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Examining the Effects of the Positive Child Care Program In Early Childhood Education Environments: A randomized control trial

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Abstract

While there are a variety of programs and techniques that have been developed to support and address challenges with children's behaviour in early learning and care settings, few studies have focused on the effectiveness and implementation of such approaches with fidelity.

This study examines The Positive Child Care Program (PCCP) in order to inform program development. Participants in this study included 96 Early Childhood Educators and 12 Directors from 12 child care centres in Alberta, Canada. Findings indicate that PCCP has the potential to dramatically improve quality social and emotional experiences for both children and adults in early learning environments. This study also provides meaningful insights for understanding implementation of such program supports in early childhood settings.

Keywords: early childhood; implementation; mental health; prevention; fidelity; Triple P

“I’ve learned that I still have a lot to learn.” – Maya Angelou

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Chapter 1: Introduction

The World Health Organization (2009) defines mental health as, “a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community. It is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity” (p. 1). Mental health disorders, however, are defined in the American Psychiatric Association’s Diagnostic and Statistical Manual, Fifth Edition (DSM-V) as "a syndrome characterized by clinically significant disturbance in an individual's cognition, emotion regulation, or behavior that reflects a dysfunction in the psychological, biological, or developmental processes underlying mental functioning” (American Psychiatric Association, 2013). Approximately 1 in 5 children in Canada have a mental health disorder which causes significant distress and impairs their functions at home, school, with peers, and in the community (Boyle & Georgiades, 2009; Canadian Institute for Health Information, 2009; Santor, Short, & Ferguson, 2009; Waddell, Shepherd, Chen, & Boyle, 2013). However, there is a gross inadequacy in children’s mental health service delivery. Canadian based research indicates that since 2007 there has been a 54% increase in emergency department visits, and 60% increase in hospitalizations for children and youth seeking treatment for their mental health (CMHO, 2016). In addition, it is widely acknowledged that up to 80% of Canadian children who require mental health services do not receive them (e.g., Canadian Collaborative Mental Health Initiative, 2006; Mental Health Commission of Canada, 2014; Schwean & Rodger, 2013).

The foundation for mental health in middle childhood, adolescence, and beyond is established in early childhood (Wadell, Schwartz, Barican, Andres, & Gray-Grant, 2015).

Childhood signifies the unique intersection of developmental growth, and opportunities for educators to influence and support children's mental health (Rodger et al., 2014). Several studies (e.g., Friendly & Prentice, 2009; Graham, Phelps, Madisson, & Fitzgerald, 2011; Hamre & Pianta, 2001; O'Connor, Dearing, & Collins, 2011) have indicated that educator-child relationships that demonstrate low conflict, positive interactions, and frequent communication and connectedness are fundamental influences relating not only to children's academic development, but also to their mental health, social-emotional and behavioural development. Given the documented importance of the educator-child relationship, early childhood educators are positioned to be primary service providers in prevention and early intervention related to challenges in children's mental health. Of importance here, children with challenges to their mental health require educators to understand the characterizing factors related to their needs, in order to be better equipped in managing the associated difficulties in educational settings (Graham et al., 2011; Happo & Maatta, 2011). Many of the behavioural problems associated with challenges to mental health first become evident in early learning settings (Perry, Holland, Darling-Kuria, & Nadiv, 2011). However, lack of training and skill in behaviour guidance techniques and in supporting social-emotional competency development for young children continues to be the greatest need identified by educators, administrators and family members (Fox & Smith, 2007; Fuchs, Monson, & Hatcher, 2010; Graham et al., 2011; Hemmeter, Santos & Ostrosky, 2008; Reinke, Stormont, Herman, Puri, & Goel, 2011), and is the premise on which this research study is based.

Changing Directions, Changing Lives: The Mental Health Strategy for Canada (2012) marks the first nationwide mental health strategy in Canada. This initiative states "A close bond with parents, guardians and other caregivers provides a sense of safety and support that helps

brain development and contributes to positive social relationships and enhanced self-esteem" (Mental Health Commission of Canada, 2012). However, despite explicit recommendations for initiatives to enhance the knowledge and skills of educators in supporting the mental health and wellbeing of children in the K-12 education system, the strategy fails to address the needs of children in early childhood education environments. This is problematic given that approximately 17% of children between the ages of 2-5 years meet diagnostic criteria for mental health problems (Clinton et al., 2014).

Research continues to highlight how early and serious mental health challenges may arise (e.g. Membride, 2016; Waddell Schwartz, Barican, Andres, & Gray-Grant, 2015). Challenges in mental health have been shown to begin as early as during prenatal development and infancy, and are associated with continued impairments in behavioural and emotional functioning in late adolescence and adulthood (Clinton et al., 2014; Côté, Boivin, Liu, Nagin, Zoccolillo, & Tremblay, 2009; Tremblay, 2010; Waddell et al., 2015). The long-term influence of early difficulties with children's behaviour and mental health becomes the most damaging and adverse when not addressed (Mash & Wolfe, 2013, Perry et. al., 2011), and may include outcomes such as school-leaving, limited income, and patterns of failure that persist into adulthood (Fox & Smith, 2007). Clinton et al. (2014) state "the long- term social and economic impact of mental health problems among infants and young children is significant, making infant and early childhood mental health an issue of critical importance for government and communities" (p. 6). Early onset of one disorder is associated with continued impairments in behavioural and emotional functioning in late adolescence and greatly increases the risk of both subsequent challenges with mental health, and being diagnosed with one or more *other* disorders by the time the child reaches 18 years of age (Childrens Mental Health Ontario, 2002; Clinton et al., 2014).

However, when conducting a meta-analysis of experimental studies relating to interventions designed to prevent or reduce disruptive and aggressive behaviours of children, Wilson and Lipsey (2007) found that of 249 experimental studies only 8% included children under the age of 6. Furthermore, in a review of the literature from 2000-2010 that focused on developmental trajectories of disruptive problems, Tremblay (2010) found that the majority of prevention and intervention studies continue to target pre-adolescent and adolescent children. Tremblay (2010) suggests that this may be because "adolescents create more apparent social disruption than elementary school children and the latter more than toddlers" (p. 358).

In recent years there has been an assortment of approaches and techniques developed for and utilized by childcare staff, in attempts to manage and diminish behaviour problems in young children while promoting social and emotional development (i.e., Conners-Burrow, Whiteside-Mansell, & McKelvey, 2012; Fox, Hemmeter, Snyder, Perez Binder & Clarke, 2011; Hemmeter, Ostrosky, & Corso, 2012). Yet, few studies focus on implementation of evidence-based programs with fidelity within early childhood classrooms (Fox et al., 2011; Metz & Bartley, 2012; Halle, Metz, & Martinez-Beck, 2013). Influences on the mental wellbeing of children begin early; therefore, addressing the deficit in the research supporting children's mental health through examining implementation, fidelity, and outcomes of evidence-based programs in early childhood education settings is essential. Limited research evaluating fidelity and implementation of evidence-based early childhood programs indicates a need to understand how early childhood educators (ECEs) are using evidence-based practices so that robust, actionable recommendations for implementation can be made.

For the purpose of this study, "*Early Childhood Educator*" and "*Educator*" are used interchangeably and are defined as an individual/individuals involved in "the planning and

delivery of inclusive play-based learning and care programs for children in order to promote the well-being and holistic development of children" (Early Childhood Educators Act, 2007). This research study will contribute to the sparse literature that exists relating to implementation of evidence-based programs in early childhood education, and will provide precise information to assist in identifying implementation requirements for a specific child guidance program during the formative period of the program development. The knowledge ascertained through this research will have broad implications in the fields of children's mental health and early childhood education, as study outcomes will provide a framework in which to consider addressing challenging behavior as it relates to children's mental health in early learning environments.

Research Purpose

This study is a foundational trial for program development, examining the implementation and effectiveness of a program designed to complement the widely disseminated Triple P Positive Parenting Program, and enhance the skills and child guidance techniques of early childhood educators: (working title) Positive Child Care Program (PCCP). The purpose of this study is to establish if this variant of the Triple P Positive Parenting Program (hereafter referred to as Triple P) is effective in early childhood education settings and further, to identify the relationship between implementation variables and program outcomes. It is assumed that if found effective, the Positive Child Care Program could complement widely adopted parenting practices, by extending training of positive adult-child interactions to early childhood education environments. In addition, as this study also examines implementation variables, it is assumed that considerations and findings related to implementation of evidence-based programs may be generalized to other evidence-based programs recommended for implementation in early learning

settings. The University of Queensland (UQ) is the owner of the Intellectual Property and copyright of the Triple P - Positive Parenting Program, and variants of the program are developed at the University's Parenting and Family Support Centre (www.triplep.net). UQ will not transfer the rights of the program variant to Triple P International for worldwide dissemination until a substantial evidence base has been demonstrated in randomized control trials. As such, the initial PCCP training program was developed by, and adhered to the standardized training and quality assurance protocols, of The University of Queensland. As the results from the current study will contribute to the development and preliminary examination of the PCCP, The University of Queensland is identified as a research partner in this study, with Triple P Parenting Canada providing project management support.

Research Questions

Situated in Alberta, this mixed methods doctoral research used a Canadian sample of participants for preliminary assessment examining the following research questions:

- Is the Positive Child Care Program effective in increasing ECEs confidence and competence in managing children's behaviour?
- Is the Positive Child Care Program effective in changing child behaviour?
- Does the Positive Child Care Program increase staff satisfaction in the workplace?
- What is the relationship between organizational factors, program adherence, and Positive Child Care Program outcomes? (Intervention condition only)

Hypothesis

It is hypothesized that compared to ECEs in a control condition, PCCP will produce increased confidence and competence of ECEs in guiding the behaviours in children experienced

as challenging. including: i) increased responsivity to children; ii) lower levels of observed and ECE-reported coercive teaching practices; iii) increased educator confidence; iv) improved educator adjustment; and v) lower levels of observed and staff reported disruptive child behaviour. Additional goals of this project are to examine program implementation, fidelity, and consumer satisfaction, and to explore potential moderators of intervention effects.

Organizational Overview of the Remaining Chapters

In this dissertation, chapter two details a review of the relevant literature consulted in this study. Four major considerations are addressed in the review: (1) the landscape of early childhood education and care in Canada; (2) the landscape of early childhood education and care in Alberta; (3) the research and practice disparity; and (4) the link between Triple P and early childhood education and care.

Chapter three examines the utilization of implementation theory in order to interpret the research findings and develop responses to the research questions. Due to the intricate nature of implementation science, chapter three also considers the significance of fidelity in implementation, and how variance in the adherence to fidelity may influence implementation outcomes.

Chapter four is a discussion on the methodology and methods applied to this study. This study used a mixed methods design to examine the interface between the Positive Child Care Program and related dependent variables. This study used a randomized experimental design; involving two conditions (intervention vs. service as usual/wait list control), using repeated measures to assess at three time periods: pre intervention (T1), post intervention (T2), and two

month follow up (T3). Data collected included: semi-structured interviews, standardized assessment tools, and observations. The procedures of orientation, data collection, the process of data analysis, and issues of trustworthiness are discussed.

Chapter five presents the findings from the research data collected as they relate to the research questions and hypothesis. In this chapter, equal priority is given to both quantitative and qualitative findings. Outcomes are presented side by side so that unique variances between the two can be captured and discussed.

Chapter six provides a discussion of the insights and implications when synthesizing the findings highlighted in Chapter five. This chapter illustrates the interconnectedness of the data to help readers to recognize how the findings relate to the research questions.

Lastly, Chapter seven concludes the dissertation, highlighting the research implications, limitations to the study, and future recommendations for both research and practice that arose from this research study.

Chapter 2: Literature Review

Evidence-based practice has been defined as "a decision-making process that integrates the best available scientific research evidence with family and professional wisdom and values" (Buysse, Wesley, Snyder, & Winton, 2006). In the field of early childhood education, evidence-based practice has derived from origins in medicine, in recognition of a gap between theory and practice, and in efforts to enhance standards and accountability of early childhood educators (Buysse et al., 2006). Recently there have been efforts to reduce the gap between research and practice in human services and early childhood education, heightening the attention towards the adoption of evidence-based practices and programs (American Psychological Association, 2009; Purper, 2016). The National Research Council Committee on Research in Education (2004) recognizes the importance of adopting evidence-based research and practice in in the development of policy and providing educational services to young children and families. However, many disciplines have identified inconsistencies between the development of evidence-based practices and the implementation of such supports (Fixen, Naoom, Blase, Friedman, Wallace et. al, 2005). In conducting a synthesis of the literature relating to implementation research, Fixsen et al. (2005) identify discrepancies in terminology and the associated interpretations as being persistent obstacles to implementation research that may potentially contribute to the 'poorly developed state of the field' (p. 4). Damschroder et al. (2009) echo this thought when they state that "implementation, context, and setting are concepts that are widely used and yet have inconsistent definitions and usage in the literature" (p. 3). In this study, the term *implementation* refers to "efforts to incorporate a program or practice at the community, agency, or practitioner levels" (Fixen et. al, 2005). In addition, *intervention* is defined as "treatment or prevention efforts at the consumer level" (Fixen et. al, 2005). Explicitly

differentiating between these two terms denotes implementation processes are intentional and comprehensive, and that implementation outcomes must be considered separate from intervention outcomes.

Research that evaluates the real-world implementation of evidence-based programs is essential, yet lags significantly behind the already sparse research on implementation (Flay, Biglan, Boruch, Gonzales Castro, Gottfredson, Kellam et al., 2005; Metz & Bartley, 2012). This research study positively adds to this limited knowledge, however a review of the literature that contextualizes the associated state of knowledge and concerns must first take place (Punch, 2009). This literature review looks at the landscape of early childhood education in Canada and Alberta, followed by the research and practice disparity in early childhood education, and the relationship between Triple P and early childhood education.

The Landscape of Early Childhood Education and Care in Canada

In Canada, the accountability for health, education, and early childhood education and care are the separate responsibility of each province and territory. For health care, the Canada Health Act (Canada Health Act, 1984) legislates five core principles that must be met in order for Canadians to be able to attain funding for services. These principles are portability, universality, comprehensiveness, public administration, and accessibility (Canada Health Act, 1984, c.6, s. 7). However, there is no equivalent federal-level department of education that regulates core components for education/early childhood education across Canada, nor is there a formal framework for collaborative integration of health and education services in Canada despite the relationship between mental health and education (Boyle & Georgiades, 2009; Canadian Institute for Health Information, 2009; Santor, Short, & Ferguson, 2009; Waddell, Shepherd, Chen, &

Boyle, 2013). Historically, early childhood education and care have been under the responsibility of social/community services ministries; however seven provinces/territories across Canada have now redeployed responsibility for child care to their Ministries of Education: Prince Edward Island, Nova Scotia, New Brunswick, Ontario, Saskatchewan, Northwest Territories and Nunavut (Ferns & Friendly, 2014).

Differences among training requirements in Canadian early learning and care settings reflect the fragmentation that lack of federal regulation allows. Despite variances across the country, overall training requirements for childcare staff and program directors remain low. This is concerning, as "research on quality at the program level shows that child care centres with teaching staff and directors with college or university-level training in early childhood education have higher quality scores" (Friendly & Prentice, 2009, p. 57). In a recent report on the state of early childhood education and care in Canada (Ferns & Friendly, 2014), the authors found that as of 2012 only five provinces required program directors hold at least a two-year diploma in early childhood education, and one province required a one-year diploma. The authors further stated that in one province a director may have "equivalent" education, while in five jurisdictions the training requirements for a director are either not specified or not required. In the same study, Ferns and Friendly (2014) also found that as of 2012 Manitoba remained the only province that required more than a two-year diploma for a centre director. The requirements for full time educators in early learning and care settings reflect similar standards and nominal requirements, with only 50% of program staff required to have at least a one-year credential in early childhood education in only five provinces/territories, and lower requirements in the remaining in eight jurisdictions (Ferns & Friendly, 2014).

The Child Care Resource and Research Unit (n.d.) states "Good wages and working conditions are associated with higher job satisfaction and morale, lower staff turnover, more developmentally appropriate, more sensitive, less harsh caregiving, better language development, and higher levels of appropriate play in children" (p. 2). However, research indicates that Canadian child care centres fall grossly under the national average for hourly wages. In 2012, the average hourly wage in Canada across all occupations was $23.92 (Ferns & Friendly, 2014). Despite child care wages rising for program staff in most provinces and territories across Canada (Fern & Friendly, 2014) the report on the state of early childhood education and care in Canada indicates that the median gross hourly wage for Canadian child care program staff in 2012 was $16.50, and $22.00 for program directors. These findings indicate that as of 2012, child care program staff were earning 31% lower than the median Canadian wage, and child care centre directors were earning 8% lower than the median Canadian wage.

The Landscape of Early Learning and Care in Alberta

This research study took place in licensed early childhood education settings in Alberta, Canada. In Alberta, the Ministry of Human Services is responsible for licensed and approved early childhood education and child care, with 10 local Child and Family Service Authorities (CFSA) offices and 18 Delegated First Nation Agencies (DFNA) working on their behalf in order to monitor and license regulated child care. Child care centres must operate in accordance with the regulations set out in the Child Care Licensing Regulation (Child Care Licensing Act, Alberta Regulation 143/2008). Regulations for child care staff educational requirements indicate that directors require a two-year diploma in Early Childhood Education, and 25% of staff in full-time child care centres hold a one year certificate in Early Childhood Education. In addition, all staff

requires an orientation course or equivalent ECE-related course work (45 hours). These educational requirements are reflected through Certification requirements under Part 3 of the Alberta Child Care Licensing Regulation. For more details regarding staff training standards please refer to Table 1.

LEVEL OF CHILD CARE CERTIFICATION	TRAINING STANDARDS
Child Development Assistant (formerly Level 1)	• Completed the Child Care Orientation Course (Alberta Government sponsored course); or • Completed CCS 3110, 3120, 3130, 3140, and 3150 offered through Alberta high schools; or • Completed a 45-hour (3 credit) college/university-level course related to child development; or • Completed the Step Ahead Family Day Home Training or Family Child Care Training Program through an approved Alberta Family Day Home Agency registered with the Alberta Family Child Care Association.
Child Development Worker (formerly Level 2)	• Completed a one-year Early Learning and Child Care certificate program offered by an Alberta public college or university, or has completed an equivalent level of training (refer to the Equivalencies Charts on the following pages or on the website at www.humanservices.alberta.ca/certification);AND • Obtained a Canadian Language Benchmark Assessment* (CLBA) of at least a Level 7 (only applicable if the post-secondary training was not in English or French); AND • Completed at least one college/university-level English/French course (e.g. communication, composition). Note: ESL courses and English language proficiency exams/assessments (such as CLB) are not valid to meet this requirement; OR • Successfully completed the Life Experience Equivalency Process (LEEP).
Child Development Supervisor (formerly Level 3)	• Completed a two-year Early Learning and Child Care diploma program offered by an Alberta public college, or has completed an equivalent level of training (refer

	to the Equivalencies Charts on the following pages or on the website at www.humanservices.alberta.ca/certification); AND • Obtained a Canadian Language Benchmark Assessment* (CLBA) of at least a Level 7 (only applicable if the post-secondary training was not in English or French); AND • Completed at least one college/university-level English/French course (e.g. communication, composition). Note: ESL courses and English language proficiency exams/assessments (such as CLB) are not valid to meet this requirement.

Table 1. *Note.* Adapted from "Child Care Staff Certification Guide", by Alberta Human Services, 2015.

The median gross hourly wage for program staff in Alberta in 2012 was $15.33, which is 26% below the national median for the Canadian workforce overall and over 7% lower than the national median for early childhood education and care (Fern & Friendly, 2014). Currently, the Ministry of Human Services is offering a variety of incentives for individuals to become child development specialists, working in the field of early learning care and education, including: scholarships for high school students pursuing post-secondary education in early learning and care, staff attraction incentive allowances (for those new or returning to the field), and child care wage top up (http://humanservices.alberta.ca/family-community/work-in-child-care.html).

In 2014, regulated child care environments in Alberta were introduced to a curriculum framework entitled *Play, Participation, and Possibilities: An Early Learning and Child Care Framework for Alberta* (Makovichuk, Hewes, Lirette, & Thomas, 2014). Though informed by national and international research and practice, this framework was developed locally in Alberta as a guide for Albertan educators in shaping responsive practices regarding relationships and curriculum decisions in early learning and care (Makovichuk et al., 2014). The authors of the

document recognize the necessity for this curriculum in early childhood education to cultivate relationships through addressing the holistic needs of children by interpreting and appreciating children's every day experiences; "It illustrates how curriculum decisions reflect early childhood professional values (democratic citizenship and equity) and principles (children are citizens and active participants in society) (Makovichuk et al., 2014 p. 14). The *Play, Participation, and Possibilities* framework (2014) envisions Alberta to be a place of vitality, with shared values being established through cultivating the practice of relationships with children among early childhood educators, families, and communities. The framework recognizes family involvement as *essential* for creating these spaces and is "deeply grounded in theories that recognize the significance of family social and cultural practices and traditions" (Makovichuk et al., 2014 p. 19).

In an effort to support unique constraints in child development and associated demands on staff in early childhood education and care settings, additional funding and supports are available to Albertan early childhood education programs for children between the ages of 2.5 and 6 years who have been identified as having a mild to severe disability or delay, gifted/talented, and/or English as an additional language (i.e. Program Unit or PUF funding, Preschool Outreach, and Community Preschool Education). Some supports may be multi-disciplinary in nature, and offer additional staff to enhance the staff to child ratio in the child care setting, consultation support, development of individualized program plans, and distribution of educational resources.

The Research and Practice Disparity

There is a substantial amount of literature that recognizes that educator-child relationships which demonstrate low conflict, positive interactions, and frequent communication and

connectedness are fundamental influences to children's academic, social-emotional, and behavioural development (Friendly & Prentice, 2009; Graham et al., 2011; Hamre & Pianta, 2001; O'Connor, Dearing, & Collins, 2011). However, educators face many challenges around classroom management and teaching practices (Achinstein & Barrett, 2004, Tsouloupas, Carson, & Matthews, 2014). Though the development of approaches to child care staff management of behavior problems in young children continues to expand (Brennan, Bradley, Allen & Perry, 2008; Fox et al., 2011; Conners-Burrow, Whiteside-Mansell, & McKelvey, 2012; Hemmeter, Ostrosky, & Corso, 2012), research indicates that early childhood educators do not customarily rely on research knowledge to solve practice dilemmas (Buysse et al. 2006; Purper, 2016) and continue to identify meeting the needs of children with social-emotional and behavioural challenges as a key disparity in their knowledge and skills (Hemmeter, Santos & Ostrosky, 2008; Fuchs, Monson, & Hatcher, 2010; Reinke et al., 2011). These findings provide an important platform for the discussion of research and practice discrepancies.

The difficult behaviour of children is often demonstrated as a symptom of struggles with mental health. Children's struggles with mental health are commonly divided into externalizing and internalizing behavioural challenges (O'Connor et al., 2011). Externalizing challenges are characterized by behavioural disinhibition, over activity, impulsivity, and aggressive behaviours (King, Iacono, & McGue, 2004; O'Connor et al, 2011). Children experiencing externalizing challenges tend to be less engaged in school and do less well academically (Barriga et al., 2002, as cited in O'Connor et al., 2011). Internalizing challenges are characterized by depressive mood states, social withdrawal, and inhibition (King et al., 2004; O'Connor et al., 2011). Children with internalizing challenges tend to exhibit academic underachievement and deficient problem-solving skills (Kovacs & Devlin, 1998, as cited in O'Connor et al, 2011). Research has also

indicated that very young children "commonly exhibit challenges that do not fall within either of these general diagnostic categories, for example, sleeping problems, eating problems, and toilet-training related problems" (Perry et al., 2011, p. 4). Mental health disorders are comprised of a distinguishing variety of features and characteristics, and the impact of each of these disorders on children ranges from mild to severe (Canadian Mental Health Association, 2002; Public Health Agency of Canada, 2002). O'Connor et al. (2011) conducted research utilizing data from the longitudinal study of non-parental care experiences and child development conducted by the National Institute of Child Health and Development (NICHD) Study of Early Child Care and Youth Development. In their research it was found that the quality of the educator-child relationships was among the strongest predictors of externalizing behaviors. The study utilized data from 1,364 children from birth through adolescence, and found that positive educator-child interactions reduced the challenging externalizing behaviour of children throughout elementary school years.

The oppositional and aggressive behaviours often associated with mental health difficulties are known to adversely affect the manner in which students are perceived by their educators, and the associated application of effective guidance strategies (Bell, 2006; Greene, Beszterczey, Katzenstein, Park, & Goring et. al, 2002, Tsouloupas et al., 2014). Children who exhibit behaviours that adults experience as challenging such as disruptiveness or inattention, may add an immense strain to resources, and educators who experience a disparity in supports may quickly become frustrated with the children and engage in power struggles, negative reactions and verbally abusive behaviour toward the children (Brendgen, Wanner, & Vitaro., 2006; Howes, Phillipsen & Peisner-Feinberg, 2000; Mack, 2004). As a result, students with

emotional disorders have been rated as significantly more stressful to teach compared to their classmates with other challenges (Greene et al., 2002; Tsouloupas et al., 2014).

Bell (2006) states "Teachers may inadvertently contribute to social structures that encourage defiant, aggressive, or bullying behavior, either through ineffective disciplinary procedures or through lack of awareness of social hierarchies that exist in class" (p. 21). Brophy-Herb, Lee, Nievar, and Stollak (2007) conducted research with the parents of 183 preschool children and their associated educators in order to investigate ratings of the children's social competence, and the relationship between family characteristics, educator behaviours and classroom climate. Researchers found that educators' negative ratings of children were predictive of negative educator behaviour and poor classroom climates. Similarly, the researchers found that positive assessments of children coincided with positive ratings of classroom climate and positive educator behaviour. These findings indicate that the subjective interpretation relating to the functions of children's behaviour may inappropriately influence the manner in which mental health may be addressed. "Adults often interpret behaviour from the perspective of their own life experiences and current circumstances. These perspectives affect the observer's expectations for the student" (Ontario Ministry of Education, 2010, p. 21). For example, if children with emotional disorders experience frustration as a result of difficulties with tasks, it could contribute to a negative reinforcement paradigm between the child and educator that becomes non-instructional or even disruptive (Tsouloupas et al., 2014).

Friendly and Prentice (2009) state that although childcare staff tend to offer environments that are "physically safe environments that protect children's health and safety, staffed by warm, supportive adults" (p. 59), most centres provide care that is of minimal to mediocre quality, and may compromise the child's development. Warm and responsive educator-child relationships are

distinguished in part by decreased anger and severity, which is linked to children's greater academic achievement and social competence (Li Grining, Cybele Raver, Champion, Sardin, Metzger & Jones, 2010; O'Connor et. al., 2010). The absence of this quality is not unique to child care environments, as when Friendly and Prentice explored Kindergarten classrooms in elementary schools, they discovered many Kindergarten educators who were not trained specifically to work with young children, and pedagogical practices that were similarly concerning (Friendly & Prentice, 2009). Understanding educator attitudes and perceptions related to mental health is significant in order to promote timely assessment, diagnosis and effective treatment (Bell, 2006). Providing training and education so that educators may improve early recognition of challenges related to children's mental health may be a critical component in creating a supportive environment for the individual (Health Canada, 2002; Schwean & Rodger, 2013).

Another area of consideration is the role that the educator's own mental health may have on the influence of children's behaviour. If educators themselves are experiencing increased levels of psychosocial stress, they may encounter additional challenges in developing and maintaining positive learning environments and successful behaviour management (Li Grining et al., 2010). Li Grining et al. (2010) situated research in 18 Head Start locations to investigate the influence educators' psychosocial stressors have in maintaining emotionally positive classroom climates, and successful behaviour guidance of children. In the first arm of this study, 90 preschool educators depicted their stressors and examined the way in which these stressors predicted their ability to maintain a positive classroom emotional climate and implement effective behaviour management techniques. Results indicated that the educator's struggles with their own mental health and well-being were reasonably predictive of a decreased use of effective

approaches towards behaviour management in the classroom. In a second study, 48 randomly selected preschool educators were evaluated in order to test the theory that psychosocial stressors would serve as critical predictors in the capacity of early childhood educators to seek, adopt, and integrate interventions developed to enhance classroom emotional climate and effective behaviour management. The findings from the second study suggested that psychosocial stressors did not pose a barrier to the adoption and implementation of intervention services by educators. In fact, educators who identified elevated levels of stress also reported an increase in access of training and supports, comparative to those experiencing a reduced amount of stressors. However, despite increased access to supports, educators who identified higher levels of work and personal stressors in Study 'B' also reported a reduced amount of time being spent on developing positive relationships with children with challenging behaviours. With knowledge of the emotional and psychological importance of building positive relationships with children this research is critical, as it addresses the influence that educator stress may have on this proficiency in their classroom. As the previously mentioned research identified increased levels of challenging behaviours in environments where the educator-child relationship quality was poor, the findings in this study imply an increased dependency on outside support services, and a lack of accountability by educators who are stressed to recognize the influence they may be having on the child's behaviour and mental health challenges.

Though there is a recognition that behavioural and mental health challenges arise in the everyday context of teaching, there is also a heavy dependence on outside experts to assist with addressing these challenges (Graham et al., 2011), implying low self-efficacy relating to the guidance of behaviour seen as challenging. Perceived educator efficacy has been defined as "the extent to which the teacher believes he or she has the capacity to affect student performance"

(Bergman et al., 1977, p. 137). Children with challenges to their mental health require educators to understand the characterizing factors related to their needs in order to be better equipped in managing the associated difficulties in educational settings (Happo & Maatta, 2011; Graham et al., 2010). In a meta-analysis conducted by Fukkink and Lont (2007), the researchers reviewed studies published between 1980 and 2005 seeking to "integrate findings from (quasi-) experimental studies into the effects of specialized caregiver training on caregiver competencies" (p. 296). In this study, Fukkink and Lont (2007) identified caregiver competencies as "the professional knowledge, attitudes, and skills that are related to educator-child interaction" (p.296), specifically exploring study characteristics that are associated with experimental results, as well as the transfer effects of specialized caregiver training on children's behavior and development. Results indicated a significant positive effect of specialized training on the competency of caregivers in child care (Fukkink & Lont, 2007). More specifically, the researchers also supported recognition of positive outcomes relating to a causal link between caregiver training, caregiver competencies, and child behaviour in child care settings where the studies collected both caregiver and child data (Fukkink & Lont, 2007).

Research examining the attitudes and beliefs of child care providers and teachers towards the mental health of young children has been sparse (Bell, 2006; Gleason, Scott Heller, Nagle, Boothe, Keyes, & Rice, 2012). With an increased focus on the importance of early childhood mental health (Clinton et al., 2014; National Scientific Council on the Developing Child, 2008; The Center on the Social and Emotional Foundations for Early Learning, 2012), skill development of child care providers related to understanding the function of children's behaviour, child guidance techniques, and the development of positive mental health and wellbeing of children in early childhood education settings are timely.

The Link Between Triple P and Early Childhood Education

The evidence base of Triple P has been well established. Meta-analyses and systemic reviews have documented the positive effects of Triple P (e.g., deGraaf, Speetjens, Smit, de Wolff, & Tavecchio, 2008; Sanders, Kirby, Tellegen, & Day, 2014), and the system has been recommended by the National Institute for Health and Clinical Excellence (2009). Currently, Triple P is being used in 25 countries worldwide, has over 30 years of empirical evidence as a multi-level, multi-disciplinary approach to parenting (www.triplep.net), and is the United Nations' leading recommended program for evidence-based parenting (UNODC, 2010). "Triple P is a tiered multilevel system of parenting support that has both preventive and treatment components and incorporates five levels of intensity and several delivery formats (for example, large group, small group, individual, self-directed, media, and online interventions), with different variants and applications targeting different types of clinical problems, age groups and populations" (Sanders, Pickering, Kirby, Turner, Morawska, Mazzucchelli, Ralph, & Sofronoff, 2012). Triple P has been found to be highly effective in demonstrating long term benefits in prevention and treatment of a variety of mental health disorders (Waddell et al., 2015), and applies a population health approach to service delivery that demonstrates the flexibility to be applicable in both treatment (Sanders & Prinz, 2005) and prevention (Prinz & Sanders, 2007) contexts. The Triple P program draws from a variety of theoretical principles, including social learning models related to parent-child interactions (e.g., Patterson, 1982), child and family behaviour therapy and applied behaviour analysis (e.g., Risley et al., 1976), developmental research on social and intellectual competence in early parent-child relationships (e.g., Hart & Risley, 1995), research on risk and protective factors and developmental psychopathology (e.g.,

Rutter, 1985; Patterson, 1982), cognitive social learning theory (e.g., Bandura, 1977, 1995), and public health and community psychology, which recognizes the broader ecological context for human development (e.g., National Institute of Mental Health, 1998) (Sanders, 1999). Triple P uses a strength-based, self-reflective approach to parenting that promotes positive relationships between parents and children through building upon parents' strengths to prevent and treat behavioural, emotional, and developmental challenges in children (Sanders, Markie-Dadds, & Turner, 2003). The tiered levels of intervention aims to incorporate the public health principle of minimal sufficiency (i.e., the least amount of intervention required to effect change and prevent future difficulties) (Prinz, Sanders, Shapiro, Whitaker, Lutzker, 2009), in order to maximize efficiency at the earliest point of contact. A core principle of the Triple P system is the process of learning to change one's behavior and become an independent problem solver through self-regulation, including self-sufficiency, self-efficacy, self-management, personal agency, and problem solving (McWilliam, Brown, Sanders, & Jones, 2016).

