist Items With Factor Loadings

Item	Items to be Used in Abbreviated Version	Psycho-dynamic Factor Loading	Cognitive Factor Loading	Behavioural Factor Loading
Psychodynamic technique scale				
Understand effects of early experiences	X	.89	.06	.07
Develop a dynamic formulation	X	.89	.09	.09
Help child develop ego functioning	X	.86	.04	.01
Alter child’s use of defense mechanisms	X	.83	.09	-.04
Understand child’s unconscious drives	X	.84	.03	-.03
Help child resolve developmental struggles	X	.82	.10	.05
Use transference to understand interpersonal style	X	.82	-.09	.02
Understand original problem circumstances		.81	.04	.15
Interpret child’s play/art/behavior for parent		.78	.08	.02
Interpret child’s in-session behaviors		.77	.04	.02
Interpret underlying meaning of words		.77	.04	-.03
Analyze child’s fantasies		.76	.01	-.13
Explore child’s understanding of family dynamics		.75	.26	.08
Help child gain insight into feelings/motives		.72	.20	-.16
Help develop adequate psychic structure		.71	.08	-.16
Foster therapeutic relationship		.70	.04	.05
Encourage expression of feelings		.70	.22	.12
Use play to encourage symbolic expression		.69	.16	-.09
Encourage recall of early memories		.67	.07	-.08
Provide corrective emotional experience		.65	.19	.06
Cognitive technique scale				
Teach modification of cognition	X	.00	.84	.01
Challenge irrational beliefs	X	.04	.82	-.10
Train child to recognize maladaptive thoughts	X	.03	.77	-.07

Teach model of cognition-behavior-emotions	X	.02	.75	.03
Teach child to monitor self-talk	X	-.06	.69	.11
Help child generate alternative interpretations	X	.36	.67	-.04
Cognitive reframing	X	.01	.66	.11
Enhance perspective-taking skills		.19	.62	-.03
Encourage use of self-talk to guide action		.08	.57	.29
Give direct instruction to change thoughts		-.13	.53	.21
Train problem-solving skills		-.07	.52	.29
Encourage self-evaluation of performance		.13	.51	.27
Set up hypothesis tests		.12	.50	.14
Behavioral technique scale				
Use point or token system	X	-.03	-.09	.85
Discontinue rewards for negative behaviors	X	-.02	-.01	.79
Fade rewards to promote generalization	X	-.04	-.01	.77
Reward and praise positive behaviors	X	.11	.05	.75
Chart behavioral gains	X	-.01	-.01	.72
Develop secondary reinforcers	X	-.03	.12	.71
Use prompts to elicit desired behavior	X	-.05	.04	.70
Use time-out		-.09	-.16	.70
Arrange modeling opportunities		.13	.11	.69
Teach behavior in steps		-.07	.09	.68
Use response-cost procedures		-.09	-.01	.68
Rearrange environmental contingencies		-.01	.09	.67
Ignore inappropriate behavior		.02	-.11	.66
Use overcorrection techniques		-.05	-.11	.62
Make contract for child's behavior		-.01	.14	.58
Train parents and teachers		.15	.16	.55
Carry out functional analysis of behavior		-.08	.19	.51

Table 2

Demographic and Work Setting Characteristics of Participants (in Percentages)

Characteristic	Full Sample (n = 725)	CSA Sample (n = 231)	Non-CSA Sample (n = 494)
Sex			
Male	29.7	28.1	30.6
Female	69.5	71.9	68.6
Missing	0.8	0.0	0.8
Age			
Under 30	0.6	0.0	0.8
30 to 40	22.6	19.5	24.1
41 to 50	27.8	34.6	24.7
51 to 60	28.6	30.3	28.0
61 to 70	16.2	12.6	17.8
Over 70	3.0	2.6	3.2
Missing	1.2	0.4	1.4
Highest Degree Received			
Masters	14.6	12.1	15.4
Ph.D.	78.8	81.4	77.7
Psy.D.	2.9	2.6	3.0
Ed.D.	2.6	2.2	2.8
Missing	1.1	1.7	1.1
Year Degree was Awarded			
2006 to 2010	8.4	6.5	9.3
1999 to 2005	28.5	27.7	29.0
1994 to 1998	11.7	14.3	10.5
1989 to 1993	13.9	18.6	11.8
1984 to 1988	13.6	16.0	12.6
1979 to 1983	10.2	9.5	10.3
1974 to 1978	7.7	3.9	9.5
1969 to 1973	3.6	3.5	3.7
1964 to 1968	1.0	0.0	1.4
1959 to 1963	0.7	0.0	1.0
Before 1959	0.1	0.0	0.2
Missing	0.6	0.0	0.7
Primary Work Setting			
Private Practice	42.5	47.6	41.0
Hospital Setting	16.5	16.5	17.0
Community Agency	12.8	17.7	10.8
Educational System	18.0	6.5	24.0
University	7.3	7.8	7.2
Children's Aid Society	0.4	1.3	0.0
Other	1.5	1.1	0.0
Missing	1.0	1.5	0.0
Geographic Location of Primary Work Setting			
Large Urban	84.9	79.7	87.6
Small Urban	10.0	14.7	7.9

Rural	3.4	4.3	3.0
Missing	1.7	1.3	1.5
Location of Primary Work Setting Within Ontario			
North West	3.3	3.5	3.2
North East	2.6	2.6	2.6
East	23.5	23.8	23.3
South Central (Greater Toronto Area)	43.2	39.8	45.0
Central	12.1	15.6	11.2
Southwest	13.9	14.3	13.2
Missing	1.4	0.4	1.5

Table 3

Treatment Provision Characteristics of Participants (in Percentages)

Characteristic	Full Sample (n = 725)	CSA Sample (n = 231)	Non-CSA Sample (n = 494)
Years of Clinical Experience			
0 to 4	3.0	1.3	3.9
5 to 9	13.1	10.4	14.4
10 to 14	18.6	18.2	18.9
15 to 19	14.6	19.9	12.2
20 to 24	16.2	23.4	13.0
25 to 29	12.2	8.2	14.2
Over 30	18.2	18.2	18.3
Missing	4.1	0.4	5.1
Client Contact Hours Per Week			
0 to 4	27.9	23.4	30.2
5 to 9	16.9	21.6	14.8
10 to 14	18.2	19.5	17.6
15 to 19	12.9	12.1	13.4
20 to 24	9.5	12.6	8.1
25 to 29	6.1	4.8	6.7
Over 30	5.0	5.6	4.7
Missing	3.5	0.4	4.5
Primary Age Range of Clients			
Under 5	5.2	3.0	6.3
6 to 12	40.7	28.6	46.7
13 to 18	28.6	39.0	23.9
Over 18	21.2	28.1	18.1
Missing	4.3	1.3	5.0
Primary Presenting Problems Treated			
Anxiety Disorders	67.8	82.3	61.5
Mood Disorders	52.5	71.0	44.2
Maltreatment or Trauma	32.5	64.9	17.4
Behaviour or Conduct Disorders	52.1	59.3	49.1
Developmental Disorders	35.1	33.3	36.1
ADHD	52.0	49.8	53.3
Learning Disorders	52.1	47.2	54.8
Substance Abuse/Dependence	11.3	20.3	7.1
Eating Disorders	9.4	11.3	8.5
Personality Disorders	13.9	21.6	10.3
Sleep Disorders	7.7	11.3	6.1
Missing	0.9	0.4	1.2
Primary Theoretical Orientation			
Cognitive	2.8	2.6	2.8
Behavioural	3.7	3.0	4.1
Cognitive-Behavioural	51.3	43.3	55.4
Interpersonal	2.3	2.6	2.2

Psychodynamic	10.6	14.7	8.7
Experiential-Humanistic	2.6	3.5	2.2
Integrative	20.2	29.0	16.2
Missing	6.5	1.3	8.4
Frequency of Receiving Clinical Supervision			
Never	56.1	66.2	51.7
Daily	0.6	0.9	0.4
Weekly	4.0	6.1	3.0
Twice Per Month	5.2	6.5	4.7
Monthly	15.7	19.5	14.0
Missing	18.4	0.8	26.2
Satisfaction With Supervision			
Completely Satisfied	44.7	42.0	46.2
Somewhat Satisfied	15.8	19.9	14.0
Neutral	17.3	19.5	16.4
Somewhat Dissatisfied	6.1	8.2	5.1
Completely Dissatisfied	1.7	3.0	1.0
Missing	14.4	7.4	17.3
Frequency of Providing Clinical Supervision			
Never	22.3	19.5	23.7
Daily	9.8	11.3	9.1
Weekly	33.8	39.0	31.6
Twice Per Month	9.4	10.0	9.1
Monthly	10.3	11.3	9.9
Missing	14.4	8.9	16.6
Opportunities to Learn New Clinical Methods			
Yes	95.9	99.6	94.7
No	0.6	0.4	0.6
Missing	3.5	0.0	4.7
Hours Devoted to This Learning Per Month			
0 to 4	46.1	42.4	48.1
5 to 9	35.2	39.4	33.5
10 to 14	10.7	12.6	9.9
Over 15	3.7	4.8	3.2
Missing	4.3	0.8	5.3

Note. Given that primary presenting problems treated are not mutually exclusive categories, percentages do not add to 100

Table 4

Treatment Provision Characteristics Specific to Clinicians Who Work With Children Who Have Experienced Sexual Abuse (in Percentages)

Characteristic	CSA Sample (n = 231)
Years of Service Provision to Children Who Have Experienced CSA	
0 to 4	13.9
5 to 9	12.6
10 to 14	19.5
15 to 19	18.2
20 to 24	16.5
25 to 29	7.8
Over 30	10.0
Missing	1.5
Client Contact Hours Per Week (Children Who Have Experienced CSA)	
0 to 4	84.4
5 to 9	10.8
10 to 14	2.2
15 to 19	1.7
Over 20	0.0
Missing	0.9
Receipt of Certifications in Mental Health Treatments for Children Who Have Experienced CSA	
Yes	20.8
No	77.5
Missing	1.7
Receipt of Referrals from Children's Aid Societies to Treat Children Who Have Experienced CSA	
Yes	51.9
No	45.9
Missing	2.2

Table 5

TPC Item Correlation Matrix

	1	3	4	5	6	7	8	9	10	11	12	13	14	15	16	18	20	21	22	23
1	1.00	.65*	.06	-.09	.09	.10	.08	.54*	.11	.39*	.15*	.38*	.15*	-.12	.07	-.10	-.10	.45*	.43*	-.05
3		1.00	-.01	.01	.14*	.15*	.20*	.57*	.18*	.44*	.23*	.44*	.17*	-.05	.15*	-.05	-.07	.44*	.44*	-.04
4			1.00	.42*	.01	.05	.07	-.01	,04	-.05	-.06	-.10	,03	.52*	.01	.25*	.36*	-.10	-.14	.49*
5				1.00	.09	.12	.09	-.07	.14*	-.13	-/02	-.12	.18*	.51*	.12	.33*	.38*	-.09	-.17	.40*
6					1.00	.66*	.57*	.19*	.56*	.22*	.62*	.10	.53*	.10	.54*	.23*	.14*	.18*	.02	.07
7						1.00	.68*	.28*	.60*	.22*	.66*	.11	.53*	.17*	.59*	.24*	.21*	.18*	.10	.09
8							1.00	.28*	.67*	.10	.66*	.11	.59*	.13*	.56*	.23*	.13	.12	-.00	.04
9								1.00	.24*	.41*	.38*	.41*	.21*	-.03	.17*	-.05	-.09	.48*	.51*	.00
10									1.00	.22*	.63*	.15*	.63*	.15*	.56*	.31*	.13	.15*	.08	.13*
11										1.00	.31*	.60*	.16*	-.06	.21*	.02	-.08	.41*	.42*	-.03
12											1.00	.17*	.56*	.10	.67*	.17*	.08	.20*	.15*	.01
13												1.00	.10	-.17	.05	-.11	-.05	.54*	.49*	-.09
14													1.00	.11	.52*	.26*	.10	.18*	.05	.08
15														1.00	.10	.36*	.42*	-.15	.16*	.44*
16															1.00	.28*	.13	.10	.00	.12
18																1.00	.46*	-.07	-.08	.49*
20																	1.00	-.03	.01	.49*
21																		1.00	.59*	-.02
22																			1.00	-.01
23																				1.00
24																				
25																				
26																				
27																				
28																				
29																				
30																				
31																				
32																				
33																				
34																				
35																				
36																				

Note. * $p < .05$

TPC Item Correlation Matrix- Continued

	24	25	26	27	28	29	30	31	32	33	34	35	36
1	-.04	.08	.09	.09	.06	.11	.21*	.07	.03	-.05	.01	.03	.11
3	-.07	.12	.08	.15	.08	.08	.27*	.17*	.08	-.03	.07	.03	.17*
4	.51*	.25*	.23*	.17*	.28*	.20*	.11	.07	.16*	.18*	.11	.34*	.15*
5	.43*	.15*	.16*	.16*	.13	.15*	.03	.17*	.09	.05	.16*	.16*	.14*
6	-.04	.02	-.01	.12	.02	.20*	.09	.16*	.12	-.02	.07	-.05	.12
7	-.04	-.02	-.06	.05	-.04	.20*	.08	.20*	.11	-.07	.04	-.08	.09
8	-.03	-.05	-.07	.02	-.08	.18*	-.03	.13	.06	-.04	-.01	-.11	.03
9	-.12	.01	.08	.10	.02	.05	.29*	.05	.04	-.02	-.06	-.03	.15*
10	-.05	.01	.03	.09	.01	.26*	.03	.21*	.08	-.14*	.05	-.11	.08
11	-.06	.21*	.15*	.24*	.20*	.12	.38*	.26*	.18*	.09	.08	.19*	.23*
12	-.11	.05	-.02	.15*	-.04	.23*	.14*	.14*	.15*	-.09	.01	-.07	.01
13	-.08	.23*	.24*	.26*	.25*	.10	.39*	.23*	.18*	.10	.18*	.21*	.27*
14	-.07	-.04	-.01	.06	-.03	.21*	.05	.15*	.04	-.13	.01	-.11	.07
15	.45*	.18*	.16*	.06	.17*	.10	.06	-.00	.15*	.08	.06	.23*	.07
16	-.05	-.07	-.04	.07	-.09	.26*	-.01	.16*	.02	-.06*	-.05	-.12	-.05
18	.31*	.03	-.01	-.03	-.05	.16*	-.06	.04	.03	-.05	.04	-.04	-.05
20	.40*	.18*	.08	.06	.11	.19*	.00	.07	.20*	.02	.26*	.21*	.12
21	-.11	.12	.12	.12	.19*	.15*	.30*	.09	.07	.00	.09	.06	.16*
22	-.11	.17*	.14*	.20*	.21*	.14*	.30*	.09	.17*	-.00	.22*	.20*	.23*
23	.56*	.18*	.20*	.09	.19*	.16*	.04	.10	.10	.11	.23*	.22*	.15*
24	1.00	.26*	.20*	.16*	.21*	.16*	.07	.05	.24*	.13	.23*	.56*	.41*
25		1.00	.65*	.61*	.64*	.14*	.53*	.27*	.45*	.42*	.28*	.56*	.41*
26			1.00	.60*	.70*	.13	.54*	.17*	.38*	.46*	.18*	.54*	.32*
27				1.00	.68*	.25*	.58*	.37*	.55*	.33*	.27*	.50*	.34*
28					1.00	.14*	.57*	.25*	.48*	.41*	.28*	.68*	.38*
29						1.00	.18*	.32*	.25*	-.03	.22*	.17*	.19*
30							1.00	.36*	.47*	.34*	.19*	.44*	.42*
31								1.00	.47*	.24*	.31*	.18*	.26*
32									1.00	.33*	.38*	.46*	.27*
33										1.00	.19*	.43*	.19*
34											1.00	.37*	.48*
35												1.00	.38*
36													1.00

Note. * $p < .05$

Table 6

Factor Loadings for Abbreviated TPC Items

	Factor				
TPC Item	Behaviour	Cognitive	Psychodynamic	Play	Gradual Exposure
12	.84				
8	.82				
7	.81				
16	.80				
10	.80				
6	.78				
14	.74				
1		.84			
3		.8			
9		.80			
22		.75			
21		.73			
13		.63			
11		.58			
23			.80		
24			.73		
4			.72		
15			.72		
20			.65		
5			.65		
18			.60		
26				.88	
28				.86	
25				.78	
27				.76	
33				.69	
30				.67	
35				.64	
32				.47	.43
34					.83
31					.59
29					.50
36					.46
Eigenvalues	6.91	5.02	4.20	2.90	1.38
% of variance	20.95	15.22	12.73	6.33	4.20