Systemic and coordinated implementation of parenting supports across agencies and service sectors has demonstrated population-level impact on child mental health and parenting outcomes (Sanders et al., 2008). In all current variants of the Triple P program the content delivery is aimed at supporting *parents* of children 0-16 years. Researchers recommend training existing workforces that have access to families, such as child care, education, or primary care, in order to attain the broadest reach of the intervention (Shapiro, Prinz, & Sanders, 2010). However, it is recognized that these service providers are not routinely trained or supported in implementation of evidence-based parenting programs (Shapiro, Prinz, & Sanders, 2012). The development of PCCP is an innovative application of the evidence-based Triple P, for use in early childhood education environments, aimed at supporting *early childhood educators* to

promote these same aspects of positive adult-child relationships and guidance (Appendix A - PCCP program overview). This study builds on the extant literature by evaluating the efficacy of an established evidence-based parenting intervention for parents of children with early –onset conduct problems, delivered with early childhood educators, whilst examining the implementation of this innovative delivery approach. The Triple P intervention system explicitly promotes self-sufficiency and independent problem solving (Shapiro, Prinz, & Sanders, 2010). As the Triple P program also has demonstrated effectiveness in reducing dysfunctional adult-child interactions, increasing adult self-efficacy in addressing behaviour that is experienced to be challenging, and reducing child disruptive behaviour in preschool aged children (Boyle et al., 2009), the innovative application of these strategies in early learning settings may address the research and practice disparity examined earlier in this chapter.

PCCP corresponds to a Level 4 intervention in Triple P's multilevel system (Standard Triple P; Sanders, Markie-Dadds, & Turner, 2012). PCCP is a low intensity, self-administered online child guidance program for early childhood educators, designed to be interactive, video-enriched, and personalised. It aims to promote social and emotional skills of children, help children to develop a positive approach to learning, and help children develop new ways to behave. Coaching skills are embedded into the implementation of the PCCP program with practitioners trained and identified to support practical application of these strategies by ECEs in early learning environments (Appendix A – PCCP program overview).

There has been a provincial rollout of Triple P in Alberta since 2007. Currently the primary providers of Triple P in Alberta are the Parent Link Centres. Parent Link Centres have five core services: family support, early childhood development, developmental screening, information and referrals, and parent education. As part of the parent education services, the

various levels and modalities of Triple P form part of the service delivery. Parent Link Centres are accountable to the Ministry of Human Services to meet minimum service delivery targets of Triple P delivery each year. The Ministry of Human Services is fully supportive of Triple P being provided in Parent Link Centres due to the large evidence base of the program, and how the program complements the Ministry mandate relating to parent resourcing. In an effort to reduce barriers in the ability of Parent Link Centres to deliver Triple P, the Early Childhood Development Branch of the Ministry of Human Services funds training of staff to be Triple P Practitioners, and covers the expense of consumable resources required for parent participation. *"Practitioner"* as used by Triple P, and as used in this study, is defined as all persons who have undertaken training in the Positive Child Care Program provider course, and have completed related training and accreditation requirements. As many staff may need to travel for the initial Triple P Practitioner training, the Early Childhood Development Branch also ensures organization and payment for accommodation for those travelling long distances, and reimbursement for mileage and sustenance incurred by attendance (L. Cummins, personal communication, January 22, 2015).

Policy Analyst Lana Cummins stated that as a natural extension of the landscape of Triple P in Alberta, the Early Childhood Development Branch of the Ministry of Human Services will fund the contract for the foundational trial for program development of PCCP, ensuring coverage for the expenses associated with practitioner training and resources required for staff participation (personal communication, January 22, 2015). The Ministry has expressed an interest in building on the capacity of child care staff in dealing with challenging behaviours and emotions that children in their care may present. As both child care and parenting resources fall under the jurisdiction of the Early Childhood Development Branch, incorporating Triple P into service

delivery in child care settings is a way to promote consistency among the strategies that are encouraged among parents through Parent Link Centres, with that of the child care providers.

Examination of the implementation and effects of Triple P in child care settings is timely. Waddell et al. (2015) indicate that intervention in childhood is optimal for addressing and averting poor life course outcomes. Canada is in dire need of a population health approach to children's mental health (Waddell et. al., 2013). Triple P employs a population health approach to prevention and intervention. To date there is a significant evidence base of the Triple P program as a whole, with attention to training individuals in broader practice communities (Sanders et al., 2014). Additionally, Anderson et al. (2003) contend that early childhood development interventions that are based in early childhood education centres may be significant to the development of a coordinated system of supportive services for families, making the link between early childhood interventions and evidence-based parenting supports a natural fit. Due to the limited number of participants, this study is a feasibility trial of the PCCP. Should positive outcomes be identified, recommendation for a larger scale trial would be suggested to further establish an evidence base for the program.

Chapter Summary

In order to contextualize this study, this literature review has examined the landscape of early childhood education and care in both Canada and Alberta, followed by examining the research and practice disparity in early childhood education, and the relationship between Triple P and early childhood education. In summary, it appears as though there are a variety of policies and initiatives intended to enhance the quality of early learning and care in Alberta. Despite this, early childhood educators continue to encounter experiences they find challenging related to

children's behaviour in their classrooms, and may benefit from strategies and supports that increase their confidence and competence in addressing these concerns. In answering the research questions posed in this study, this investigation will further inform an understanding relating to these elements.

Chapter 3: Theoretical Framework

Implementation Theory

May (2013) identifies implementation theory as "the production of a robust set of conceptual tools that enable researchers and practitioners to identify, describe and explain important elements of implementation processes and their outcomes" (p. 2). Implementation theory anchors a variety of constructs that are embedded within other theories, to a central theoretical position which discerns the mechanisms contextualized within social systems, and the associated expressions of agency (May, 2013). The grounding assumption of implementation theory recognizes that attaining desired outcomes requires strategic organization and design of elements that "induce individuals to (always) choose actions that lead to the desired outcomes" (Jackson, 2001, p. 656). The complexity of such strategic organization and design requires careful consideration of the context in which implementation takes place. Damschroder et al. (2009) indicate that "in implementation research, 'context' is the set of circumstances or unique factors that surround a particular implementation effort" (p. 3). Findings in the synthesis literature on implementation research completed by Fixen et al. (2005) share similar thoughts when it is stated, "treatment occurs in context, and that context is important to the success of implementation attempts" (p. 27). Application of implementation theory provides a distinction between *implementation* and *mechanism design*, as the latter questions incentive compatibility and whether outcomes can be induced, failing to address or recognize the complexity of other mechanisms that may have influenced the results (Jackson, 2001). Conversely, implementation theory explicitly addresses the intricacy of a wide variety of mechanisms that influence outcomes, whilst paying heed to the consideration that full implementation takes place away from

the project itself, and is placed in a natural context, where many factors are beyond control of the program designer (Jackson, 2001).

In implementation theory, there is variety in the meaning and approaches represented in the research. Fixsen et al. (2005) distinguish these differing implementation categories as paper implementation, process implementation, and performance implementation. Understanding intentions and expectations behind the degrees of implementation may assist organizations and individuals in recognizing their point of entry of the implementation process. In conducting a synthesis of the literature on implementation research spanning various disciplines, Fixsen et al. (2005) highlight the importance of identifying community readiness prior to implementation, and recognize seven stages within the identification process: no awareness, denial, vague awareness, pre-planning, preparation, initiation, and stabilization (p. 10). The authors further recognize that there is minimal research that supports the concept of readiness at any level (practitioner, organization, community), and ascertain that "while the developers of the various scales have assessed the reliability and construct validity of their measures or readiness, so far there has been no assessment of predictive validity. Thus the relationship between measures of readiness and later implementation success is unknown" (p. 10). That being said, in a study conducted by Romney, Isreal, and Zlatevski (2014), outcome results between community-based agencies who had participated in site readiness processes for implementation preparation were compared with those of agencies that did not complete the process. The study found significant contrasts in costs per participant (over seven times higher for the agencies that had not completed the readiness process) and observed completion rates that were 12.2 times greater in the programs delivered by the agencies that completed the readiness process, indicating that readiness assessment and support are vital in effective implementation. Building on the readiness profile, Fixsen et al.

(2005) further categorize six stages within the implementation process: exploration and adoption, program installation, initial implementation, full operation, innovation, and sustainability (p. 15). Similarly, in the development, evaluation and national implementation of a school-based program to reduce violence and related risk behaviours of children, Crooks, Wolfe, Hughes, Jaffe, and Chiodo (2008) categorized the factors that promoted effective implementation: the pre-implementation phase (whereby the program is selected), the supported implementation phase (where there is active support for the program) and the sustainability phase (also known as the institutionalization phase). Metz and Bartley (2012) suggest the use of evidence-based active implementation framework can close the research-to-practice gap in early childhood and ensure sustainable program success. According to Metz and Bartley (2012), the active implementation framework consists of four distinct aspects: implementation stages, implementation drivers, policy-practice feedback loops, and organized, expert implementation support. Though identified individually, the authors are clear in indicating that the implementation process is a non-linear, interconnected process (Metz & Bartley, 2012).

In describing a Consolidated Framework for Implementation Research (CFIR), Damschroder et al. (2009) combine various constructs of implementation across published theories in order to develop a pragmatic, meta-theoretical framework for advancing implementation science. In their study these researchers consolidate the key constructs found in implementation literature as a starting point for understanding implementation, in order to develop the CFIR. The CFIR categorizes each of these constructs in one of five major domains: the intervention, inner and outer setting, the individuals involved, and the process by which implementation is accomplished. In considering aspects of CFIR as a guide for formative evaluations, Damschroder et al. (2009) recommend researchers carefully assess each construct

individually in order to determine the most appropriate focus of implementation evaluation in each unique study.

Many disciplines have identified inconsistencies between the development of evidence-based practices and the implementation of such supports (Fixen et al., 2005). Research that evaluates the real world implementation of evidence-based programs is essential, yet lags significantly behind the already sparse research on implementation (Flay et al., 2005; Metz & Bartley, 2012). A readiness profile builds a fertile ground for program implementation; however the implementation itself is a process, not an event. Fixsen et al. (2005) identify a conceptual framework for program implementation which includes five essential components: a source (the evidence-based program, i.e., PCCP), a destination (the delivery agent, i.e., Early Childhood Educator), a communication link (core implementation components, i.e., practitioner/practitioner training), a feedback mechanism (i.e., fidelity measures for practitioners), and an operational sphere of influence (i.e., licensing regulations, community relations, resources, etc.). The PCCP lends itself to this framework for implementation by design, and through the guidance of Triple P Canada.

The Significance of Fidelity in Implementation

Fidelity (or program adherence) is an indicator of implementation success that refers to the extent a program is delivered as originally developed (Fixsen et al., 2005). Durlak and DuPre (2008) identify program adherence as the most commonly studied measure of implementation, however monitoring and verification of program integrity remains scant in the research, diminishing reliability of real world program outcome and study replication data (Asgary-Eden & Lee, 2011). High adherence to the original development of an evidence-based program is

essential in attaining desired results, and a critical component in the transition from research to practice (Elliott & Mihalic, 2004; Fixsen et al., 2005). Nevertheless, following training in evidenced-based programs, staff may either fail to adopt the treatment or adapt the program in ways that move it beyond the evidence base (Mazzucchelli & Sanders, 2010; Metz & Bartley, 2012; Webster-Stratton & Herman, 2010). In examining the taxonomy of staff reported adaptations to evidence based programs in natural settings, Moore et al. (2013) found a significant number of service providers made adaptations reactively, in response to problems encountered in program delivery, and often these adaptations were not aligned with, or deviated from, the theoretical framework of the program. Metz and Bartley (2012) emphasize the significance of fidelity in stating "The research-to-practice gap is a critical issue because children and families cannot benefit from services they don't receive" (p. 11). Staff have identified various concerns in adopting evidence-based programs, arguing that they limit creativity and innovation, interfere with individualized approaches to participant support, and are neither relevant to their work nor appropriate for their clients (Mazzucchelli & Sanders, 2010). However, Kendall, Gosch, Furr, and Sood (2008) contend that many of these issues arise from misconceptions about the nature of flexibility embedded in evidence-based programs that continues to allow for fidelity to practice. In recent years, developers of evidence-based programs have recognized flexible delivery formats that are responsive to client needs, and increase the engagement process in service delivery (Mazzucchelli & Sanders, 2010; Webster-Stratton, 2010).

There is limited research that identifies specific strategies and skill development that will support educators to implement intervention programs with fidelity (Fox et al., 2011). However, several studies have found that positive educator perceptions of organizational climate,

professional development opportunities, and supportive supervision (coaching) predict improvements in job satisfaction, increased program fidelity, and improved implementation over time (e.g. Damschroder et al., 2009; Durlak & DuPre, 2008; Fox et al., 2011; Gregory, Henry, Schoeny, & The Metropolitan Area Child Study Research Group, 2007; Halle et al., 2013; Sanders, Prinz, & Shapiro, 2009). Research indicates lower levels of program fidelity among locations that lack these supports, with most innovative (and effective) components of programs getting dropped (Fixsen et al., 2005; Mihalic et al., 2004). Gregory et al. (2007) further caution that isolating efforts to stand-alone classroom climates potentially overlooks the influence of workplace climate and educator relationships. Often studies examining fidelity and implementation stem from well-funded research trials with ongoing financial provisions and coordination support from researchers and program developers (Asgary-Eden & Lee, 2011). Service providers who do not receive funding for implementation may encounter challenges associated with decreased fidelity, including strained resources, decreased quantity or intensity of supervision, and reductions in monitoring of their adherence to the program (Asgary-Eden and Lee, 2011).

Fixsen et al. (2005) emphasize the need for recognition and awareness of the multi-level influences on implementation that span beyond fidelity and the intended program itself. Though the theoretical underpinnings related to the PCCP research project focus on performance implementation, this study has been shaped by the exploration of key stages and phases identified in implementation theory. In recognizing the complexity of mechanisms that may influence implementation results, the PCCP randomized control trial is designed to capture data relating to organizational, individual, and child specific constructs. This will allow for examining whether positive outcomes can be induced through the mechanism design of the PCCP program.

Damschroder et al. (2009) state: "Many theories of individual change have been published, but little research has been done to gain understanding of the dynamic interplay between individuals and the organization within which they work, and how that interplay influences individual or organizational behavior change" (p. 5). The proposed research study recognizes that implementation is not a stand-alone event, but rather consists of complex factors that occur over time and influence overall implementation success. The limited attention to predictive validity in implementation literature reinforces a need for research that follows the implementation process throughout the implementation cycle in order to identify obstacles that may be preventatively addressed prior to adopting evidence-based programs. Applying aspects of implementation theory to the data analysis in the PCCP research study will promote active consideration of how each of these characteristics of implementation theory has influenced the data results.

Though various studies indicate slight variations, literature relating to implementation identifies key constructs that are consistently recognized as critical components in the implementation process: organizational climate, adequacy of resources, staff attributes, training and ongoing support, and supervision (Asgary-Eden & Lee, 2011; Damschroder et al., 2009; Durlak & DuPre, 2008; Fixsen et al., 2005; Mihalic & Irwin, 2003; Palinkas, Schoenwald, Hoagwood, Landsverk, Chorpita, et al., 2008). The presence or absence of these variables has been demonstrated as influencing positively or negatively the facilitation of program implementation and program outcomes. As implementation theory is anchored in a variety of constructs that are embedded within other theories (Damschroder et al., 2009; May, 2013), the strength of using this theoretical framework as the foundation for this study is that it does not easily lend itself to limitations which may otherwise exist in theories that do not allow for

diversity in influence. Implementation theory is a highly developed theoretical framework as it distinguishes the complexity of the implementation process, as well as the different types of implementation and how each influences the progression of the process.

Chapter Summary

It is clear from the literature that the process of implementation is complex, and requires an examination of multiple constructs in a variety of domains in order to be understood. In acknowledging the research and practice disparity that was identified in chapter two, the application of this theoretical framework throughout this study seeks to contribute to the research questions by linking theory to practice as it relates to use and adoption of the Positive Child Care Program by individuals and organizations.

Chapter 4: Method

This study used a mixed methods approach to examine the interface between the PCCP program and related dependent variables. Punch (2009) defines mixed methods research as "empirical research that involves the collection and analysis of both qualitative and quantitative data" (p. 288). Applying both quantitative and qualitative measures as a mixed method to research design strengthens the study in a manner which is greater than employing either approach separately (Creswell & Plano Clark, 2007). Making use of the strengths of both qualitative and quantitative research, mixed methods studies have been conducted by several researchers in social and human sciences, including those in both mental health and education (Creswell, 2009). Creswell (2009) indicates that mixed methods may be useful when a researcher "want[s] to both generalize the findings to a population as well as develop a detailed view of the meaning of a phenomenon or concept for individuals" (p. 18).

Fraenkel, Wallen & Hyun (2015) identify three strengths of mixed methods research, namely:

1. To help clarify and explain relationships found to exist between variables
2. To explore relationships between variables in depth
3. To help confirm or cross-validate relationships discovered between variables, as when quantitative and qualitative methods are compared to see if they converge on a single interpretation of a phenomenon. (p. 556)

This research study specifically examined a) ratings of different independent variables (i.e., organizational climate, resources, staff characteristics, training needs, and supervision); b) characteristics related to child behavior; c) reported variables associated with usage and adherence to the PCCP program; d) whether outcomes were influenced by usage, implementation variables, and adherence. Mixed methods was best suited for this study as it seeks to validate the

relationship between identified variables, program outcomes, and implementation while also exploring the detailed view of the study participants to assist in clarifying and explaining the relationships between these variables.

Design. This study used a randomized, controlled trial design, employing a two conditions (PCCP intervention vs service as usual) x Time (time: pre-intervention, post-intervention, 2 month follow up) repeated measures design. Child care centres were randomly assigned to either the PCCP intervention condition or a control condition (allowing service as usual). Participants completed assessments at three time points: T1-Pre-assessment (on enrollment in the study), T2 – Post-assessment (approximately 10 weeks later, and T3 – at 2 month follow-up.

This study included examination of one independent variable: PCCP intervention vs. control. Related dependent variables include organizational ecology, ECE behaviour, ECE confidence, ECE adjustment, workplace practices, and child behaviour. This design allowed the researcher to study the interaction between variables, and examine the independent variable and its joint effect on outcomes. The consideration of internal validity in this study refers to ensuring that the relationship between the dependent variables (organizational ecology, staff factors, child factors) are directly related to the independent variable (PCCP), and not to some other (uncontrolled) variable. Through stratified randomization, the threat to internal validity and influence of extraneous variables on study participants was reduced or eliminated.

Recruitment and screening. Upon gaining ethics approval from the University of Western Ontario (Appendix B), this study used random selection with inclusion criteria to invite research participants from licensed child care environments from throughout the province of Alberta. Triple P Parenting Canada, in partnership with the Alberta Ministry of Human Services, Early Childhood Development Branch developed a flyer for distribution to Alberta-based child care centres, advising them of an orientation session to introduce the PCCP program on behalf of The University of Queensland. A letter of information regarding the study was disseminated with the orientation flyer by the Alberta Ministry of Human Services, in order to inform potential participants of the proposed study and encourage child care centres to attend the PCCP orientation and/or self-refer to participate in the study (Appendix C – ECE Letter of information).

As an existing element of strategic dissemination of Triple P, Triple P Parenting Canada works with agencies to orient them to Triple P, identify readiness to change, and conceptualize an implementation framework. To mirror this support, the orientation to the Positive Child Care Program was provided by Triple P Parenting Canada to interested parties from licensed Alberta child care centres using a webinar format. To ensure transparency with the Provincial Government regarding both the PCCP and the research study, Provincial Child Care Licensing Officers, Senior Policy Analyst, and the Manager of Early Childhood Development Initiatives were also invited to attend the orientation sessions. Orientation sessions were held on four different dates and times to allow for flexibility in attendance of participants. The use of webinar was selected as the initial format for orientation as it maximized the number of centres and

individuals that were able to participate by eliminating the need for travel away from each program.

The orientation contextualized the rationale and development of the PCCP program among the suite of programs offered by Triple P International, and indicated that this variant of Triple P is in the development stages, awaiting further research to determine effectiveness in early learning environments before it can be broadly disseminated. Participants at the orientation session were asked to consider the objectives and goals of the PCCP program and the fit between these and their own child care programs. Participants at the orientation session were also asked to consider how to integrate PCCP into their daily work, including when and how staff would have access to completing the online modules, and what feedback loops and supports directors anticipated and could provide. Following the orientation to the PCCP program, persons present received an information package which included an introduction to the research study, the Positive Child Care Program overview (Appendix A – PCCP Program Overview), the purpose of the study (Appendix C – ECE Letter of Information), identification of elements recognized for informed consent (Appendix D – ECE Certificate of Consent), and a self-referral checklist for potential participants (Appendix E – Self-Referral Checklist). The orientation session was also video recorded and provided to all interested individuals and child care centres in order for staff that were not able to attend the initial orientation to still access the information. By providing their contact information to the researcher, one or more representatives from a child care centre site were able to express interest in participating in the study at or following said orientation; however they were not able to formally register until eligibility had been determined and consent to participate from all staff at said centre was confirmed. Persons present were advised that only

child care centres participating in the study would be funded to take part in the PCCP training at this time.

When a representative from a child care centre expressed an interest to the researcher in participating in the study, the researcher contacted the program supervisor/director of the child care centre directly to complete a 15-minute telephone call to assess for eligibility to participate using inclusion and exclusion criteria presented later in this chapter. If the child care centre was eligible to participate, the researcher arranged for a full centre orientation to the research study. This orientation was intended to contribute to the process of engaging the centre as a whole, as well as engagement of individual participants. The orientation included a site visit at each potential location that encompassed an overview of the PCCP program, what participation and research would entail, and collection of written, informed consent individually and privately from each staff member. If the whole of the centre did not consent to participating, the centre was declined participation, but was not informed of which staff did not provide consent. As the study relates to a centre-wide implementation it required all staff to initially consent to participate in the research. However, staff who chose to withdraw once the study had commenced were able to do so without jeopardizing the participation of the rest of the child care centre. Staff withdrawal would be kept confidential between themselves and the researcher, and data collection for the remaining participants at the child care centre would still continue.

The Early Childhood Development Branch of the Ministry of Human Services funded the contract for the foundational trial for program development of PCCP, ensuring coverage for the expenses associated with practitioner training and resources required for staff participation (L. Cummins, personal communication, January 22, 2015). The Ministry of Human Services, Child

Development Branch to eliminate barriers for participation in the study, also covered any additional expense associated with the prerequisite training. The Ministry of Human Services has expressed an interest in building on the capacity of child care staff in dealing with challenging behaviours and emotions that children in their care may present. As both child care and parenting resources are part of the work of the Early Childhood Development Branch, incorporating PCCP into service delivery in child care settings was seen as a way to promote consistency among the strategies that are encouraged among parents through the Triple P program with that of the child care providers. As part of recruitment, child care centres were advised of this expense coverage so that this was not a barrier for considering participation. There was a contract for project deliverables between the Province of Alberta, Ministry of Human Services, Early Childhood Development Branch and Triple P Parenting Canada. The University of Queensland was accountable to the Early Childhood Development Branch for use of funds and the project deliverables. The Early Childhood Development Branch was to be responsive to any questions or concerns that Triple P Parenting Canada may have regarding the trial or implementation.

As funding for participation in the PCCP trial was an initiative that was provided by the Alberta Provincial Government, there was an understanding and implicit expectation regarding staff implementation and integration of the strategies. As such, the use of the PCCP program in child care centres themselves did not require parental orientation and consent. However, for the duration of the study, each ECE staff participating were asked to identify one child as the focus for child-specific data collection (hereinafter referred to as the *focus child*). Child measures were identified to be included in the study to assess child-specific outcomes as they relate to program effectiveness and implementation, in order to enhance the quality of data collected. The

measures ask about specific children – not to know the child, but rather to seek demographic information and information regarding how the educator and early childhood education environment respond to each child's needs throughout the study. Thinking about a particular child was a way to help the educator think about how to implement the PCCP program with children rather than providing them with an abstract case. Once child care centres had been confirmed as participants in the study, each child care staff distributed to the parent/caregiver of the focus child a letter of information and consent for data collection (Appendix F – Parent Letter of Information and Consent). This letter advised the parent/caregiver of the research study, participation details, benefits and barriers of participation, and the potential role of the parent as a research participant. The parent version of the study introduction letter was developed by the researcher, and contained the contact information of the researcher, in order to respond to any questions or concerns that the parents had. In situations where the focus child was 7 years of age or older, the child was also asked to provide assent for their role in the study (Appendix G – Child letter of Assent). Parents were asked to return the letters of consent/assent and demographic information form (Appendix H – Parent and Child Demographic Information Form) to the researcher via the child care centre staff. Parental consent was not kept confidential from the staff, as it was required for staff to complete child measures of data collection. The parental demographic information form was not kept confidential from the staff as it was information to which each child care program had access outside of the study. An envelope containing the parental consent and demographic information form was kept in a locked drawer on site at each child care location until the researcher returned to begin pre-intervention data collection. Though child-specific data contributed to the quality of the data collected, parents were advised in writing that they may withdraw consent for participation at any time, without

cause or concern of penalty. In situations where parents chose to withdraw once the study had commenced, data collection measures that were not child-specific would still be collected for child care centre participants.

Inclusion Criteria for Selection of Participants

- Participating child care centres will ensure all research participants are provided paid time to complete research evaluation measures (rationale: staff will not be burdened with extra work-related tasks outside of the working day)

- Each child care centre will have a minimum of four regular ECEs (rationale: this minimum was established to ensure implementation efforts and whole centre approach to delivery reflect a team approach)

- All child care organizations operate in accordance with requirements of Schedule 1, Child Care Licensing Act (Alberta Regulation 143/2008) and have classrooms that provide service delivery for children within the ages of 2-12 years (rationale: the category of child care program is consistent between all research participants, and the content delivered in the PCCP program is relevant for child care staff working with children between the ages of 2 and 12 years)

- All staff must initially indicate an interest in participating in the PCCP study (rationale: study relates to centre-wide implementation and requires all staff to be

utilizing the program, however staff can withdraw consent to participate from the research study at any time)

- Each ECE participant in the PCCP program works directly with children a minimum of 20 hours per week, and is able to identify at least one child who is demonstrating challenging behaviour that the ECE will address utilising the PCCP strategies (rationale: to assess child behaviour measures)

- Child care centres are able to identify 1-2 staff to be trained as Practitioners in the Positive Child Care Program, who are able to attend training dates as identified

Exclusion Criteria for Selection of Participants

- Centres that have staff trained in any level of the Triple P Positive Parenting Program that have delivered to, or intend to deliver to the parents of the identified child throughout the duration of the study (rationale: to avoid threats to internal validity)

Participants

Study participants included 17 directors/assistant directors, 96 ECEs, and 96 focus children. ECE education varied between Level 1, Level 2, and Level 3 provincial recognition with most ECE participants (85%) having obtained at least Level 2 statuses. ECE experience ranged from zero to 11+ years, with experience specifically with the current age group also ranging from zero to 11+ years. All director participants were female, and most ECE

participants were also female (98%). Written informed consent was obtained from all participants and parents of focus children. In total, 14 centres expressed interest in participating in the study and were provided with full staff orientation. One centre had not completed collection of parental consent at the onset of the study, thus 13 child care centres remained for stratification. Stratified randomization was conducted by research partners at the University of Queensland to establish an experimental group and wait list control condition, matching each group in terms of the size of the centres allocated to the group, socioeconomic status, and geographical areas (determined by postal code). Six child care centres were randomly assigned to the control condition and seven child care centres were randomly assigned to the intervention condition. To check for adequate randomization, preliminary analyses were conducted to confirm the equivalence of the intervention and control groups at T1 on all demographic variables using ANOVA for continuous variables, and chi-square tests for categorical variables. There were no significant differences between intervention and service as usual conditions in terms of ages of focus children or ages of staff members, indicating that the randomization resulted in comparable groups on sociodemographic measures. Though the number of participants in the intervention condition were higher in Calgary and lower in Edmonton than the participants in the control condition, it was not identified by this researcher to be of concern as both are larger cities with similar demographics. A series of between-group MANCOVAs were conducted using the quantitative assessment measures to determine if there were any significant differences between the two groups at pre-intervention. There were no significant differences at baseline, between conditions on any variable, indicating that the randomization process resulted in two groups that were similar on outcome variables prior to intervention. Tables 2 and 3 display the relevant descriptive information (means and SDs or frequencies) for each condition

on the key demographic characteristics.

Table 2.

Summary of key participant demographic characteristics: continuous score variables

	Control (*N* = 53)	Intervention (*N* = 43)
	M (SD)	M (SD)
Staff age	39.45 (12.64)	39.13 (11.53)
Child age	3.68 (1.82)	3.42 (1.03)

Table 3.

Sociodemographics by randomized condition

	Control (N = 53)	*Intervention (N = 43)*			
	n (%)	n (%)	χ^2	df	*p*
Region			**7.00***	2	.030
Calgary	20 (37.74)	26 (60.47)			
Central Region	12 (22.64)	10 (23.26)			
Edmonton	21 (39.62)	7 (16.28)			
Education[b]			4.49	2	.106
Level One	5 (9.43)	10 (23.26)			
Level Two	16 (30.19)	8 (18.60)			
Level Three	31 (58.49)	21 (48.84)			
Experience[c,g]			-	-	.298
0 – 1 year	6 (11.32)	6 (13.95)			
2 – 5 years	11 (20.75)	10 (23.26)			

6 – 10 years	13 (24.53)	8 (18.60)			
11+ years	23 (43.40)	8 (18.60)			
Experience with this age[c,g]			-	-	.345
0 – 1 year	16 (30.19)	10 (23.26)			
2 – 5 years	12 (22.64)	11 (25.58)			
6 – 10 years	19 (35.85)	6 (13.95)			
11+ years	6 (11.32)	5 (11.63)			
Staff gender[g]					.500
Female	51 (96.23)	43 (100.00)			
Male	2 (3.77)	0 (0.00)			
Child gender[d]			2.80	1	.094
Female	17 (32.08)	6 (13.95)			
Male	30 (56.60)	26 (60.47)			
Staff Ethnicity[g]			-	-	.883
Aboriginal	2 (3.77)	1 (2.33)			
Black	0 (0.00)	1 (2.33)			
East Asian	4 (7.55)	6 (13.95)			
Latino	5 (9.43)	5 (11.63)			
Other	4 (7.55)	2 (4.65)			
South-East Asian	6 (11.32)	5 (11.63)			
South Asian	5 (9.43)	5 (11.63)			
West Asian	2 (3.77)	0 (0.00)			
White	25 (47.17)	18 (41.86)			
Child Ethnicity[f,g]			-	-	.614
Caucasian	29 (54.72)	23 (53.49)			
UK	1 (1.89)	1 (2.33)			
Arab	2 (3.77)	0 (0.00)			
Congo	1 (1.89)	0 (0.00)			
Native	1 (1.89)	0 (0.00)			
Japanese	1 (1.89)	0 (0.00)			

Spanish	2 (3.77)	0 (0.00)			
Chinese	2 (3.77)	0 (0.00)			
Black	0 (0.00)	1 (2.33)			
Diagnosis[e,g]			-	-	1.000
Not indicated	45 (84.91)	27 (62.79)			
Indicated	1 (1.89)	1 (2.33)			
Other professional[e,g]			-	-	1.000
Not indicated	42 (79.25)	25 (58.14)			
Indicated	4 (7.55)	3 (6.98)			
Parent marital status[e,g]			-	-	.598
Single	7 (13.21)	2 (4.65)			
Married/Partner	23 (43.40)	13 (30.23)			
Divorced	4 (7.55)	2 (4.65)			
Prefer not to say	12 (22.64)	11 (25.58)			
Parent education[e,g]			-	-	.448
Nursery school to 8th grade	1 (1.89)	0 (0.00)			
Some high school, no dip.	3 (5.66)	1 (2.33)			
High school grad., dip. or equiv.	3 (5.66)	1 (2.33)			
Some college, no degree	8 (15.09)	1 (2.33)			
Trade/technical/vocational	8 (15.09)	3 (6.98)			
Bachelor degree	6 (11.32)	6 (13.95)			
Masters degree	3 (5.66)	4 (9.30)			
Doctorate degree	1 (1.89)	0 (0.00)			
Prefer not to say	13 (24.53)	12 (27.91)			
Parent income[e,g]			-	-	.099
<$19,999	3 (5.66)	0 (0.00)			
$20,000 - 39,999	6 (11.32)	0 (0.00)			

$40,000 - 59,999	3 (5.66)	4 (9.30)
$60,000 - 79,999	2 (3.77)	1 (2.33)
$80,000 - 99,999	7 (13.21)	1 (2.33)
$100,000 - 149,999	2 (3.77)	4 (9.30)
$150,000+	4 (7.55)	4 (9.30)
		14 (32.56)
Prefer not to say	19 (35.85)	

[b]Five responses missing for *Education* (Control = 1; Treatment = 4). [c]Eleven responses missing for *Experience* categories, all from Treatment condition. [d]17 responses missing for *Child gender* (Control = 6; Treatment = 11). [e]22 responses missing for *Diagnosis*, *Other professional support*, *Parent marital status*, *Parent education*, and *Parent income* categories (Control = 7; Treatment = 15). [f]32 responses missing for *Child ethnicity* (Control = 14; Treatment = 18).