Table 7

Abbreviated TPC Subscale Correlation Matrix

	Behavioural	Cognitive	Psychodynamic	Play Therapy	Gradual Exposure
Behavioural	1.00	.24***	-.13*	.26***	.24***
Cognitive		1.00	.13*	-.01	.19**
Psychodynamic			1.00	.25***	.24***
Play Therapy				1.00	.50***
Gradual Exposure					1.00

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

Table 8

Univariate Assumption Testing and Remedy for Violations

Assumption	To Detect a Violation	Violation Detected	Remedy
Ratio of cases to independent variables	In order not to violate this assumption, the sample size must be larger than 50 + 8*m* (where *m* is the number of independent variables).	√	Given that the high number of categorical variables increased the number of predictor variables, univariate analyses were conducted between all predictor variables and each outcome variable to determine which variables significantly predicted variance on each outcome variable. Non-significant predictor variables were not included in the final regression model.
Absence of univariate outliers	Categorical variables: examination for impossible values Continuous variables: z = ± 3.29	√	Two cases were found to have Z scores above 3.29 on the cognitive subscale. These two scores were deleted from the cognitive scale.
Absence of multicollinearity and singularity	Bivariate correlations were conducted between all independent variables. A correlation of greater than .70 was deemed to indicate a problem with multicollinearity (Tabachnick & Fidell, 2007).	√	Year degree was awarded had a correlation of .78 with age and .70 with years of treatment provision. Year degree was awarded was removed from analyses to prevent the input of redundant information.
Normality	Assessed whether the kurtosis and skew of the continuous outcome variables (EST and 5 TPC subscales) and continuous predictor variables (EBPAS total and subscale scores) violated the suggested cutoff of z = ± 3.29 by Tabachnick and Fidell (2007).	√	-Three variables were found to be skewed (behaviour subscale = positive skew of 3.55; play subscale = positive skew of 3.72; cognitive subscale = negative skew of 6.50). -As suggested by Tabachnick & Fidell (2007): -Square root transformations resulted in acceptable skew values for the behaviour subscale (.40) and the play subscale (1.76). -A reflected logarithmic transformation resulted in an acceptable skew value for the cognitive subscale (1.80). The variable was rereflected after transformation for ease of interpretation of results.

Linearity and Homoscedasticity	Bivariate scatterplots between the continuous predictor variables (EBPAS total and subscale scores) and each outcome variable were examined.	No	Not applicable

Table 9

Multivariate Assumption Testing and Remedy for Violations

Assumption	**To Detect a Violation**	**Violation Detected**	**Remedy**
Absence of multivariate outliers	The presence of multivariate outliers was assessed by examining Mahalanobis' Distance ($p < .001$) and the influence of multivariate outliers by examining Cook's Distance (Cook's $D > 1$).	No	Not applicable
Absence of multicollinearity and singularity	Tolerances and VIF statistics were examined. Problems with multicolinearity were assumed if either the tolerance or VIF statistics were very low (e.g., tolerance under 10, VIF below .01; Tabachnick & Fidell, 2007).	No	Not applicable
Normality of the residuals	Residual scatterplots were examined (ZPRED vs. ZRESID) to test for this assumption (a concentration of residuals in the center of the distribution was deemed as evidence that this assumption was not violated).	No	Not applicable
Linearity and homoscedasticity of the residuals	Residual scatterplots were examined (ZPRED vs. ZRESID) to test for this assumption.	No	Not applicable
Independence of errors	It was expected that this assumption would be respected due to the design of the study (i.e., cases are independent from each other; not a repeated-design).	No	Not applicable

Table 10

Multiple Regression Model of Empirically Supported Interventions for CSA

Variable	Unstandardized *b*	SE	Standardized *B*	*t*	95% CI
Constant	1.18***	.14		8.52	[.91, 1.46]
Age	-.06*	.02	-.16	-2.39	[-.11, -.01]
Orientation[1]					
Interpersonal/Psychodynamic	-.29***	.06	-.30	-4.50	[-.41, -.16]
Integrative	-.20***	.05	-.26	-3.84	[-.31, -.10]
Experiential/Humanistic	-.36**	.12	-.18	-2.93	[-.60, -.12]
Hours Devoted to Training[2]					
5 to 9	.02	.05	.02	.34	[-.08, .12]
10 and Greater	.14*	.06	.15	2.14	[.01, .26]
EBPAS Appeal	.06[t]	.04	.12	1.79	[-.01, .13]
EBPAS Openness	.00	.04	.01	.09	[-.07, .08]
R^2	.19				
Adjusted R^2	.16				

Note. * $p < .05$ ** $p < .01$ *** $p < .001$; t = trend level findings for EBPAS Appeal ($p = .07$)
[1]Reference = CBT
[2]Reference = 0 to 4 hours per month

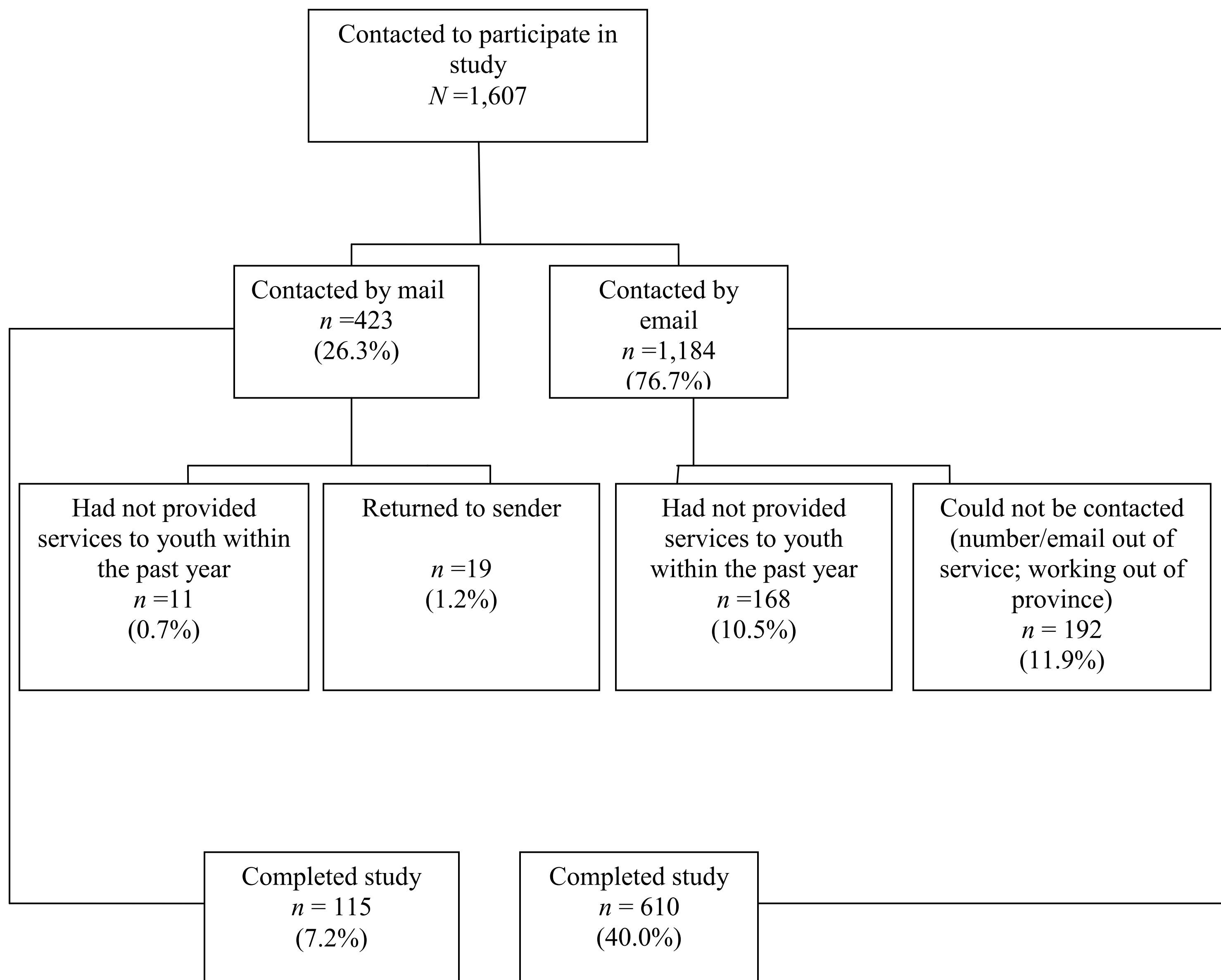


Figure 1. Flowchart of Participant Recruitment

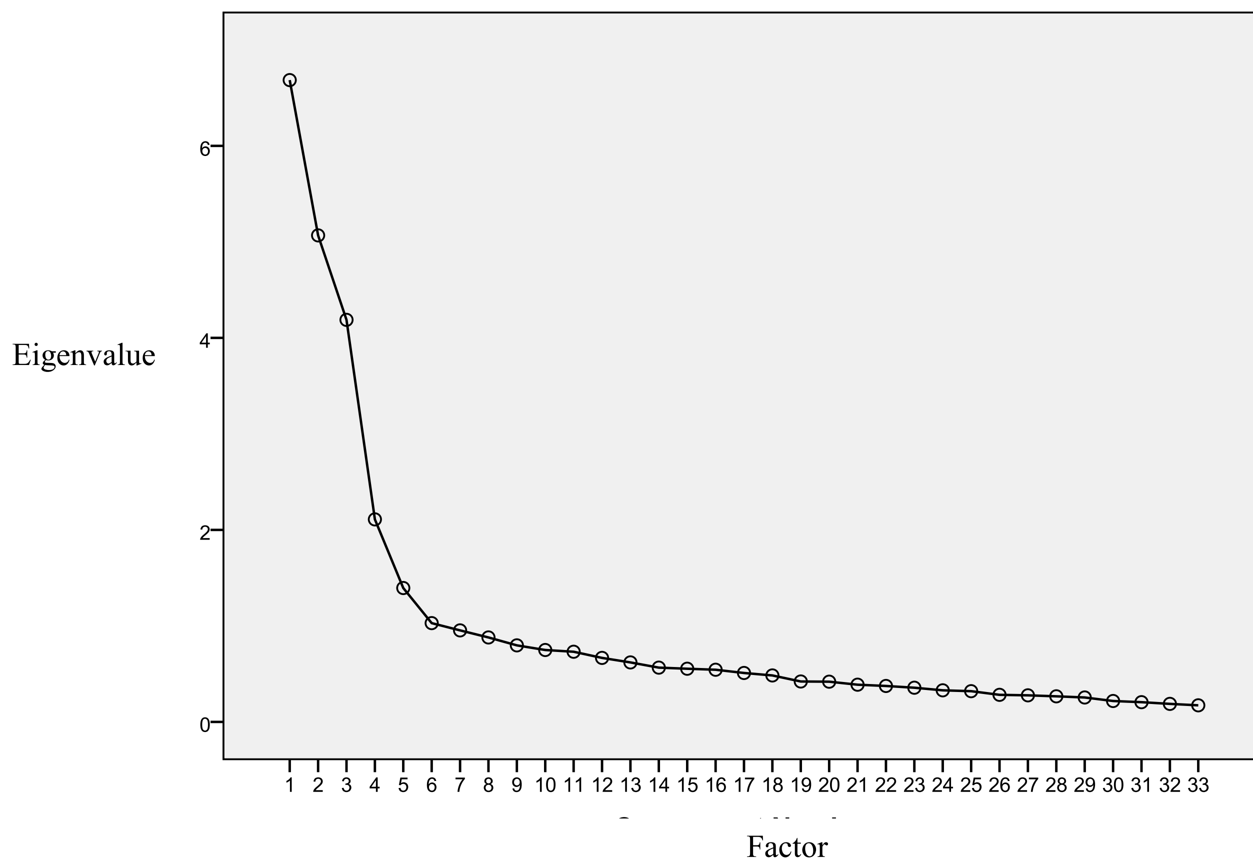


Figure 2. Scree Plot of Factors in the Exploratory Factor Analysis of the Abbreviated TPC

Appendix A

Definition of Child Maltreatment Types (Trocmé et al., 2008)

Physical Abuse

Shake, push, grab or throw: Includes pulling or dragging a child as well as shaking an infant.

Hit with hand: Includes slapping and spanking, but not punching.

Punch, kick or bite: Includes any other hitting with other parts of the body (e.g., elbow or head).

Hit with object: Includes hitting with a stick, a belt or other object, throwing an object at a child, but does not include stabbing with a knife.

Choking, poisoning, stabbing: Includes any other form of physical abuse, including choking, strangling, stabbing, burning, shooting, poisoning and the abusive use of restraints.

Other physical abuse: Other or unspecified physical abuse.

Sexual Abuse

Penetration: Penile, digital or object penetration of vagina or anus.

Attempted penetration: Attempted penile, digital, or object penetration of vagina or anus.

Oral sex: Oral contact with genitals either by perpetrator or by the child.

Fondling: Touching or fondling genitals for sexual purposes.

Sex talk or images: Verbal or written proposition, encouragement or suggestion of a sexual nature (include face to face, phone, written and Internet contact, as well as exposing the child to pornographic material).

Voyeurism: Includes activities where the alleged perpetrator observes the child for the perpetrator's sexual gratification. Use the "Exploitation" code if voyeurism includes pornographic activities.

Exhibitionism: Includes activities where the perpetrator is alleged to have exhibited himself or herself for his or her own sexual gratification.

Exploitation: Includes situations where an adult sexually exploits a child for purposes of financial gain or other profit, including pornography and prostitution.

Other sexual abuse: Other or unspecified sexual abuse.

<u>**Neglect**</u>

Failure to supervise: physical harm: The child suffered physical harm or is at risk of suffering physical harm because of the caregiver's failure to supervise or protect the child adequately. Failure to supervise includes situations where a child is harmed or endangered as a result of a caregiver's actions (e.g., drunk driving with a child, or engaging in dangerous criminal activities with a child).

Failure to supervise: sexual abuse: The child has been or is at substantial risk of being sexually molested or sexually exploited, and the caregiver knows or should have known of the possibility of sexual molestation and failed to protect the child adequately.

Permitting criminal behaviour: A child has committed a criminal offence (e.g., theft, vandalism, or assault) because of the caregiver's failure or inability to supervise the child adequately.

Physical neglect: The child has suffered or is at substantial risk of suffering physical harm caused by the caregiver(s)' failure to care and provide for the child adequately. This includes inadequate nutrition/clothing, and unhygienic, dangerous living conditions. There must be evidence or suspicion that the caregiver is at least partially responsible for the situation.

Medical neglect (includes dental): The child requires medical treatment to cure, prevent, or alleviate physical harm or suffering and the child's caregiver does not provide, or refuses, or is unavailable, or unable to consent to the treatment. This includes dental services when funding is available.

Failure to provide psych. treatment: The child is suffering from either emotional harm demonstrated by severe anxiety, depression, withdrawal, or self-destructive or aggressive behaviour, or a mental, emotional or developmental condition that could seriously impair the child's development. The child's caregiver does not provide, or refuses, or is unavailable, or unable to consent to treatment to remedy or alleviate the harm. This category includes failing to provide treatment for school-related problems such as learning and behaviour problems, as well as treatment for infant development problems such as non-organic failure to thrive. A parent awaiting service should not be included in this category.

Abandonment: The child's parent has died or is unable to exercise custodial rights and has not made adequate provisions for care and custody, or the child is in a placement and parent refuses/is unable to take custody.

Educational neglect: Caregivers knowingly permit chronic truancy (5+ days a month), or fail to enroll the child, or repeatedly keep the child at home. If the child is experiencing mental, emotional or developmental problems associated with school, and treatment is offered but caregivers do not cooperate with treatment, classify the case under failure to provide treatment as well.

Emotional Maltreatment

Terrorizing or threat of violence: A climate of fear, placing the child in unpredictable or chaotic circumstances, bullying or frightening a child, threats of violence against the child or child's loved ones or objects.

Verbal abuse or belittling: Non-physical forms of overtly hostile or rejecting treatment. Shaming or ridiculing the child, or belittling and degrading the child.

Isolation/confinement: Adult cuts the child off from normal social experiences, prevents friendships or makes the child believe that he or she is alone in the world. Includes locking a child in a room, or isolating the child from the normal household routines.

Inadequate nurturing or affection: Through acts of omission, does not provide adequate nurturing or affection. Being detached, uninvolved; failing to express affection, caring and love, and interacting only when absolutely necessary.