Measures

Measures for this study included both standardized assessment tools and semi-structured interviews. Standardized assessment tools were used to gather quantitative data and have been demonstrated through peer-reviewed research studies to be valid and reliable. In addition, the semi-structured interviews were used to gather qualitative data. Presence or absence of key constructs have been demonstrated in the literature to positively or negatively facilitate program implementation and program outcomes (Damschroder et al., 2009; Fixen et al., 2005). Consequently, this study used comparative measurements to collect demographic data, and data related to organizational climate, staff attributes, and child behaviour (Appendix I - Study variables and measurement instruments). Collecting data relating to these constructs informed the study research questions relating to the implementation and effectiveness of the PCCP program. Fixen et al. (2005) highlight the inconsistency between the development of evidence-based practices and the implementation of such supports. With this in mind, this study examined

the effects of the PCCP program on ECEs and children in order to investigate its efficacy and implementation. Additionally, in the intervention condition, data measuring program completion, implementation, practitioner training outcomes and consumer satisfaction were collected. Though fidelity measures are incorporated in the program were encouraged for use and provided to practitioners at training, these measures were not completed by practitioners and thus were not collected.

Quantitative measures. To gather quantitative data, surveys were an appropriate tool to use in this research study as they "are useful for gathering factual information, data on attitudes and preferences, beliefs and predictions, opinions, behaviour and experiences – both past and present" (Cohen et al., 2011). Surveys are able to gather large-scale data that describes and explains variables in order to make generalizations, generate statistically manipulable data, and gather context-free data (Cohen et al., 2011). Surveys encompass a variety of characteristics and are able to address several key components of this study. Cohen et al. (2011) indicate that surveys can be used to explore relationships and patterns, as well as to confirm causal relationships among variables. Each survey tool explicitly relates to the specific central aim of the study. By selecting validated survey tools for this study, challenges associated with survey design were significantly reduced. A variety of established quantitative survey measures were selected as most appropriate for this study, as described below. These tools have demonstrated strong psychometric properties and predictive validity in gathering quantitative data that relates to the variables being examined. Each of the validated survey tools selected addresses how to account for non-response items and maintain the demonstrated validity of the tool.

ECE Confidence and Competence (research question #1). The *Teacher Interpersonal Self-Efficacy Scale* (Brouwers & Welko, 2001) consists of three subscales (managing child behaviour in the classroom, eliciting collegial support, and eliciting principal's support). This study used 13 of the 14 items in the self-report subscale relating to managing child behaviour in the classroom in order to measure perceived confidence and self-efficacy of the ECE participants in classroom management. The decision to drop item 14 in the scale ("I am not always able to execute several activities at once") was based on Brouwers and Tomic's recommendation as a result of its poor factor loading (Brouwers & Tomic, 2001). In this subscale, ECEs were asked to reflect on their true feelings and thoughts when dealing with disruptive behaviour and stressful situations. The items were measured on a 6-point Likert-type scale ranging from 1 (strongly disagree) to 6 (strongly agree). This subscale has shown to have acceptable reliability (mean α = .93) and factorial validity (Brouwers & Tomic, 2001).

The *Child Care Ecology Inventory* (Rusby, Backen Jones, Crowley & Smolkowski, 2013) is an 18-item observational tool that uses three scales to measure enriched environment, organized environment, planned activities/routines, monitoring, positive attention, promoting social skills, and teaching rules. Items are rated on a 4-point scale, from not at all in place (0) to consistently in place (3). This tool "focuses on features of the child care environment that have an impact on children's social skills and behaviour in child care settings, and subsequently social skills and behaviour upon entry to school" (Rusby et al., 2013, p. 949). This tool has demonstrated moderate to substantial inter-rater reliability, which is adequate for research purposes (Rusby et al., 2013). Ensuring that the observer was masked to the research condition reduced observer/information bias. Observer inter-rater reliability correlations were conducted on 10% of the observations.

Child behaviour (research question #2). The *Strengths and Difficulties Questionnaire* (for reporting on children aged 4-10 years) or *Early Years Strengths and Difficulties Questionnaire* (for reporting on children aged 2-4 years) (Goodman, 1997) was administered to ECE staff to capture perceptions of prosocial and difficult behaviours in children. This is a 25-item educator-report questionnaire that specifically examines emotion, conduct, hyperactivity/inattention, peer relationship challenges, and prosocial behaviour. Each item has three response categories: 'Not True' (0), 'Somewhat True' (1) or 'Certainly True' (2). A total difficulties score is obtained by summing the scores from all of the sub-scales with the exception of the prosocial sub-scale. Scores have demonstrated test-retest reliability of both symptom and impact measures, with 95% confidence intervals, and have been found to discriminate between low- and high-risk samples (Goodman, 1999; Goodman & Scott, 1999).

The *Child & Adolescent Disruptive Behavior Inventory (CADBI) Screener* (Burns, Taylor, & Rusby, 2001) was administered to ECE staff to capture data relating to child attributes, and perceived child behaviour improvement. The CADBI Screener is a brief questionnaire-validated rating consisting of 25 items adapted from the oppositional to peers (8 items), oppositional to adults (8 items), and the hyperactivity/impulsivity scales (9 items) from the CADBI. Each item is rated on an 8-point frequency of occurrence scale over the past month, with 1 representing "never in the past month", and 8 representing "10 or more times per day". The CADBI Screener has established internal consistency alpha of .91 to .97, educator inter-rater reliability correlation of .64 to .69, and a 3-month test-retest of .86 to .94. The concurrent validity is negatively associated ($r = .71$, $p < .001$) with peer-preferred social skills from the Walker McConnell Scale of Social Competence and School Adjustment (1995).

This study also used the items on the CADBI Screener as a guide to inform observer assessments. The CADBI screener was adapted by the author of the tool for use during the child care observations in this study; *Child and Adolescent Disruptive Behavior Inventory: Observer Rating* (CADBI-OBS - Rusby, 2015). This version consisted of 39 items: behaviour towards adults at child care (7 items), behaviour towards peers at child care (7 items), activity level at child care (9 items), behaviour towards adults and peers at child care (11 items), and peer relationships (5 items). Each item is rated on a 5-point frequency of occurrence scale over a 30-minute observation period, with 0 representing "never during the observation", and 4 representing "more than six times during the observation". Observers masked to the research condition observed the identified child in the natural child care setting for 30 minutes and then completed the CADBI-OBS. Observer inter-rater reliability correlations were conducted on 10% of the observations. Observer ratings were compared with ECE ratings to check validity in the context of the study. Utilizing the CADBI screener in this manner posed an advantage to the research as ECE and observer ratings then utilized elements of the same measure.

Staff Satisfaction (research question #3). ECE adjustment variables were measured using the *Depression, Anxiety, and Stress Scale* (DASS; Lovibond & Lovibond, 1995). This assessment tool is a 42-item self-report instrument designed to measure the negative emotional states of depression, anxiety, and stress of the ECE. The DASS has demonstrated good convergent and discriminant validity (Lovibond & Lovibond, 1995) and test-retest reliability (r = .71-.81 for each scale).

Workplace-related stress was measured using the *Child Care Worker Job Stress Inventory* (Curbow, Spratt, Ungaretti, McDonnell, & Breckler, 2001). This self-report measure uses three 17-item job stress scales that are specific to child care staff in measuring child care worker job

demands, job control, and job resources. Items are measured on a 5-point Likert-type scale, with 1 representing "rarely/never" and 5 representing "very much/most of the time". Internal reliability of the scales has been demonstrated using Cronbach's item coefficients and item-to-item correlations. Convergent and discriminant validity were examined by comparing the developed scales with standard scales of similar and dissimilar constructs. The overall pattern of results supports the construct validity of the developed scales (Curbow et al., 2001).

Organizational Climate, Fidelity, and Outcomes (research question #4 – intervention condition only). The National Implementation Research Network (NIRN, 2013) has indicated that there is no single existing evidence-based assessment measure that captures the complexity of organizational readiness for implementation. As such, NIRN (2013) has developed the *Implementation Driver Assessment* as a tool to support the implementation process and measure the organizational climate in order to identify the presence and strengths of the implementation drivers. This tool has extracted "best practices" from what is currently known from all stages and aspects of implementation science literature. NIRN (2013) indicates that there are ongoing studies to establish the reliability and validity of the items included in this assessment, with the most current data indicating findings of Cronbach alphas in the 0.80 range for most of the implementation driver scales. In its entirety, the *Implementation Driver Assessment* tool examines the nine following variables: practitioner selection (9 items), training (9 items), supervision/coaching (10 items), performance assessment (10 items), decision support data systems (9 items), facilitative administration (7 items), system intervention (4 items), leadership (10 items), and implementation climate (7 items). The tool uses a 9-point scale, ranging from 1 representing "completely disagree", to 7 representing "completely agree", with 8 representing

"does not exist in our organization", and 9 representing "don't know". Key informants are practitioners/directors, and each is asked to reflect upon practice in the past six months.

In order to maximize the use of the Implementation Driver Assessment tool effectively it is noted that a well-operationalized intervention (i.e., PCCP program) is a prerequisite; "The more clearly the core intervention components are defined and validated through research (e.g., performance assessment correlated with outcomes; dosage and outcome data), the more clearly the Implementation Drivers can be focused on bringing these core intervention components 'to life' and sustaining and improving them in the context of practices, organizations, and systems" (Fixsen et al., 2013). As the PCCP program is still in its development stage, this study did not use the tool in its entirety, but rather examined items related to practitioner selection, training, performance assessment, decision support data systems, facilitative administrative supports, and leadership in order to inform areas of implementation that are common amongst this sector to guide future research and evaluation. The decision to reduce the number of items being examined using this tool was made in recognition that without ongoing interpretation and explicit and strategic implementation support being externally provided, the language and enormity of implementation elements identified as required for full implementation may be daunting to participants. Items removed were selected either because of the clinical nature of the language being used, or because other assessment measures in the study would inform the related content.

Implementation fidelity measures that are built into the Positive Child Care Program to assist with quality assurance were also provided to participants in the intervention condition only. Specifically, PCCP Innovation characteristics were to be measured through the practitioners' use of coaching session checklists to capture data related to coaching and peer support sessions embedded in the PCCP program. Attendance at coaching sessions (ECE), and attendance at peer

support (Practitioner) was also to be collected. Practitioner confidence and competence in coaching skill support is embedded in the PCCP training and was measured using the Positive Child Care Program Consultation Skills Checklist (Turner & Sanders, 2015). This measure is an 18-item self-report Likert-type scale that assesses proficiency in coaching skill support. An additional tool related to consumer satisfaction that was administered at the PCCP training is the Workshop Evaluation Survey. This measure is a 7-item self-report Likert-type scale that assesses perceptions and overall satisfaction of the PCCP training itself (Turner & Sanders, 2015).

Web analytics reports relating to staff use of PCCP online modules were generated and collected, and measured the number of codes issued and activated, and the state of progress of the PCCP online program.

Qualitative Measures. Qualitative data related to organizational climate, staff attributes, and child behaviour were gathered through self-reflective, semi-structured interviews (Appendix J – Semi-Structured interview questions), using a phenomenological approach. Creswell (2013) indicates "the basic purpose of phenomenology is to reduce individual experiences with a phenomenon to a description of the universal essence" (p. 76). Essentially, phenomenology focuses on what individuals have experienced and how they have experienced it, rather than centering on explanations or analysis of such experience (Moustakas, 1994). The strength of using this approach in gathering qualitative data for the PCCP study is that phenomenology allowed the researcher to understand the shared experience of staff experiences related to the challenging behavior of children, as well as the use and implementation of PCCP among several individuals. Creswell (2013) indicates that this method of qualitative data collection does not require participants to be located at a single site, but rather it prioritizes the shared experience of

the phenomenon being explored. As participants were recruited from various child care programs, and reflect a variety of demographical differences of child care centres across Alberta, the ability to explore the shared experience of PCCP implementation allowed the researcher to identify similarities in this experience, rather than differences among these settings.

Procedure

Ethical clearance for the study was obtained from Western University Research Ethics Board, Project #106654 (Appendix B). Stratified randomization was conducted as outlined above, ensuring to establish an intervention condition and wait list control condition that were equally matched. Training dates for PCCP were confirmed for practitioners in the intervention condition to undertake training in the PCCP program. In the intervention condition, each participating child care centre identified one or two staff to receive the practitioner training for PCCP, and all other staff were identified to be the ECE participants in the PCCP program. The self-referral checklist recommended that identified practitioners were staff who had a leadership or managerial role within the early education or child care centre (e.g., centre director, assistant director) and were in a position to offer advice and support to staff. Of the seven sites in the intervention condition, all but one sent two participants to be trained as practitioners. The remaining site sent one participant for training as a practitioner. The experimental group began training and were eligible to implement the PCCP program immediately, while the control participants continued with service as usual, and were offered the PCCP program outside of this study, after completing the follow-up assessments.

Training and Intervention. The University of Queensland has a standardized training and quality assurance protocol that was followed in the PCCP training session. In order to provide a base foundational knowledge of Triple P (of which the PCCP program is a variant), the initial PCCP practitioner-training program incorporated a prerequisite training in Primary Care Triple P. Primary Care Triple P is relevant to practitioners who regularly provide parenting support and advice to parents of children aged 0-12 years. Learning outcomes of practitioner training in Primary Care Triple P include:

- Early detection and effective management of child behaviour problems
- Core principles of positive parenting and behaviour change
- Specific positive parenting strategies for promoting children's development
- Effective parent consultation
- Identification of indicators suggesting more intervention is required and appropriate referral procedures
- Risk and protective factors operating within families (Triple P America, n.d.)

Training in Primary Care Triple P is a pre-requisite for PCCP practitioner training, and was delivered to Director Participants by Triple P Parenting Canada.

PCCP Practitioner training was delivered by Triple P Parenting Canada on behalf of the University of Queensland, and adhered to their related standardized training and quality assurance protocols. Practitioners attended a 2-day training course in Primary Care Triple P (Appendix K – Primary Care Overview Info sheet), followed immediately by 1-day extension training in the Positive Child Care Program. This extension training introduced the PCCP content, which was to be provided in online topic-based modules to ECE staff. The PCCP training also oriented practitioners to the procedure for providing clinical support and coaching to staff using a coaching model. Following the PCCP training, practitioners were to review and

study the PCCP material independently, and complete accreditation requirements for Triple P Primary Care approximately 10 - 12 weeks later. The accreditation process and results for the Triple P Primary Care training was outside of the scope of this study. As the PCCP program was still in development and trial stage, there was no accreditation requirement for PCCP at the time of the study.

Once trained in PCCP, the practitioner was to be responsible for the dissemination of the PCCP intervention in their child care centre, conduct coaching sessions, and provide program support for child care centre staff, as identified in the PCCP training manual. With PCCP practitioners in place, ECE participants received personal log-in details that granted them access to the PCCP program, enabling them to partake in the PCCP program as designed (Appendix A – Positive Child Care Program Overview) and at their own pace (ideally over a maximum 8-week period). PCCP incorporates elements designed to engage participants and improve knowledge acquisition, positive self-efficacy, and behaviour activation. These elements include: 1) user friendly navigation; 2) video-based modelling of skills, 3) personalized content including goal setting, review, and feedback; 4) interactive exercises to promote ECE problem solving, decision making, and self-regulation; 5) downloadable worksheets to review session content; and 6) automated email prompts to increase the likelihood of program completion. The program also provides ECEs with a customizable and printable workbook that records program content, ECE goals, and responses to exercises. Cultural sensitivity is addressed through the use of multicultural video models and the self-regulatory framework that enables ECEs to select goals informed by their own values and traditions.

Worldwide dissemination of Triple P is led by Triple P International. The existing delivery and implementation of Triple P also recognizes the importance of site readiness, and the

benefits and complexity of thorough implementation. Employees at Triple P International conducted a formal, comprehensive review of the literature on implementation science, and determined that there was no single model or framework for implementation that would facilitate each of the outcomes intended within the Triple P system (McWilliam et al., 2016). As such, the working group created a framework that was specifically tailored to the Triple P system, which integrated the best practices and concepts of implementation science, while reflecting the core principles of Triple P (McWilliam et al., 2016). Existing delivery organizations and communities are supported by Triple P International in integrating an Implementation Framework when employing Triple P in their settings (Appendix L – Triple P International Implementation Framework). As a support to new and existing initiatives, Triple P International assigns an Implementation Consultant to organizations and communities in order to provide technical assistance regarding the implementation process. The intention of this support is to ensure that the implementation process is smooth, timely, and responsive to the contextual needs of provider organizations and communities (Triple P Parenting Canada, 2014). The implementation framework utilized by Triple P International encompasses five inter-related implementation phases: Engagement, Commitment and Contracting, Implementation Planning, Training and Accreditation, and Implementation and Maintenance. This framework provides explicit activities, questions, tools, and resources for consideration by organizations and providers prior to embarking on training and delivery of the Triple P program. Potential research participants in the PCCP study received the Triple P International Implementation Framework at the pre-study orientation to the PCCP program, as well as were offered site readiness support from Triple P Canada prior to and throughout this research study, upon request. This researcher recognizes that participants may have entered the research study at a disadvantage if some of the

core aspects identified for consideration in implementation theory and/or the Triple P International Implementation Framework had not been addressed prior to embarking upon participation in the study.

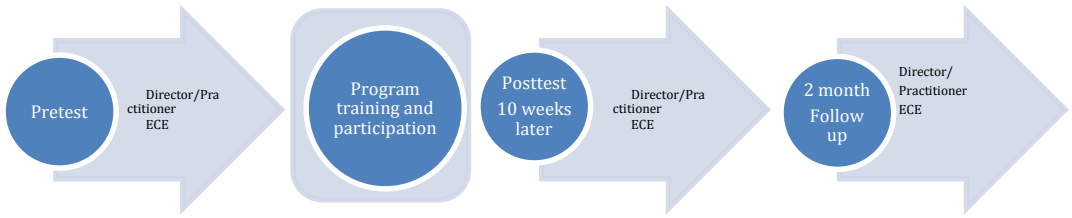
Fraenkel et al. (2015) indicate, "An essential requirement of a well conducted experiment is that the researchers have control over the treatment" (p. 284) and yet this "also provides the greatest opportunity for an implementation threat to occur. The more the researcher diffuses implementation by adding other implementers in the interest of reducing threats, however, the more he or risks distortion or dilution of the treatment" (p. 284). The PCCP program has attempted to address these challenges through use of minimal sufficiency, coaching, and self-regulatory models embedded in the service delivery design (Appendix M – PCCP Coaching Skills Checklist, PCCP Coaching Session Checklist). Embedding coaching models into implementation activities have been shown to have positive effects on fidelity, program outcomes, and the capacity for service providers to increase their own competence and reduce the reliance on external support (Halle et al., 2013). The initial training of practitioners in the PCCP program embeds discussions of flexibility with fidelity in program implementation, as well as offering fidelity assessment checklists for practitioner use ongoing. Findings from the proposed study may further enhance knowledge of aspects associated with fidelity and implementation related to intervention outcomes and the extent the PCCP program is delivered as originally developed.

Upon completion of practitioner training for the intervention condition, one participating centre in the intervention condition formally withdrew from the study, citing competing demands on time as the reason (specifically, requirements of study participation while preparing for child care centre accreditation). In order to reduce this perceived conflict, this centre was offered

external support for facilitation of implementation and integration on behalf of Triple P Canada, however the child care centre director declined and thus this centre was removed from the study, and all related data collected to that point was destroyed.

Data Collection. Data collection used a multiple informant approach to collect data at three time points: T1, T2, and T3. Pre-intervention measures were collected from all participants in both groups prior to any intervention training or implementation (T1). Post-intervention measures were collected from all participants approximately 10 weeks later (to allow for ECE completion of online modules of PCCP, T2); follow-up measures were collected from all participants approximately two months after completion of post-intervention measures (T3). Data were collected from two types of participants, ECE staff who work directly with children, and Program Directors who supervise the ECE staff and program. Data collection measures embedded in the PCCP training protocol were collected from the practitioners in the intervention condition during pre/post training sessions.

Intervention Condition



Control Condition

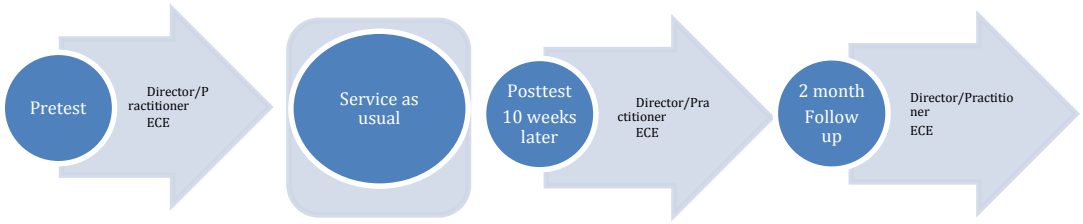


Figure 1 *Data collection*

Completion of the standardized quantitative assessment measures required approximately 30 minutes per participant, per time point. Face-to-face administration of surveys has been demonstrated to improve response rates (Cohen, Manion, & Morrison, 2011), therefore, in T1 data collection, standardized quantitative measures were administered with ECEs and practitioners face to face in their workplace, in order to reduce non-response challenges and allow the researcher to provide a rationale when introducing how each survey tool relates to the study. In T2 and T3 data collection time points 7 practitioners requested the surveys be left for completion rather than collected face to face. All participants who made this request were participants where English was not the first language, and they indicated the difficulty to translate and reflect on the measures within perceived time constraints of the scheduled visit. This option was not offered to all study participants, but was granted to all who made the request.

Observers masked to the research condition collected quantitative data, and required approximately one hour per participant, per time point. This observation took place in the classroom of each ECE participant during his/her regularly scheduled shift. Participation in qualitative data collection (semi-structured interviews) required approximately 5-30 minutes per participant, per time point. In accordance with the funding agreement for participation in the PCCP trial, research participants were to be provided paid time to complete the evaluations during their workday.

Using semi-structured interviews, participants were asked to describe their current experiences with children's behaviours that they found challenging, as well as their feelings of efficacy and satisfaction in their job requirements. Participants were asked to describe their centre's philosophy regarding behaviour management and programming, professional

development opportunities for staff, and access to other support services/consultants for children identified as demonstrating challenging behaviour. Participants in the intervention condition were further asked to describe their participation in PCCP implementation, their thoughts on program satisfaction, effectiveness, and what context or situations influenced or affected their experience of the program implementation and adherence. These interviews took place in person, at the workplace of each participant. The interviews spanned approximately 5-30 minutes per participant, at each time point.

In order to answer the research questions identified, data collection measures were selected that addressed associated variables, as well as child-level characteristics in order to further clarify implementation and program outcomes. The results of this Randomized Control Trial (RCT) were determined by comparing the progress of the intervention condition against the control condition. PCCP program training and participation was offered to control group participants following study completion. As control group training and participation was beyond the scope of this study, it will not be discussed in this report.

Data Analysis Strategy. The initial stratified randomization of the intervention and control conditions reduced internal threats and helped ensure equal population variances in the pre-intervention time frame. A concurrent triangulation approach to data collection and analysis was employed, involving collecting both quantitative and qualitative data simultaneously and comparing the two to identify convergences, differences, or a combination of each (Creswell, 2009). When describing concurrent data collection using the triangulation design in mixed methods studies, Creswell (2009) states that the researcher can "actually merge the data (i.e.,transform one type of data to the other type of data so that they can easily be compared) or integrate or compare the results of two databases side by side in a discussion" (p. 213). This

research compares the two databases side by side so that unique variances between quantitative and qualitative findings can be captured and discussed. Through data triangulation, equal priority to both quantitative and qualitative data is given in order to ascertain if the two distinguished a single understanding of the research problem being investigated (Fraenkel et. al, 2015). Creswell (2009) indicates that triangulating methods is advantageous as it "can result in well-validated and substantiated research findings" (p. 213). As this study seeks to identify program effectiveness, and provide specific information relating to implementation considerations for PCCP during the formative period of program development, well-validated and substantiated research findings that are easily generalizable and transferable are essential. Adopting the triangulation approach to analyzing quantitative and qualitative data ensured the "strengths of the two methods will complement each other and offset each method's respective weakness" (Fraenkel et. al, 2015, p. 559).

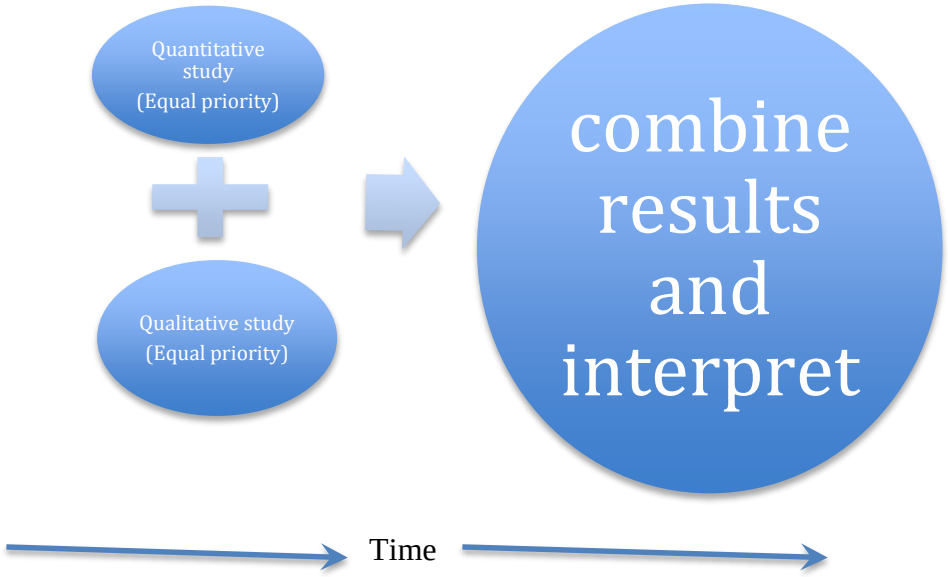


Figure 2 *Triangulation design*

Source: Adapted from Creswell & Plano Clark (2006).

Quantitative Data Analysis. Before analysis related to the research questions, the quantitative data was first examined for normativity. Scatterplot analysis and other descriptive techniques were used to better understand the configuration of the data set. Quantitative data were analyzed using *R* statistical software (R Core Team, 2016) to determine means, standard deviations, and internal consistency (Cronbach Alpha). Missing data were controlled for using multiple imputation. According to Rubin (1976) there are three circumstances in which missing data can occur: missing at random (MAR), missing completely at random (MCAR), and missing not at random (MNAR). Rubin (1976) recognizes MAR as *when given the observed data, the missingness mechanism does not depend on the unobserved data.* For example, the MAR assumption would be satisfied if the probability of missing data on stress depended on the participants' age, but within the age category the probability of missing data was unrelated to stress. However, as the value of the missing data is unknown, it is not possible to compare values with and without missing data to determine if there is a systemic difference on the related variable. As such, MAR allows the probability of missingness to depend on observed variables. There is no statistical way to determine which circumstance has created missing data. Assumptions of MAR were made based upon knowledge of the data and its collection mechanisms. In this study, missing data were observed to be occurring when there was child or ECE absence at data collection time points, either due to temporary non-attendance such as vacation or illness, or permanent non-attendance such as resignation, layoff, or child withdrawal from the child care program; thus the missing data were deemed appropriate to be considered MAR. Approximately 25% of missing data overall was considered to be MAR. All available data was retained, and missing data was imputed using Amelia II in *R* (Honaker, King, & Blackwell, 2011).

One imputation per percentage of missing data has been suggested as a good practice when determining the number of imputations to generate (e.g., Graham, Allison, Olchowski & Tamika, Bodner, 2008; Royston et al., 2011); thus 25 imputations were run. An alpha criterion P <0 .05 was used for all analyses. In research, missing data is often the rule, and not the exception, particularly when working with large data sets. Multiple imputation uses modern algorithms to preserve existing datasets, and create substitutes for missing data using a series of regression models in order to create an unbiased estimation of the parameters and standard errors of a statistical model. It was determined that multiple imputation was the most appropriate approach to the management of missing data in this study, as this approach would reduce bias and not reduce the power of findings as may otherwise be experienced if applying list wise or pair wise deletions. For further information regarding the total number of missing/non-missing responses by individual subscale, as well as the proportion of missing responses at each time point, see Appendix N.

To evaluate intervention effects, main effect differences between the intervention and control conditions were examined using multivariate analyses (MANCOVAs), with T2 and T3 scores as dependent variables, while including T1 scores as a covariate. MANCOVAs are recommended for related scales as they account for correlations between them. MANCOVAs were conducted on each set of conceptually related dependent variables: ECE confidence (*Teacher Interpersonal Self-Efficacy Scale*), ECE competence (*Child Care Ecology Inventory*); child behaviour (*Strengths and Difficulties Questionnaire, Child & Adolescent Disruptive Behavior Inventory, Child and Adolescent Disruptive Behavior Inventory: Observer Rating);* ECE adjustment (*Depression, Anxiety, and Stress Scale, Child Care Worker Job Stress Inventory)* There is currently no recommended strategy for pooling findings from multivariate

analyses (e.g., MANOVAs/MANCOVAs) across multiple imputed datasets, therefore values are reported as the median value, providing an indication of whether further univariate analyses were warranted. Univariate analyses (ANCOVAs) were conducted and univariate F values examined when the median MANCOVA significance level was below the .05 cutoff, to determine which variable contributed to the multivariate effect. ANCOVAs compared mean scores between groups at T2 and T3 while controlling for pretreatment (T1) differences. Parameter estimates were pooled across multiple imputations using Rubin's (1987) combining rules. Cohen's *d* effect sizes were computed as mean change from T1 at T2 and T3 for the treatment condition, minus the corresponding mean change from T1 at T2 and T3 for the control condition. Effect sizes were standardized using the pooled pretreatment standard deviation. Effect sizes were computed individually for each imputation, and then averaged. Rubin's (1987) rules were used to compute the pooled standard error of the estimates for confidence intervals.

Where significant multivariate effects were identified, secondary analysis were conducted using a Generalized Least Squares (GLS) linear regression approach in order to determine interaction effects between group and time. GLS is well-suited to repeated-measures data as it allows for correlated errors across time points and has fewer assumptions than standard ANOVAs (e.g. sphericity). There is not yet clear consensus on how to combine repeated measures ANOVA across multiple imputations, however GLS allows for implementing Rubin's combining rules for imputed data. Interaction effects were computed individually for each imputation, and pooled across the imputed datasets following Rubin's (1987) combining rules.

In quantitative assessments where data was collected through observation, observer inter-rater reliability correlations were conducted on 10% of the observations, using Pearson's Correlation Coefficient between subscales, *Child Care Ecology Inventory* (Rusby, Backen Jones,

Crowley & Smolkowski, 2013) *r* = >.785, and *Child and Adolescent Disruptive Behavior Inventory: Observer Rating* (CADBI-OBS - Rusby, 2015) *r* = >.878. Though the PCCP program has been designed for use in community-based early childhood education environments and not for clinical intervention, clinical significance was also calculated where published clinical cut-offs were available, as it denotes whether participants moved from clinical or borderline range between T1, T2, and T3 of intervention.