Exploiting or corrupting behaviour: The adult permits or encourages the child to engage in destructive, criminal, antisocial, or deviant behaviour.

Exposure to Domestic Violence

Direct witness to physical violence: The child is physically present and witnesses the violence between intimate partners.

Indirect exposure to physical violence: Includes situations where the child overhears but does not see the violence between intimate partners; or sees some of the immediate consequences of the assault (e.g., injuries to the mother); or the child is told or overhears conversations about the assault.

Exposure to emotional violence: Includes situations in which the child is exposed directly or indirectly to emotional violence between intimate partners. Includes witnessing or overhearing emotional abuse of one partner by the other.

Exposure to non-partner physical violence: A child has been exposed to violence occurring between a caregiver and another person who is not the spouse/partner of the caregiver (e.g., between a caregiver and a neighbour, grandparent, aunt or uncle).

Appendix B

Mental Health Need Identification and Service Referral Questionnaire for Study 1

Mental Health Need Identification and Service Referral Process For Youth Who Have Experienced Maltreatment

1) Please provide the ***approximate*** number of mental health professionals currently employed at your CAS:

___ Social Workers
___ Child and Youth Workers
___ Psychologists
___ Psychiatrists
___ Other (please specify: _____________)

2) What is the process used to identify the mental health needs of children and adolescents served by your agency?
(Please include any policies or assessment tool in place related to this process)

-Does the process vary based on type of maltreatment experienced? If so, how?

3) In a typical one-year period, ***approximately*** what percentage of children and adolescents who have experienced maltreatment and who are being served by your agency have mental health needs that require a referral to therapeutic mental health services?

____ %

4) Are therapeutic mental health services available at your agency for children and adolescents who have mental health needs?

___ Yes ___ No (Skip to next question)

If yes: What types of services are available?

Which professionals would typically provide these services?

In a typical one-year period, approximately what percentage of overall referrals made to therapeutic mental health services is provided by your agency for children and adolescents who have mental health needs?
____ %

How are fees typically handled for these services?

5) Are referrals to community-based therapeutic mental health services made to address the mental health needs of children and adolescents being served by your agency?

___ Yes ___ No (Skip to next question)

If yes: To which professionals are most of these referrals made (e.g., psychologists, social workers, psychiatrists, child and youth workers)?

Which professionals at your agency typically make these referrals?

In a typical one-year period, approximately what percentage of overall referrals made to therapeutic mental health services is made to community-based services to address the mental health needs of children and adolescents being served by your agency?

____ %

How are fees typically handled for these services?

What is the process (if any) for tracking whether children and adolescents receive services in the community for their mental health needs?

6) Does your agency have any partnerships or collaborative projects with mental health service providers in the community?

If yes: Please briefly describe the nature of these partnerships or projects

7) What (if any) changes would you make in the process of identifying mental health needs and providing therapeutic services or referrals for children and adolescents being served by your agency?

THANK YOU KINDLY
YOU WILL BE RECEIVING AN OVERVIEW OF STUDY FINDINGS IN THE NEAR FUTURE

Appendix C

Study 1 Cover Letter

Dear Dr./ Ms. / Mr. ____________________,

In follow-up to the voicemail and email last week, attached is the brief questionnaire on how the mental health needs of children who have experienced maltreatment are assessed and treated within Ontario CASs. The questionnaire is to be completed by the Director of Service from each of the 53 Ontario CASs and the findings will help to put strategies in place for improving the assessment and treatment of mental health problems for children who have experienced maltreatment. This study is ***extremely important*** given the high prevalence rates of mental health difficulties in this population.

This research is supported by the Ontario Association of Children's Aid Societies and the University of Ottawa and is for my Ph.D. thesis in Clinical Psychology

The questionnaire will take approximately 20 minutes to complete and your agency will be provided with a summary of the research upon the completion of the study. Dissemination of findings will ensure that ***your identifying information as well as that of your agency will be protected.***

Please complete the questionnaire and return to this email address as either an attachment or in the body of the email.

We sincerely appreciate your time and participation in our research project. If you have any further questions or concerns about the study, please contact the researchers listed below.

Sincerely,

Ms. Jennifer Czincz, B.A. (Hons.)
Doctoral Candidate, Clinical Psychology

Dr. Elisa Romano, C.Psych.
Supervising Psychologist

Appendix D

Mental Health Need Identification Process at CASs

Assessment Process	Number of Endorsing Directors	Geographic Location
Unstructured interview/observation by CAS worker	26 (63.4%)	57.7% Large Urban 34.6% Small Urban 7.7% Rural
Structured Screening Tools	22 (53.7%)	50.0% Large Urban 31.8% Small Urban 18.2% Rural
Did not specify all the specific tools used (but mentioned use of additional assessment tools)	5 (12.2%)	40.0% Large Urban 40.0% Small Urban 20.0% Rural
Battelle Developmental Inventory	1 (2.4%)	100.0% Large Urban
Brief Child and Family Phone Interview (BCFPI)	6 (14.6%)	33.3% Small Urban 66.7% Rural
Child and Adolescent Functional Assessment Scale (CAFAS)	7 (17.1%)	42.9% Small Urban 57.1% Rural
Child 30 Day Assessment Questionnaire	1 (2.4%)	100.0% Large Urban
Child Emotional Wellbeing Screen	2 (4.9%)	50.0% Large Urban 50.0% Small Urban
Child & Family Strengths and Needs Assessment	3 (7.3%)	66.7% Large Urban 33.3% Small Urban
Differential Response Protection Recordings	1 (2.4%)	100.0% Large Urban
Eligibility Spectrum	2 (4.9%)	50.0% Large Urban 50.0% Rural
Family Support Scale	1 (2.4%)	100.0% Large Urban
Mental Health Index 5	1 (2.4%)	100.0% Small Urban

Ontario Risk Assessment Tool	4 (9.8%)	50.0% Large Urban 50.0% Small Urban
Ontario Looking After Children Assessment and Action Record	7 (17.1%)	71.4% Large Urban 28.6% Small Urban
Nipissing District Developmental Screen	2 (4.9%)	100.0% Large Urban
Plan of Care	7 (17.1%)	57.1% Large Urban 42.9% Small Urban
Symptom-Specific Questionnaires	2 (4.9%)	100.0% Rural
Strengths and Difficulties Questionnaire	2 (4.9%)	100.0% Small Urban
Interview with families and collaterals (e.g., teachers)	8 (19.5%)	62.5% Large Urban 37.5% Small Urban
No specified assessment process	1 (2.4%)	100.0% Large Urban

Appendix E

Interagency Collaboration between CASs and Community-Based Mental Health Providers

Themes and Sample Responses	Number of Endorsing Directors	Geographic Location
Collaborative projects or joint programming with community mental health service providers	31 (75.6%)	50.0% Large Urban 42.9% Small Urban 7.1% Rural

Women's Advocate Program (a women's advocate from local women's shelter attends home visits with a child protection worker where concern re domestic violence exist-supported with ministry funding).

Training opportunities for child welfare staff and foster parents to enhance understanding of children's mental health issues (administered by local mental health agencies).

Prevention and/or therapy groups that are co-lead local by children's mental health providers and CAS staff.

Trauma treatment program working with foster parents and children in their homes in collaboration with a local children's mental health organization.

Partnership with a local children's mental health facility that gives priority to CAS children in crisis to be seen very quickly.

CAS social workers are placed directly in local schools to handle both child welfare issues and school-identified issues.

Exclusive access beds to children's residential mental health facilities for clients of CAS.

Provision of ESTs collaboratively with community providers (i.e., Triple P program).

Themes and Sample Responses	Number of Endorsing Directors	Geographic Location
Contract or agreement with community mental health service providers to serve children or adolescents involved with CAS	11 (26.8%)	63.6% Large Urban 27.3% Small Urban 9.1% Rural

Contract/service agreement with psychologists and/or psychiatrists for mental health assessment and treatment services.

Themes and Sample Responses	Number of Endorsing Directors	Geographic Location
Funding partnerships between CAS and community service providers	5 (12.2%)	60.0% Large Urban 40.0% Small Urban

CAS providing funds for mental health services in the community specifically for children

involved with CAS.

Involvement of CASs in committees/collaborative conferences regarding mental health service provision to CAS clients and/or funding in partnership with community service providers

Collaborative development of shared protocols with community service providers for mental health service provision to children involved with CAS	3 (7.3%)	33.3% Large Urban 66.7% Rural

Collaborative development of shared protocols regarding mental health service provision to children involved with CAS with agencies such as OPP, school boards, community mental health agencies, hospitals, and community living agencies.

Appendix F

Suggested Modifications to Mental Health Need Identification and Service Referral Process at CASs

Themes and Sample Responses	Number of Endorsing Directors	Geographic Location
Need for a greater number of child and adolescent mental health services and resources in the community	16 (39.0%)	50.0% Large Urban 31.3% Small Urban 18.7% Rural

There are not enough resources to meet the number and complexity of children's mental health needs in the community. The system is difficult to access, particularly for more highly specialized care.

It would be helpful to have easier access to these types of services. We live in a resource poor area with no major urban center. There is a long wait list for therapeutic service at our local children's mental health agency and no local psychological or psychiatric services. Referrals are made or children are transported to outlying urban centers. Often our youth are caught in jurisdictional disagreements over who is to provide service.

The largest complaint from our clients is the waiting lists- 6 months to a year that make the services irrelevant by the time they are available and leads to unnecessary family breakdown.

The region has an inadequate number of mental health beds for children and youth requiring admission. There is also an inadequate amount of outpatient services and those that exist have extensive wait lists.

Our local mental health service providers serve those who are seriously mentally ill and therefore there are limitations on the supports that can be provided to those children and adolescents whose situations aren't seen as being serious enough. Early intervention and prevention would be advantageous to everyone.

Need for improved efficiency in the identification of mental health needs of youth involved with CAS	7 (17.1%)	57.1% Large Urban 42.9% Small Urban

We need training and access to the same assessment tools that mental health providers use to screen for mental health needs and to assess outcomes, to ensure that providers are talking from the same view point when examining needs of children.

We do not currently have any standardized screening mechanism or tools to assist

frontline child protection staff in the identification of children with mental health needs.

Our agency needs better education of frontline workers in the assessment of mental health difficulties.

A clearer process for identifying children with mental health concerns is needed, as well as better tracking of this information and not just with children in care.

Early and comprehensive mental health assessments are needed.

Need for more mental health services (both professionals and treatment services) within CAS	5 (12.2%)	80.0% Large Urban 20.0% Rural

Our preference would be to establish an in house clinical team consisting of both a psychologist and a psychiatrist.

Our agency needs at least one dedicated child psychiatrist. Consultation is not enough and most family physicians have little to no experience or desire to manage the care and treatment of children with mental health problems.

I feel we should have a psychologist on staff.

Mental health professional(s) should be assigned exclusively to child welfare services, as well as a crisis response team for child welfare clients.

By having more mental health workers on our staff, the waiting period for our clients would drastically decrease and their needs would be addressed sooner.

Need for increased funding directed to mental health services for youth	3 (7.3%)	66.7% Small Urban 33.3% Rural

Improved funding for children's mental health services that are empirically supported and outcome oriented is needed. Children's mental health is chronically underfunded in our area, which likely results in increased referrals to child protection.

More funding to child mental health services is needed so that children are able to be served within a reasonable time period.

Child mental health services in Ontario are grossly underfunded. With more funding, a wider range of service could be provided and youth in need could be served sooner.

Need for increased accountability and tracking of outcomes for youth involved with CAS who are referred for mental health services	3 (7.3%)	66.7% Large Urban 33.3% Small Urban

Better tracking of mental health referrals is needed to determine if families engage with other service providers.

There needs to be more accountability and coordination of services between the children's mental health programs and the child welfare system where many of the high risk children reside.

A stronger working relationship with the child psychiatrists working in the community would be helpful.

No changes necessary in the identification and service provision process for mental health needs of children being served by CAS	3 (7.3%)	33.3% Large Urban 66.7% Small Urban

Appendix G

Web-Based Questionnaire for Study 2

HELP KIDS: Survey of Mental Health Services for Youth in Ontario

1) **Sex:**
   - □ Female
   - □ Male

2) **Age:**
   - □ Under 30
   - □ 30-40
   - □ 41-50
   - □ 51-60
   - □ 61-70
   - □ Over 70

3) **Highest degree received:**
   - □ Bachelors
   - □ M.A.
   - □ M.Sc.
   - □ Ph.D.
   - □ Psy.D.
   - □ Ed.D.
   - □ Other (please specify: _______________)

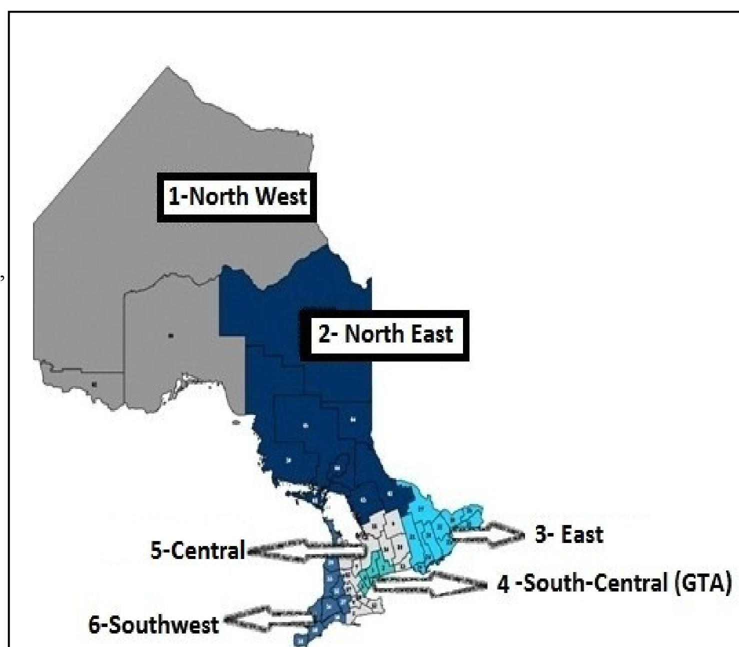
4) **Year this degree was awarded:**
   - □ 2006-2010
   - □ 2001-2005
   - □ 2000-2004
   - □ 1999-2003
   - □ 1994-1998
   - □ 1989-1993
   - □ 1984-1988
   - □ 1979-1983
   - □ 1974-1978
   - □ 1969-1973
   - □ 1964-1968
   - □ 1959-1963
   - □ Before 1959

5) **Primary work setting:**
   - □ Private Practice
   - □ Hospital Setting
   - □ Community Agency
   - □ Educational System
   - □ University
   - □ Children's Aid Society
   - □ Other (please specify_)

6) **Geographic location of your primary work setting:**
   - □ Large Urban: municipalities centered on an urban core with a population of at least 50,000
   - □ Small Urban: any urban area with a population between 1,000 and 50,000
   - □ Rural: all other areas

   Based on the image below, please specify the location of your primary work setting

- □ 1- **North West**
  i.e., Kenora, Rainy River, Thunder Bay
- □ 2- **North East**
  i.e, Algoma, Cochorane, Manitoulin, Nipissing, Parry Sound, Sudbury, Timiskaming
- □ **3-East**
  i.e., Ottawa, Belleville, Cornwall, Kingston, Frontenac, Hastings, Lanark, Leeds/Grenville, Prescott-Russell, Prince Edward, Renfrew, Stormont, Dundas, Glengarry
- □ **4-South-Central (GTA)**
  i.e., Toronto, Durham, Halton, Peel, York, Barrie
- □ **5-Central**
  i.e., Brant, Dufferin, Haldimand-Norfolk, Haliburton, Hamilton, Muskoka, Niagara, Northumberland, Peterborough, Simcoe, Kawartha Lakes, Waterloo, Wellington, Owen Sound
- □ **6-Southwest**
  i.e., Bruce, Elgin, Essex, Grey, Chatham-Kent, Huron, Lambton, Middlesex, Oxford, Perth, London, Sarnia, Windsor



7) Years of clinical experience treating children and/or adolescents:

□ 0-4 □ 10-14 □ 20-24 □ Over 30
□ 5-9 □ 15-19 □ 25-29

8) How many direct client contact hours per week do you usually provide to children and/or adolescents (individual and/or family)?