As mentioned previously, research using implementation science indicates that the organizational ecology plays a role in moderating the relationship between program integration and improved outcomes from program delivery (e.g., Damschroder et al., 2009; Durlak & DuPre, 2008; Fox et al., 2011; Gregory, Henry, Schoeny, & The Metropolitan Area Child Study Research Group, 2007; Mihalic et al., 2004, Sanders, Prinz, & Shapiro, 2009). This study recognizes the potential for organizational ecology as a moderator for program outcome variables. Data related to implementation in the intervention condition was collected and examined to understand whether program completion predicted outcomes. Further analysis investigated the relationship between implementation drivers and program completion.

Qualitative Data Analysis. Though semi-structured interviews were conducted with all available participants at each data collection time point, missing qualitative data occasionally occurred in situations where a) participant was absent on the scheduled interview day, or b) participant was no longer employed with the agency. In conducting phenomenological research, Creswell (2013) endorses in-depth, multiple interviews with 5-25 individuals who have all experienced the same phenomenon. As such, interview transcripts for directors and three ECE participants were randomly selected from each participating site for analysis, thus representing six directors and 18 ECE participants in each condition at each time point. A random selection

criterion was that qualitative data for the ECE participant was available at each time point to allow for analysis of change within and between conditions. Qualitative Interviews were transcribed verbatim using ExpressScribe. Following this, the transcripts were read in their entirety several times, with this researcher memoing and making marginal notes relating to phrases, sentences, and passages in order to gain an understanding of the interviews as a whole before deconstructing their parts (Creswell, 2013). After completing the transcriptions and initial memoing and marginal notes, this researcher listened to the digital recordings again, while reading the transcription, in order to listen to what was said in a fluid manner, and catch intonation and subtleties that may otherwise be overlooked in written text only. Through utilizing this approach to qualitative data analysis, this researcher was able to obtain a deep working knowledge of the transcriptions by handling the data multiple times before coding and analysis. Relevant words, statements, and sections were provided with a one or two word code throughout each interview transcript. Codes were identified as relevant when repeated in several places or by several participants; the interviewee explicitly stated something as important; and statements related to literature previously examined on this topic, including that of implementation theory; and surprising findings. Initially 118 codes were identified, however thematic analysis of qualitative data allowed for grouping together significant statements and patterned responses to ultimately form five overarching themes, in order to develop a textured description of how participants experienced the phenomenon of addressing the challenging behaviour of children, and adopting PCCP in their child care centre for implementation. As recommended by Creswell (2013), lean coding was conducted by identifying the initial five themes, and then coding was expanded as the database continued to be reviewed and re-reviewed. Further themes were developed in connection with the frequency and similarity of participant

descriptions to those descriptions of others involved in the study. Sub categories were identified in order to display the core theoretical ideas. Sub-categories were then incorporated into the five overarching themes in order to best convey the qualitative findings by connecting each sub category to each theme related to the research purpose. This process is referred to by Creswell (2007) as selective coding, and is the last step in the coding process, resulting in a systematic organization of the information.

Recurrent, cross-sectional analysis explored these themes and changes over time between the two groups, seeking to understand similarities and differences in how each group experienced the phenomenon of addressing the challenging behaviour of children. Through this process, this researcher identified additional sub-categories at T2 and T3 in the intervention condition only.

Respondent validation of transcripts was not conducted as it was recognized that participants may have changed their perceptions and views due to a number of reasons, including but not limited to progressive effects, potential changes in their situation, as well as a result of participation in the study and minimal contribution to emerging overall themes (Burnard, Gill, Stewart, Treasure & Chadwick, 2008). Instead, the process of peer review was executed, whereby transcripts, data analysis, and emerging themes were explored independently to establish trustworthiness and inter-rater reliability. As transcripts of intervention group participants included discussions of the PCCP program usage, this researcher was unable to remain blind to the condition when coding qualitative findings.

Chapter Summary

This chapter outlined the research methods employed in this study, through study design, participant selection, measures, and procedure. The approach to data collection and analysis describes using mixed methods in this research. Triangulating the two data types allows for distinctive participant perspectives relating to the outcomes and implementation process to be meticulously examined. The mixed methods design maximizes information attained from each participant, and the data collection timelines further characterize aspects of the study that embrace an opportunity to examine the stages and phases identified in implementation theory as being necessary for program success. Though some mixed methods research transform one type of data to the other type of data so that they can easily be compared (e.g., counting and reporting frequency rates of codes), this research study does not report counts of codes as "this conveys a quantitative orientation of magnitude and frequency contrary to qualitative research" (Creswell, 2013). Instead, the two databases are compared side by side in a discussion. This triangulation of quantitative and qualitative data allows for a deeper insight into factors that facilitate program implementation and outcomes.

Chapter 5: Findings

In Chapter 1 it was hypothesised that PCCP would produce increased confidence and competence of ECEs in managing children's challenging behaviour, compared with the control condition, including: i) increased responsivity to children; ii) lower levels of observed and ECE-reported coercive teaching practices; iii) increased educator confidence; iv) improved educator adjustment; and v) lower levels of observed and staff-reported disruptive child behaviour. Additional goals of this project were to examine program implementation, fidelity, and consumer satisfaction, and to explore potential moderators of intervention effects. This chapter shares findings as they relate to the research questions and hypothesis.

Analyses were completed on a sample of 96 ECE participants; 53 in the control condition, and 43 in the intervention condition. Director/practitioner data was collected separately and represents an additional 12 participants; 6 in the control condition, and 6 in the intervention condition. As mentioned in Chapter 4, each ECE participant was asked to identify one child as the focus for child-specific data collection in order to examine child-specific outcomes regarding program effectiveness. In situations where staff were not available or no longer working at the agency, child-related measures were still collected where possible, as reported by an ECE participant with current knowledge of the child (i.e., co-educator in the same classroom). In situations where children were no longer attending the agency, staff-related measures were still collected.

Pre-Intervention Data Collection

An overall summary of psychological descriptives at baseline (T1) for all participants is presented in Table 4 (below). Also included on this table are the percentage of participants in

both the clinical and non-clinical range. Where available, clinical cutoff scores used to calculate the clinical status are identified.

Table 4.

Outcome descriptives at baseline; combined sample

			Clinical status			
Measure	**Mean (*N* = 96)**	**sd**	**% clinical (*n*)**	**% non-clinical (*n*)**	**% missing (*n*)**	**Cutoff score**
CADBI (CC worker report)						
Behaviour towards adults	27.51	12.16	-	-	-	-
Activity level at CC	38.35	16.25	-	-	-	-
Behaviour towards peers	32.45	14.11	-	-	-	-
CADBI (Obs)						
Activity level at CC	9.85	7.41	-	-	-	-
Behaviour towards adults	3.79	3.28	-	-	-	-
Behaviour towards adults and peers	4.43	5.08	-	-	-	-

Peer relationships	12.13	3.78	-	-	-	-
Behaviour towards peers	4.52	4.02	-	-	-	-
CCEI (Obs)						
Planning activities	1.6	0.53	-	-	-	-
Managing attention	1.82	0.58	-	-	-	-
Circle time	0.42	0.83	-	-	-	-
Teaching rules/expect	1.78	0.48	-	-	-	-
Materials	2.21	0.42	-	-	-	-
Monitoring	1.82	0.69	-	-	-	-
Physical space [b]	2.15	0.41	-	-	-	-
DASS						
Anxiety	6.63	6.65	19% (18)	68% (65)	14% (13)	10
Depression	6.39	8.64	14% (13)	73% (70)	14% (13)	14
Stress	10.45	8.86	10% (10)	76% (73)	14% (13)	19
Job Stress Inventory						
Job Control	47.02	10.38	27% (26)	59% (57)	14% (13)	41.55[a]
Job Demands	48.39	9.97	14% (13)	73% (70)	14% (13)	57.68[a]

Job Resources	71.75	9.44	78% (75)	8% (8)	14% (13)	57.49[a]
Job-Specific Demands	9.33	3.35	-	-	-	-
SDQ						
Conduct problems	4.88	2.44	58% (56)	24% (23)	18% (17)	4
Total problems	17.2	6.21	45% (43)	38% (36)	18% (17)	17
Emotional problems	2.54	2.03	12% (12)	70% (67)	18% (17)	5
Hyperactivity	6.31	2.43	38% (36)	45% (43)	18% (17)	7
Peer problems	3.46	2	41% (39)	42% (40)	18% (17)	4
Prosocial	4.92	2.34	33% (32)	49% (47)	18% (17)	4
Teacher Interpersonal SE						
Self-Efficacy subscale	4.66	0.64	1% (1)	85% (82)	14% (13)	2.9

[a]Cutoff score computed as 1SD from mean of validation sample as published clinical cutoffs not available.

Qualitative data collected at pre intervention sought to examine staff experiences of children's behaviours experienced as challenging, philosophies regarding child guidance, ECE confidence and competence in preventing and addressing behavioural difficulties, and staff satisfaction in the workplace. Data was collected from two types of participants, ECE staff who

work directly with children, and Program Directors who supervise the ECE staff and program.

The following themes and sub categories were identified at T1:

Theme 1 – Types of behaviour

- Physical aggression
- Verbal aggression
- Non-compliance

Theme 2 – Etiology of behaviour

- Child development (stable)
- Parent/family influence (blame)
- Childs decision to misbehave (intentional)

Theme 3 – Strategies for addressing and preventing misbehaviour

- Strategies ECE finds effective
- Strategies ECE finds Ineffective
- Coercive strategies
- Lack of strategies

Theme 4 – Resources used

- Books/internet
- Workshops
- Director/internal team members
- External support/extra staff

Theme 5 – Resources required

- New/reviewed strategies
- Director/internal team members
- External support/extra staff

The phenomenon of challenging behaviour pre intervention appeared to be experienced similarly between all participants. Themes identified in the types of behaviours experienced referred to physical aggression (e.g., biting, hitting, throwing objects), verbal aggression (e.g., shouting, arguing, swearing, tantrums), and non-compliance. Participants indicated that physical aggression often extends to both adults and children, for example: “it’s not only other children that they are hurting but they are getting very upset and then they are physically hurting staff “ (Participant 98, T1).

Three themes relating to the etiology of the behavior were present in the ECE descriptions of experiences with challenging behaviour: child development (stable), parent/family influence (blame), and child's decision to misbehave (intentional) –for example, "one pushed so the other one decided *'I'm going to bite just to spite her'*" (Participant 55, T1). In qualifying the behaviour from a developmental context, staff appeared to be normalizing the experiences as common developmental milestones; "Maybe because their age, so they usually bite and push friends" (Participant 3, T1), or as concerns regarding developmental milestones; "for one of my kids he only can talk two words. He is almost 30 months, but that's not normal...so sometimes when he doesn't want someone to touch him he cannot explain so [he's] just fighting" (Participant 107, T1). Perceiving behavioural etiology as being related to parenting/family home ranged between beliefs about parental inability to provide time and attention, changes to family dynamics such as divorce or moves, and parental conduct such as abuse or neglect. Though it was not common for ECE participants to identify diagnostic differences such as Autism, Attention Deficit Hyperactive Disorder, and Oppositional Defiant Disorder as the etiology for challenging behaviour, diagnostic differences and parent/family influence were the two thematic elements of behavioural etiology identified by directors.

When asked to describe the policy or philosophy relating to child guidance, directors were typically able to do so in detail, highlighting the importance of aspects such as observation, planning for a child's interests, and redirection. However, there were occasions where some directors were not able to describe the policy, and instead were vague, uncertain, or demonstrated inconsistency in the approach; for example, "(long pause) I'm drawing a blank. Just guiding them, like you know in areas that they need it. Like I don't know what else to say" (Participant 45, T1), or "it [kind of] depends on how or what the situation is, and how severe it is"

(Participant 12, T1). When ECE staff were asked to describe the policy or philosophy relating to child guidance, most explicitly stated that they could not; "Uh, I'm not really sure (laughs)" (Participant 29, T1), and "(long pause) I can't remember what our philosophy is actually, to be honest" (Participant 47, T1). Few ECEs were generic in addressing the policy or philosophy, such as "My centre's philosophy doesn't really change for misbehaved kids as we call it. It's like general for everybody. Provide comfort and care" (Participant 92, T1). Other ECEs highlighted strategies they use or avoid; for example, "to think positive and redirect, like if they are doing something that they shouldn't we try to redirect…We don't do the time outs or anything, we have quiet where they need to be left alone, we have a spot where they can be to calm themselves down and, so they can think. That's pretty much it" (Participant 55, T1).

ECE participant confidence in addressing the challenging behavior was mixed, and denoted a division between use of strategies that ECEs found to be effective, such as programming for children's interests or separating children who are misbehaving, and those which they found to be ineffective or coercive, such as yelling at or avoiding the child. There was a tendency for ECEs to emphasize redirection and distraction as the most common approach to preventing misbehavior. Only one participant appeared to be considering the behaviour in context of the child's skill development beyond the moment of difficulty; "I'm really finding that with the kids here at daycare I'm really needing to think about where they need to be in the future as opposed to getting them to stop the situation now" (Participant 44, T1).

Similar to the division in pre-intervention findings of ECE confidence and competence, when asked what resources and supports ECEs utilized for understanding and addressing challenging behavior, ECE participants were equally divided in what was currently in use and what was still required. Four themes arose relating to current supports that ECE participants

found helpful: books/internet, workshops, director/internal team members, and extra staff/external support. Just as prevalent were three similar themes which acknowledged supports still required: new/reviewed strategies, director/internal team members, and extra staff/external support. Overall, ECE participants indicated satisfaction in their chosen profession, however many continued to identify lack of skills or supports regarding addressing challenging behavior as the main influence reducing workplace satisfaction.

Intervention usage. As mentioned in Chapter 4, web analytics reports relating to staff use of PCCP online modules were generated and collected, and measured the number of codes issued and activated, and the state of progress of the PCCP online program. Progress was measured by module number, with each module representing 25% of the online program component. Recall that fidelity to the implementation of the PCCP program required all four modules and related coaching sessions to be completed prior to T2 data collection. Web analytics reports relating to use of PCCP online modules indicated that of the 11 director/practitioner codes issued, eight were not launched; one indicated initial launch occurred the day of T3 data collection, with one module completed at that time; and two indicated full intervention completion prior to T2 data collection. Of the 43 ECE participant codes issued, web analytics reports revealed no ECE participants had completed the online modules at T2. At T3, 4 ECE participants had completed in full or in part online module 1, What is Positive Child Care?, 6 ECE participants had completed all of module 1, plus in full or in part online module 2, Building children's social and emotional skills, 6 ECE participants had completed all of modules 1 and 2, plus in full or in part online module 3, Helping children develop a positive approach to learning, and 24 ECE participants had completed all of modules 1-3, plus in full or in part online module 4, Helping children learn new ways to behave. Three ECE participants did not launch

codes at all. Participants indicated that each module took approximately one hour to complete. Two participants who did not speak English as a first language indicated that it took slightly longer than this to complete, citing allowing time to translate the materials as the reason. Several participants indicated that they would start and stop a module without completion in one sitting due to conflicting demands on time. Some participants indicated that they printed the content from various modules to refer to as a resource throughout the study. Two participants indicated that they worked through the program using printed material from a colleague, rather than launching the program directly themselves. These two participants stated discomfort with technology as the reason for not launching their own code.

The following additional subcategories were found thematically in the interviews from the intervention condition only, at T2 and T3.

Theme 2 – Etiology of behaviour

- ECE Role in preventing/addressing behaviour

Theme 3 – Strategies for addressing and preventing misbehavior

- Validation through use of PECE (ECEs with 6+ years' experience only)
- Refresher through use of PECE (ECEs with 6+ years' experience only)
- Importance of self-reflection

Theme 4 – Resources used

- Parent partnership

Research question #1: Is the Positive Child Care Program effective in increasing ECE confidence and competence in managing children's behaviour?

ECE Confidence. ECE self-efficacy was measured using the managing child behaviour in the classroom subscale of the *Teacher Interpersonal Self-Efficacy Scale* (Brouwers & Welko, 2001). As only one subscale was used in this measure there was not a need to conduct a

multivariate analysis. Table 5 below indicates Means, SD, and internal reliability for the Teacher Interpersonal Self-Efficacy Scale. ANCOVAs were conducted to investigate statistically significant differences between groups at T2 and T3 with findings pooled across 25 imputations. On this scale it appears there were no differences in educator confidence between groups at each time point; T2 (*t* 0270, *df* 72.081, *p* = 0.788), T3 (*t* 0.800, *df* 34.715, *p* = 0.429). Clinical cut-off scores revealed both groups as being within the normal range at each time point within both imputed datasets, suggesting a ceiling effect, as there was little room for change as it relates to ECE confidence.

Table 5: Means, SD, and internal reliability for Teacher Interpersonal Self-Efficacy Scale.

		Control (*n* = 53)			Treatment (*n* = 43)		
		T1	T2	T3	T1	T2	T3
Measure	α[a]	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)
Self-Efficacy subscale	.87	4.71 (.59)	4.73 (.55)	4.86 (.53)	4.61 (.69)	4.73 (.50)	4.93 (.51)

ECE Competence. Analysis of ECE competence over time was observed using the *Child Care Ecology Inventory* (Rusby, Backen Jones, Crowley & Smolkowski, 2013). Observed variables pertained to physical space, materials available, planning activities/schedules, teaching rules/expectations, monitoring, managing attention, and circle time. Table 5 below indicates Means, SD, and internal reliability for the Child Care Ecology Inventory. No significant multivariate effects were found for ECE competence at T2, *F* (7, 81), = 1.394, *p* = .219. As *p* was >.05 for all imputed datasets, further investigation of univariate ANCOVAs was not

warranted. No significant multivariate effects were found for ECE competence at T3, F (7, 81) = 1.735, p = .112. Significance levels across imputed datasets crossed the p <.05 range, indicating further investigation of univariate ANCOVAs was warranted, however follow up ANCOVAs showed no significant univariate effects at T3 in all areas. On this scale it appears that the program did not make a difference as there were no differences found between conditions at each time point.

Table 6: Means, SD, and internal reliability for Child Care Ecology Inventory.

		Control (n = 53)			Treatment (n = 43)		
		T1	T2	T3	T1	T2	T3
Measure	α[a]	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)
Physical space	.66	2.09 (.46)	2.27 (.36)	2.55 (.34)	2.22 (.33)	2.37 (.33)	2.49 (.28)
Materials	.74	2.20 (.48)	2.41 (.40)	2.66 (.26)	2.21 (.33)	2.47 (.29)	2.58 (.25)
Planning activities/ schedules	.88	1.49 (.57)	1.67 (.66)	2.27 (.55)	1.75 (.45)	1.95 (.51)	2.21 (.51)
Teaching rules/expectations[b]	.75	1.74 (.49)	2.03 (.75)	2.41 (.70)	1.84 (.47)	2.24 (.64)	2.58 (.60)
Monitoring[b]	.74	1.65 (.67)	1.94 (.82)	2.23 (.77)	2.02 (.67)	2.04 (.70)	2.24 (.69)
Managing attention	.82	1.77 (.60)	2.00 (.73)	2.39 (.61)	1.87 (.55)	2.04 (.73)	2.43 (.60)
Circle time[b]	.85	0.28 (.60)	0.18 (.72)	0.28 (.80)	0.59 (1.03)	0.24 (.69)	0.02 (.33)

[a]Unstandardized Cronbach's alpha computed from raw item-level scores. [b]One item dropped due to poor reliability.

Despite quantitative data collection not revealing significant differences in educator confidence and competence, qualitative findings between groups and time points yielded differences in themes. ECE Participants in the intervention condition reported increases in the use and variety of strategies found to be effective, both at T2 and T3. Intervention condition participants stated they found effectiveness and value in adopting a variety of approaches to help guide behaviour, and were reflective in their own role of addressing and preventing challenges. Examples included tracking the behaviour of children, setting clear limits, building relationships with children; "The way I approach the child when they are crying. I just say 'what happened', but now I learned that we have to understand them, why they are crying, the reason" (Participant 129, T2), and establishing goals and strategies for the prevention of misbehavior, for example at transition times;

> Before they're just sitting there and not doing anything, especially in transition periods. It's like it's always you need to force them or you need to argue with them. But now at least they know how to do their routine because I'm trying to explain more to them. You know, and using some tricks (Participant 133, T3**)**.

Some intervention condition participants indicated a newly recognized need for self-care as an important factor in preventing and addressing challenging behaviour; "setting goals for myself…even for me getting dressed and stuff and making sure I am here on time, or getting here a few minutes before my shift starts and stuff so that I can get ready and actually join them" (Participant 11, T2). Through having knowledge of a variety of strategies that could be flexible to the situation, participants expressed feelings of preparedness for future challenges that may arise;

> I love the program. Love it! So my plans are to take it one step further. Especially things like planned ignoring, ok, sit and watch, clear instructions. And the reason I want to use it for my entire class, and continue to make it one of my main guidelines I guess you can say, is we're always getting new children. Ok? We

> have one right now where I am already using one of the concepts, planned ignoring. So, and then I want to document because as each…children are all different, but they still have a lifestyle/culture fit. OK? So you can have that working very well on one child and it might be six months 'til the next one comes that's exactly the same behaviour-wise. So it's like having a rolodex that you can just go 'I'm, hey, I know what to do'. So I absolutely love this program (Participant 9, T3).

At T3, one participant indicated that the program was helpful in learning new ways to engage the child, but that she continued to struggle in knowing what strategies to use when his behaviour escalated. Web analytics confirmed the participant report that she had completed the first two PCCP modules (which focused on 'What is Positive Child Care' and 'Building Social and Emotional Skills'), but had not yet begun the modules intended to identify approaches and techniques for the prevention and management of misbehaviour.

Participants in the intervention condition that had been in the early childhood education field for 6 years or longer reported two additional themes regarding confidence and competence as the result of using the program: reminder and validation. At both time points ECE participants in the intervention condition indicated they perceived positive changes to their effectiveness in child guidance as they found the program to be a helpful reminder of the importance of positive interactions with the children; "it gives you, you know, a little boost to do things that we sometimes forget to do, apply it. So it is a good reminder for us" (Participant 124, T2) and "It opened my eyes to the little stuff that I take for granted over the years. You know? So that's a plus for me because sometimes you are in something and you have been doing it for a period of time you become like rote. So the program has opened my eyes and let me see how I could do stuff different than I've been doing" (Participant 16, T3). ECE participants in the intervention condition also indicated the value of validation and reassurance for the work they have been doing, "Sometimes if you don't have these things you've been asking yourself 'am I doing the

right thing?' But then when we have this Triple P and you think 'OK I am on a good track. I'm doing it" (Participant 14, T3). Many participants also provided insight on consideration of who else may benefit from participation in the PCCP program:

> I think for people who usually come into this field, new ones, you know, just entered the field and do not know what to do. So it will be helpful for those ones and usually the people that do not get the actual education, you know, in this field and they just come along from other departments or anything and they just start a profession in this country, newcomers or anything, so it will be good for them (Participant 124, T3).

In the control condition, participants continued to report low confidence and competence in preventing and managing misbehavior at both T2 and T3. Strategies used to prevent and address challenging behaviour continued to primarily be redirection or distraction and removal from room. Staff indicated feelings of uncertainty regarding knowledge of strategies to employ; for example, "I just don't know what to say to him to make him want to care" (Participant 44, T2) and, "It is hard for us as, because we are not really special needs educators, we can do our best and try to support him as best as we can but we don't have all the techniques to support him like he needs to be supported" (Participant 39, T3). Some staff reported that the lack of skills contributed to a response that contradicts positive guidance;

> When someone is very difficult I don't know how to use the gentle words, how to guide them, which words I can use, which way I can use…He is about to hit me and [changes tone] '*No, I don't like you anymore. Do not go close to me. I don't like this bad behaviour. It is not a good idea to hit the teacher'* (Participant 107, T2).

Very few participants in the control condition identified their confidence and competence as having improved across the time points. Where improvements were indicated, it was also associated with a significant environmental change such as a new team partner, external consultation support to enhance ratios or assist with strategy development and planning (such as those discussed in Chapter 2), or the 'difficult' child having moved to a different room or been

withdrawn; “we had this child that is no longer in our care. They were like the main, main instigator of like the whole group. They are now gone so it has calmed down” (Participant 47, T2). Very few participants in the control condition were reflective of and confident in regarding their own role in supporting positive behaviour. Participants in the control condition continued to cite redirection and distraction as a common approach for preventing and managing misbehaviour, however some also indicated they had been recently introduced to the use of visual schedules and providing engaging activities by external consultation supports and had been finding these techniques beneficial.

Research question #2: Is the Positive Child Care Program effective in changing child behaviour?

Child Behaviour. Child behaviour was assessed using the *Strengths and Difficulties Questionnaire* (SDQ) for reporting on children aged 4-10 years of age, or *Early Years Strengths and Difficulties Questionnaire* (SDQ) for reporting on children 2-4 years of age (Goodman, 1997). Variables examine strengths and difficulties related to emotion, conduct, hyperactivity/inattention, peer relationship challenges, and prosocial behaviour. Table 7 below indicates Means, SD, and internal reliability for each of the subscales on the Strengths and Difficulties Questionnaire. ANCOVA of the SDQ total score revealed a significant univariate effect between groups at T3 with findings pooled across 25 imputations, indicating improvements of total strengths and difficulties in the intervention condition comparative to the control condition (t -2.071, df.42.419, p = 0.044). However, when analyzing strengths and difficulties using GLS linear regression in order to determine interaction effects between group and time, a significant interaction effect was not evident on this measure.

Further examination of clinical changes over time relating to the *Strengths and Difficulties Questionnaire* and *Early Years Strengths* and *Difficulties Questionnaire* (Goodman, 1997) indicates notable shifts in the intervention condition between T1 and T3**.** As indicated in Figure 3 (below), total SDQ for both intervention and control conditions were in the clinical range at T1. The intervention condition moves to borderline at T2 and normal at T3, however the control condition remains roughly the same at T3. In summary, despite main effects indicating improvements related to total strengths and difficulties in the intervention condition, no statistically significant interaction effects between groups or time points were evident on this measure. However, clinical differences are indicated in total strengths and difficulties between groups and time points.

Table 7: Means, SD, and internal reliability for Strengths and Difficulties Questionnaire.

		Control (n = 53)			Treatment (n = 43)		
		T1	T2	T3	T1	T2	T3
	α	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)
Emotional problems	.69	2.49 (1.90)	2.41 (2.28)	2.41 (2.00)	2.61 (2.20)	2.07 (1.89)	1.82 (1.86)
Conduct problems	.75	4.58 (2.29)	4.55 (2.61)	4.58 (2.46)	5.25 (2.58)	4.53 (2.56)	4.04 (2.71)
Hyperactivity	.74	6.02 (2.37)	6.02 (2.34)	5.97 (2.39)	6.67 (2.47)	6.09 (2.56)	5.36 (2.69)

Peer problems	.57	3.54 (2.10)	3.52 (2.17)	3.42 (2.04)	3.37 (1.87)	2.39 (1.88)	2.44 (1.83)
Prosocial	.74	5.21 (2.32)	5.09 (2.31)	5.23 (2.13)	4.55 (2.34)	5.08 (2.04)	5.68 (2.49)
Total problems	.82	16.63 (5.69)	16.50 (6.28)	16.38 (6.38)	17.89 (6.78)	15.09 (6.63)	13.66 (6.90)

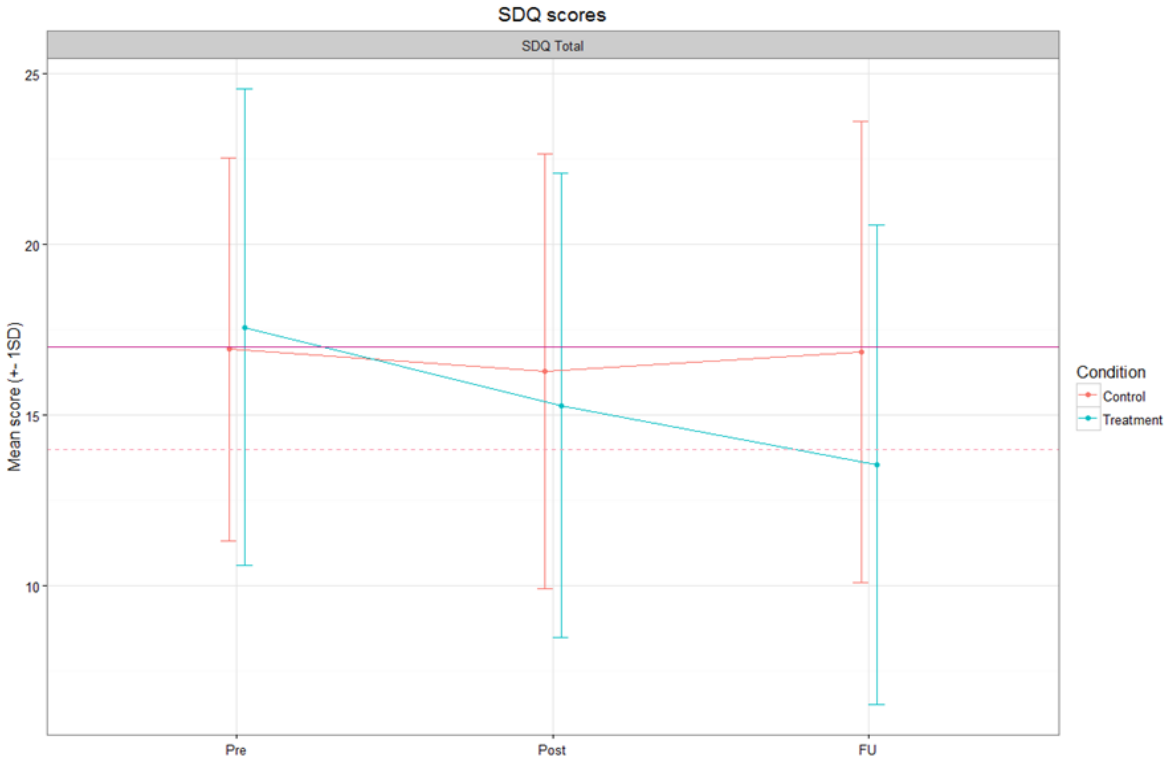


Figure 3 SDQ plot of mean scores related to overall score with clinical cutoff indicated by solid line and borderline indicated by dashed line

The *Child & Adolescent Disruptive Behavior Inventory (CADBI) Screener* (Burns, Taylor, & Rusby, 2001) captured data from ECE participants relating to child attributes and child disruptive behaviour. Variables examine perceived disruptive behaviour towards adults, perceived disruptive behaviour towards peers, and overall perceived activity level at child care. Table 8 below indicates Means, SD, and internal reliability for the CADBI Screener.

Multivariate analysis for treatment effects at T2 revealed no significant differences between groups, F (3, 89) = 1.259, p = .293. However, significance levels across imputed datasets crossed the p <.05 range, suggesting further investigation of univariate ANCOVAs may be warranted. Multivariate analysis for treatment effects at T3 revealed a significant difference, with intervention participants reporting significantly less disruptive behaviour, F (3, 89) = 5.080, p = .003. Follow up ANCOVAs investigating difference between groups at T2 and T3, with findings pooled across 25 imputations, revealed no significant univariate effects at T2 in all areas. A significant univariate effect indicating greater improvements in the intervention condition vs. the control condition regarding behaviour towards adults was found at T3 (t -2.290, df 54.746, p = 0.026). When analyzing the *CADBI* using GLS linear regression to determine interaction effects between groups and time points, a significant difference indicating improvement in the intervention condition was also evident in behaviour toward adults (p = 0.035). No published clinical cut-offs were available for the *CADBI* (Burns, Taylor, & Rusby, 2001). In summary, in comparison to the control condition, participants in the intervention condition reported significantly reduced disruptive behaviour towards adults.

Table 8: Means, SD, and internal reliability for Child & Adolescent Disruptive Behavior Inventory (CADBI) Screener.

		Control (n = 53)			Treatment (n = 43)		
		T1	T2	T3	T1	T2	T3
	α	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)
Behaviour towards adults	.93	25.76 (10.52)	25.30 (12.99)	23.73 (12.53)	29.66 (13.71)	22.91 (13.22)	18.93 (12.48)

Behaviour towards peers	.95	29.66 (13.67)	29.26 (14.39)	24.67 (13.39)	35.89 (14.01)	29.44 (13.16)	25.83 (14.54)
Activity level at CC	.93	36.15 (14.74)	33.61 (16.57)	30.67 (14.29)	41.07 (17.71)	34.71 (16.21)	29.64 (16.22)

When used as an observation tool by observers masked to the research condition, the *Child and Adolescent Disruptive Behavior Inventory: Observer Rating (CADBI-OBS)*, (Rusby, 2015) captured observed child attributes and child disruptive behaviour towards adults at child care, disruptive behaviour towards peers at child care, overall activity level at child care, and peer relationships at child care in 30-minute intervals per time point, per child. Table 8 below indicates Means, SD, and internal reliability for the CADBI-OBS. Multivariate analysis for treatment effects at T2 relating to observed child disruptive behaviour revealed a significant difference between groups, F (5, 85) = 2.485, p = .038. As median significance levels across imputed datasets was in the p <.05 range, further investigation of univariate ANCOVAs was warranted. Multivariate analysis for treatment effects at T3 relating to observed child disruptive behaviour revealed no significant differences between groups, F (5, 85) = 1.052, p = .393. However, significance levels across imputed datasets crossed the p < .05 range, suggesting further investigation of univariate ANCOVAs may be warranted. Follow up ANCOVAs investigating difference between groups at T2 and T3, with findings pooled across 25 imputations, revealed improvements in the intervention condition, with significant univariate effects at T2 regarding peer relationships (p = 0.038), however no significant univariate effects were found at T3 between groups in all areas. When analyzing the *CADBI-OBS* using GLS linear regression to determine interaction effects between groups and time points, no significant differences were evident on this scale. No published clinical cut-offs were available for the

CADBI-OBS (Rusby, 2015). In summary, the intervention condition indicated improvements as significant differences between groups relating to observed peer relationships at T2, but not maintained at T3. No significant interaction effects were identified between groups and time points.

Table 9: Means, SD, and internal reliability for Child and Adolescent Disruptive Behavior Inventory: Observer Rating (CADBI-OBS).

		Control (n = 53)			Treatment (n = 43)		
		T1	T2	T3	T1	T2	T3
	α	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)
Behaviour towards adults	.78	3.42 (2.84)	2.62 (2.64)	1.91 (3.25)	4.25 (3.72)	2.14 (2.94)	2.30 (4.52)
Behaviour towards peers	.82	4.31 (3.44)	2.09 (3.00)	.84 (2.49)	4.79 (4.66)	3.17 (3.20)	1.83 (2.60)
Activity level at CC	.79	10.09 (7.06)	6.41 (6.10)	4.70 (4.71)	9.56 (7.89)	6.51 (4.97)	4.99 (4.71)
Behaviour towards adults and peers	.83	3.14 (3.28)	1.64 (2.84)	.92 (2.39)	6.03 (6.35)	2.69 (3.06)	1.67 (3.39)
Peer relationships	.80	12.13 (3.94)	12.23 (4.23)	14.02 (3.84)	12.13 (3.60)	14.09 (3.61)	14.26 (3.96)

Qualitative findings between groups and time points yielded differences in the thematic elements of child attributes and disruptive behaviour. Participants in the intervention condition

widely endorsed improvements in children's prosocial behaviour at both T2 and T3, whereas the control condition primarily reported no change, or a decrease in prosocial behaviour at each time point. Participants in the intervention condition expressed that they found participation in the PCCP valuable in helping children learn new skills and behaviours;

> Before he plays by himself, at least now he play with other children and I have also observed that when we talk to him nicely he can even share the toys to other children, not like before, he would grab and push other friends. Now he can even hug friends. When, for example when somebody crying or upset he can go close and then hug (Participant 129, T3).

Participants in the intervention condition expressed increases in self-reflection regarding the role they may have in preventing and addressing behaviour they find challenging. Themes indicated increases in their own motivation to throughout the duration of the study to build positive relationships, as well as demonstrating an increase in the value of incorporating reflective practice in their daily interactions:

> So [before beginning the program] we don't have the time to think, OK maybe we need to give these children more attention or something. So then in this program, we saw a couple of strategies how we can behave with these children. So [we] think about it. Because sometimes with these things, all children, even not with good behaviour, if they don't know how to do something, we, like adults, we know it and we can't understand why, why you can't do it (Participant 130, T2).

In addition, participants in the intervention condition frequently cited they found that the benefits of using PCCP extended not just to the focus child, but also to the behaviour and interactions with the class as a whole; for example, "I haven't done it with just the one child, I've done it with others as well because I do have children with similar behavior" (Participant 16, T3).

Perceptions of child behaviour reported by control condition participants indicated the behaviour had stayed the same or had worsened, both for individual children and in groups;

> It's not just a select few. It's a lot of them starting to pick up the behaviours of others, so starting to get a little worse I think. Just 'cause more people are adapting to it because it's kind of like the whole, not kill or be killed but eat or be eaten type thing (Participant 112, T3),

Where improvements were noted in the control condition, staff indicated the 'main instigator' had left program (Participant 47, T2), or that the team teaching partnership had changed, providing more consistency to the approaches used to prevent and address challenges (Participant 55, T3). The most significant theme that occurred where participants reported decreases in children's challenging behaviour related to accessing additional resources to build support plans and enhance the staff/child ratio;

> Researcher: And what types of supports have you had for the classroom?
>
> Participant: We have had TONS! Like we still have [external service provider] visiting. I'd say at minimum 2 or 3 times a week. We have lots of, been having lots of practicum students, so I'd say now we have in the prekinder room, we have it in the preschool room, I've heard we are going to have help in the toddler room. So we definitely have lots of adult support for sure (Participant 62, T3).

Though staff perceptions on the etiology of behaviour were still unsolicited, participants in both conditions continued to offer their thoughts on this topic. There was, however, a shift in how this was being expressed between the groups. In the intervention condition, both ECE and director participants tended to be more reflective of the ECE role in preventing and understanding the child's needs in order to reduce the challenging behaviour, for example, "It is not only about the program which we need to give, it is also interpersonal relationship, how do we speak" (Participant 130, T3), and "they were starting to recognize the impact *they* had and what they could do for the child. So there was, it was like a 50 percent ownership in that behaviour. Which I think made them more constructive problem solvers" (Participant 22, T3). Additionally, there was a shift in the attributions towards parent/family environments, with both director and ECE

participants in the intervention group identifying collaboration with parents as an essential element to supporting the child; "I also spoke with parents about it so it was like help at home, help here, and so like understanding in my mind why they did it" (Participant 130, T3) and, "involving parents in it which we really hadn't done before…there's more of a dialogue, and I think that's positive and I don't really know that I expected that to be an outcome" (Participant 22, T3).

In the control condition, participants continued to identify the etiology for misbehaviour as being related to development (particularly as it relates to communication); parent/family environment, such as, "we can work in here, but if they don't work at home, with the kids, it doesn't work" (Participant 30, T2); and child's decision to misbehave – "other ones they don't want to help, they want to get trouble" (Participant 107, T2), and "it is really hard to control him when he is really, like he's not in the mood" (Participant 122, T3). Additionally, participants in the control condition identified environmental factors such as staffing shortages, weather, and unforeseen transitions; "I'm finding that is actually a drain on the children because we have been shuffling them a lot" (Participant 47, T3). Very few participants identified that perhaps the behaviour was because the child's needs were not being met; "I think our children, they need more love. From the parents, from anyone in the room. Because that's why they call everyone worse. Like they call crying, they call like, because they are saying '*look at me, come on, help me*'" (Participant 30, T3). One participant cited the ripple of the economic crisis in Alberta as the etiology of the behaviour:

> We have other families where there were changes, there are job losses. Several of our families have now come forward and said that they are regularly using the food bank which is not something that you would suspect in this area and one family as a result of the job loss is probably moving towards losing their house and divorce in the family. So the children are showing the results of that, and they need us more than ever (Participant 63, T2).

Research question #3: Does the Positive Child Care Program increase staff satisfaction in the workplace?

ECE Adjustment. Analysis of ECE adjustment variables regarding negative emotional states of depression, anxiety, and stress of the ECE were measured using the *Depression, Anxiety, and Stress Scale* (DASS; Lovibond & Lovibond, 1995). Table 10 below indicates Means, SD, and internal reliability for the DASS. No significant multivariate effects were found between groups for DASS scores at T2,F (3, 89), = 0.711, p = .548, or T3, F (3, 89) = 0.548, p = .651. Further examination of clinical changes over time relating to the DASS (Lovibond & Lovibond, 1995) indicated both intervention and control conditions start and end below the clinical cut-off between T1 and T3, suggesting little room for change as it relates to ECE depression, anxiety, and stress**.**

Table 10: Means, SD, and internal reliability for the Depression, Anxiety, and Stress Scale (DASS)

		Control (n = 53)			Treatment (n = 43)		
		T1	T2	T3	T1	T2	T3
	α	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)
Depression	.95	5.51 (8.05)	4.74 (6.23)	4.33 (4.99)	7.47 (9.28)	4.51 (6.09)	3.87 (4.75)
Anxiety	.88	6.01 (5.82)	4.70 (4.99)	4.42 (4.96)	7.40 (7.43)	3.77 (4.17)	3.81 (3.98)
Stress	.93	10.47 (8.44)	8.16 (7.41)	7.92 (7.60)	10.42 (9.22)	7.50 (7.79)	6.77 (7.06)

Analysis of ECE adjustment regarding job-related stress was measured using *Child Care Worker Job Stress Inventory* (Curbow et al., 2000). Variables examined job demands, job control, and job resources. Multivariate analysis for treatment effects at T2 regarding job-related stress revealed a significant difference between groups, F (4, 87), = 3.620, p = .009, with participants in the intervention condition reporting increases in workplace satisfaction. As median significance levels across imputed datasets was in the p <.05 range, further investigation of univariate ANCOVAs was warranted. Multivariate analysis for treatment effects at T3 relating to ECE job satisfaction revealed no significant differences between groups, F (7, 81) = 1.282, p = .283. However, significance levels across imputed datasets crossed the p < .05 range, suggesting further investigation of univariate ANCOVAs may be warranted. Follow up ANCOVAs investigating difference between groups at T2 and T3, with findings pooled across 25 imputations, revealed significant univariate effects at T2, as intervention condition participants reported increased job control (p = 0.005), however this was not maintained at T3. When analyzing the *Child Care Worker Job Stress Inventory* using GLS linear regression to determine interaction effects between groups and time points, significant interaction effects relating to improved job control of intervention condition participants over control condition participants were also revealed between groups at T2, however were not maintained at T3. No published clinical cut-offs were available for the *Child Care Worker Job Stress Inventory* (Curbow et al., 2000).

Recall that participants in both conditions indicated overall job satisfaction at T1 as satisfying, with many identifying lack of skills or supports for addressing challenging behavior as the main factor contributing to reducing workplace satisfaction. Qualitative findings at T3 indicated differences between the intervention and control conditions relating to sense of job

control, demands, and resources. During T3 interviews with participants in the intervention condition, participants indicated a decrease in workplace demands as they relate to stress, for example:

> When I just joined this in October I met a kid in my room, a child who was really upset at small things, and that always created a big tantrum in my room, and now I feel for myself it is really easy to calm her down by giving her individual time, and so that way I feel like now my job is less stressful. So really, like it is not…there is no more stress in my job. (Participant 125, T3).

Intervention condition participants also identified their colleagues as resource assets in reducing perceived demands and increased control in the workplace, by identifying increased communication and support within their workplace teams; "I feel relaxed and everything. I feel, you know what? Me and my co-worker communicate when we were doing this program, we communicate our skills, and how we can Triple P some of the behaviours" (Participant 124, T3). Another thematic element was that participants in the intervention condition felt well prepared and supported in meeting the needs of children and the ongoing demands of challenging behaviour. For example, when asked to reflect on how she felt at the beginning of the study and compare it to how she felt after completing the PCCP, one participant stated:

> [I was] stressed. And exhausted. Flustered for most of the day. I was just feeling '*Oh my god I want to go home!*' but now it's like, '*I can't wait to get to daycare to be with the kids today and see how they're doing'*. Definitely, I am so much happier (Participant 119, T3).

Participants didn't just feel that they were meeting the needs of the child that was being identified for tracking, but also that they were more responsive to others in the classroom: "I haven't done it with just the one child, I've done it with others as well because I do have children

with similar behaviour. So [with] the children with similar behaviour I could use whatever I learned along the way" (Participant 16, T3).

Directors also reported increased workplace satisfaction as the result of the new skills staff were developing;

> I really liked the fact that the staff had to figure out for themselves what was going on and how to fix it. How to correct it, how to work through it themselves. Not have to be relying on me so much to solve their problems (Participant 2, T3).

Control group participants indicated that the behavioural demands of children continued to negatively impact their workplace satisfaction and performance (e.g., "Most of the time we spend lots of time with him only, and we neglect some other children because of him", Participant 122, T3), job satisfaction, and overall wellbeing ("I try my best I try this way, I try that way, and nothing seems to click to him. I feel like it is dragging me down" [Participant 30, T2]). Furthermore, sometimes the stress associated with the demands associated with challenging behaviour and not having the skills or resources to reduce the challenging behaviour was found to impact their experiences at home, and with their own family; for example, "We get very frustrated and it tends to like carry on to home, when we go home it just kind of boomerangs to home as well because you've had a day and then you go home and then your family gets it" (Participant 39, T3). Participants in the control condition continued to report high levels of reliance on external resource support to address the needs of children with challenging behaviour; for example, access to funding that would enhance the staff-child ratios, provide one on one support, consultants that provided resources and direct/indirect service delivery for children, and more. When asked at T3 what supports and resources they wish they had, participants in the control condition continued to request additional staffing for one on one support ("I think just like [another child] is getting, one on one support for him because of the behaviour of the child"

[Participant 122, T3]), and consultation through external services. Some participants indicated a sense of dejection as they continued to struggle with children's behaviour they find to be challenging, despite having access to several resources and supports; for example,

> There's a lot of resources, but when it comes to the resource that you want, it's something you've heard before, it's not helping you. So I [want to] find things that are actually there to help you with whatever is the problem with the child, or to help you right?" (Participant 29, T3)

and "[I want] more education on how to deal with this, because he hasn't really been diagnosed with anything so we really don't know what we are treating" (Participant 39, T3).

Research question #4: What is the relationship between organizational factors, program adherence, and Positive Child Care Program outcomes? (Intervention condition only)

Organizational factors. Analysis of the organizational climate relating to the implementation process was measured using the *Implementation Driver Assessment* (NIRN., 2013), in order to identify the presence and strengths of a variety of implementation drivers. Implementation drivers are the key components of organizational infrastructure that initiate and support a program's success in implementation. Given that the timelines between recruitment and initial data collection were narrow, the status of implementation drivers at T3 is reported in this study, as this assessment asks for participants to reflect upon organizational practice related to implementation in the past six months. Multiple items are provided in each category, with ratings ranging between not in place, partially in place, and in place. In calculating to what extent implementation driver are in use, credit is given to the column where 50% or more of the items in each category were indicated. Overall organizational preparedness as reported by

practitioners indicated *recruitment and selection of staff* participating in the PCCP program was equally dispersed between partially in place and in place. The competency driver that examined *training* considers not only practitioner training, but also accountability for monitoring of program completion and skill-based rehearsals or interactions of ECE participants. Findings indicate that at T3 data collection, one third of organizations participating still did not have this driver in place. The competency driver that examined *performance assessment* considers accountability for staff competency and effectiveness in adopting the PCCP program. Findings indicate that at T3 data collection, one third of organizations participating still did not have this driver in place. The competency driver that examined *facilitative administrative supports* considers leadership and implementation teams that facilitate implementation procedures and feedback loops from staff and stakeholders. Findings indicate that at T3 data collection, one third of organizations participating still did not have this driver in place. The competency driver that examined *decision support data systems* considers how data related to PCCP usage is collected and reported within the organization. Findings indicate that at T3 data collection, decision support data systems were equally dispersed between partially in place and in place. The competency driver that examined *leadership* examined technical leadership, which focuses on issues that matter at the practice level, as well as adaptive leadership, where leaders within the organization continually seek ways to align product, policy, and practice. Ratings range from disagree, neutral, agree, to strongly agree. Table 11 indicates organizational ratings of implementation drivers as reported by Director/practitioner participants at T3.

Practitioner confidence and competence in providing coaching skill support that is embedded in the PCCP program was completed pre and post PCCP training, and measured using the *Positive Child Care Program Consultation Skills Checklist* (Turner & Sanders, 2015).

Ratings ranged from 1=not at all confident to 7=very confident. The pre-training assessment mean = 5.00 (*n*=6), whereas the post-training assessment mean = 6.34 (*n*=6).

Consumer satisfaction was administered to practitioners post PCCP training through the *Workshop Evaluation Survey* (WES). Though the WES examines a number of variables related to the PCCP training itself, data analysis was conducted using three items that inform goodness of fit between PCCP and organizational factors required for implementation. Ratings ranged from 1= no, definitely not, to 7 = yes, definitely. In response to the question *Is the Positive ChildCare Program appropriate for your work?* Mean = 7 (*n*=6). In response to the question *How would you rate the content of the workshop?* Mean = 6.83 (*n*=6). In response to the question *Do you feel you now have the skills to implement the Positive ChildCare Program in your workplace?* Mean = 6.66 (*n*=6).

Competency Driver	**In place**	**Partially in place**	**Not in place**	
Recruitment and staff selection	3	3		
Training	3	1	2	
Performance assessment	2	2	2	
Facilitative administrative supports	2	3	2	
Decision support data systems	3	3		
	Strongly agree	**Agree**	**Neutral**	**Disagree**
Leadership	3	3		

Table 11. *Implementation Drivers Assessment Summary (n=6)*

Program adherence. Program adherence was to be measured using coaching session checklists, coaching session attendance records, and peer support attendance records that are embedded in the PCCP program. Though one third of practitioners report that they completed coaching sessions as outlined in the manual, none captured the session using the checklist or attendance records. The remaining two thirds of practitioners reported that they did not complete the coaching sessions and thus had no records to provide for analysis. All intervention condition sites indicated that they did not hold formal peer support sessions, though one third of practitioners reported that regular discussion of PCCP was embedded into full staff meetings, and half of all practitioners reported having regular, informal discussions with ECE participants about the program and application of strategies.

PCCP outcomes. Using web analytics reports, regression models were run for each of the outcomes, examining whether T2 scores for each outcome were predicted by program completion. All analyses included T1 scores as a covariate in the model to control for baseline differences. Program completion was defined as percentage completed, through use of a continuous variable ranging from 0-100. Though intervention condition $n = 43$, as some participants did not launch PCCP codes, and others launched code after T2 data collection, data on program completion in these analyses is $n = 35$. Due to the small sample size, the power to detect effects is limited. Findings indicated that percent completed was not a significant predictor of T2 outcome for any of the subscales, however the effect of percent completed was borderline significant ($p = .058$) for the SDQ Conduct subscale.

Qualitative data collection indicated a mix of organizational factors that may have influenced practitioner adherence to program fidelity and implementation. At the T2 data

collection time point, where it was intended that program completion would have occurred and thus data would be post intervention, 100% of participants in the intervention condition had not completed the online modules, with no coaching sessions conducted at any intervention site. Though most staff had completed the online modules at T3 (follow up), still less than 30% of the staff participated in coaching sessions at this time point. Qualitative findings indicated that lack of module completion may have been negatively influenced by staff perceptions and lack of readiness going into the study: "Maybe I was a bit apprehensive because I didn't know what I was going in to. Well after I had been in it and see[n] what is about I knew it was beneficial to me and to the children" (Participant 16, T3). Program directors indicated that though they saw value to conducting the coaching sessions, there was not time to complete the coaching sessions within their daily tasks:

> Not just because we were busy and crazy and we had lots of transitions, I think overall the reality in a real life situation in the centres is, it is not like when you have families come in and you are sitting in the office and you are able to kind of coach through scenarios, we don't have that kind of time line (Participant 75, T3).

Demands on time were particularly prevalent at centres identified as 'large' size. In these particular settings, often no coaching sessions took place at any of the time points.

Despite the expressed interest and initiative to adopt and implement PCCP, directors described experiencing resistance by some ECEs, and hypothesized as to what may be contributing factors:

> The [staff] who I feel have struggled with implementation as well as getting the

> modules done are the ones who don't take feedback well; who, you know, often come late or consistently need to leave early, the ones who treat this as a job rather than a career. Those are the people who it has been really hard to get on board (Participant 98, T3).

Additional phenomenological themes identified by both the directors and the ECEs included challenges regarding the economic crisis in Alberta, lack of facilitative administrative supports, and conflicting demands for both practitioners and ECE participants. Some directors indicated that they made attempts to implement the program despite such constraints;

> [A barrier was] finding time to do the weekly sessions. We would talk just to figure out how things are going. Due to economic hours, cut backs and all that kind of stuff, so just trying to catch them on the fly when I can to talk to them. Even if it's 5 minutes, we still got to touch-base on how the week was going for them" (Participant 2, T3);

while one indicated she did not: "like when we went to do the behaviour rehearsals and stuff we were like, the reality is who has time for that? And that was I guess sort of what it came down to" (Participant 75, T3). In situations where resistance was present, directors who reported having completed modules and coaching sessions spoke about taking the extra time to understand the resistance in order to build trust and self-regulation with the staff regarding the demonstration of skills. Directors who reported not having completed the coaching sessions and/or the modules identified that they did not work with these staff to reduce the resistance, but rather avoided further dialogue about the program and related implementation. Where the director indicated a lack of time for implementation, she also stated that she did not make attempts to integrate content as she anticipated staff resistance. She cited lack of motivation by staff: "the staff is not very motivated here, they really don't want to learn new things, they don't want to try new things, and they don't put in effort, other than the minimum of their day-to-day stuff" (Participant 75, T3). ECE participants at this location contradicted the perspective of low staff motivation. These participants indicated they found the program very useful and saw benefit to

implementation. These participants also stated that they had been discouraged by the director from using the program, stating they were told some strategies would contradict centre policy, specifically the strategies of time out and rewards charts. ECE participants at this location stated that centre policy is to use quiet time and not time out. As time out is not a strategy that is embedded in PCCP, but quiet time is, clarification was sought from the ECE participants about this perceived incongruity. Despite reassurance and clarification from this researcher that time out is not a strategy that is embedded in the PCCP, ECE participants at this location continued to identify that it was. Many participants at this location indicated that despite lack of implementation support at their work site, they continued to pursue module completion to assist them with challenges with their own children at home.

One director indicated that the program had been working effectively, and staff had been reporting high levels of success and satisfaction regarding their experiences in increasing the positive behaviour of children in their class. She indicated frustration, however, when she was instructed by her senior manager to cease using the program following a parent concern about the use of quiet time in the classroom. The director stated she attempted to explain the rationale and approach for using this strategy, but was told the decision was non-negotiable. She expressed frustration in the lack of support required from the organization to integrate and implement PCCP:

> I'm confused, which one is which. Because they said 'ok go for a workshop, learn something, come back and you need to do what you learned' but the thing is, yeah I will do it for a week, and next week is different, you will find out no, it's not like that. It's, like, it's useless because every moment we are learning right, so we need to, like, *learn*. And I just keep telling all my friends that we are learning every day. What we learn we need to implement. What we learn we need to implement. But how can we do it? (Participant 102, T3)

Though coaching sessions were not widely completed, for those that did participate and/or facilitate coaching sessions the perceptions shared on the experience were positive as it related to implementation and communication among the child care team: "I think that was a good thing because it also builds communication between myself and the staff member as well" (Participant 22, T3), staff self-efficacy, "I think bringing up not just reflective practitioners, but a reflective and supportive and solution focused team, which has been phenomenal to see" (Participant 98, T3), and parental engagement:

> Being able to have those conversations with parents. It's difficult, to have conversations, difficult conversations with parents, but I think it's the approach that you use with them as well, and the fact that you're coming from a place of hope, and helping. And also from a strength-based strategy, which I think is important for them to know, that you know, you not saying their child is bad and evil and, or, you know, or we're gonna kick them out or, any of that kind of thing and I think that- that there's some parents who are worried about that at times with the behaviours that their child has (Participant 22, T3)

Directors who conducted formal coaching sessions indicated preparation provided through the PCCP practitioner training increased their preparedness and confidence in integrating this implementation support: "I really, really liked how much training we, as the coach, got at the onset. That was great, because without that I know that I wouldn't have felt as confident" (Participant 98, T3). Web analytics reports also indicate that the directors who conducted the coaching sessions completed all modules of PCCP. Some directors indicated that though they did not conduct formal coaching sessions, they made attempts to informally provide this support, and endeavored to integrate the self-regulatory approach that is embedded in the PCCP framework:

> I'm trying to do the coaching when I'm talking to the staff. Getting them to think about what is happening in their room, how they think they can change it, kind of making them more accountable for what's happening in the rooms and trying to solve the problems themselves instead of giving them the answers, which is really hard (Participant 2, T2).

One director indicated that she was also conducting informal coaching supports, however in describing her approach to implementation she contradicted the expectations of the self-regulatory framework embedded in PCCP; for example, "I did tell her perhaps you can watch me and if you want you can even correct me, and then you know, if you want to do it with kids and then I will watch you and then I will correct you" (Participant 12, T2), and "So we just kind of, like, hung out and waited until something happened and then it was like, ok, listening in and looking at what happened" (Participant 12, T3).

Most staff reported ease of use in accessing the program online, and a preference for the flexibility that online delivery allowed in terms of demands on their own time, and the ability to watch and re-watch videos and explore exercises at their own pace. Some staff indicated that they wished there was more support from their management team to complete the modules during their workday, rather than being expected to do it from home. In centres where workday completion was made available there was 100% completion rate of the modules, however in centres where staff were asked to complete modules on their own time and/or away from the centre the completion rate was often delayed, and occasionally not completed. In these situations staff cited competing demands on their time outside of the centre as the reason for this challenge. In centres where formal coaching sessions were integrated, ECE participants had increased completion rates of the modules, and spoke more explicitly about the variety of integrated approaches to preventing and addressing challenging behaviour.

Chapter Summary

This chapter outlined the quantitative and qualitative findings of this study. Though there were no quantitative differences between groups or time points relating to ECE confidence and

competence, qualitatively there were differences in themes that indicated ECEs in the intervention condition experienced increased confidence and competence in their approaches to supporting and understanding child behaviour they had previously found to be difficult. Both quantitative and qualitative findings indicated significant improvements in the intervention condition regarding changes in *difficult* child behaviour. Though quantitative findings indicated an increase in workplace satisfaction at T2, this was not maintained at T3. Qualitatively, the participants in the intervention condition thematically indicated greater workplace satisfaction and decreased stress compared to those in the control condition.

With respect to the relationship between organizational factors, program adherence, and Positive Child Care Program outcomes in the intervention condition, differences were noted in both program adherence and completion rates where competency drivers were identified as being in place. Directors/practitioners who completed the modules also reported increased fidelity in program adherence and providing implementation support such as conducting coaching sessions and allowing time for staff to engage in program completion. In sites where directors report not completing modules and/or not facilitating implementation drivers, staff completion rates also declined. At T2 a borderline effect was found for outcomes being influenced by program completion.

Chapter 6: Discussion

Research on interventions that address behaviours in children that educators find challenging in early childhood education environments is limited (Upshur, Wenz-Gross, & Reed, 2008), with even less evaluating implementation of evidence-based early childhood programs (Dunlap, Strain, Fox, Carta, Conroy, Smith, & Sowell, 2006; Metz & Bartley, 2012). There is a need to understand how early childhood educators use evidence-based programs in order to make actionable recommendations for implementation. Though the Positive Child Care Program is not an evidence-based program, this preliminary study examined the adoption of the Positive Child Care Program as an innovative application of the evidence-based Triple P Positive Parenting Program designed for use in early childhood education environments in order to better understand both effectiveness of the evidence based strategies in this context and implementation.

The participants in this study were early childhood educators and directors from child care programs in which the decision to participate in the PCCP study was initiated at centre level, and who were from agencies that were supportive of the decision to participate in the study and adopt the program. Though initially there were apprehensions in the intervention condition regarding how the PCCP program could be of benefit to both new and, especially, experienced staff, these concerns dissipated throughout the study as veteran staff consistently expressed rejuvenation of skills they once used, and a sense of validation regarding those already in place.

PCCP Program Effectiveness

Program efficacy and ECE Perceptions

This study sought to ascertain changes in early childhood educators' effectiveness, confidence and competence in utilizing skills and techniques to guide children's behaviour and

support social-emotional competence of young children, as well as to identify strengths and barriers that influence program fidelity and implementation. Despite evidence of differences qualitatively related to positive changes in the intervention condition vs. the control condition, quantitative findings did not always indicate significant differences.

Very few studies have focused on classroom management self-efficacy beliefs among ECEs (Gibbs & Powell, 2012), with previous research relating to efficacy in classroom management being conducted almost exclusively among elementary school teachers (Bullock, Coplan, Bosacki et al., 2015). Contrary to what was hypothesized; statistically significant differences were not found in perceived confidence and competence of participants over time in the intervention condition. As the overall mean scores relating to ECE adjustment variables such as self-efficacy, as well as depression, anxiety, and stress were within the normal range at T1, there was very little room for change in these areas. That being said, as differences were found qualitatively, the lack of quantitative differences need to be explored further as they may be related to a variety of factors. Though the measurement tools selected for this study have shown to be reliable, the difference in qualitative and quantitative findings challenges the validity in some areas; importantly, this discrepancy leads to the question, "Were the measures valid?". Specifically, self-report ratings in all tools used to measure ECE perceptions of variables related to their own adjustment indicated very little elevation, often indicating a ceiling effect in associated measures at T1, with little room to change. The social desirability effect of completing paper assessment measures in workplace settings may have led to under-reporting in these areas, thus influencing outcomes. Similarly, the ECEs' own beliefs relating to the relationship between their individual factors and child challenging behaviour may influence the way ECEs respond on these measures also. Research has shown that the dominant belief of

educators is that children need to conform their deviant behaviour to societal norms and appropriately respond to the environment (Orsati & Causton-Theoharis 2013). Orsati & Causton-Theoharis (2013) state "Such dynamics raise questions regarding power relations between teacher and student, equity issues regarding access to education, and construction of stability regarding emotional and behavioural disturbances" (p. 510). As mentioned, qualitatively there were marked differences between the intervention and control conditions in the ECE reported confidence and competence during semi-structured interviews from T1 to T3. These differences may be due in part to the intervention condition ECEs shift in perception as it relates to challenging behaviour. As mentioned previously, oppositional and aggressive behaviours are known to adversely affect the manner in which students are perceived by their educators, and the associated application of effective guidance strategies (Bell, 2006; Greene, Beszterczey, Katzenstein, Park, & Goring et. al, 2002, Tsouloupas et al., 2014). An improved understanding to the ECE contribution and responsibility relating to challenging behaviour may assist in reducing the perceived barriers to integrating strategies for change and as a result increase the perception of confidence and competence of the ECE (Edwards, 2017). However, if the ECEs believe that their role is to control or conform the child's behaviour, there may be a stigma associated with not knowing how to respond to the child/situation, and they may be less likely to answer authentically on paper measures about experiences they find challenging. The semi-structured interviews provided questions that were more open ended, lending itself to descriptions of situations and emotions that may not otherwise be captured through paper and pencil measures, which may account for improvements that were noted qualitatively that were not captured quantitatively. As child measures used in this study were exclusive to the perception of the child, and external to the ECE perception of self. Each indicated elevated

scores at T1, further consideration should be given to ECE perceptions of self, and the relationship between their individual factors and the child behaviour.

Differences in quantitative and qualitative findings related to ECE confidence and competence may also be associated with implementation of the program as it relates to program completion. The complexity of effective implementation relies on not only the intervention itself, but also the intervention being integrated with fidelity, the individuals involved, and the process by which implementation is accomplished (Damschroder et al., 2009). As mentioned in Chapter 5, fidelity to the implementation of the PCCP program required all four modules and related coaching sessions to be completed prior to T2 data collection. However, web analytics reports relating to use of PCCP online modules indicated that only two of the Director/Practitioner participants, and only 24 of the 43 ECE participants (55%) completed all online modules, with scarce evidence to support the coaching sessions were completed as they were intended in the program design. Lack of program module completion rates, combined with the overall scarcity of formalized coaching sessions, highlights that fidelity to the model was compromised, and support systems designed to enhance confidence, competence, and self-efficacy of the individuals involved, such as the self-regulatory framework that is the pillar of the coaching model, are disregarded and may reduce the propensity of ECE participants to develop these skills. Without documentation of coaching sessions in locations where practitioners reported they had been completed, there was not the ability to run an analysis that controlled for fidelity, in order to examine if those who adhered to the program with more fidelity had increased competence and confidence relative to those who did not. It should be noted though that the online program modules primarily focus on changes the ECE can make that are child related, including building positive relationships, building social and emotional skills, developing a

positive approach to learning, and learning new ways to behave. The coaching sessions are intended to build on these preliminary skills through promoting self-reflection by the ECE in order to deepen their understanding of how they as individuals support or prevent situations they may find challenging. In the absence of coaching sessions and the related documentation, there are limitations in the data that make it impossible to ascertain the impact that not participating in the coaching component of the program may have had on the ECE perceptions of self, nor if statistically significant quantitative differences may have increased to better reflect what was captured qualitatively if the fidelity were strengthened.