□ 0-4 □ 10-14 □ 20-24 □ Over 30
□ 5-9 □ 15-19 □ 25-29

9) Age range of the majority of clients treated in the last 4 months (choose one):

□ Under 5 years of age □ 13 to 18 years old
□ 6 to 12 years old □ Older than 18 years

10) Primary presenting problems for the majority of clients treated in the last year (check all that apply):

□ Anxiety Disorders □ Developmental Disorders □ Eating Disorders
□ Mood Disorders □ ADHD □ Personality Disorders
□ Maltreatment or Trauma □ Learning Disorders □ Sleep Disorders
□ Behaviour or Conduct Disorders □ Substance Abuse/Dependence
□ Other (_________)

11) Your primary theoretical orientation as a clinician:

□ Cognitive □ Interpersonal □ Integrative
□ Behavioural □ Psychodynamic □ Other (please specify: ____)
□ Cognitive-Behavioural □ Experiential/Humanistic

12) How often do you receive clinical supervision?

□ Never □ Weekly □ Monthly
□ Daily □ Twice a Month □ Other (please specify: ____________)

13) What is your level of satisfaction with the amount of clinical supervision you currently receive?

□ Completely Satisfied □ Neutral □ Completely Dissatisfied
□ Somewhat Satisfied □ Somewhat Dissatisfied

14) How often do you provide clinical supervision to others?

□ Never □ Weekly □ Monthly
□ Daily □ Twice a Month □ Other (please specify: ____________)

15) Do you have opportunities to learn new clinical methods (i.e., workshop attendance, self-directed readings)?

□ Yes □ No

If yes, about how many hours per month do you devote to this learning?

□ 0-4 □ 5-9 □ 10-14 □ Over 15

16) Do you provide treatment to children and/or adolescents who have experienced sexual abuse?

□ Yes □ No

IF NO: Thank you kindly for your participation. Please feel free to provide any additional comments at the end of this package.

IF YES: Please continue……

17) How many years have you have been providing treatment to children and/or adolescents who have experienced sexual abuse (individual and/or family):

□ 0-4 □ 10-14 □ 20-24 □ Over 30
□ 5-9 □ 15-19 □ 25-29

18) Approximately how many hours per week involve the treatment of children and/or adolescents who have experienced sexual abuse?

□ 0-4 □ 10-14 □ 20-24 □ Over 30
□ 5-9 □ 15-19 □ 25-29

19) Have you received any certifications in mental health treatments for children who have experienced sexual abuse?

□ Yes □ No

If yes, please specify which treatment(s):

____

20) Do any of your referrals to provide mental health services to children who have experienced childhood sexual abuse come from an Ontario Children's Aid Society?

□ Yes □ No

If yes, please approximately what percentage of these referrals comes from a CAS?

____

21) Please use the following scale to rate the extent to which you use each of the treatment techniques listed below when treating a child or adolescent exhibiting mental health symptoms related to a sexual abuse experience

	Rarely/ Never	**Some-times**	**Often**
Using prompts to elicit desired behaviour			
Fading therapist rewards/prompts to facilitate generalization and maintenance			
Developing a dynamic formulation			
Trying to help the child resolve struggles related to states of development (e.g., industry vs. inferiority, a la Erikson; Separation-Individuation a la Mahler)			
Training the child to recognize and modify maladaptive thoughts			
Teaching the child that cognitions affect behaviour and emotions and can cause behaviour problems			
Identifying and challenging irrational beliefs, attributions, or schemes			
Developing secondary reinforcers to facilitate stimulus generalizations			
Helping the child generate alternative interpretations for events, consider other evidence, and correct misappraisals of perceived threat			
Charting behavioural gains and making the chart available to the child			

Teaching the child to modify maladaptive cognitions			
Using a point or token system to reward the child for good behaviour			
Cognitive restructuring or reframing			
Trying to help the child develop more effective ego functioning			
Teaching the child to monitor self-statements, automatic thoughts, and/or behaviours			
Trying to help the child gain insight into his/her feelings, motives, or conflicts			
Trying to understand the effects of early life experiences in the family			
Using rewards or praise to increase positive behaviour			
Trying to extinguish undesirable behaviour by discontinuing rewards for that behaviour			
Trying to understand and/or alter the child's use of defense mechanisms			
Using transference and/or countertransference to understand interpersonal transactions or styles			
Using puppets or dolls to facilitate emotional expression			
Using inherent fun of play to de-condition the traumatic response the child has to trauma reminders			
Providing child with specific play projects designed to facilitate expression of thoughts, feelings, memories of abuse			
Encouraging the use of play to enhance sense of mastery			
Encouraging the child to gradually describe more details of upsetting or frightening life experiences			
Using games to strengthen and enhance retention skills			
Encouraging the child to create a book in which to describe thoughts and feelings about frightening or upsetting life experiences, and which can be added to over time			
Using art projects to facilitate processing memories, thoughts, and feelings about the abuse			
Using sand play to process traumatic events			
Having joint parent-child treatment sessions to allow the child to communicate upsetting feelings, thoughts, or memories directly to the parents			
Allowing the child to choose play/activities because they are instinctually aware of what is needed in order to work toward healing			
Role-playing with parents supportive responses to the child's direct discussion of upsetting life experiences			

22) The following questions ask your opinions about using new types of treatments. Please specify the extent to which you agree which each of the following statements using the following scale:

Not at all	To a slight extent	To a moderate extent	To a great extent	To a very great extent
0	1	2	3	4

Question	Rating
I like to use new types of therapy/interventions to help my clients	

I am willing to try new types of therapy/interventions even if I have to follow a treatment manual	
I know better than academic researchers how to care for my client	
I am willing to use new and different types of therapy/interventions developed by researchers	
Research-based therapy/interventions are not clinically useful	
Clinical experience is more important than using manualized therapy/interventions	
I would not use manualized therapy/interventions	
I would try a new therapy/intervention even if it were very different from what I am used to doing	

If you received training in a therapy/intervention that was new to you, how likely would you be to adopt it if:

	Rating
It was intuitively appealing	
It "made sense" to you	
It was required by your supervisor	
It was required by your agency	
It was required by your state	
It was being used by colleagues who were happy with it	
You felt you had enough training to use it correctly	

Any additional comments:

____

____

THANK YOU KINDLY FOR YOUR PARTICIPATION-
WE TRULY APPRECIATE YOUR INPUT!

Appendix H

Study 2 Cover Letter

Dear Dr./ Mr. / Ms. __________________,

My name is Jennifer Czincz and I am a Clinical Psychology Ph.D. student at the University of Ottawa. For my doctoral dissertation, I am conducting a province-wide questionnaire of mental health professionals to determine the interventions that are being used in the treatment of children who have experienced sexual abuse.

I obtained your name from [state source from which contact was obtained] as being a clinician who works with children who have experienced sexual abuse. It is important that clinicians, such as yourself, have the opportunity to become involved with research in their area of practice so that they are able to provide researchers with feedback and suggestions for the optimal delivery of treatments in the real world.

The questionnaire will take approximately 20 minutes to complete. Participation in the questionnaire is voluntary and consent to participate will be implied if you choose to complete and return the questionnaire. All individual data will remain strictly confidential and only aggregate group data will used in any summary reports or resulting publications. For every completed questionnaire, a donation will be made to the Kids Help Phone.

The web-link to the questionnaire is provided below. I sincerely thank you for considering providing your valuable feedback. If you have any questions regarding this study, please feel free to contact the researchers.

Sincerely,

Ms. Jennifer Czincz, B.A. (Hons.)
Doctoral Candidate, Clinical Psychology

Dr. Elisa Romano, C.Psych.
Supervising Psychologist

Appendix I

Cover Letter for Study 2 Mailings

Dear Member of the College of Psychologists of Ontario,

Following on a previous voicemail message, enclosed is the first province-wide questionnaire of clinicians who provide services to children and/or adolescents. I obtained your name from the College of Psychologists of Ontario as being a clinician who works with this population. This study is for my Ph.D. dissertation.

The questionnaire can either be completed by hand and returned in the enclosed envelope or completed online (web address was provided).

WHY COMPLETE THE QUESTIONNAIRE?

o To gather information on the types of services provided by Ontario clinicians working with youth
o To gather information on the location and distribution of services
o A subset of the questionnaire will gather specific information on interventions used by Ontario clinicians who work with youth who have experienced sexual abuse
o To gather critical information to help us better understand and address any gaps in how the mental health needs of youth are identified and treated in Ontario

WHAT IS REQUIRED?

o If you work with youth but not sexual abuse, the questionnaire will take about 5 minutes to complete
o If you work with youth who have experienced sexual abuse, it will take about 10 minutes to complete the questionnaire

ADDITIONAL INFORMATION

o Your participation is anonymous and voluntary
o Consent is implied should you choose to complete the questionnaire
o The study is approved by the Ontario Association of Children's Aid Societies

FOR EVERY COMPLETED QUESTIONNAIRE, A DONATION WILL BE MADE TO KIDS HELP PHONE

If you choose not to complete the questionnaire, kindly notify researchers of the reason you are not completing it (either by email or by sending this letter back in the enclosed envelope):

___ I have not provided psychological services to children and/or adolescents within the past year
___ I have limited time or interest

Thank you for your participation and valuable input. Please feel free to contact the researchers should you have any further questions.