The qualitative perception of increased confidence and efficacy, in part, may also be due to the statistically significant increase in the sense of job control that was captured quantitatively in the intervention condition at T2 and qualitatively at both T2 and T3. Li Grinning et al. (2010) recognize the link between work stressors, lack of self-efficacy, and educator burn out. Perceptions of positive change related to work stressors and self-efficacy are imperative, as positive perceptions contribute to job satisfaction, retention, and motivation, thus influencing educator-child relationships and environmental quality and climate (Ciftci, Ozgun, & Erden, 2011; Royer & Moreau, 2016). That being said, differences in ECE confidence and competence in the intervention condition may be related to the perception of their working conditions as the result of increased prosocial behaviour of the children, therefore increasing their sense of self efficacy in managing behaviour they had previously found to be challenging.

Another consideration regarding the importance of staff perception relates to the beliefs surrounding the etiology of child behaviour. At the beginning of the study, three themes regarding etiology of child behaviour were present: child development (stable), parent/family influence (blame), and child's decision to misbehave (intentional). These themes remained in the

control condition at T3, though in the intervention condition the ECEs were instead demonstrating an increase in self-reflection and awareness of their own role in preventing and addressing challenges with children's behaviour as they cited the importance of the staff-child relationships, the value of partnering with parents, and consistency and connectivity within the ECE team, with minimal reference to the child's development. The impact of this change in perception and accountability aligns with the existing literature relating to the educator/child relationship. The quality of educator-child relationships are strong predictors of externalizing behaviour (O'Connor et al., 2011), with negative ratings of child behaviour predicting poor classroom climate and negative educator behaviour (Brophy-herb et al., 2007). Often there is a lack of accountability by educators who are stressed to recognize the influence they may be having on the child's behaviour and mental health challenges (Li Grinning et al., 2010). This was certainly the case in the T1 data collection, and the lack of accountability remained in the control condition only, at the end of the study. The differences in attributions held by the intervention condition participants are noteworthy due to the changes it may influence in educator classroom conduct. When staff attribute the origin of behaviour to be due to challenges in development or diagnostics it increases likelihood that may staff perceive the condition as static, and are less likely to change their own behaviour. Placing blame or responsibility on the parent and family environment contradicts the practice of parent-educator collaboration, and may contribute to erosion in the educator-parent relationship. Attribution of intentional misbehaviour on the part of the child implies that it is the child's choice to misbehave, and does not recognize behaviour as a form of communication. This positions the intention as malicious rather than interconnected. What does it mean to choose to behave a certain way? Though it is not always verbal communication, children can be barometers of their environment, and challenging

behaviour is indicative of a child's expression that something is not quite right, be it internal or external to the children themselves. Communication is a valuable skill to encourage in children, however the key is supporting children to 'choose' a language that is socially acceptable and promotes self-regulation. ECE attributions and beliefs about the etiology of children's behaviour will contribute to the overall climate of the classroom and affect their own sense of accountability for influencing change. As many of the participants in the intervention group shifted from parent blaming to parent engagement, this demonstrates the potential for PCCP to complement widely adopted parenting practices, by extending training of positive adult-child interactions to early childhood education environments.

In the intervention condition there were improvements regarding child behaviour, where ECEs that completed the online modules experienced the child behaviour towards adults to be less challenging and more positive. Interestingly, the quantitative ECE report measures indicated significant differences in child behaviour towards adults, however this difference was not captured in the classroom observations. Similarly, observed child behaviour found significant differences in behaviour towards peers at T2, which was not captured in ECE participant quantitative reporting measures. This is perhaps another example of the questionable validity of the quantitative measurements used in this study. However, again these findings may be indicative of how educator perceptions regarding child behaviour may be being internalized by ECE participants, particularly when managing peer conflict, and the reduced stress that may be experienced by educators when peer conflict decreases. Given that ECE participants in the intervention condition reported significant improvements over the control condition in changes of child behaviour towards staff, but also that ECEs themselves were qualitatively more reflective and attuned to the needs of the child, consideration should be given to the value ECEs place on

the etiological beliefs relating to child behaviour. For example, if ECEs no longer believe the child behaviour they perceive to be difficult is intentional, they may be more inclined to be responsive to the social and emotional needs of the child. Warm, responsive educator-child relationships are linked to children's social competence (Li Grinning et al., 2010), and require educators who are motivated to positively interact with children. Qualitative findings highlighted the recognition from ECEs in the intervention group that it is important to take time to think about their own interactions with children, as well as the role that ECEs have in supporting children to learn new skills. ECE understanding of the role that early childhood educators each play in the prevention and intervention of challenging behaviour has the potential to reduce attribution bias and promote self-sufficiency in initiating change. In addition, perceptions of decreased challenges in behaviour towards adults may influence staff receptivity to and prosocial engagement with children in their care. As mentioned above, these changes in ECE internalization related to the experience of challenging behaviour also contribute to the educator-child relationship and quality of the learning environment.

PCCP Impact on Children's Mental Health

Though not developed as a clinical intervention, when considering the *effectiveness* of the PCCP program in changing child behaviour it is also important to note clinical shifts related to child behaviour in the intervention condition that were not found in the control condition. Clinically significant changes in the intervention condition relating to overall strengths and difficulties were evident. Recently, a Canadian-based study which focused on the return on investment for mental health promotion in early childhood development found that each 1% population reduction in conduct disorder would potentially save CA$456,244 over a lifetime

(Institute of Health Economics, 2011). Given the importance of early intervention related to children's mental health, and recognizing there are often barriers to accessing timely treatment (CMHA, 2016), the potential for clinically significant changes in children's mental health through delivery of PCCP in early learning settings is both critical and timely. FRP Canada (2011) states "Programs are most effective if the primary focus stays on supporting the child within his or her family and community. Child, family and community well-being must be equally valued, since they are inextricably linked." (p. 15). Equipping ECEs with evidence-based strategies designed to prevent and treat behavioural and emotional challenges in children (i.e., PCCP) contributes to a seamless coordinated system of care which effectively recognizes the needs of children in community-based mental health supports, as it ensures children whose parents don't access parenting programs have exposure to these interactions.

PCCP Implementation

The study of implementation of PCCP in this research project was grounded in implementation theory, and drew from research expertise in implementation science (e.g., Damschroder, 2009; Fixen et al., 2005) in order to analyze and interpret the data. As mentioned in Chapter 4, Triple P International has developed its own Implementation Framework, and research participants in the PCCP study received and reviewed the Triple P International Implementation Framework at the pre-study orientation. Participants were also offered site readiness support from Triple P Canada prior to and throughout this research study, upon request. It was recognized by this researcher that participants may have entered the research study at a disadvantage regarding implementation success if some of the core aspects identified for consideration in implementation theory and/or the Triple P International Implementation

Framework had not been addressed prior to embarking upon participation in the study. In analyzing the results of the study through applying the Triple P International Implementation Framework, there were aspects of implementation that were done well, and other aspects that were missed or not done as thoroughly, which may have influenced study outcomes. The Triple P International Implementation Framework consists of 5 core constructs for successful implementation: Engagement, Commitment and Contracting, Implementation Planning, Training and Accreditation, and Implementation and Maintenance. Though Triple P Canada offered supports in helping agencies enact implementation of PCCP, none of the child care centres expressed an interest in receiving this support. This raises a consideration for the role of the researcher in implementing the study, and how this process may parallel or influence the implementation of the program itself. Table 12 (below) indicates strengths and omissions regarding each of these core constructs as they relate to actions that could have been undertaken by the researcher to enhance the implementation success in this research project.

Qualitative findings suggest that even when both ECEs and directors are open to new learning opportunities and integration of new ideas, both may express resistance to taking action to implementing behavioural change as they meet unforeseen challenges (Anello, Weist, Eber, et al., 2017). Although the initial decision to adopt PCCP was initiated at centre level, the actual implementation process appeared to be influenced by organizational capacity to support and integrate program completion and skill development at both ECE and director level. Brown & Zhang (2016) recommend three key aspects for increasing success in implementing evidence informed practice:

- School leaders engaging in ‘learning-centred’ leadership activity, such as showcasing or demonstrating how research and evidence can form key aspects of

school improvement strategies;

- School leaders ensuring staff engage with research as part of their ongoing learning communities' activity, such as when engaging in discussion in relation to teaching and learning; and
- The continued active encouragement by school leaders for teachers to engage in evidence use. (p. 795).

Table 12. *Strengths and omissions regarding integration of the Triple P International Implementation Framework*

IMPLEMENTATION CONSTRUCT	WHAT WAS DONE	WHAT WAS MISSED
Engagement	• Established partnerships with local government • Study proposal presentation and discussions with Ministry representatives, Child Care Owners/Operators, Directors, ECE staff • Establish partnership with ECE staff and Directors	• Continuing discussions with Owners/Operators of the centre post recruitment regarding ongoing organizational supports required for implementation success
Commitment and Contracting	• Secured funding for training and staff online codes • Clarified both study and program objectives and goals with Directors and ECE staff • Confirm fit between child care centres, the intended research outcomes and PCCP program	• Explicit contracting of agency, practitioner, and ECE outputs • Contracting of roles and responsibilities regarding program completion

IMPLEMENTATION CONSTRUCT	WHAT WAS DONE	• WHAT WAS MISSED
Implementation and Maintenance	• Provided general timelines for intervention completion (online modules) and service delivery (coaching) • Provided email or phone support by request	• Explicit timelines for practitioners to complete intervention (modules) and commence service delivery (coaching) • Determination of how research findings will inform decisions about sustained service delivery

These recommendations complement the implementation drivers that were endorsed for director planning and consideration at the onset of the study (e.g. practitioner selection, training, performance assessment, decision support data systems, facilitative administrative supports, and leadership) and assessed using the *Implementation Driver Assessment* (NIRN, 2013) at the beginning and end of data collection. As mentioned in Chapter 4, this researcher recognized participants may have entered the research study at a disadvantage if some of the core aspects identified for consideration in implementation theory and/or the Triple P International Implementation Framework had not been addressed prior to embarking upon participation in the study. On the basis of directors' responses to implementation drivers in place at T3, combined with web analytics reports of program completion, and qualitative interview responses, this seemed to be the case. It was found that agencies with drivers in place addressed and overcame ECE resistance more readily than did agencies without such mechanisms. However, it must be noted that given the limited sample size in measures associated with implementation variables (n = 6), statistically significant differences in resistance and response may have gone undetected.

Given that the practitioner coaching did not happen using the PCCP design introduced at training, it is acknowledged that more discussion related to addressing barriers to coaching prior to implementation would be of benefit. It is unrealistic to anticipate the day to day demands of child care directors will decrease, however understanding the barriers to providing the direct supervision and support will help to ensure sustainability of the program model. Perhaps if more time was spent in planning for the implementation, or a gradual roll out instead of a full centre approach may decrease the challenges to fidelity in this aspect of program support. Despite the lack of formal coaching, however, there were still statistically significant changes for both staff and children. This then brings forward the question, is the coaching necessary? With the increased focus on staff connectivity and support for one another throughout the study, it would be interesting to determine what (if any) additional value occurs through the formal coaching process versus a less formal peer support model. Though directors stated value to the full-team approach for initial implementation, it does place additional demands on implementation support as PCCP is initially integrated into their centres. In acknowledging the competing demands for directors to meet the complex job performance expectations, it may not be realistic to anticipate program adherence in full-staff implementation with weekly coaching sessions.

Another consideration regarding implementation and adherence relates to the degree of involvement the directors themselves had in understanding the PCCP. Though each director participated in a full day training that provided an overview of PCCP, and were given codes for their own engagement in PCCP modules, directors were not explicitly required to launch or complete the program. This begs the question: can directors provide implementation support without having experienced the program itself? Brown & Zhang (2016) state that implementation of evidence informed practices “cannot be achieved without the direct support

and buy-in of school leaders (who, via transformative approaches to leadership are able to steer school cultures)" (p. 797). Without a comprehensive working knowledge of the PCCP modules it may be difficult for directors to inspire the transformative change in classroom management techniques. The directors that did complete the program indicated they had also completed the coaching sessions, and reported highest fidelity to the self-regulatory model and program adherence, despite gaps in documentation and use of implementation support tools provided in PCCP. These directors also had the most variety in themes being reported as outcomes of participation and integration of PCCP. ECE participants at locations where coaching sessions were completed also had the highest program completion rates, and reported the greatest implementation support. However, there were still positive outcomes in locations where there was no coaching provided, and where directors did not launch the PCCP code themselves. Again, this implies that there still may be benefit to staff completing the program without coaching, though there would be questions surrounding where ECE participants could access supports for the implementation and integration of the program.

There were also differences noted at one location regarding the self-regulatory framework that is the cornerstone of the Triple P program, and is embedded in PCCP for practitioner use in coaching sessions. At this location, the director/practitioner indicated she would provide answers and suggestions to ECE participants when problems arose, rather than encouraging self-efficacy in reflection as a problem-solving strategy. This contradiction may indicate the need for increased practice and assistance in enhancing this skill for practitioners. Primary Care Triple P was identified as a prerequisite for the PCCP training, and has an embedded accreditation element where practitioners demonstrate competencies in the self-regulatory framework. However, for practitioners involved in this study, Primary Care accreditation took place after

staff had completed the PCCP program so that the focus of practitioners could be on the implementation of PCCP, and not Primary Care accreditation and service delivery. The inconsistent demonstration of the self-regulatory feedback process between practitioners illustrates that there is value to the skill development that occurs through the Primary Care accreditation process that may have been lost in not prioritizing accreditation to take place before beginning the integration of PCCP at each location. Had accreditation occurred prior to PCCP delivery, it may have enhanced this skill among practitioners, and augmented the fidelity of program adherence.

Sustainability of PCCP

Overwhelmingly, staff indicated qualitatively that they found strategies helpful and relevant to meeting their needs in the classroom. However, at two locations, the negative implementation impact of inadequate buy-in from administrators diffusing toward ECEs (Anello et al., 2017) was evident as many ECE participants indicated that they were told not to use particular strategies as they conflicted with the centre policy and/or Ministry licensing expectations. Examples of such strategies include the use of rewards systems and quiet time (although this was misidentified by ECE participants as time out). In discussions with Ministry representatives prior to the study, this researcher was advised that these strategies in the context of the program do not conflict with Ministry licensing expectations. Keeping in mind that at T1 data collection it was clear that many participants were not able to articulate the child guidance policies or philosophies at their centre, this may have contributed to the disconnect between understanding policy and practice. In addition, following the PCCP training, where all strategies were explicitly introduced and discussed, all practitioner participants responded ‘Yes, definitely’

to the question " *Is the Positive Child Care Program appropriate for your work?*" without indicating questions or concerns regarding any of the techniques. This contradiction poses a challenge for implementation considerations, as both director and ECE participants lack clarity on acceptable strategies within policy and practice. Open dialogue with Ministry licensing advisors throughout the study regarding strategy integration may have reduced this challenge, however, due to the ethical requirements of anonymity within the study, and the potential for bias or influence with study participants, it was not possible to have these discussion as they arose.

It is well established that early childhood education environments experience high levels of staff turnover, with recent studies indicating the average child care staff attrition is 30% annually (Cassidy, Lower, Kinter-Duffy, Hegde, & Shim, 2011). Participant attrition throughout the study was reflective of this. Throughout the data collection process, staff frequently referred to the influence of provincial economic factors on child care services in Alberta as being related to a higher than typical number of child withdrawals from the child care, and correlated staff layoffs. It is important to note, however, that there was no attrition in program directors during the time of the study, which lends itself to the sustainability of the proposed model of directors being trained as practitioners. As ECE staff turnover occurs, the director is more likely to remain stable and able to continue to integrate support for implementation. Consistency in practice among the staff team could be promoted by having all new ECEs complete the PCCP program as part of the orientation framework for their interactions with children.

In addition to the attrition of ECE staff in participating centres, there were also a several children being withdrawn from programs throughout the study (N=96 at T1 versus N=85 at T3). Though not identified by ECE participants as a direct influence on module completion, the impact of the removal of the focus child from the program may be a worthy consideration for

discussion. Transference of skills is a potential benefit to PCCP participation and staff development, as it promotes self-regulation and ongoing personal agency of the ECE. The expectation of PCCP implementation was that staff would use the approach with all children in their classroom, and track the behaviour of one. Many staff indicated use of strategies with other children as though it was an afterthought, and potential added benefit to program usage. If staff perceived program usage was only to be with the focus child due to the explicit collection of child-specific measures, they may not have recognized the value and intention for a whole class approach, and thus abandoned program completion.

Reliance on External Resources

As stated previously, research has found that ECEs often demonstrate dependency on outside support services, and lack of accountability in recognizing the influence they may be having on the child's behaviour and mental health challenges, particularly when they themselves are stressed (Li Grinning, 2010). Participants in the intervention condition reported no reliance on external supports, and yet they still experienced significant gains related to their own confidence and competence, and changes in child behaviour. With the exception of one outlier (who did not complete the online modules), participants in the intervention condition also indicated no ongoing need for additional supports or resources to address the needs of children with challenging behaviour. This distinction suggests that PCCP met an existing demand for services and that ECEs who may be struggling with supporting and addressing behaviours in children they experiences as challenging are able to enhance their own skill development when provided with structured and supportive resources. It is well established that the demands on service delivery in children's mental health are high, and often involve lengthy waitlists and

limited funds. If participation in PCCP is able to effect clinical and behavioural change in the absence of external support, occupational and economical formations for return on investment must be considered. Recent Canadian research indicates the cost of treatment for one child with mental health disorders was found to be CAD$7,312.90 (Schwean & Rodger, 2013), with researchers suggesting approximately 71% of expenses to be considered to be non-value added (e.g. case management, waitlist support etc.) (Schwean & Rodger, 2013 citing Pepler & Bryant, 2011). Demonstration of clinical shifts in child behaviour that were identified in this study, combined with the expressed reduction in need for external supports that were found in the intervention group signifies the potential for PCCP to dramatically reduce the financial and service delivery burden on the social services system, and the value of innovative service delivery frameworks for the provision of mental health supports and interventions which align with the needs of families accessing services.

Chapter Summary. This chapter discusses the complexity of considerations that influence the interpretation of research findings outlined in Chapter 5. Examining core constructs identified in implementation science as they relate to this study helps to recognize that these constructs were two-fold as they relate to implementation considerations in this study; implementation of the PCCP program, as well as implementation of elements related to the research study itself. These considerations are necessary in order to better explore and understand the effects of PCCP, how child care centres integrated and implemented this program in their settings, and how implementation in real world settings is understood and examined in the context of a research study. Recognition of the influence PCCP may have on the promotion, prevention, and early intervention related to developmental trajectories of children's mental health is identified. The positive influence PCCP may have on service delivery and economic

burdens are considered. This discussion is essential for the creation of actionable recommendations for program development and implementation frameworks following this foundational trial.

Chapter 7: Conclusion and Recommendations

Drawing on implementation theory, this study sought to understand the implementation of PCCP in order to contribute to the knowledge of implementation science that is currently available in the literature. Findings indicate many lessons learned from the Early Childhood Education sector regarding implementing a new program, particularly when coupled with a research study, and being implemented across multiple sites. According to Lana Cummins from the Alberta Ministry of Human Services, there were 3,962 frontline child development workers and child development assistants employed in licensed community-based child care settings in Alberta in September 2014 (L. Cummins, personal communication, Feb. 4, 2015). Inclusion criteria of this study sought to ensure a minimum of 48 potential ECE participants for each condition in the study, for a total of 96. In total, 96 ECE participants took part in the study, 53 in the control condition, and 43 in the intervention condition. It is recognized that this number of participants is not fully representative of the early childhood education workforce in Alberta. As such, a key limitation in this study is that the results of this study will not be generalizable to the ECE population as a whole; but rather will seek to inform program development.

Though the tight study timelines precluded enhanced implementation support, there were many aspects of the study that were designed to supplement the implementation process. Partnerships with provincial governing bodies allowed for the study proposal to be presented and discussed with Ministry representatives, owners, operators and ECE staff. Following this, partnerships with ECE staff and directors were established. Commitment and contracting allowed for the researcher to secure funding for training and staff online codes, clarifying the objectives of the study and the goals of the researcher and the participants surrounding participation, as well as confirming a fit between expectations of outcomes and the Positive Child

Care Program. Implementation planning confirmed the planning process, which individuals would be involved in the study, and plans for several aspects of the research (such as data collection, data analysis, and feedback loops). Training and accreditation preparation allowed for discussions to determine which staff would be most appropriate to be trained in PCCP, confirming funding for training, and providing practitioners with contact information for post training support. Implementation and maintenance provided for general timelines for service delivery, and providing email or phone support by request.

Though there were several implementation supports offered throughout the study, a limitation that is recognized through this research is that child care programs may benefit from additional strategic implementation support to further enhance engagement, commitment and contracting, and implementation planning *prior* to launching the PCCP program at child care centres in order to further examine efficacy and implementation. More explicit engagement with owners and operators, combined with Ministry representatives, and parents may reduce perceived conflict in policy and practice relating to the strategies endorsed in PCCP. As part of the engagement process, it is recommended that Ministry licensing advisors provide communication that confirms and clarifies strategies as being acceptable in licensed environments when part of a strategic system of supports for children. This engagement may also help these owners and operators to understand the strategies in context, thus reducing 'gatekeeping-type' behaviour, and assisting in addressing questions and concerns as they arise. Enhanced commitment and contracting would allow for explicit contracting from the agency, practitioner, and staff regarding output, roles, and responsibilities related to completion and integration. Implementation planning would allow for organizational readiness to be assessed regarding both the engagement in the research process, and the implementation of Triple P. Readiness checks would further allow for

planning of all aspects of the application of PCCP, including planning for potential complications in data collection (such as child and staff attrition). Implementation support regarding training and accreditation would be enhanced by initiating follow-up supports and coaching related to initial implementation. Implementation and maintenance supports would be enhanced through the provision of explicit timelines for practitioners to commence service delivery (i.e., coaching), and determination of how research findings may inform decisions about sustained service delivery. As this was a foundational trial, there were not discussions about ongoing delivery, as it was uncertain at initial implementation what the outcomes from the study would be.

This research may have broad implications for promoting mental wellness of children in early learning settings. Statistically significant shifts in child strengths and difficulties, combined with clinically significant changes in the intervention condition specifically relating to child behaviour, preliminary findings in the PCCP study are promising and indicate improvements related both to a decrease in behaviours which ECEs find challenging, and an increase of staff-perceived self-efficacy in preventing and addressing behavioural challenges. To date there is a significant evidence base of the Triple P program as a whole, with attention to training individuals in broader practice communities (Sanders et al., 2014). The Triple P Program has been found to be a highly effective psychosocial intervention for childhood anxiety, substance use, conduct and major depressive disorders (Waddell et al., 2015). Combining the findings of this study with previous research on the effectiveness of Triple P indicates that effective implementation of PCCP aligns with the 2014 Mental Health Commission of Canada's recommendation regarding the collective responsibility of educators and community organizations towards supporting children's mental health. The Canadian Mental Health Association (2014) states:

> By the time they reach age 25, approximately 20 per cent of Canadian children and youth will have developed a mental illness. To help prevent serious mental health problems later in life, early intervention is essential. Child and youth mental health is a collective responsibility: it requires the engagement of parents, educators, health professionals and community organizations.

Though program-related benefits to society remain unknown, it is well known that early childhood educators are often at a loss as to how to appropriately address behaviours in children that they find challenging. This may be, largely due to educators' lack of knowledge and instructional repertoire to address these difficulties. By providing early childhood educators strategies for early intervention addressing challenging behaviours, PCCP has the potential to lessen the risk of serious mental health challenges for both the educators and children later in life. Effective implementation of PCCP may further influence the collective responsibility towards preventing mental health challenges through complementing widely adopted parenting practices and extending consistent approaches of positive adult-child interactions to early childhood education environments worldwide. Policy informing effective early childhood mental health service delivery "encompasses the full continuum of promotion, prevention and early intervention, with strategies targeted appropriately to the unique needs of families, schools and communities" (Clinton, 2014). Additionally, Anderson et al. (2003) contend that early childhood development interventions that are based in early childhood education centres may be significant to the development of a coordinated system of supportive services for families. Coordinated systems of support make the link between early childhood interventions and evidence-based parenting supports a natural fit, and a benefit to society that may have resulted from participating in this study. Strategies for consideration in PCCP support an ecological approach to intervention efforts that focuses on the context of interactions, rather than problematizing children's behaviour. As such, further research examining the interaction between ECEs who

utilize the PCCP and parents who access Triple P for use in the home environment would provide a deeper understanding of the benefits to children when consistent language and approaches to guidance and positive interactions are applied across settings.

There are further limitations that require consideration when interpreting the results of this research. Given that full program completion with fidelity was not accomplished at any of the intervention locations as was required for the current study, the study results may underestimate the full potential of intervention effects when using PCCP in early learning settings. In addition, the current study included a 3-month follow up of ECEs allocated to the intervention condition, however, this follow-up period is limited and does not accurately reflect full program completion at post intervention. Ensuring program completion at T2, with longer-term follow up would further validate intervention effects. Confirmation of preliminary findings with larger samples, combined with a more extensive measurement system to explore the interaction between program completion, participant resistance and implementation supports may assist in providing a better understanding of the function of resistance and strategies to prevent and address resistance during implementation.

As program development of the PCCP continues, future research considerations may also be given to alternate designs for program support; for example, aligning coaching aspects of the program externally through other service delivery partners, such as Preschool Outreach Services or Community Preschool Education. An external coalition such as this may increase program fidelity and reduce the conflict of time and demands that director participants identified as negatively influencing adherence. As there were positive outcomes in the absence of coaching, future research may also consider an evaluation of the PCCP modules as stand-alone in comparison to completion with coaching support provided.

In order to ascertain program-related benefits to society, there are also a number of recommendations for program-related future research. Firstly, in response to the Mental Health Commission of Canada recommendations related to mental health supports being a collective responsibility, future research may examine outcome differences when using PCCP with and without the Triple P Positive Parenting Program system of supports being provided for families. Second, future research may examine the clinical impact PCCP may have with children explicitly seeking support related to their mental health; for example, a comparative study using PCCP in community-based child care versus PCCP application in therapeutic day nursery settings, or examining the differences in community-based child care when used with children who have been formally identified with challenges to their mental health and those who have not. Third, many of the participants in the control condition identified regular access to external supports, such enhancing staff-child ratio, providing one to one service delivery, and utilizing consultative services and resources. Though this respects the directive of *service as usual* that was provided at the onset of the study, it did not allow this research to capture program effects in the absence of additional program- and child-related supports. Though ethically it is not appropriate to withhold services and supports for children and staff when there is an identified need, future research may consider capturing data from control conditions when centres and/or children are on hold for service delivery as this may most accurately reflect the reality of the experience of many children in early learning settings.

This research study contributes to the limited literature relating to fidelity and implementation of evidence-based strategies in early childhood education, providing specific information to assist in identifying implementation requirements for PCCP during the formative period of the program development. All things considered, the findings from this study provide

an encouraging demonstration of the potential for PCCP to positively influence the nature and significance of early childhood education as it relates to children's mental health. It is anticipated that the significance of program outcomes would increase with 100% adherence to program fidelity. Enhanced outcomes and quality of life for children and adults, as well as sustainable prevention and early intervention relating to children's mental health, could be achieved by considering policies that support integration of evidence-based, social-emotional and behavioural supports in early learning and care. Aligning governmental investments in early learning and care could further strengthen supports for the continued improvement of children's mental health. Such investments would be consistent with provincial and federal governments' publicly stated goals related to health promotion and strategies to prevent illness.

Fixen et. al (2005) indicate that there are three significant changes that need to take place in order to positively influence implementation success: changes in adult professional behaviour, changes in organizational structures and cultures, and changes in relationships with consumers, stakeholders, and systems partners. This research study captured evidence of changes in adult professional behaviour, with limited evidence of changes in organizational structures and relationships with consumers, stakeholders, and systems partners. Findings in this study support the continued use and application of PCCP. Knowledge related to fidelity and implementation gained in this study, combined with recommendations for future research efforts, will continue to contribute to the evolution of implementation practices in human services and early childhood education for years to come.

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Appendix A

POSITIVE CHILDCARE PROGRAM OVERVIEW

The Positive Child Care Program is ideally completed over an 8-week period, with one online module completed per week, followed by 1-3 individual practice and coaching sessions. Content is as follows.

Online module 1: What is positive child care?

- Introduction
- Setting up a safe, engaging environment
- Creating a positive learning environment
- Teaching good social skills and behaviour
- Having realistic expectations
- Taking care of yourself
- Working as a team
- Common child care traps
- Get active

Online module 2: Building social and emotional skills

- Introduction
- Setting up engaging activities (free play; staff structured activities; group activities)
- Managing transitions
- Talking with children
- Descriptive praise
- Giving attention
- Individual time
- Affection

- Make a plan
- Get active

Online module 3: Helping children develop a positive approach to learning

- Introduction
- Skills for children to learn (communicating; managing feelings; becoming independent; solving problems)
- Setting a good example
- Incidental teaching
- Ask-say-do
- Teaching backwards
- Encouraging early learning
- Behaviour charts
- Rewards
- Get active

Online module 4: Helping children learn new ways to behave

- Introduction
- Setting rules and limits
- Directed discussion
- Diversion
- Planned ignoring
- Clear, calm instructions
- Consequences
- Sit and watch
- Quiet time
- Putting a plan together
- Get active

Coaching sessions

The coaching sessions are designed to assist workers with the practical implementation of the positive childcare skills introduced in modules 1 to 4 and are conducted over a 3 week period. Coaching sessions continue until the ECE is observed to accurately implement positive attending strategies and the start and stop routines (generally a minimum of 1 and a maximum of 3 sessions are completed).

- Establish an agenda
- Review progress (including previous goals for practice and monitoring)
- Practice task

    Exercise 1 Setting goals for the practice task

    Exercise 2 Keeping track
- Feedback

    Exercise 3 Reviewing the practice task (strengths, areas for improvement)
- Goal setting
- Other issues
- Session close

POSITIVE CHILDCARE PROGRAM TRAINING OVERVIEW

The Positive Childcare Triple P Provider Training Course is designed for practitioners who have a leadership or managerial role within an early education or childcare centre (e.g. Centre Director, Assistant Director) and are in a position to offer advice and support to staff. The 1-day training course provides an overview of the content of the Positive Childcare online program including information on a range of strategies designed to promote children's development within an early education or childcare setting. In addition, the course provides practical, skills-based training in a range of consultation skills necessary for the delivery of coaching and supervision sessions with early childhood education staff to promote their confidence and competence with the delivery of the program. A variety of instructional methods, including

didactic presentation; DVD and live demonstrations; clinical problem-solving exercises; simulated practice of consultation skills and peer-tutoring strategies are used throughout the course.

Appendix B

Western Research

Research Ethics

Western University Health Science Research Ethics Board
NMREB Full Board Initial Approval Notice

Principal Investigator: Dr. Jacqueline Specht
Department & Institution: Education\Faculty of Education,Western University

NMREB File Number: 106654
Study Title: Examining the Effects of the Positive Child Care Program In Early Childhood Education Environments: A randomized control trial
Sponsor:

NMREB Initial Approval Date: July 31, 2015
NMREB Expiry Date: July 31, 2016

Documents Approved and/or Received for Information:

Document Name	Comments	Version Date
Instruments	CADBI Screener for child care providers	2015/04/08
Instruments	Child Care Ecology Inventory	2015/04/08
Instruments	Teacher Interpersonal Self-Efficacy Scale	2015/04/08
Instruments	Implementation Drivers Discussion Tool	2015/04/08
Revised Western University Protocol		2015/06/29
Instruments	Strengths and difficulties questionnaire T4 revised	2015/06/29
Instruments	Semi structured interview questions	2015/06/29
Instruments	Strengths and Difficulties questionnaire 2-4 revised	2015/06/29
Instruments	Child and Adolescent Behaviour Inventory	2015/06/29
Instruments	Appendix G Parent demographic data	2015/06/29
Instruments	Depression, Anxiety and Stress Scale revised clean	2015/06/29
Recruitment Items	Orientation flyer	2015/06/29
Instruments	Child Care worker job stress inventory	2015/06/29
Instruments	Implementation drivers assessment	2015/06/29
Instruments	Appendix E research instruments chart revised clean	2015/06/29
Recruitment Items	Appendix F advert	2015/06/29
Letter of Information & Consent	Appendix D LOI parent revised clean	2015/06/29
Recruitment Items	Self referral checklist	2015/06/29
Other	PCCP program overview	2015/06/29
Letter of Information & Consent	Appendix A LOI ECE clean	2015/06/29
Assent		2015/07/20

The Western University Non-Medical Research Ethics Board (NMREB) has reviewed and approved the above named study, as of the NMREB Initial Approval Date noted above.

NMREB approval for this study remains valid until the NMREB Expiry Date noted above, conditional to timely submission and acceptance of NMREB Continuing Ethics Review.

The Western University NMREB operates in compliance with the Tri-Council Policy Statement Ethical Conduct for Research Involving Humans (TCPS2), the Ontario Personal Health Information Protection Act (PHIPA, 2004), and the applicable laws and regulations of Ontario.

Members of the NMREB who are named as Investigators in research studies do not participate in discussions related to, nor vote on such studies when they are presented to the REB.

The NMREB is registered with the U.S. Department of Health & Human Services under the IRB registration number IRB 00000941.

This is an official document. Please retain the original in your files.

Western University, Research, Support Services Bldg., Rm. 5150
London, ON, Canada N6G 1G9 t. 519.661.3036 f. 519.850.2466 www.uwo.ca/research/ethics

Appendix C

[University of Western Ontario Letterhead]

Invitation to participate and informed Consent form for Early Childhood Education staff who work in licensed child care centres in Alberta, and who we are inviting to participate in research on the implementation and effectiveness of the Positive Child Care Program. The title of this project is "Examining the Effects of the Positive Child Care Program in Early Childhood Education Environments: A Randomized Control Trial

Principal Investigator: Shawna Lee, PhD Candidate
University of Western Ontario
Faculty Advisor: Jacqueline Specht, PhD

Examining the Effects of the Positive Child Care Program in Early Childhood Education Environments: A Randomized Control Trial

This Informed Consent Form has two parts:

- **Information Sheet (to share information about the research with you)**
- **Certificate of Consent (for signatures if you agree to take part)**

You will be given a copy of the full Informed Consent Form

We are researchers at the University of Western Ontario who are interested in conducting a trial for program development examining the implementation and effectiveness of a program designed to enhance the skills and child guidance techniques of early childhood educators; (working title) Positive Child Care Program (PCCP).

Purpose of the research

Early Childhood Educators often have concerns about preventing and managing difficult child behaviour. Though there are many recommended techniques to address challenging behaviour, it remains a popular topic in early childhood education. There is a new program being designed which may help ease these challenges. This research is designed to find out how the program is used, and if the program can be helpful for early childhood educators.

Participant selection

We are contacting licensed child care centres throughout Alberta to identify interest, and determine eligibility and interest in participating in this study.

Voluntary Participation

Participation in this study is entirely voluntary. It is your choice whether to participate or not. You may refuse to participate without explanation or penalty. If you choose to participate in the study, you may refuse to answer any of the questions. You may also withdraw from the study after the data collection is complete or at a later date without explanation or penalty. If you choose to withdraw from the study your decision will be kept strictly in the confidence of the researcher. Upon your request to withdraw from the study, all information gathered from you will be shredded and deleted within 24 hours.

Information on the Positive Child Care Program

1) This is a preliminary study of the Positive Child Care Program. This study intends to identify effects of the program, and considerations for implementation.
2) The Positive Child Care Program is a variant of the Triple P Positive Parenting Program, and is being developed to compliment evidence based parenting strategies that are being used worldwide.
3) This is the first public study relating to the Positive Child Care Program.

Procedures and Protocol

A. Unfamiliar Procedures

As we do not know if the PCCP program is effective, we need to compare the two. To do this, we will put centres taking part in this research in two groups. The groups are selected by chance, as if by tossing a coin.

Participants in one group will be given training and resources required to implement the PCCP program, while participants in the other group will continue service as usual. We will then compare the differences between the two groups. Observations will be conducted of child care staff at your child care centre. It is important that the observers do not know which group you are in to ensure this knowledge does not unduly influence their observation. If there is anything you are concerned about or is bothering you about the research throughout the study, please speak to the researcher identified below.

B. Description of the Process

During the research data will be collected at three time points, and involve three methods of collection (survey, observation, and semi-structured interview):

- *The first time point will be before any training has taken place for the PCCP program (pre-assessment).*
- *The second time point will be approximately 10 weeks later (post-assessment)*
- *The third time point will be approximately 3 months later (follow up assessment)*

You will be asked for permission by the researcher for the interview session to be audiotaped to ensure accuracy. If you choose to be audiotaped, you will be provided with the opportunity to validate the transcription of the interview at a later time to ensure accuracy and validity. If you choose not to consent to audiotaping this will not exclude you from the study.

Data will be collected primarily from Early Childhood Educators and Program Supervisors in your child care centre, however there are limited measures that will be collected from the child care centre director only.

Duration

If you choose to participate, the researcher will contact you directly to determine times that are convenient for you for data collection to take place. This research takes place over 9 months in total. During that time, data collection will take approximately 1.5 hours per participant, at each of the three data collection time points. In total, data collection will take approximately 4.5 hours per participant. At the end of the 9 months, the research study will be completed.

Risks

As this is the first trial of its kind relating to the PCCP program, program related risks and benefits are unknown, however by participating in this research it is possible that you will be at greater risk than you would otherwise be. While the possibility of this happening is very low, you should still be aware of the possibility.

- Child/ children may test new situations / strategies, and behaviours may initially escalate resulting in further short term challenges for the program staff, and family
- On site observations may be seen as intrusive by the program staff and family
- Strategies embedded in the program made may not result in immediate short term solutions, depending on the situation
- Program Supervisor may experience short term challenges with staffing coordination when relieving staff for completion of data collection.

- Staff may perceive challenges to completing the required data collection measures in addition to their daily tasks

Benefits

As mentioned above, there is no current research to support the benefits of participating in the PCCP program delivery.

- There may not be any benefit for you directly but your participation is likely to help us find the answer to the research questions.
- There may not be any benefit to your centre at this stage of the research, but future studies relating to implementation of the PCCP program are likely to benefit

Reimbursements

- Reimbursement for expenses incurred as a result of participation in the research will be provided by the Alberta Ministry of Human Services, Child Development Branch. These may include, for example, travel and training costs associated with the PCCP training, resource material required for PCCP participation, wages lost for staff to complete assessment measures. You will not be given any other money or gifts to participate in this research. Whether your centre chooses to participate in the study or not will not influence supports currently received from the Alberta Ministry of Human Services.

Confidentiality

The researcher will safeguard the privacy of each participant. Having the research take place in your place of work will require strict measures to ensure data is collected and stored in the strictest confidence. The information that we collect from this research project will be kept confidential. All data measures will be collected in person. Information about you that will be collected during the research will be put away and no one but the researchers will be able to see it. Any information about you will have a number on it instead of your name. Only the researchers will know what your number is and we will lock that information up with a lock and key. It will not be shared with or given to anyone outside of the research team. The notes from interviews will be kept in a locked cabinet and transcribed data will be kept in a secure computer file, only accessible to the researchers. Raw data collected will be retained for five years following the completion of the study, at which time it will be permanently shredded and deleted. With this research, something out of the ordinary is being done in your community. It is possible that if others in the community are aware that you are participating they may ask you questions. We will not be sharing the identity of those participating in the research. Exception to confidentiality will be made if required by law under Section 4 of the Child, Youth and Family Enhancement Act ("CYFEA", Alberta, 2000) if there is reasonable and probable grounds to

believe that a child is in need of intervention due to suffering or having substantial risk of suffering from harm inflicted by the caregiver or resulting from the caregivers failure to care for or protect the child.

Sharing the Results

The knowledge that we get from doing this research will be shared with you through community meetings before it is made widely available to the public. Confidential information will not be shared. There will be small meetings in the community and these will be announced to each participating child care centre in advance. If preferred, findings may be presented privately to the group of child care staff at your child care centre. After these meetings we will publish the results in order that other interested people may learn from our research.

Right to Refuse or Withdraw

You do not have to take part in this research if you do not wish to do so. Refusing to participate will not affect your involvement with the Ministry of Human Services in any way. You will still receive any pre-existing support from the Ministry that you should otherwise be entitled. You may stop participating in the research at any time that you wish without losing any of your rights. You may not be coerced to participate or remain involved in this study by any involved stakeholder, including your employer or licensing ministry.

Who to Contact

If you have any questions you may ask them now or later, even after the study has started. If you wish to ask questions later, you may contact any of the following:

Shawna Lee, PhD Candidate - Telephone XXX-XXX-XXXX; email XXXXXXX

Jacqueline Specht, PhD, Primary Faculty Supervisor XXXXXXX

This proposal has been reviewed and approved by [name of the local IRB], which is a committee whose task it is to make sure that research participants are protected from harm. If you wish to find about more about the IRB, contact [name, address, telephone number.]

Appendix D

PART II: Certificate of Consent

I have read the foregoing information, or it has been read to me. I have had the opportunity to ask questions about it and any questions that I have asked have been answered to my satisfaction. I consent voluntarily to participate as a participant in this research.

I Consent_____ I do not consent _____ to my interview being audiotaped to ensure accuracy.

Print Name of Participant_____

Signature of Participant _____

Date _____

Day/month/year

A copy of this Certificate of Consent has been provided to the participant.

Print Name of Researcher/person taking the consent_____

Signature of Researcher /person taking the consent_____

Date _____

Day/month/year

Appendix E

Examining the Effects of the Positive Child Care Program

In Early Childhood Education Environments:

A randomized control trial

SELF REFERRAL CHECKLIST

- Do you have a minimum of four regular education staff at your child care centre, who work directly with children a minimum of at least 20 hours per week?

- Can each educator identify at least one child in their classroom that is demonstrating challenging behaviour that they would be willing to address using the Positive Child Care Program strategies?

    - Can you ensure that child care centre staff will not/has not delivered any level of the Triple P Positive Parenting Program to, or intend to deliver to, the parents of the identified child throughout the duration of the study?

- Are all child care centre staff interested in participating in the Positive Child Care Program research study?

- Can you identify 1 – 2 staff to be trained as practitioners in the Positive Child Care Program? Is the identified staff able to attend the training on (INSERT DATE) ***NOTE** - It is recommended that identified practitioners are staff who have a leadership or managerial role within your childcare centre (e.g. Centre Director, Assistant Director) and are in a position to offer advice and support to staff

- Will you ensure all research participants are provided paid time to complete research evaluation measures? ***NOTE** - Approximately 1.5 hours per participant at 3 timepoints

- Does your child care centre operate in accordance with requirements of Schedule 1, Child Care Licencing Act (Alberta Regulation 143/2008), and have classrooms that provide service delivery for children within the ages of 2-12 years of age? ***NOTE** – your centre does not have to provide care for each of these ages to be eligible for the study

If you answered YES to each of these questions, please contact Shawna Lee at XXX or

(email) to confirm your eligibility for participation in this study.

Thank you!

Appendix F

Letter of Information

Principal Investigator: Jacqueline Specht, PhD, University of Western Ontario
Researcher: Shawna Lee, PhD Candidate, University of Western Ontario

This Informed Consent Form has two parts:

- **Information Sheet (to share information about the research with you)**
- **Certificate of Consent (for signatures if you agree to take part)**

You will be given a copy of the full Informed Consent Form

We are researchers at the University of Western Ontario who are interested in conducting a trial for program development examining the implementation and effectiveness of a program designed to enhance the skills and child guidance techniques of early childhood educators; Positive Child Care Program (PCCP).

Purpose of the research

Early Childhood Educators often have concerns about preventing and managing difficult child behaviour. Though there are many recommended techniques to address challenging behaviour, it remains a popular topic in early childhood education. There is a new program being designed which may help ease these challenges. This research is designed to find out how the program is used, and if the program can be helpful for early childhood educators.

Participant selection

The educators at the child care centre your child attends have expressed an interest in participating in this study. As part of their participation, staff are being asked to think about one child as they complete data collection measures. Thinking about a particular child is a way to help the educator think about how to work with children rather than providing them with an abstract case. The child measures being used ask about specific children, not to know the child, but rather to inform the researcher on how the educator and early childhood education environment respond to each child's needs throughout the study. Should you choose to provide

your consent, the staff will be completing questionnaires asking their perceptions about your child's strengths and difficulties relating to his/her behaviour in child care over the past 6 months (or since the school year has begun), and tracing their implementation of program strategies by tracking your child's behaviour in child care throughout the study. In addition, interactions between the staff and your child will be observed. A staff at your child's child care program has expressed an interest in thinking about your child as they complete the data collection, requiring your consent to participate in the study.

Voluntary Participation

The Positive Child Care Program is a child guidance approach that has been adopted for use in your child's child care centre regardless of the study. The study itself will not change the way your child is treated. Your participation in the study involves providing your consent for the staff to present information related to your child's behaviour as he/she considers how he/she implemented the program. There will be no other requests for your time or involvement. Participation is entirely voluntary. It is your choice whether to allow this consent to participate or not. You may refuse to provide consent without explanation or penalty. If you choose to allow consent for data collection as it relates to your child, you may withdraw this consent at any time without explanation or penalty.
If you choose to withdraw from the study the staff will be advised so that they cease data collection as it relates to your child. Upon your request to withdraw from the study, all information gathered as it relates to your child will be shredded and deleted within 24 hours.

Information on the Positive Child Care Program

1. Positive child care is an approach that emphasises positive and constructive ways to promote children's development, health and wellbeing, and to guide their behaviour and emotions.

2**.** Positive child care is about strong relationships, good communication and using positive attention to encourage children to develop the skills they need to do well in life: to get along well with others, to manage their emotions, to do their best, to become independent and learn to solve problems for themselves, and to feel good about themselves

3. Positive child care is also about working as a team with parents and other educators to build a safe, predictable and nurturing environment for children, and help them reach their potential.

Procedures and Protocol

A. Unfamiliar Procedures

As we do not know if the PCCP program is effective, we need to conduct a study comparing centres that are using the PCCP with those that are not. To do this, we will put centres taking part in this research in two groups. The groups are selected by chance, as if by tossing a coin.

Participants in one group will be given training and resources required to implement the PCCP program, while participants in the other group will continue service as usual. We will then compare the differences between the two groups. Observations will be conducted of child care staff at your child's child care centre. If there is anything you are concerned about or is bothering you about the research throughout the study, please speak to the researcher identified below.

B. Description of the Process

During the research data will be collected at three time points, and involve three methods of collection (survey, observation, and semi-structured interview):

- The first time point will be before any training has taken place for the PCCP program (pre-assessment).
- The second time point will be approximately 10-12 weeks later (post-assessment)
- The third time point will be approximately 3 months later (follow up assessment)

Data will be collected from your child's Early Childhood Educator.

Risks

There are no known risks associated with participating in this study.

Benefits

There are no known benefits for your child's participation as all children will be taught in the same manner by the ECE regardless of whether or not they participate.

Reimbursements

You will not be given any money or gifts to participate in this research.

Confidentiality

The researcher will safeguard the privacy of each participant. Strict measures will be taken to ensure data is collected and stored in the strictest confidence. The information that we collect from this research project will be kept confidential. All data measures will be collected in person. Information about your child that will be collected during the research will be put away and no one but the researchers will be able to see it. Staff will assign your child a pseudonym instead of his/her name when completing all measures. Raw data collected will be retained for five years following the completion of the study, at which time it will be permanently shredded and deleted. Exception to confidentiality will be made if required by law under Section 4 of the Child, Youth and Family Enhancement Act ("CYFEA", Alberta, 2000) if there is reasonable and probable grounds to believe that a child is in need of intervention due to suffering or having substantial risk of suffering from harm inflicted by the caregiver or resulting from the caregivers failure to care for or protect the child.

Sharing the Results

Findings will be made available to yourself and staff at your child's child care centre after the research project is completed (approximately April 2017). Findings may also be published (using no identifiable information of participants) after being made available to participants, in order that other interested people may learn from our research.

Who to Contact

If you have any questions you may ask them now or later, even after the study has started. If you wish to ask questions later, you may contact any of the following:

Shawna Lee, PhD Candidate - Telephone XXX-XXX-XXXX; email XXXXXX

Jacqueline Specht, PhD, Primary Faculty Supervisor: email XXXXX

If you wish to find about more about your rights as a research subject please contact The Director

– Office of Research Ethics, Western Ontario [name, address, telephone number]

PART II: CONSENT FORM Examining the Effects of the Positive Child Care Program in Early Childhood Education Environments: A Randomized Control Trial

I have read the foregoing information, or it has been read to me. I have had the opportunity to ask questions about it and any questions that I have asked have been answered to my satisfaction. I consent voluntarily to participate as a participant in this research.

Print Name of Participant_____

Signature of Participant _____

Date _____

Day/month/year

A copy of this Certificate of Consent has been provided to the participant.

Print Name of Researcher/person taking the consent_____

Signature of Researcher /person taking the consent_____

Date _____

Day/month/year

Appendix G

Project Title: Examining the Effects of the Positive Child Care Program in Early Childhood Education Environments: A Randomized Control Trial

Principal Investigator: Dr. Jacqueline Specht

Researcher: Shawna Lee, PhD Candidate

Assent Letter

Dr. Specht and other researchers are doing a study to learn about what makes childcare enjoyable. They want to see if you would like to be in this study.

If you want to be in the study two things will happen:

1. On three different days during this school year someone will come to your child care classroom to watch and take notes about how you play
2. Your childcare teacher will think about you as they answer questions about how they make the child care a positive place to be.

There will not be any tests or marks that are part of this study. We want to see you play as usual.

This study may help everyone enjoy childcare more.

You can ask questions at any time, now or later. You can talk to the ECE's, your family or someone else.

You do not have to be in the study. No one will be mad at you if you do not want to do this. If you do not want to be in the study, just say so. Even if you say yes, you can change your mind later. It is up to you.

Project Title: Examining the Effects of the Positive Child Care Program in Early Childhood Education Environments: A Randomized Control Trial

I want to participate in this study.

Print Name of Child _____ **Date_____**

Signature of Child _____ **Signature of Person Obtaining Consent**

Age _____ **_____**

Appendix H

Examining the Effects of the Positive Child Care Program in Early Childhood Education Environments: A Randomized Control Trial

PARENT AND CHILD DEMOGRAPHIC INFORMATION

CHILDS AGE (in years only) _____ CHILDS GENDER _____

CHILDS ETHNICITY_____ DIAGNOSIS (if applicable) _____

HAS THERE BEEN CONTACT WITH OTHER PROFESSIONALS RELATING TO BEHAVIOURAL CHALLENGES? _____ IF YES, what type of professional? _____

QUESTIONS RELATING TO FAMILY STRUCTURE

MARITAL STATUS OF PARENT

- o Single, never married
- o Married or Domestic Partnership
- o Divorced
- o Widowed
- o Prefer not to answer

HIGHEST LEVEL OF EDUCATION COMPLETED (PARENT)

- o No schooling completed
- o Nursery school to 8th grade
- o Some high school, no diploma
- o High school graduate, diploma or the equivalent (for example: GED)
- o Some college credit, no degree
- o Trade/technical/vocational training
- o Bachelor's degree
- o Master's degree
- o Doctorate degree
- o Prefer not to answer

WHAT IS YOUR TOTAL ANNUAL HOUSEHOLD INCOME?

- o Less than $19,999
- o $20,000 to $39,999
- o $40,000 to $59,999
- o $60,000 to $79,999
- o $80,000 to $99,999
- o $100,000 to $149,999
- o $150,000 or more
- o Prefer not to answer

Appendix I

Positive Child Care Program – Study variables and measurement instruments

CONSTRUCT	TARGET	MEASURES	METHOD	T1	T2	T3	HYPO-THESIS
Demographic information	Parent	*Child age, gender, ethnicity, diagnosis for behavioural issue (e.g. ADHD, oppositional behaviour, conduct disorder), contact with other professionals, family structure, parents' education, income*	Parents complete along with consent form	X			

	ECE	Age, Education, years of experience, ethnicity, gender	ECE's complete along with consent form	X			
ECE behaviour • Responsivity • Relationship • Performance	ECE	Child Care Ecology Inventory (Rusby, Backen Jones, Crowley & Smolkowski, 2013)	Observer masked to condition 18 items	X	X	X	H1
ECE Confidence	ECE	*Teacher Interpersonal Self-Efficacy Scale: perceived self-efficacy in classroom management subscale (Brouwers & Welko, 2001)*	Self-report Questionnaire 13 items	X	X	X	H1
Child Behaviour • Engagement in learning	Observed child behaviour	*Child and Adolescent Disruptive Behavior*	Observer who is masked to condition	X	X	X	H2

• Social Development • Emotional Regulation		*Inventory: Observer Rating* (CADBI-OBS). (Rusby, 2015)	39 items				
	ECE	*Strengths and Difficulties Questionnaire* (Goodman, 1997) *Child & Adolescent Disruptive Behavior Inventory (CADBI). (Burns, GL., Taylor, TK., & Rusby, JC., 2001)*	Self-report questionnaire 25 items 25 items	X X	X X	X X	H2 H2
ECE adjustment • Emotional state	ECE	• *Depression, Anxiety, and Stress*	Self-report 42items	X X	X X	X X	H3 H3

• Job demands; • Resources rewards • Job satisfaction		*Scales* (Lovibond & Lovibond, 1995 • *Child Care Worker Job Stress Inventory* (Curbow et al., 2000).	34 items				
Workplace practices	Centre observation	• *Child Care Ecology Inventory* (Rusby, Backen Jones,	Observer who is masked to conditions 20 items	X	X	X	H1

		Crowley & Smolkowski, 2013)					
	Practitioner ECE	• *Self-reflective measure*	Semi-structured interview	X	X	X	H1, H3
Moderators/Predictors							
CONSTRUCT	**TARGET**	**MEASURES**	**METHOD**	**T1**	**T2**	**T3**	**HYPO-THESIS**
Organizational Ecology	Director Practitioner ECE	*Implementation Driver Assessment (NIRN, 2013)*	Self-report questionnaire	X	X	X	H4
Training and Program Evaluation: Intervention Condition Only							
CONSTRUCT	**TARGET**	**MEASURES**	**METHOD**	**T1**	**T2**	**T3**	**HYPO-THESIS**
Training outcomes:	Practitioner	*Coaching Skills Checklist*	Self-report questionnaire	X	X		H4

confidence, consumer satisfaction			(administered by trainer)				
	Practitioner	*Workshop Evaluation Survey*	Self-report questionnaire (administered by trainer)		X		H4
Program: consumer satisfaction (intervention condition only)	ECE	Positive Child Care Program Online Satisfaction Questionnaire	Self-report questionnaire (administered electronically)				H4
	Supervisor Practitioner ECE	Self-reflective measure	Semi-structured Interview		X	X	H4
Implementation / fidelity / quality assurance	Practitioner	Coaching Session Checklists	Embedded in PCCP				H4
	ECE	Attendance at peer support sessions	Embedded in PCCP		X	X	H4
	ECE	Module completion	Tracked by database		X	X	H4

Appendix J

Semi-Structured Interview Questions

Part 1 – Experiences of children's challenging behaviour to date

1. Describe your current experiences with children's challenging behaviour.

    Probe: Let the interviewee tell you about their experiences with children's challenging behaviour.
    Prompt: Are there any behaviours of the children in your classroom that you find particularly challenging?

2. Describe your child care centre's philosophy regarding child guidance.
    Probe: Let the interviewee tell their understanding of child guidance philosophy

Part 2 – Confidence and Competence in child guidance

3. Do you feel effective in preventing children's challenging behaviour?

    Probe: Programming philosophy? Safe, engaging environment? Positive Interactions?
    Prompt: What strategies do you use to prevent misbehaviour in your classroom?

4. Do you feel effective in addressing difficulties that arise in behaviour after they occur?
    Probe: Is there anything that would help you to feel more confident or effective?
    Prompt: How confident are you in addressing challenges that arise in behaviour?

Part 3 – Staff satisfaction in the workplace

5. Describe professional development opportunities for staff.

    Probe: Are these opportunities are adequate to address your needs in the classroom?
    Prompt: What opportunities does your child care centre offer for your professional growth and development?

6. Describe any access your centre has to other support services regarding supporting children with challenging behaviour.

    Probe: Do you find these services helpful?
    Probe: Are there other services or supports relating to supporting children's challenging behaviour that you would find helpful?
    Prompt: Do you have external support for addressing children's challenging behaviour?

7. All things considered, how satisfied are you in your current job?

Intervention condition only:

Part 4 – Experiences of Positive Child Care Program Implementation

1. Tell me about your experiences with the Positive Child Care Program

Probe: Ask them to relate experiences since deciding to participate in the PCCP implementation (i.e. how were they involved in the decision, thoughts on the effectiveness of the program)

Prompt: How did you feel about the PCCP program initially? Now?

2. What aspects of the program did you find most helpful?

Probe: Strategies/Coaching/online modules/tracking tools etc.

Prompt: Is there any particular element of the program that you accessed most often?

3. Is there anything about the program that you did not find helpful? Explain.

4. What factors do you feel influenced or affected your experience of the PCCP program implementation? Adherence?

Probe: Ask them to relate experiences

Prompt: How did they feel?

5. How satisfied are you with the PCCP program overall?

Probe: How well did the PCCP program meet your needs? Expectations?

Prompt: Did participant find value in participating in the study?

Appendix K

Primary Care Triple P

What is Primary Care?

Primary Care Triple P is a brief targeted intervention in a one-to-one format that assists parents to develop parenting plans to manage behavioral issues (e.g., tantrums, fighting, going shopping) and skill development issues (e.g., eating independently, toilet training, staying in bed at night). These focused consultations are carried out in the course of providing routine health care for all health professionals. Practitioners provide 3-4 sessions (15-30 minutes each) over a period of 4-6 weeks. Sessions can be done in person, over the phone, or as a combination of both.

Who is it for?

Parents or caregivers who benefit from Primary Care Triple P are those with a specific concern about their child's behavior and who prefer one-to-one consultations. They are likely to benefit when their child's behavior problems are mild and uncomplicated by a high level of family stress. Parents receiving this intervention sometimes then choose to do a Group Triple P course if problems persist.

What is covered in sessions with parents?

Consultation Session 1: *Assessment of the presenting problem.* In this session the practitioner conducts an initial interview, discusses options for intervention, and introduces the parent to keeping track of their child's behavior.

Consultation Session 2: *Developing a parenting plan.* In this session the practitioner provides the parent with feedback of assessment results, helps the parent identify causes of their child's behavior problem, and to set goals for change.

Consultation Session 3: *Review of implementation.* In this session the practitioner uses a self regulatory feedback process to assist the parent to review their implementation of their parenting plan and to set goals for further refinement if needed. Behavioral rehearsal in this session is used when parents want to rehearse specific parenting techniques.

Consultation Session 4**:** *Follow up.* A review of the child's progress and how Triple P is being used is discussed along with any maintenance issues. If it is necessary, referral options are discussed.

What resources do parents recieve?

Each family will receive up to three Triple P Tip Sheets relevant to the targeted problem behavior/s and a Positive Parenting Booklet.

Triple P – Positive Parenting Program®

How much time is needed to deliver the intervention?

In addition to each session, the practitioner should allow time for reviewing satisfaction questionnaires, and preparing for the session and/or supervision. Please see the table below for an approximate delivery guideline time for each family.

Course	Face to Face Consultation or Group Session Time	Questionnaire Scoring and Feedback - Pre and Post Assessment*	Telephone Support or Home Visit	Session Preparation and Post-Session Debrief/ Supervision	Case notes and Report Writing**	Total Time
Primary Care Triple P	2 hours (30 minutes per family for 4 sessions)	n/a	n/a	¼ hour	¼ hour	2½ hours per family

*An additional 2-3 minutes per family should be allowed for reviewing the Client Satisfaction Questionnaire (CSQ).

**Not including comprehensive reports for government agencies.

What is involved in provider training?

To provide Primary Care Triple P to families, practitioners must have completed an active-skills training program and demonstrated their knowledge and competence in program delivery through a skills-based accreditation process. The table below provides an estimate of the time commitment for practitioners to attend training and support days, as well as time needed for preparation and peer support.

Course	Number of Training Days (9.00am - 4.30pm)	Pre-Accreditation Day (9.00am - 4.30pm)	Preparation Time for Accreditation Day	Accreditation Day	Peer Support	Total Time
Primary Care Triple P	2 days	1 day	4-6 hours (quiz and competency preparation)	Half day	2-3 hours (hourly meetings per month)	4½ days

What resources do practitioners receive?

Each practitioner will receive a copy of the following Triple P practitioner resources at training:

- Practitioner's Kit for Primary Care Triple P (includes Practitioner's Manual and Consultation Flip Chart);
- Triple P Tip Sheet Series - Sample Pack (includes the Positive Parenting Booklet and a sample of the Triple P Tip Sheets); and
- Every Parent's Survival Guide [DVD].

Appendix L

Triple P International Implementation Framework

Overview of the Implementation Process

Triple P Parenting Canada Inc.

v. January 2015

CONTENTS

INTRODUCTION

The Triple P Implementation Framework is a foundation upon which organizations can build and maintain their Triple P program. The framework is intended to assist planners (and later, providers) in making key decisions regarding best practice of program delivery and service configurations to achieve desired outcomes. The framework consists of five inter-related phases: Engagement, Commitment and Contracting, Implementation Planning, Training and Accreditation, and Implementation and Maintenance. Each phase contains a set of critical activities to be addressed by an organization or community, and planners and providers are encouraged to familiarise themselves with each set of activities. Guiding questions and discussion areas, tools, and resources are available for each set of activities.

A Triple P Implementation Consultant (IC) is assigned to each initiative to provide support and expertise regarding the implementation process. In its implementation support capacity, Triple P Parenting Canada Inc. (TPPC) works in partnership with organizations to ensure that the implementation process is smooth, timely and responsive to the contextual needs of the implementing organization and community.

ENGAGEMENT

Definition

This phase is focused on the initial interaction between an interested organization and TPPC, which will lead to a decision about working together.

Outcomes

- Interested organization has an increased understanding of the Triple P system.
- TPPC has an understanding of the level of interest and potential scope of the organization's interest.
- Both TPPC and the interested organization have developed clarity about the scope of interest and capacity.

The Engagement phase concludes when there is enough knowledge to make a commitment to continue to develop a work plan and/or a contract describing the services and levels of training that will be provided.

Key Activities

- Initial information exchange.
- Exploring desired outcomes.
- Exploring potential fit for Triple P (target populations, workforce).
- Exploring potential reach/scope.
- Identifying potential partners.

Topics for Discussion

- The organization (mission and vision, how work with families is approached, and the aims and values of the organization or collaborative).
- Triple P (the Triple P system, the evidence base supporting Triple P, support available for implementation and sustainability).
- The fit (potential reach, community information, funding context).

Tools

The following tools are available to support these activities:

- Triple P Website and the Triple P Evidence Base Website.
- Triple P Information Pack:
  - Triple P Decision Trees
  - Triple P Implementation Framework Overview
  - Introduction to Triple P
  - Meta-Analysis 2014

These tools are used to support a series of discussions between the interested organization and the IC. These discussions continue as required to develop an understanding of how the Triple P system might best suit the needs of the organization and community, and what might need to be considered for effective implementation and sustainability.

COMMITMENT AND CONTRACTING

Definition

This phase confirms the scope of the Triple P implementation so that a written agreement can be signed between the organization and TPPC.

Outcomes

- Interested organization and TPPC have developed a shared understanding of the:
  - Scope of the implementation.
  - Importance of a communications strategy.
  - Local capacity to implement and sustain an evidence-based intervention such as Triple P.
  - Costs involved in installing and maintaining the implementation.
- A signed agreement regarding the training, support and resources.

The Commitment and Contracting phase concludes when commitment is agreed upon and a contract is signed.

Key Activities

- Determining goals both internal and external to the organization.
- Assessing the fit, and determining the target population and workforce.
- Calculating the capacity needed to meet the initiative's intended reach and goals (e.g. number of practitioners, cost of training and program resources, workforce attrition, anticipated effects, and potential savings).
- Financial management and contracting, including engaging the organization's leadership, and developing a costing and a contract.

Topics for Discussion

- Who are the families the initiative wants to reach?
- What is the nature of the current service delivery?
- What is the funding mechanism?
- Who will assume responsibility for the coordination functions?
- Where does the proposed Triple P service fit within the organization and/or community?
- Who will take leadership of the initiative?
- How will the initiative be administered?
- Who and what is the nature of the existing workforce (e.g. experience, qualifications, style of service delivery)?

Tools

The following tools are available to support these activities:

- Triple P Training Guide.
- Triple P Provider Training Course Summaries.
- Triple P Capacity Calculator (currently in development).
- Implementation Planning Template.
- Tailored proposal.
- Triple P Initiative Information Form.

IMPLEMENTATION PLANNING

Definition

During this phase, a detailed implementation plan is developed.

Outcomes

- An effective and comprehensive Implementation Planning Process:
  - Communications Plan.
  - Training and Accreditation Plan.
  - Service Delivery Plan.
  - Quality Assurance Plan.
  - Evaluation Plan.
- Budget and financial commitments are confirmed.