Ms. Jennifer Czincz, B.A.(Hons.)
Doctoral Candidate, Clinical Psychology

Dr. Elisa Romano, C.Psych.
Supervising Psychologist

Appendix J

Collapsed Response Categories Within Categorical Predictor Variables to Meet Cell Size Requirement for Regression Analyses (Tabachnik & Fidell, 2007)

Predictor Variable	Collapsed Response Categories	Resulting Response Category
Theoretical Orientation	Cognitive therapy (2.6%) Behaviour therapy (3.0%) CBT (43.3%)	CBT (48.9%)
	Interpersonal (2.6%) Psychodynamic (14.7%)	Interpersonal/Psychodynamic (17.3%)
	Experiential/Humanistic (3.5%)	Experiential/Humanistic (3.5%)*
Geographical Location (Provincial)	Northwest Ontario (3.5%) Northeast Ontario (2.6%)	Northern Ontario (6.1%)
Receipt of Supervision	Daily (0.9%) Weekly (6.1%) Twice a month (6.5%)	At least bi-weekly (13.5%)
Hours Devoted to Training	10 to 14 (12.7%) Over 15 (4.8%)	10 and greater (17.5%)

**Note*: Experiential/Humanistic was left as a cell of 3.5% as it could not be combined with any other group based on theoretical considerations

Appendix K

Predictor Variables Included in Final Regression Models Based on Univariate Analyses

	Outcome Variables				
	Behaviour	Cognitive	Psychodynamic	Play Therapy	Gradual Exposure
Sex	-	-	-	√	√
Age	√	-	-	-	-
Education	-	-	-	-	-
Work Setting	√	-	-	√	√
Urban/Rural	-	-	√	-	-
Provincial Location	-	-	-	√	-
Self-Reported Orientation	√	√	√	-	-
Receipt of Supervision	-	-	-	√	-
Hours Devoted to Clinical Training	-	-	-	-	-
Clinical Service Hours Per Week with Children Who Have Experienced CSA	-	-	-	-	-
EBPAS Total	√	√	√	-	-

Note: All significant at $p < .1$ or lower

Appendix L

Significant Predictor Variables within Final Regression Models

	Outcome Variables				
	Behaviour	Cognitive	Psychodynamic	Play Therapy	Gradual Exposure
Sex	-	-	-	√	-
Age	√	-	-	-	-
Education	-	-	-	-	-
Work Setting	-	-	-	√	√
Urban/Rural	-	-	√	-	-
Provincial Location	-	-	-	√	-
Self-Reported Orientation	√	√	√	-	-
Receipt of Supervision	-	-	-	√	-
Hours Devoted to Clinical Training	-	-	-	-	-
Clinical Service Hours Per Week with Youth who have Experienced CSA	-	-	-	-	-
EBPAS Total	-	-	-	-	-

Note: All significant at $p < .05$ or lower

Appendix M

Multiple Regression Model of Behaviour Therapy

Variable	Unstandardized *b*	SE	Standardized *B*	*t*	95% CI
Constant	1.10***	.16		6.93	[.79, 1.27]
Age	-.08**	.03	-.19	-2.86	[-.13, -.02]
Work Setting[1]					
Hospital	.08	.07	-.08	-1.15	[-.22, .06]
Community Agency	.17*	.07	.17	2.61	[.04, .31]
Educational System	.08	.98	.06	.85	[-.11, .28]
University	-.06	.09	-.04	-.64	[-.24, .12]
CAS/Other	.12	.15	.05	.83	[-.17, .41]
Orientation[2]					
Interpersonal/Psychodynamic	-.39***	.07	-.37	-5.56	[-.53, -.25]
Integrative	-.18**	.06	-.21	-3.14	[-.29, -.07]
Experiential/Humanistic	-.31*	.13	-.15	-2.32	[-.56, -.05]
EBPAS Total	-.02	.05	-.02	-.31	[-.11, .08]
R^2	.23				
Adjusted R^2	.19				

Note. * $p < .05$ ** $p < .01$ *** $p < .001$
[1]Reference = Private Practice
[2]Reference = CBT

Appendix N

Multiple Regression Model of Cognitive Therapy

Variable	Unstandardized b	SE	Standardized B	t	95% CI
Constant	1.73**	.15		11.91	[1.44, 2.02]
Orientation[1]					
Interpersonal/Psychodynamic	-.24**	.08	-.20	-2.88	[-.40, -.07]
Integrative	-.21**	.07	-.21	-3.09	[-.34, -.07]
Experiential/Humanistic	-.30*	.15	-.13	-1.98	[-.61, .00]
EBPAS Total	.08	.06	.10	1.40	[-.03, .19]
R^2	.09				
Adjusted R^2	.07				

Note. * p < .05 ** p < .01 *** p < .001
[1]Reference = CBT

Appendix O

Multiple Regression Model of Psychodynamic Therapy

	Unstandardized		Standardized		
Variable	*b*	SE	*B*	*t*	95% CI
Constant	1.10***	.17		6.19	[.70, 1.35]
Urban/Rural[1]					
Small Urban	-.25**	.09	-.16	-2.71	[-4.23, -.07]
Rural	.09	.16	.04	.58	[-.22, .40]
Orientation[2]					
Interpersonal/Psychodynamic	.60***	.09	.42	6.46	[.42, .78]
Integrative	.33***	.08	.28	4.31	[.18, .48]
Experiential/Humanistic	.53**	.18	.19	3.03	[.19, .87]
EBPAS Total	-.02	.06	-.02	-.25	[-.14, .11]
R^2	.23				
Adjusted R^2	.21				

Note. * $p < .05$ ** $p < .01$ *** $p < .001$
[1]Reference = Large Urban
[2]Reference = CBT

Appendix P

Multiple Regression Model of Play Therapy

Variable	Unstandardized *b*	SE	Standardized *B*	*t*	95% CI
Constant	.98***	.10		9.92	[.94, 1.06]
Sex	-.18*	.06	-.18	-2.82	[-.37, -.06]
Work Setting[1]					
Hospital	-.21*	.08	-.18	-2.71	[-.37, -.06]
Community Agency	.06	.08	.05	.70	[-.10, .21]
Educational System	.05	.12	.03	.41	[-.18, .27]
University	-.36**	.11	-.22	-3.38	[-.58, -.15]
CAS/Other	-.04	.17	-.02	-.24	[-.38, .30]
Provincial Location[2]					
East	-.17*	.07	-.17	-2.38	[-.32, -.03]
Southwest	.02	.09	.01	.21	[-.15, .19]
Central	.03	.09	.02	.31	[-.14, .19]
Northern	-.23	.12	-.13	-1.94	[-.47, .01]
Receipt of Supervision[3]					
At Least Bi-Weekly	-.17*	.09	-.13	-1.98	[-.33, .00]
Monthly	.00	.07	.00	.04	[-.14, .15]
R^2	.18				
Adjusted R^2	.13				

Note. * $p < .05$ ** $p < .01$ *** $p < .001$
[1]Reference = Private Practice
[2]Reference = South Central (Greater Toronto Area)
[3]Reference = Never

Appendix Q

Multiple Regression Model of Gradual Exposure

Variable	Unstandardized *b*	SE	Standardized *B*	*t*	95% CI
Constant	1.14***	.11		10.85	[.93, 1.35]
Sex	-.13	.07	-.12	-1.79	[-.28, .01]
Work Setting[1]					
Hospital	-.12	.09	-.09	-1.33	[-.21, .14]
Community Agency	-.03	.09	-.03	-.36	[-.11, .19]
Educational System	-.09	.13	-.05	-.67	[-.35, .17]
University	-.51***	.13	-.27	-3.92	[-.76, -.25]
CAS/Other	-.17	.20	-.06	-.84	[-.57, .23]
R^2	.08				
Adjusted R^2	.06				

Note. * $p < .05$ ** $p < .01$ *** $p < .001$
[1]Reference = Private Practice