The Implementation Planning phase can be accomplished within 2 to 3 months, and occurs while other activities are ongoing but prior to service delivery beginning.

Key Activities

- **Organizational readiness:** A self-assessment process for the organization to develop an awareness of their capacity to implement Triple P, and to assess the current capacity and available resources.
  When: At a number of points, depending on the scope of the initiative.
- **Preparing to plan:** Supports the organization to put the structures and processes in place to plan for implementing Triple P.
  When: Once commitment has been given.
- **Organizational assessment:** A self-assessment process to highlight how existing functions operate and to identify changes needed to support effective implementation.
  When: Once the organization has assessed readiness and is beginning to plan.
- **Developing a plan:** Assists the organization to identify the actions and sequences of activities that need to be accomplished to support effective implementation.
  When: Ongoing process.

Topics for Discussion

- How familiar is the organization/ community with effective implementation processes?
- How does the organization want to plan for implementing Triple P?
- How successfully have previous innovations been implemented and sustained?
- How developed are the key organization functions?
- Does the current service delivery occur in a way that is consistent with the chosen Triple P programs?
- Has the organization developed a quality assurance plan?
- Has the organization developed a communications plan?
- Has the organization developed monitoring and evaluation processes and data collection systems?

Tools

The following tools are available to support these activities:

- Organizational Readiness Checklist.
- Terms of Reference document.
- Implementation Planning Template.
- Quality Assurance Checklist.
- Organization Information Form.
- Progress Report.
- Local Coordination Functions.
- Example of Memorandum of Understanding/Service Level Agreement
- Practitioner Training Preparation Form.
- Practitioner Information Sheets.

TRAINING AND ACCREDITATION

Definition

During this phase, the agreed upon training and subsequent accreditation is completed.

Outcomes

- Practitioners are carefully selected and prepared prior to attending training.
- Practitioners have sufficient time to prepare for accreditation.
- The organization/community has an adequate number of trained providers to offer the planned service.
- The training and accreditation sessions are experienced as high quality.
- Peer Support Networks are established and practitioners are supported to attend.

The Training and Accreditation phase concludes when the training and accreditation is completed.

Key Activities

- Training:
  - Preparation, Event and Follow-up.
- Pre-Accreditation:
  - Preparation, Event and Follow-up.
- Accreditation:
  - Preparation, Event and Follow-up.

During this phase, the organization is assigned a Triple P Training Coordinator who works with the organization to schedule and arrange all Training, Pre-Accreditation and Accreditation events. The Training Coordinator also schedules any optional events that the organization has arranged, including the Triple P Workshop Series and Clinical Support.

Topics for Discussion

- Are practitioners adequately prepared for training?
- Are practitioners adequately prepared for accreditation?
- Do practitioners feel adequately prepared to deliver the service?
- Have plans been put in place to support practitioners to deliver Triple P prior to accreditation?
- Have Peer Support Networks been established?
- Was there a good alignment between practitioner expectations and the training program?
- Is there a good alignment between practitioner expectations and service delivery?

Tools

The following tools are available to support these activities:

- Training Process Information.
- Example Delivery Targets.
- Practitioner Program Resource Order Form.
- Triple P Briefing PowerPoint presentation.
- Peer-Assisted Supervision and Support Model Information.
- Role of Observers Information.

IMPLEMENTATION AND MAINTENANCE

Definition

During this phase, the program is delivered. Feedback cycles provide information for ongoing development and sustainability, and maintenance mechanisms are put in place.

Outcomes

- Effective delivery of Triple P.
- Active process evaluation with feedback loops to refine service delivery procedures.
- Effective program supports are in place to provide technical assistance and clinical consultation as needed.
- Practitioners participate in Triple P Peer Support Networks.
- Ongoing clinical outcomes, quality assurance and performance measure reporting and feedback.
- Ongoing procedures to maintain workforce staffing levels, Triple P program fidelity and a shared understanding of the overall project aims.
- Succession planning and knowledge transfer.

The Implementation and Maintenance phase is ongoing and should include mechanisms to support sustainability of effective delivery with performance measures.

Key Activities

- **Initial Service Delivery:** Organizations begin to implement Triple P in their community. ICs prompt organizations to consider the following (as appropriate):
  - Clarifying performance expectations and outcomes for initial implementation.
  - Reflecting on challenges and variances.
  - Encouraging service delivery.
  - Implementing processes for peer support, coaching and supervision.
  - Using information from data systems to review support processes, service delivery, administrative support and leadership structures.
- **Program refinement:** Developing a culture and schedule of feedback and revision within the organization.
- **Developing and reviewing sustainability and maintenance plan. Reviewing quality assurance, communications and evaluation plan:** Support the adoption of revisions informed by initial service delivery as well as ongoing data gathering.

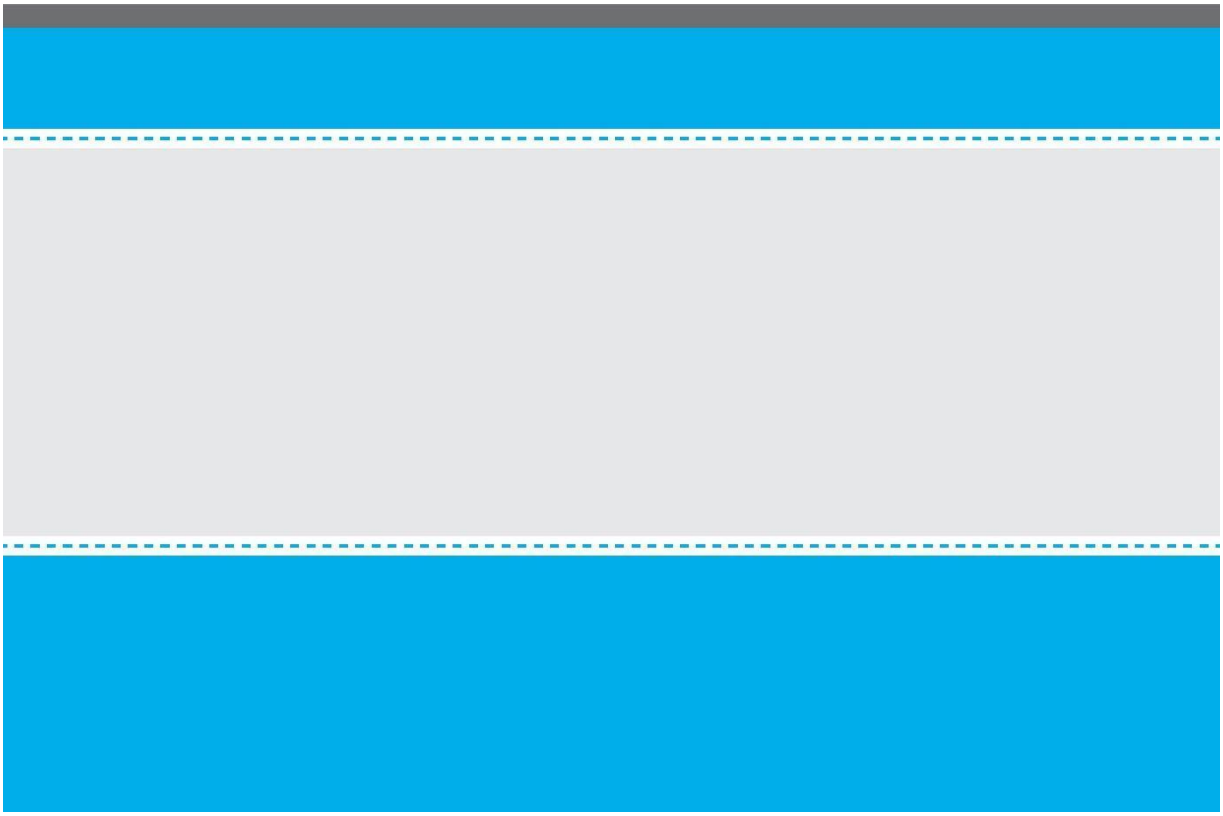
Topics for Discussion

- Do the service delivery systems support sustainable service delivery?
- Are there effective and timely data analysis processes in place to inform required changes or confirm successes?
- Are there feedback loops between the data analysis and leadership, management and practitioners?
- Are there plans in place to address practitioner attrition?
- Are there plans in place to address a change in leadership and manage the transfer of knowledge?
- Have the required support processes been institutionalised throughout the organization?

Tools

The following tools are available to support these activities:

- Practitioner Program Resources Order Form.
- Triple P Clinical Tools.
- Implementation Planning Template.
- Triple P Training Guide.



Appendix M

Positive Child Care Program

Coaching Skills Checklist

Please circle the response that best describes how you honestly feel.

1. Do you feel adequately trained to conduct coaching sessions about managing child behaviour?

7	6	5	4	3	2	1
Yes	definitely	Yes	generally	No	not really	No definitely not

2. How confident are you in conducting coaching sessions about managing child behaviour?

1	2	3	4	5	6	7
Not at all	confident	Not	very confident	Confident		Very confident

3. Please rate how proficient you feel in the following coaching skills from 1 (not at all proficient and would like assistance) to 7 (extremely proficient, no assistance required).

a.	Setting up a conducive environment for coaching sessions with an educator in their work setting.	1	2	3	4	**5**
b.	Establishing an agenda for	1	2	3	4	**5**

the session.					
c. Reviewing the educator's skill development and goals to date.	1	2	3	4	**5**
d. Helping the educator set goals for a practice task.	1	2	3	4	**5**
e. Checking the educator's comfort with the practice and observation process.	1	2	3	4	**5**
f. Prompting the educator to track their own behaviour.	1	2	3	4	**5**
g. Observing and recording the educator's interaction with children.	1	2	3	4	**5**
h. Prompting the educator to set up for a self-	1	2	3	4	**5**

evaluation and feedback discussion.					
i. Using minimal prompting to help the educator identify their strengths and areas for improvement.	1	2	3	4	**5**
j. Shaping the educator's self-evaluation and providing feedback as appropriate.	1	2	3	4	**5**
k. Prompting the educator to set specific goals to work on.	1	2	3	4	**5**
l. Handling educators' questions and concerns about discipline and child care strategies.	1	2	3	4	**5**
m. Dealing with resistance	1	2	3	4	**5**

to the observation or feedback process.					
n. Supporting the educator to set specific goals for practice and monitoring.	1	2	3	4	**5**
o. Using minimal prompts to help the educator resolve any other issues.	1	2	3	4	**5**
p. Supporting the educator to refer to resources for further help if required.	1	2	3	4	**5**

Positive Child Care Program

Coaching Session Checklist

Use this as a guide and as a record of what you covered in the session. Indicate with a tick (✓) if the item was covered. Leave blank if the item was omitted.

Client number: Date of session: .

Start time: Finish time:

Content checklist

1. Agenda (ask the educator for their session goals)

• Issues to discuss:

…….....
.....

.....
.....

2. Review

• Discuss the educator's progress with their previous goals for practice and monitoring

…….....
.....

.....
.....

.....
.....

3. Practice Task

■ Exercise 1: Setting goals for the practice task (review the educator's specific goals)

…….....
.....

.....
.....

.....

.....

• Check how the educator feels

■ Exercise 2: Keeping track

• Prompt the educator to keep track of what they do (e.g. on a worksheet from their modules), as part of the practice task

• Begin the practice task (on a *Practice Session Observation Form*, keep a tally and note examples of descriptive and general praise comments, and specific and vague instructions; note strengths and weaknesses in incidental teaching and back-up consequences)

4. Feedback

• Set up to conduct self-evaluation and feedback (prompt the educator to make sure the children are supervised and move to a location for discussion)

■ Exercise 3: Reviewing the practice task

• Use the minimal amount of prompting to help the educator identify their strengths and weaknesses, shape the educator's skills as appropriate

• Review strengths (at least two positive points):

…….....

.....

.....

.....

.....

.....

• Review areas for improvement:

…….....

.....

.....

.....

.....

.....

5. Goal setting

• Prompt the educator to set some specific goals to work on:

……..
.....

.....
.....

.....
.....

6. Other issues

• Discuss any other issues the educator wants to cover (use minimal prompts to help them solve any problems):

……..
.....

.....
.....

7. Session close

• Prompt the educator to review the main points covered in the session which they are to follow up on:

……..
.....

.....
.....

• Prompt the educator to set and note down their practice and monitoring goals for the week:

……..
.....

.....
.....

• Prompt the educator to list any material they would like to review:

……..
.....

.....
.....

Signature: ..... Date completed: .....

Positive Child Care Program

Practice Session Observation Form

Session goals (list the goals set by the educator for this session)

Observation

Setting up engaging activities

Comments:

Encouraging appropriate behaviour (e.g. talking, attention, individual time)

Comments:

Praise (place a tick in a square each time the educator uses the strategy)

Descriptive:																	
General:																	

Examples:

Teaching new skills (e.g. incidental teaching / ask-say-do / teaching backwards)

Comments:

Instructions (place a tick in a square each time the educator uses the strategy)

Specific:																	

Vague:																		

Examples:

Consequences

Comments:

Sit and watch / quiet time

Comments:

Summary

Strengths (note what the educator did well during the interaction)

Weaknesses (note areas for improvement)

Homework (note the activities/strategies to be practised before the next session)

Goals for next session (list the goals set by the educator for the next session)

Appendix N

Proportion of responses at each time point

T1 outcome	npresent	nmiss	ntotal	proportion_missing	T2 outcome	npresent	nmiss	ntotal	proportion_missing	T3 outcome	npresent	nmiss	ntotal	proportior
CADBI_adults_tot	81	15	96	0.15625	CADBI_adults_tot	74	22	96	0.229167	CADBI_adults_tot	55	41	96	0.427083
CADBI_peers_tot	81	15	96	0.15625	CADBI_peers_tot	74	22	96	0.229167	CADBI_peers_tot	55	41	96	0.427083
CADBI_hyp_tot	81	15	96	0.15625	CADBI_hyp_tot	74	22	96	0.229167	CADBI_hyp_tot	55	41	96	0.427083
SE_tot	83	13	96	0.135417	SE_tot	77	19	96	0.197917	SE_tot	61	35	96	0.364583
JSD_tot	83	13	96	0.135417	JSD_tot	77	19	96	0.197917	JSD_tot	61	35	96	0.364583
JSR_tot	83	13	96	0.135417	JSR_tot	77	19	96	0.197917	JSR_tot	61	35	96	0.364583
JSC_tot	83	13	96	0.135417	JSC_tot	77	19	96	0.197917	JSC_tot	61	35	96	0.364583
JSSD_tot	83	13	96	0.135417	JSSD_tot	77	19	96	0.197917	JSSD_tot	61	35	96	0.364583
DASS_dep_tot	83	13	96	0.135417	DASS_dep_tot	77	19	96	0.197917	DASS_dep_tot	61	35	96	0.364583
DASS_anx_tot	83	13	96	0.135417	DASS_anx_tot	77	19	96	0.197917	DASS_anx_tot	61	35	96	0.364583
DASS_stress_tot	83	13	96	0.135417	DASS_stress_tot	77	19	96	0.197917	DASS_stress_tot	61	35	96	0.364583
SDQ_emotion_tot	79	17	96	0.177083	SDQ_emotion_tot	74	22	96	0.229167	SDQ_emotion_tot	57	39	96	0.40625
SDQ_conduct_tot	79	17	96	0.177083	SDQ_conduct_tot	74	22	96	0.229167	SDQ_conduct_tot	57	39	96	0.40625
SDQ_hyper_tot	79	17	96	0.177083	SDQ_hyper_tot	74	22	96	0.229167	SDQ_hyper_tot	57	39	96	0.40625
SDQ_peer_tot	79	17	96	0.177083	SDQ_peer_tot	74	22	96	0.229167	SDQ_peer_tot	57	39	96	0.40625
SDQ_prosoc_tot	79	17	96	0.177083	SDQ_prosoc_tot	74	22	96	0.229167	SDQ_prosoc_tot	57	39	96	0.40625
CADBI_obs_adults_tot	71	25	96	0.260417	CADBI_obs_adults_tot	70	26	96	0.270833	CADBI_obs_adults_tot	65	31	96	0.322917
CADBI_obs_peers_tot	71	25	96	0.260417	CADBI_obs_peers_tot	70	26	96	0.270833	CADBI_obs_peers_tot	65	31	96	0.322917
CADBI_obs_activity_tot	71	25	96	0.260417	CADBI_obs_activity_tot	70	26	96	0.270833	CADBI_obs_activity_tot	65	31	96	0.322917
CADBI_obs_adultspeers_t	71	25	96	0.260417	CADBI_obs_adultspeers_t	70	26	96	0.270833	CADBI_obs_adultspeers_t	65	31	96	0.322917
CADBI_obs_peerrel_tot	71	25	96	0.260417	CADBI_obs_peerrel_tot	70	26	96	0.270833	CADBI_obs_peerrel_tot	65	31	96	0.322917
CCEI_phys_tot	74	22	96	0.229167	CCEI_phys_tot	83	13	96	0.135417	CCEI_phys_tot	87	9	96	0.09375
CCEI_mat_tot	74	22	96	0.229167	CCEI_mat_tot	83	13	96	0.135417	CCEI_mat_tot	87	9	96	0.09375
CCEI_act_tot	74	22	96	0.229167	CCEI_act_tot	83	13	96	0.135417	CCEI_act_tot	87	9	96	0.09375
CCEI_exp_tot	71	25	96	0.260417	CCEI_exp_tot	70	26	96	0.270833	CCEI_exp_tot	71	25	96	0.260417
CCEI_mon_tot	71	25	96	0.260417	CCEI_mon_tot	70	26	96	0.270833	CCEI_mon_tot	71	25	96	0.260417
CCEI_attn_tot	71	25	96	0.260417	CCEI_attn_tot	70	26	96	0.270833	CCEI_attn_tot	71	25	96	0.260417
CCEI_circ_tot	71	25	96	0.260417	CCEI_circ_tot	70	26	96	0.270833	CCEI_circ_tot	71	25	96	0.260417
	Totals	525	2688	0.195313		Totals	601	2688	0.223586		Totals	880	2688	0.327381
				19.53%					**22.36%**					**32.74%**

Shawna L. Lee

XXXXXXXXXX
Email: XXXXXXXXXX
Res: XXX-XXX-XXXX
Mobile: XXX-XXX-XXXX

Curriculum Vitae

EDUCATION

- Doctor of Philosophy, Education (October 2017)
  Western University
  London, Ontario
  Field of specialization: Applied Educational Psychology

  Currently supporting various initiatives through the Canadian Research Centre on Inclusive Education

- Master of Arts, Early Childhood Studies
  Ryerson University
  Toronto, Ontario
  Thesis: Seeking Equity for Mental Health in Public Education in Ontario:
  A Critical Discourse Analysis of Four Policy Documents
  Under the Supervision of Dr. Angela Valeo

- Bachelor of Professional Arts
  Athabasca University Distance Education
  Athabasca, Alberta
  Field of Specialization: Human Services

- Inclusion Practices Certificate ***with High Honours***
  Seneca College (Newnham Campus), Ontario

- Early Childhood Education Diploma ***with High Honours***
  Seneca College Apprenticeship Program, King Campus

ADDITIONAL TRAINING CREDENTIALS INCLUDE

- Certified by the Mental Health Commission of Canada as a Trainer in Mental Health First Aid - Basic

- Certified member of the Association of Early Childhood Educators, Ontario

- Accredited Trainer and provider of Triple P Positive Parenting Program (multiple levels)

- Early Childhood Education Journey Persons Certificate
  Seneca College (Newnham Campus), Ontario

- Trained in Accessibility for Ontarians with Disabilities Act (AODA)

- Trained in Attachment and Atypical Caregiver Behaviours Associated with Caregiver Attachment (training by Dr. Diane Benoit)

- Working Model of the Child Interview - Trained to administer, code and classify caregivers' internal representations, or working models, of their relationship with a particular child (training by Dr. Diane Benoit)

- Child Caregiver Interaction Scale – Trainer and reliability anchor

- Right from the Start: Attachment based course for parents of children under 2 years of age - Certified Group Leader

- Incredible Years Program - Certified Parent Group Leader

- Reaching In/Reaching Out Resiliency skills training: Promoting Resiliency in Young Children in Child Care, skills training: Child applications and skills training: Educator applications

- Trained in Handle with Care: Strategies for Promoting the Mental Health of Young Children in Community Based Child Care

- Management Development: Developing Change Agents and Leaders (1 year internal training program provided by Vision Management Services)

- Trained in Interactional Supervision (training by Dr. Lawrence Shulman)

- Trained in Diversity and Cultural Competence (training delivered by Roland Rutland, Diversity Coordinator, Kinark Child and Family Services as part of Clinical Excellence Initiative)

- Certified trainer for S.A.C.E.R.S (School Age Child Environmental Rating Scale) *And* E.C.E.R.S-R (Early Childhood Environmental Rating Scale, Revised**)**

- Also trained to administer, score and interpret a variety of assessment tools related to child development, mental health, and child and family functioning

PROFESSIONAL EXPERIENCE

Seneca College of Applied Arts and Technology **2006 – Present**

PROFESSOR, School of Early Childhood Education

- Teach full time, accelerated, apprenticeship, and post diploma apprenticeship courses in Diploma and Degree level programs. **Courses taught include:**

BACHELOR OF CHILD DEVELOPMENT DEGREE

- EAD 202 – Observation Methodology
- EAD 502 – Challenging Behaviour
- EAD 506 – Interdisciplinary Practice
- EAD 510 – Emotional Wellbeing in Young Children
- EAD 606 – Case Collaboration and Leadership
- EAD 610 – Environmental Design
- EAD 804 – Reflective Practice

EARLY CHILDHOOD EDUCATION DIPLOMA

- ECE 114 – Observation and Child Development
- ECE 213 – School Age Curriculum and Applied Theory
- ECE 215 – Interpersonal Relationships
- ECE 216 – School Age Field Placement
- ECE 334 – Infant-Toddler Learning Environment and Development
- ECF 334 – Infant-Toddler Field Placement
- ECE 313 – Infant-Toddler Curriculum and Theory
- ECE 314 – Infant-Toddler Observation and Development
- ECE 315 – Relationships with Families
- ECE 316 – Infant-Toddler Field Placement
- ECE 414 – Children with Exceptionalities
- ECE 419 – Special Needs: Inclusion and Intervention
- ECY 411 – Advanced Curriculum
- ECA 304/ECF 304 – Infant Toddler Learning Environment and Placement (Apprenticeship)

INCLUSION PRACTICES POST DIPLOMA CERTIFICATE

- EIP 101 – Introduction to Inclusion Practices
- EIP 102 – Inclusion of the Child in the Community
- EIP 103 – Inclusion Practices Fieldwork
- EIP 104 – Supporting Families

- Bachelor of Child Development Student Placement Coordinator (2009/2010)
- Faculty Liaison for several Capstone Research Projects (fourth year students)
- Faculty Liaison, Student Advisory Committee

PROFESSIONAL EXPERIENCE

Triple P International **2012-present**

TRAINER (Contract)

Kinark Child and Family Services York Region, Ontario **1998 – 2013**

REGIONAL COORDINATOR – TRIPLE P in YORK REGION

SUPERVISOR of COMMUNITY SERVICES, 0-6 CHILDREN'S MENTAL HEALTH

Past positions within Kinark included –
0-6 Intensive Services Mental Health Consultant, Child Care Program Supervisor, OEYC and AOK program Supervisor, Childcare Supervisory Designate, frontline Early Childhood Educator in child care, OEYC and AOK programs, Enhancement staff

York Region District School Board York Region, Ontario **2000 – 2002**

Educational Assistant (relief)

Little Red School House Keswick, ON **1997 – 1999**

Early Childhood Educator

York Region Social Service Dept. Keswick, ON **1997 – 1998**

Early Intervention Access Worker

Newmarket & District Association for Community Living Newmarket, ON
1997 – 1998

Respite Worker

RESEARCH EXPERIENCE

2017 – Present - Improving the Well-Being and Mental Health of Children and Their Care Providers: An Evaluation of the Positive Early Childhood Education Program
Principle Investigator, Representing Seneca College of Applied Arts and Technology

2015 – 2017 - Examining the Effects of the Positive Child Care Program In Early Childhood Education Environments:

A randomized control trial
Under the supervision of Dr. Jacqueline Specht, University of Western Ontario

While there are a variety of programs and techniques that have been developed to support and address challenges with children's behaviour in early learning and care settings, few studies have focused on the effectiveness and implementation of such approaches with fidelity. This study examines The Positive Child Care Program (PCCP) in order to inform program development. Participants in this study included 96 Early Childhood Educators and 12 Directors from 12 child care centres in Alberta, Canada. Findings indicate that PCCP has the potential to dramatically improve quality social and emotional experiences for both children and adults in early learning environments. This study also provides meaningful insights for understanding implementation of such program supports in early childhood settings.

RESEARCH EXPERIENCE (Con't)

2015 – 2016 – Graduate Research Assistant, University of Western Ontario
Under the supervision of Dr. Jacqueline Specht

2014 – 2014 – Graduate Research Assistant, University of Western Ontario
Under the supervision of Dr. Vicki Schwean, Dean of Education

2013 – 2014 - Delegated Reviewer REB Seneca College

2011 – Seeking Equity for Mental Health in Public Education in Ontario:
A Critical Discourse Analysis of Four Policy Documents
Under the Supervision of Dr. Angela Valeo, Ryerson University

Through the use of critical discourse analysis (CDA), this research study conducted a comparative policy analysis which deconstructs the implicit and explicit policy components representing children's mental health in the revised *Health and Physical Education Curriculum* (2010), *Realizing the Promise of Diversity: Ontario's Equity and Inclusive Education Strategy* (2009), *Ideas and Shared Practices: Foundations for a Healthy School* (2006), and *Caring and Safe Schools in Ontario: Supporting students with special education needs through progressive discipline, kindergarten to grade 12* (2010). Underlying assumptions and contradictions regarding children's mental health in these policy documents were identified.

2011 – Triple P in Schools: An evaluation of the strategic partnership between education and Triple P

Using a combination of survey and focus group measures, this evaluation examined the outcomes for the strategic partnership between a local Board of Education and the regional network of Triple P providers that has occurred within York Region, Ontario

(population 1 million). The Triple P partnership has consisted of a phased implementation of services being delivered within select elementary (K- grade 8) schools over a two year period. The overarching goals of this initiative was threefold: to provide accessible, engaging and client-friendly supports and services to a broader range of parents and caregivers across the region; to enhance the capacity of educators and other school staff to support children and parents with their social, behavioral and educational needs; and to strengthen and facilitate links between education, mental health and other social service providers for the benefit of the broader community.

2007 – 2012: Kinark Child and Family Services

As the largest Children's Mental Health Agency in Ontario, Kinark underwent a Clinical Transformation of all services in order to ensure successful implementation of consistent, sound clinical practice based on evidence based practices throughout the agency. I have been involved in the following aspects of this process, including:

- **0-6 Services Clinical Transformation Committee (CHAIR)**
  Identify and recommend evidence-based practices for assessment and treatment of children 0 to 6 within the context of their families. Scan literature for assessment and treatment EBPs for client population, recognizing that the client group should be split between 0 to 3 and 4 to 6 year olds. Services for the 0 to 6 client population also extend to educators and care givers e.g. child care staff and kindergarten teachers.

- **Autism Services Clinical Transformation Committee**
  Use reliable, valid and current client data to inform the direction of research required. Explore research related to current evidence based practices for this population and make recommendations for future services and agency implementation.

- **Triple P Installation Committee**
  Research and develop the agency's approach to install Triple P as a foundation treatment and prevention program in Kinark.

- **Triple P Implementation Committee**
  Execute implementation plan for Triple P, supporting ongoing research of staff perspectives of implementation, as well as client outcomes and satisfaction. Revise implementation plan as required. Develop agency sustainability plan related to this practice.

COMMUNITY DEVELOPMENT AND PARTNERSHIPS

2012 – Present **Member - Triple P Ontario Network**

1999 – 2014 **Executive Member of the Association of Early Childhood Educators** Ontario (AECEO), York Branch – Public Policy Representative (2007-2014), Past President 2002-2006,

	Provincial branch Certification and Equivalency committee (2006 – 2014)
1999 – Present	**Member - Canadian Child Care Federation**
2004 – 2015	**Parent Council member (Secretary)**, Our Lady of Good Counsel School, Sharon, ON.
2005 – 2016	**Board of Directors - Give a Miracle A Chance** Non-profit organization supporting children living with Cerebral Palsy
2010 – 2015	**Volunteer - Students Crossing Borders** International volunteer in Kingston, Jamaica in a variety of settings related to child development and early childhood education; also volunteer with related local fundraising and coordination initiatives
2005 – 2014	**Member - Child and Family Collaborative** (formerly the Child Care Committee of York Region)
2007 – 2011	**CHAIR – Quality Assurance and Accessibility Committee**
2007 – 2010	**CHAIR – Triple P Peer Support Network**, Georgina
2005 – 2010	**Member - Early Learning and Care Steering Committee**
1999 – 2005	**Executive Member – Joy of Childhood Committee** Subcommittee of Child Care Committee of York Region
2006	**Member – Acorn Collaborative** Assist in coordination of "Learning Together with Children" Conference
2002 – 2003	**Member – Seneca College ECE Alumni Steering Committee**

PRESENTATIONS

Developing and implementing regional and provincial presentations based on current research and evidence based practice was an integral component of my position at Kinark Child and Family Services. As such, I will not list each of the presentations I have given. However, I will note the following presentations I have delivered to international audiences:

Triple P International Helping Families Change Conference 2016 (February 2016) – Banff, Canada - *Achieving successful research outcomes and sustained service delivery in large, community-based research projects* (Co-presented with presenters from Australia and USA)

Triple P International Helping Families Change Conference 2015 – Amsterdam, Netherlands - *The application of positive parenting principles in early childhood education and care: a discussion of potential implementation considerations and opportunities* (Co-presented with presenters from UK, Australia, and the Netherlands)

Infant Mental Health Program, Hospital for Sick Children, Toronto, ON. June, 2014 - An introduction to Baby Triple P

Canadian Association for Educational Psychology, Saint Catherines, ON., May, 2014
-Seeking Equity for Mental Health in Education, results of a policy analysis of Mental Health in Ministry of Education Documents

Triple P International Helping Families Change Conference 2013 –
Los Angeles, California – *International Parenting Survey – Aims, objectives, and data from three countries* (Co-presented community engagement strategy for recruitment)

Triple P International Helping Families Change Conference 2012 –
Glasgow, Scotland - Parallel session presentation - *Triple P in Schools: An overview of the first two years of a strategic partnership between education and Triple P providers*

Triple P International Helping Families Change Conference – Toronto 2009
- Panelist *"Challenges of Parenting in the 21st Century"*

PUBLICATIONS

Lee, S. (2017). *Second Hand Harm.* https://www.edcan.ca/articles/second-hand-harm. Viewpoint, Education Canada

Sanders, M, Turner, K.M.T (in press). *The Power of Positive Parenting: Transforming the lives of children, parents, and communities using the Triple P system.* Contributing Author, Parenting Support in Early Childhood Learning Context

Javelosa-Alvarez, J. (2016). *The Handbook for Busy Parents.* Contributing Author, Positive Parenting Please!

Turner, K.M.T., Dittman, C., & Lee, S. (2016, June). *Development and pilot evaluation of the Positive ChildCare Program for educators: Bringing a behavioural family intervention approach to early learning and childcare settings.* Paper presented at the 8th World Congress of Behavioural and Cognitive Therapies, Melbourne, Australia.

Dietze, B. & Kashin, D. (2011). Playing and Learning in Early Childhood Education. Pearson Education, Toronto. Contributing Author, 'Ask and Expert' text box, P. 122

AWARDS

2016 – Inclusive Education Research Award (Canadian Research Centre on Inclusive Education)
Awarded to a recipient whose research proposals addresses a wide range of issues related to the inclusion of students who represent a diversity of backgrounds or learning needs.

2013 – York Region Film Festival (Third Place) – Documentary
Positive parenting in Georgina, the story of the unique way positive parenting was rolled out in Georgina and the families it touched.

2012 – International Practice Award (Triple P International)
This international award distinguishes an accredited individual Triple P practitioner who exhibits excellence and innovation in the implementation of Triple P. The award serves as recognition for outstanding contribution and commitment to the delivery of Triple P, and improved client outcomes and/or advancement of Triple P.

2009 - Children's Services Award (Association of Early Childhood Educators, Ontario)
This award is presented to an individual who has been nominated by his/her peers for exemplary qualities and outstanding achievement in the field of Early Childhood Education.

2009 – Community Leadership Award (Athabasca University)
This award is provided to an individual who has proven leadership skills, exhibited a genuine concern for the well-being and betterment of fellow citizens, and contributed to their local community via volunteerism and active participation in extracurricular cultural and/or recreational activities.